SDG COVER PAGE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

SOW No.: ISM02.3

EPA Sample No.	Lab Sample ID	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MH1H50	6100167-01	X			
MH1H51	6100167-02	X			
MH1H52	6100167-03	X			
MH1H52D	QJ14019-DUP1	X			
MH1H52S	QJ14019-MS1	X			
MH1H53	6100167-04	X			
MH1H54	6100167-05	X			
MH1H55	6100167-06	X			
MH1H56	6100167-07	X			
MH1H57	6100167-08	X			
MH1H58	6100167-09	X			
MH1H59	6100167-10	X			
MH1H60	6100167-11	X			
MH1H61	6100167-12	X			
MH1H62	6100167-13	X			
MH1H63	6100167-14	X			
MH1H64	6100167-15	X			
MH1H65	6100167-16	X			
MH1H66	6100167-17	X			
MH1H67	6100167-18	X			

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 in the SDG narrative. 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: Maxwell S. Bonner For Chris Bonr

Date: 10/26/16 Title: CEO/QAO

SDG COVER PAGE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

SOW No.: ISM02.3

EPA Sample No.	Lab Sample ID	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MH1H50	6100167-01		X		
MH1H51	6100167-02		X		
MH1H52	6100167-03		X		
MH1H52D	QJ24005-DUP1		X		
MH1H52S	QJ24005-MS1		X		
MH1H53	6100167-04		X		
MH1H54	6100167-05		X		
MH1H55	6100167-06		X		
MH1H56	6100167-07		X		
MH1H57	6100167-08		X		
MH1H58	6100167-09		X		
MH1H59	6100167-10		X		
MH1H60	6100167-11		X		
MH1H61	6100167-12		X		
MH1H62	6100167-13		X		
MH1H63	6100167-14		X		
MH1H64	6100167-15		X		
MH1H65	6100167-16		X		
MH1H66	6100167-17		X		
MH1H67	6100167-18		X		

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 in the SDG narrative. 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: Lauren Meadows For Chris Bonner

Date: 10/26/16 Title: CEO/QAO

SDG COVER PAGE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

SOW No.: ISM02.3

EPA Sample No.	Lab Sample ID	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MH1H50	6100167-01			X	
MH1H51	6100167-02			X	
MH1H52	6100167-03			X	
MH1H52D	QJ14044-DUP1			X	
MH1H52S	QJ14044-MS1			X	
MH1H53	6100167-04			X	
MH1H54	6100167-05			X	
MH1H55	6100167-06			X	
MH1H56	6100167-07			X	
MH1H57	6100167-08			X	
MH1H58	6100167-09			X	
MH1H59	6100167-10			X	
MH1H60	6100167-11			X	
MH1H61	6100167-12			X	
MH1H62	6100167-13			X	
MH1H63	6100167-14			X	
MH1H64	6100167-15			X	
MH1H65	6100167-16			X	
MH1H66	6100167-17			X	
MH1H67	6100167-18			X	

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 in the SDG narrative. 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: Maxwell S. Bonner For Chris Bonr

Date: 10/26/16 Title: CEO/QAO

TECHLAW

CHAIN OF CUSTODY RECORD

No: 2016_OCT_Sed&Soil_46282_CLP

COC #: 2016_OCT_Sed&Soil_46282_CLP
Lab Contact: Chris Bonner
Lab Phone: 601-264-2854

Site #: A8M5
Lab: Bonner Analytical Testing Company
Lab Address: 2703 Oak Grove Rd

EPW14029
MH1H50

Cooler #:
Lab_Address2:
Hattiesburg, MS 39402

Lab #	Sample #	Tag	Matrix	Sample Type	Analyses	Container	Collected	Sample Time	Sampler
	MH1H50	1455	Sediment	Field Sample	TRM_Hg_Soil	4oz glass jar	9/29/2016	15:15	KB
	MH1H51	1456	Sediment	Field Sample	TRM_Hg_Soil	4oz glass jar	9/29/2016	16:00	KB
	MH1H52	1457	Soil	Field Sample	TRM_Hg_Soil	4oz glass jar	9/29/2016	16:00	KB
	MH1H53	1458	Sediment	Field Sample	TRM_Hg_Soil	4oz glass jar	9/29/2016	17:30	AA
	MH1H54	1459	Soil	Field Sample	TRM_Hg_Soil	4oz glass jar	9/29/2016	17:30	AA
	MH1H55	1460	Sediment	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	08:42	AA
	MH1H56	1461	Soil	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	08:42	AA
	MH1H57	1462	Sediment	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	09:30	AA
	MH1H58	1463	Soil	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	09:30	AA
	MH1H59	1464	Sediment	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	09:50	AA
	MH1H60	1465	Soil	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	09:50	AA
	MH1H61	1466	Sediment	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	11:30	AA
	MH1H62	1467	Soil	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	11:30	AA
	MH1H63	1468	Sediment	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	11:15	AA
	MH1H64	1469	Sediment	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	11:50	AA
	MH1H65	1470	Soil	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	11:50	AA
	MH1H66	1471	Sediment	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	12:40	AA
	MH1H67	1472	Soil	Field Sample	TRM_Hg_Soil	4oz glass jar	9/30/2016	12:40	AA

Special Instructions: CASE# 46382
Total Recoverable Metals and Mercury
QC to be determined by Lab

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Johnson ESAT	10/12/16	P. Nik Bon	0855 10-13-16	good

4

SAMPLE DELIVERY GROUP (SDG)
Definition Sheet

SDG ID: MH1H50

Laboratory Name: Bonner Analytical Testing Co.

Laboratory Code: BON

Contract No.: EPW14029

Case No.: 46282

Solicitation No.:

SDG Turnaround: 21-Day

Modified Analysis No(s).: 2658.0

Analysis Required: ICPAES ~~(1-4)~~ 5-10 ICPMS 11+, ~~ICPMS~~ (2658.0), Mercury

---

EPA Sample Nmbers in SDG (Listed in Numerical Order)

1) MH1H50	7) MH1H56	13) MH1H62	19) ZZZZZZ
2) MH1H51	8) MH1H57	14) MH1H63	20) ZZZZZZ
3) MH1H52	9) MH1H58	15) MH1H64	21) ZZZZZZ
4) MH1H53	10) MH1H59	16) MH1H65	22) ZZZZZZ
5) MH1H54	11) MH1H60	17) MH1H66	23) ZZZZZZ
6) MH1H55	12) MH1H61	18) MH1H67	24) ZZZZZZ

MH1H50	MH1H67
First Sample in SDG	**Last Sample in SDG**
10/13/2016	10/13/2016
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).

P. Ack
Signature

10-14-16
Date

FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name Bonner Analytical Testing Company		Page 1 of 1
Received By (Print Name) Trisha Aiken		Log-in Date 10/13/2016
Received By (Signature) P. Aiken		
Case Number 46282	SDG No. MH1H50	MA No. 2658.0

Remarks:	
1. Custody Seal(s)	**Present**/~~Absent*~~ **Intact**/~~Broken~~
2. Custody Seal NOs.	NA NA
3. Traffic Reports/Chain of Custody Records or Packing Lists	**Present**/~~Absent*~~
4. Airbill	**Airbill**/~~Sticker~~ **Present**/~~Absent*~~
5. Airbill No.	777455696905 ZZZZZZ
6. Sample Tags Sample Tag Numbers	~~Present~~/**Absent*** ~~Listed~~/**Not** Listed On Traffic Report/Chain of Custody Record
7. Sample Condition	**Intact**/~~Broken*~~/~~Leaking~~
8. Shipping Container Temperature Indicator Bottle	**Present**/~~Absent*~~
9. Shipping Container Temperature	0.0°C
10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree?	**Yes**/~~No*~~
11. Date Received at Lab	10/13/2016
12. Time Received	08:55

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Taq #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
2	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
3	MH1H52	ZZZZZZ	ZZZZZZ	6100167-03	Good\OnIce
4	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
5	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
6	MH1H55	ZZZZZZ	ZZZZZZ	6100167-06	Good\OnIce
7	MH1H56	ZZZZZZ	ZZZZZZ	6100167-07	Good\OnIce
8	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
9	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
10	MH1H59	ZZZZZZ	ZZZZZZ	6100167-10	Good\OnIce
11	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
12	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
13	MH1H62	ZZZZZZ	ZZZZZZ	6100167-13	Good\OnIce
14	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
15	MH1H64	ZZZZZZ	ZZZZZZ	6100167-15	Good\OnIce
16	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
17	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
18	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
21	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
22	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ

* Contact SMO and attach record of resolution

Reviewed By P. Aiken	Logbook No. ZZZZZZ
Date 10-14-16	Logbook Page No. ZZZZZZ

FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name Bonner Analytical Testing Company		Page 1 of 1
Received By (Print Name) Trisha Aiken		Log-in Date 10/13/2016
Received By (Signature) P. Aiken		
Case Number 46282	SDG No. MH1H50	MA No. 2658.0

Remarks:	
1. Custody Seal(s)	**Present**/~~Absent*~~ **Intact**/~~Broken~~
2. Custody Seal NOs.	NA / NA
3. Traffic Reports/Chain of Custody Records or Packing Lists	**Present**/~~Absent*~~
4. Airbill	**Airbill**/~~Sticker~~ **Present**/~~Absent*~~
5. Airbill No.	777455697132 / ZZZZZZ
6. Sample Tags Sample Tag Numbers	~~Present~~/**Absent*** ~~Listed~~/**Not** Listed On Traffic Report/Chain of Custody Record
7. Sample Condition	**Intact**/~~Broken*~~/ ~~Leaking~~
8. Shipping Container Temperature Indicator Bottle	**Present**/~~Absent*~~
9. Shipping Container Temperature	0.0°C
10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree?	**Yes**/~~No*~~
11. Date Received at Lab	10/13/2016
12. Time Received	08:55

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
2	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
3	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
4	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
5	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
6	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
7	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
8	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
9	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
10	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
11	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
12	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
13	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
14	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
15	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
16	MH1H65	ZZZZZZ	ZZZZZZ	6100167-16	Good\OnIce
17	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
18	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
21	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
22	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ

* Contact SMO and attach record of resolution

Reviewed By P. Aiken	Logbook No. ZZZZZZ
Date 10-14-16	Logbook Page No. ZZZZZZ

FORM DC-1
SAMPLE LOG-IN SHEET

8

Lab Name Bonner Analytical Testing Company		Page 1 of 1
Received By (Print Name) Trisha Aiken		Log-in Date 10/13/2016
Received By (Signature) P. Aiken		
Case Number 46282	SDG No. MH1H50	MA No. 2658.0

Remarks:	
1. Custody Seal(s)	**Present**/~~Absent*~~ **Intact**/~~Broken~~
2. Custody Seal NOs.	NA NA
3. Traffic Reports/Chain of Custody Records or Packing Lists	**Present**/~~Absent*~~
4. Airbill	**Airbill**/~~Sticker~~ **Present**/~~Absent*~~
5. Airbill No.	777455697235 ZZZZZZ
6. Sample Tags Sample Tag Numbers	~~Present~~/**Absent*** ~~Listed~~/**Not** Listed On Traffic Report/Chain of Custody Record
7. Sample Condition	**Intact**/~~Broken*~~/~~Leaking~~
8. Shipping Container Temperature Indicator Bottle	**Present**/~~Absent*~~
9. Shipping Container Temperature	0.0°C
10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree?	**Yes**/~~No*~~
11. Date Received at Lab	10/13/2016
12. Time Received	08:55

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
2	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
3	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
4	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
5	MH1H54	ZZZZZZ	ZZZZZZ	6100167-05	Good\OnIce
6	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
7	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
8	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
9	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
10	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
11	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
12	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
13	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
14	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
15	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
16	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
17	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
18	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
21	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
22	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ

* Contact SMO and attach record of resolution

Reviewed By P. Aiken	Logbook No. ZZZZZZ
Date 10-14-16	Logbook Page No. ZZZZZZ

FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name Bonner Analytical Testing Company		Page 1 of 1
Received By (Print Name) Trisha Aiken		Log-in Date 10/13/2016
Received By (Signature) P. Aiken		
Case Number 46282	SDG No. MH1H50	MA No. 2658.0

Remarks:	
1. Custody Seal(s)	**Present**/~~Absent*~~ **Intact**/~~Broken~~
2. Custody Seal NOs.	NA / NA
3. Traffic Reports/Chain of Custody Records or Packing Lists	**Present**/~~Absent*~~
4. Airbill	**Airbill**/~~Sticker~~ **Present**/~~Absent*~~
5. Airbill No.	777455697740 / ZZZZZZ
6. Sample Tags Sample Tag Numbers	~~Present~~/**Absent*** ~~Listed~~/**Not** Listed On Traffic Report/Chain of Custody Record
7. Sample Condition	**Intact**/~~Broken*~~/ ~~Leaking~~
8. Shipping Container Temperature Indicator Bottle	**Present**/~~Absent*~~
9. Shipping Container Temperature	0.0°C
10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree?	**Yes**/~~No*~~
11. Date Received at Lab	10/13/2016
12. Time Received	08:55

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Taq #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MH1H50	ZZZZZZ	ZZZZZZ	6100167-01	Good\OnIce
2	MH1H51	ZZZZZZ	ZZZZZZ	6100167-02	Good\OnIce
3	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
4	MH1H53	ZZZZZZ	ZZZZZZ	6100167-04	Good\OnIce
5	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
6	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
7	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
8	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
9	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
10	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
11	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
12	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
13	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
14	MH1H63	ZZZZZZ	ZZZZZZ	6100167-14	Good\OnIce
15	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
16	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
17	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
18	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
21	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ
22	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ

* Contact SMO and attach record of resolution

Reviewed By P. Aiken	Logbook No. ZZZZZZ
Date 10-14-16	Logbook Page No. ZZZZZZ

FORM DC-1
SAMPLE LOG-IN SHEET

10

Lab Name Bonner Analytical Testing Company		Page 1 of 1
Received By (Print Name) Trisha Aiken		Log-in Date 10/13/2016
Received By (Signature) P. Aik		
Case Number 46282	SDG No. MH1H50	MA No. 2658.0

Remarks:	
1. Custody Seal(s)	**Present**/~~Absent*~~ **Intact**/~~Broken~~
2. Custody Seal NOs.	NA / NA
3. Traffic Reports/Chain of Custody Records or Packing Lists	**Present**/~~Absent*~~
4. Airbill	**Airbill**/~~Sticker~~ **Present**/~~Absent*~~
5. Airbill No.	777455697522 / ZZZZZZ
6. Sample Tags Sample Tag Numbers	~~Present~~/**Absent*** ~~Listed~~/**Not** Listed On Traffic Report/Chain of Custody Record
7. Sample Condition	**Intact**/~~Broken*~~/ ~~Leaking~~
8. Shipping Container Temperature Indicator Bottle	**Present**/~~Absent*~~
9. Shipping Container Temperature	0.0°C
10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree?	**Yes**/~~No*~~
11. Date Received at Lab	10/13/2016
12. Time Received	08:55

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
2	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
3	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
4	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
5	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
6	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
7	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
8	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
9	MH1H58	ZZZZZZ	ZZZZZZ	6100167-09	Good\OnIce
10	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
11	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
12	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
13	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
14	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
15	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
16	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
17	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
18	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
21	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
22	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ

* Contact SMO and attach record of resolution

Reviewed By P. Aik	Logbook No. ZZZZZZ
Date 10-14-16	Logbook Page No. ZZZZZZ

FORM DC-1
SAMPLE LOG-IN SHEET

11

Lab Name Bonner Analytical Testing Company		Page 1 of 1
Received By (Print Name) Trisha Aiken		Log-in Date 10/13/2016
Received By (Signature) P. Aik		
Case Number 46282	SDG No. MH1H50	MA No. 2658.0

Remarks:	
1. Custody Seal(s)	**Present**/~~Absent*~~ **Intact**/~~Broken~~
2. Custody Seal NOs.	NA / NA
3. Traffic Reports/Chain of Custody Records or Packing Lists	**Present**/~~Absent*~~
4. Airbill	**Airbill**/~~Sticker~~ **Present**/~~Absent*~~
5. Airbill No.	777455697522 / ZZZZZZ
6. Sample Tags Sample Tag Numbers	~~Present~~/**Absent*** ~~Listed~~/**Not** Listed On Traffic Report/Chain of Custody Record
7. Sample Condition	**Intact**/~~Broken*~~/ ~~Leaking~~
8. Shipping Container Temperature Indicator Bottle	**Present**/~~Absent*~~
9. Shipping Container Temperature	0.0°C
10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree?	**Yes**/~~No*~~
11. Date Received at Lab	10/13/2016
12. Time Received	08:55

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
2	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
3	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
4	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
5	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
6	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
7	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
8	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
9	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
10	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
11	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
12	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
13	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
14	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
15	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
16	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
17	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
18	MH1H67	ZZZZZZ	ZZZZZZ	6100167-18	Good\OnIce
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
21	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
22	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ

* Contact SMO and attach record of resolution

Reviewed By P. Aik	Logbook No. ZZZZZZ
Date 10-14-16	Logbook Page No. ZZZZZZ

FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name Bonner Analytical Testing Company		Page 1 of 1
Received By (Print Name) Trisha Aiken		Log-in Date 10/13/2016
Received By (Signature) T. Aiken		
Case Number 46282	SDG No. MH1H50	MA No. 2658.0

Remarks:	
1. Custody Seal(s)	**Present**/~~Absent*~~ **Intact**/~~Broken~~
2. Custody Seal NOs.	NA NA
3. Traffic Reports/Chain of Custody Records or Packing Lists	**Present**/~~Absent*~~
4. Airbill	**Airbill**/~~Sticker~~ **Present**/~~Absent*~~
5. Airbill No.	777455696548 ZZZZZZ
6. Sample Tags Sample Tag Numbers	~~Present~~/**Absent*** ~~Listed~~/**Not** Listed On Traffic Report/Chain of Custody Record
7. Sample Condition	**Intact**/~~Broken*~~/~~Leaking~~
8. Shipping Container Temperature Indicator Bottle	**Present**/~~Absent*~~
9. Shipping Container Temperature	0.0°C
10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree?	**Yes**/~~No*~~
11. Date Received at Lab	10/13/2016
12. Time Received	08:55

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Taq #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
2	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
3	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
4	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
5	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
6	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
7	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
8	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
9	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
10	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
11	MH1H60	ZZZZZZ	ZZZZZZ	6100167-11	Good\OnIce
12	MH1H61	ZZZZZZ	ZZZZZZ	6100167-12	Good\OnIce
13	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
14	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
15	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
16	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
17	MH1H66	ZZZZZZ	ZZZZZZ	6100167-17	Good\OnIce
18	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
21	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
22	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ

* Contact SMO and attach record of resolution

Reviewed By T. Aiken	Logbook No. ZZZZZZ
Date 10-14-16	Logbook Page No. ZZZZZZ

FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name Bonner Analytical Testing Company		Page 1 of 1
Received By (Print Name) Trisha Aiken		Log-in Date 10/13/2016
Received By (Signature) P. Aiken		
Case Number 46282	SDG No. MH1H50	MA No. 2658.0

Remarks:	
1. Custody Seal(s)	**Present**/~~Absent*~~ **Intact**/~~Broken~~
2. Custody Seal NOs.	NA NA
3. Traffic Reports/Chain of Custody Records or Packing Lists	**Present**/~~Absent*~~
4. Airbill	**Airbill**/~~Sticker~~ **Present**/~~Absent*~~
5. Airbill No.	777455697338 ZZZZZZ
6. Sample Tags Sample Tag Numbers	~~Present~~/**Absent*** ~~Listed~~/**Not** Listed On Traffic Report/Chain of Custody Record
7. Sample Condition	**Intact**/~~Broken*~~/~~Leaking~~
8. Shipping Container Temperature Indicator Bottle	**Present**/~~Absent*~~
9. Shipping Container Temperature	0.0°C
10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree?	**Yes**/~~No*~~
11. Date Received at Lab	10/13/2016
12. Time Received	08:55

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
2	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
3	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
4	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
5	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
6	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
7	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
8	MH1H57	ZZZZZZ	ZZZZZZ	6100167-08	Good\OnIce
9	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
10	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
11	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
12	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
13	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
14	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
15	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
16	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
17	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
18	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
19	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
20	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
21	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ
22	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZ	ZZZZZZZ

* Contact SMO and attach record of resolution

Reviewed By P. Aiken	Logbook No. ZZZZZZ
Date 10-14-16	Logbook Page No. ZZZZZZ

FORM DC-2
FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LAB NAME Bonner Analytical Testing Company

LAB CODE Bonner

CONTRACT NO. EPW14029

CASE NO. 46282 SDG NO. MH1H50

MA NO. 2658.0

SOW NO. ISM02.3

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - Exhibit B Section 2.4)

		PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1.	SDG Cover Page	1	3	✓	
2.	Traffic Report/Chain of Custody Record(s)	4	5	✓	
3.	Sample Log-In Sheet (DC-1)	6	13	✓	
4.	CSF Inventory Sheet (DC-2)	14	17	✓	
5.	SDG Narrative	18	22	✓	
Inorganic Analysis					
ICP-AES					
6.	Inorganic Analysis Data Sheet (Form 1-IN)	23	40	✓	
7.	Initial and Continuing Calibration Verification (Form 2-IN)	41	46	✓	
8.	Blanks (Form 3-IN)	47	50	✓	
9.	ICP Interference Check Sample (Form 4-IN)	51	52	✓	
10.	Matrix Spike Sample Recovery (Form 5A-IN)	53	53	✓	
11.	Post-Digestion/Distillation Spike Sample Recovery (Form 5B-IN)	54	54	✓	
12.	Duplicates (Form 6-IN)	55	55	✓	
13.	Laboratory Control Sample (Form 7-IN)	56	56	✓	
14.	ICP-AES and ICP-MS Serial Dilutions (Form 8-IN)	57	57	✓	
15.	Method Detection Limit (Form 9-IN)	58	58	✓	
16.	ICP-AES Interelement Correction Factors (Form 10A-IN)	59	59	✓	
17.	ICP-AES Interelement Correction Factors (Form 10B-IN)	60	60	✓	
18.	Analysis Log (Form 12-IN)	61	64	✓	
19.	Initial Calibration (Form 15-IN)	65	70	✓	

FORM DC-2
FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

		PAGE NOs.		CHECK	
		FROM	TO	LAB	REGION
20.	Initial Calibration Summary (Form 16-IN)	71	72	✓	
21.	ICP-AES Raw Data	73	157	✓	
22.	ICP-AES Preparation Log Books, Preparation records, Analysis records, and PE Instructions	158	168	✓	
ICP-MS					
23.	Inorganic Analysis Data Sheet (Form 1-IN)	169	186	✓	
24.	Initial and Continuing Calibration Verification (Form 2-IN)	187	195	✓	
25.	Blanks (Form 3-IN)	196	203	✓	
26.	ICP Interference Check Sample (Form 4-IN)	204	207	✓	
27.	Matrix Spike Sample Recovery (Form 5A-IN)	208	208	✓	
28.	Post-Digestion/Distillation Spike Sample Recovery (Form 5B-IN)	209	209	✓	
29.	Duplicates (Form 6-IN)	210	210	✓	
30.	Laboratory Control Sample (Form 7-IN)	211	212	✓	
31.	ICP-AES and ICP-MS Serial Dilutions (Form 8-IN)	213	213	✓	
32.	Method Detection Limit (Form 9-IN)	214	214	✓	
33.	ICP-MS Internal Standard Association (Form 11-IN)	215	218	✓	
34.	Analysis Log (Form 12-IN)	219	227	✓	
35.	ICP-MS Tune (Form 13-IN)	228	231	✓	
36.	ICP-MS Internal Standards Relative Intensity Summary (Form 14-IN)	232	241	✓	
37.	Initial Calibration (Form 15-IN)	242	253	✓	
38.	Initial Calibration Summary (Form 16-IN)	254	257	✓	
39.	ICP-MS Raw Data	258	363	✓	
40.	ICP-MS Preparation Log Books, Preparation records, Analysis records, and PE Instructions	364	380	✓	
Mercury		N/A	N/A	✓	
41.	Inorganic Analysis Data Sheet (Form 1-IN)	381	398	✓	
42.	Initial and Continuing Calibration Verification (Form 2-IN)	399	401	✓	
43.	Blanks (Form 3-IN)	402	403	✓	
44.	Matrix Spike Sample Recovery (Form 5A-IN)	404	404	✓	
45.	Duplicates (Form 6-IN)	405	405	✓	
46.	Method Detection Limit (Form 9-IN)	406	406	✓	
47.	Analysis Log (Form 12-IN)	407	408	✓	
48.	Initial Calibration (Form 15-IN)	409	411	✓	

FORM DC-2
FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

49.	Initial Calibration Summary (Form 16-IN)	412	412	✓	
50.	Mercury Raw Data	413	417	✓	
51.	Mercury Preparation Log Books, Preparation records, Analysis records, and PE Instructions	418	425	✓	
Cyanide		N/A	N/A		
52.	Inorganic Analysis Data Sheet (Form 1-IN)				
53.	Initial and Continuing Calibration Verification (Form 2-IN)				
54.	Blanks (Form 3-IN)				
55.	Matrix Spike Sample Recovery (Form 5A-IN)				
56.	Post-Digestion/Distillation Spike Sample Recovery (Form 5B-IN)				
57.	Duplicates (Form 6-IN)				
58.	Method Detection Limit (Form 9-IN)				
59.	Analysis Log (Form 12-IN)				
60.	Initial Calibration (Form 15-IN)				
61.	Initial Calibration Summary (Form 16-IN)				
62.	Cyanide Raw Data				
63.	Cyanide Preparation Log Books, Preparation records, Analysis records, and PE Instructions				
Additional		N/A	N/A		
64.	Percent Solids Determination Log	426	426	✓	
65.	EPA Shipping/Receiving Documents	N/A	N/A	✓	
	Airbill (No. of Shipments 8)	427	434	✓	
	Sample Tags	N/A	N/A	✓	
	Sample Log-In Sheet (Lab)	435	438	✓	
66.	Misc. Shipping/Receiving Records (list all individual records) Communication Logs	N/A	N/A	✓	
		N/A	N/A	✓	
67.	Internal Lab Sample Transfer Records & Tracking Sheets (describe or list) In-House Chains and Digestates	439	442	✓	
		N/A	N/A	✓	
68.	Other Records (describe or list)	N/A	N/A	✓	
	Communication Logs	443	455	✓	
	e-mails Corrective Actions	456	457	✓	

FORM DC-2
FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

69. Comments:

Completed by:
(CLP Lab) Patricia Aiken (Signature) | Patricia Aiken / Sample Custodian (Print Name & Title) | 10-26-16 (Date)

Audited by:
(EPA) (Signature) | (Print Name & Title) | (Date)

BONNER Analytical
2703 Oak Grove Road
Hattiesburg, MS 39402
601-264-2854 Phone
601-268-7084 Fax

SDG NARRATIVE:

SDG Number: MH1H50
Case Number: 46282
Contract Number: EPW14029
Contract SOW: ISM02.3

Sample Receipt:
On October 13, 2016 we received 419 soils in 10 coolers via FedEx air bills listed below

- 7774 5569 7187
- 7774 5569 6905
- 7774 5569 7132
- 7774 5569 7235
- 7774 5569 7740
- 7774 5569 7739
- 7774 5569 7522
- 7774 5569 7420
- 7774 5569 6548
- 7774 5569 7338

Custody seals were present and intact, Samples were in good condition except for the following discrepancies.

Discrepancies with tags, jars, and/or COC

Issue 1: There is no relinquished time on any of the 24 pages of the COC.

Resolution 1: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Issue 2: The COC lists the Case as 46382 in the instruction box; however, these samples are for Case 46282.

Resolution 2: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Insufficient/inappropriate designation of laboratory QC

Issue 3: The COC states "QC to be determined by lab." The laboratory has provided the list below of SDGs and the sample selected for QC.

SDG	QC
MH1F86	MH1F87
MH1G05	MH1G06
MH1G23	MH1G28
MH1G77	MH1G80

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MH1G59	MH1G59
MH1H14	MH1H17
MH1G95	MH1G96
MH1H50	MH1H52
MH1H32	MH1H35
MH1H68	MH1H71
MH1H86	MH1H86
MH1J05	MH1J05
MH1J23	MH1J23
MH1J41	MH1J51
MH1J59	MH1J59
MH1J77	MH1J77
MH1J95	MH1J95
MH1K14	MH1K16
MH1K32	MH1K35
MH1K50	MH1K51
MH1K68	MH1K71
MH1K86	MH1K97
MH1L05	MH1L08

Resolution 3: Per Region 8, the samples selected for QC are acceptable to the Region. The laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Missing temperature blank

Issue 4: There were no temperature blanks in any of the coolers. A thermometer was inserted directly into the cooler, allowed to stabilize, and the temperature was then recorded. All coolers were received at 0°C.

Resolution 4: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

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Hattiesburg, MS 39402
601-264-2854 Phone
601-268-7084 Fax

Non-standard matrix

Issue 5: The laboratory is asking if they should decant or homogenize the sediment samples.

Resolution 5: Per Region 8, the laboratory shall decant the sediment samples. The laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Laboratory problems

Issue 6: Three of the 10 airbills were not removable. The laboratory took pictures of those labels and removed what parts of the label were possible.

Resolution 6: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Issue 7: The laboratory received 419 samples of the 500 that were scheduled and the shipping end date is tomorrow, 10/14/16. Please advise if this Case is complete.

Resolution 7: Per Region 8, shipping for this Case is complete. . The laboratory will note the issue in the SDG Narrative and proceed with analysis

ISSUE: The lab requests to move the following analytes from ICP-MS to ICP-AES due to elevated concentrations, As, Pb, Cu, Mn, & Zn. Bonner will keep the original MA prices for 1-4 and 11+.

REGION: what concentration levels are the labs finding for the metals in question? Is the lab seeing the elevated levels in all samples?

LAB: "All analytes are above the AES CRQL. If we identify a sample that's below CRQL we will analyze by ICP-MS. In terms of concentrations all analytes were chosen to protect the ICP-MS. For example, a large portion of the samples are over 10ppm for pb, zn & mn. They're actually high enough that we are having to do dilutions on the ICP-AES

REGION: the Region approves reporting the metals in question from the ICP-AES as described below.

Issue: The COC received with the samples for Case 46282 does not list a station location.

Resolution: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Analysis = Al, Ca, Fe, Mg, As, Pb, Cu, Mn, Zn BY ICP-AES Ag, Ba, Be, Cd, Cr, Co, Mo, Ni, Sb, Se, Tl, V, BY ICP-MS MA 2658.0 Hg

Laboratory Instrumentation Disclosure

Interelement corrections are applied to ICP-AES & ICP-MS. Background correction(s) are applied to ICP-AES, HG & CN data. Raw data ppb/ppm concentrations reflect any and all correction(s) applied. ICP-MS evaluates the following analyte masses by collision cell: 51V, 52Cr, 53ClO, 55Mn, 75-77As, 77-82Se & 103Rh.

BONNER Analytical
2703 Oak Grove Road
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601-264-2854 Phone
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ICP-AES
The analytical run began on 10/17/2016 @ 22:13 hrs. The matrix spike failed for Cu and Mn; a post spike was analyzed for both at 2X the indigenous level. MH1H63 was over the linear range for Fe; it was reanalyzed at an appropriate dilution.

ICP-MS
The analytical run began on 10/18/2016 @ 17:36 hrs. MH1H61 was outside the range for Tb and Ho; Sb, Ba, Cd, Ni, Mo, Tl and Ag were reported from a 2X dilution. The matrix spike failed for Sb and Mo; a post spike was analyzed for both at 2X the CRQL. QC failed on initial digestion: parent sample and QC were digested again on 10/24/2016 and reanalyzed.

Mercury
No discrepancies.

Sample Equation:

Lab ID 6100167-14 EPA Sample # MH1H63

Date & Time 10/18/2016 @ 13:51

ICP-AES: (Analyte Fe) µg/L * (0.100 L) / (1.00 g) * 100 % / 79.1 % * 1000 g / 1 kg * 1 mg / 1000 µg x 3 = 68 200 mg/kg
179900

Date & Time 10/19/2016 @ 02:15

ICP-AES: (Analyte Ba) µg/L * ~~(0.100 L)~~ (0.500 L) LCT 10-26-16 / (1.00 g) * 100 % / 79.1 % * 1000 g / 1 kg * 1 mg / 1000 µg = 63.9 mg/kg
101.1000

Date & Time 10/18/2016 @ 15:40

Hg: µg/L * (0.100 L) / (0.50 g) * 100 % / 79.1 % * 1000 g / 1 kg * 1 mg / 1000 µg = 0.026 mg/kg
0.1047

Authorized by _____
Data Package Reviewer

Date: 09/21/2016	**MA:** 2658.0	**Title:** ICP-MS Analysis Plus Molybdenum
Method Source: ISM02.3	**Method:** ICP-MS	
Matrix: Soil/Sediment		

Summary of Modification

The purpose of this modified analysis is to analyze soil/sediment samples by ICP-MS with the addition of the non-routine analyte Molybdenum (Mo). Unless specifically modified by this modification, all analyses, Quality Control (QC), and reporting requirements specified in the SOW listed in your current EPA agreement remain unchanged and in full force and effect.

I. Analyte Modifications **Not applicable** ☐

Analyte	CAS Number	CRQL (mg/kg)	Spike Added (mg/kg)
Molybdenum (Mo)	7439-98-7	2.0	100

II. Calibration and QC Requirements **Not applicable** ☐

The Laboratory shall:

- Perform the Initial Calibration with at least one non-blank standard at or below the modified CRQL, converted to µg/L.
- Add Mo to the ICV and CCV at appropriate mid-range concentrations.
- Evaluate the ICB and CCB against the modified CRQL converted to µg/L.
- Evaluate the Preparation Blanks using the modified CRQL.
- Perform the Matrix Spike at the level specified above. Post-digestion spike requirements are per the SOW.
- Flag the Duplicates based on the modified CRQL.
- Prepare the LCS at 2 times the modified CRQL.

III. Preparation and Method Modifications **Not applicable** ☒

IV. Special Reporting Requirements **Not applicable** ☐

The Laboratory shall:

- Add Molybdenum to Forms 1, 2, 3, 4, 5A (5B), 6, 7, 8, 9, 11, 12, 15, and 16.
- Report the "J" and "U" qualifiers in accordance with the requirements in Exhibit B, Section 3.4.2.2.5.2, using the modified CRQL.

EPA SAMPLE NO.

MH1H50

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-01

% Solids: 82.5 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	3100	*	10/18/2016	0122
7440-38-2	Arsenic	51.8	*	10/18/2016	0122
7440-70-2	Calcium	143	J*	10/18/2016	0122
7440-50-8	Copper	26.2	*	10/18/2016	0122
7439-89-6	Iron	36200	*	10/18/2016	0122
7439-92-1	Lead	275	*	10/18/2016	0122
7439-95-4	Magnesium	675	*	10/18/2016	0122
7439-96-5	Manganese	118	*	10/18/2016	0122
7440-66-6	Zinc	75.2	*	10/18/2016	0122

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H51

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Matrix: Soil
Lab Sample ID: 6100167-02
% Solids: 71.2
Date Received: 10/13/2016
Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	9110	*	10/18/2016	0126
7440-38-2	Arsenic	46.6	*	10/18/2016	0126
7440-70-2	Calcium	1270	*	10/18/2016	0126
7440-50-8	Copper	155	*	10/18/2016	0126
7439-89-6	Iron	31800	*	10/18/2016	0126
7439-92-1	Lead	664	*	10/18/2016	0126
7439-95-4	Magnesium	1690	*	10/18/2016	0126
7439-96-5	Manganese	353	*	10/18/2016	0126
7440-66-6	Zinc	613	*	10/18/2016	0126

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H52

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-03

% Solids: 92.4 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	6880	*	10/18/2016	0130
7440-38-2	Arsenic	63.3	*	10/18/2016	0130
7440-70-2	Calcium	1010	*	10/18/2016	0130
7440-50-8	Copper	61.4	*	10/18/2016	0130
7439-89-6	Iron	42100	*	10/18/2016	0130
7439-92-1	Lead	568	*	10/18/2016	0130
7439-95-4	Magnesium	1970	*	10/18/2016	0130
7439-96-5	Manganese	289	*	10/18/2016	0130
7440-66-6	Zinc	898	*	10/18/2016	0130

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H53

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-04

% Solids: 68.9 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	6620	*	10/18/2016	0147
7440-38-2	Arsenic	34.2	*	10/18/2016	0147
7440-70-2	Calcium	927	*	10/18/2016	0147
7440-50-8	Copper	94.9	*	10/18/2016	0147
7439-89-6	Iron	34900	*	10/18/2016	0147
7439-92-1	Lead	222	*	10/18/2016	0147
7439-95-4	Magnesium	1930	*	10/18/2016	0147
7439-96-5	Manganese	261	*	10/18/2016	0147
7440-66-6	Zinc	212	*	10/18/2016	0147

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H54

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-05

% Solids: 85.7 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	4180	*	10/18/2016	0151
7440-38-2	Arsenic	40.9	*	10/18/2016	0151
7440-70-2	Calcium	113	J*	10/18/2016	0151
7440-50-8	Copper	20.5	*	10/18/2016	0151
7439-89-6	Iron	29900	*	10/18/2016	0151
7439-92-1	Lead	101	*	10/18/2016	0151
7439-95-4	Magnesium	1010	*	10/18/2016	0151
7439-96-5	Manganese	73.3	*	10/18/2016	0151
7440-66-6	Zinc	33.6	*	10/18/2016	0151

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H55

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-06

% Solids: 79.6 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	4300	*	10/18/2016	0155
7440-38-2	Arsenic	482	*	10/18/2016	0155
7440-70-2	Calcium	540	J*	10/18/2016	0155
7440-50-8	Copper	421	*	10/18/2016	0155
7439-89-6	Iron	33400	*	10/18/2016	0155
7439-92-1	Lead	492	*	10/18/2016	0155
7439-95-4	Magnesium	1270	*	10/18/2016	0155
7439-96-5	Manganese	184	*	10/18/2016	0155
7440-66-6	Zinc	37.4	*	10/18/2016	0155

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H56

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-07

% Solids: 83.4 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7620	*	10/18/2016	0200
7440-38-2	Arsenic	31.3	*	10/18/2016	0200
7440-70-2	Calcium	455	J*	10/18/2016	0200
7440-50-8	Copper	13.4	*	10/18/2016	0200
7439-89-6	Iron	25200	*	10/18/2016	0200
7439-92-1	Lead	72.5	*	10/18/2016	0200
7439-95-4	Magnesium	2180	*	10/18/2016	0200
7439-96-5	Manganese	147	*	10/18/2016	0200
7440-66-6	Zinc	47.5	*	10/18/2016	0200

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H57

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-08

% Solids: 58.9 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	6370	*	10/18/2016	0204
7440-38-2	Arsenic	91.7	*	10/18/2016	0204
7440-70-2	Calcium	182	J*	10/18/2016	0204
7440-50-8	Copper	67.8	*	10/18/2016	0204
7439-89-6	Iron	42000	*	10/18/2016	0204
7439-92-1	Lead	1770	*	10/18/2016	0204
7439-95-4	Magnesium	1270	*	10/18/2016	0204
7439-96-5	Manganese	78.9	*	10/18/2016	0204
7440-66-6	Zinc	683	*	10/18/2016	0204

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H58

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-09

% Solids: 79.8 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	9430	*	10/18/2016	0208
7440-38-2	Arsenic	36.1	*	10/18/2016	0208
7440-70-2	Calcium	784	*	10/18/2016	0208
7440-50-8	Copper	25.1	*	10/18/2016	0208
7439-89-6	Iron	26800	*	10/18/2016	0208
7439-92-1	Lead	169	*	10/18/2016	0208
7439-95-4	Magnesium	1980	*	10/18/2016	0208
7439-96-5	Manganese	189	*	10/18/2016	0208
7440-66-6	Zinc	77.7	*	10/18/2016	0208

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H59

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-10

% Solids: 76.7 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	11600	*	10/18/2016	0212
7440-38-2	Arsenic	32.4	*	10/18/2016	0212
7440-70-2	Calcium	2520	*	10/18/2016	0212
7440-50-8	Copper	87.9	*	10/18/2016	0212
7439-89-6	Iron	39200	*	10/18/2016	0212
7439-92-1	Lead	275	*	10/18/2016	0212
7439-95-4	Magnesium	3740	*	10/18/2016	0212
7439-96-5	Manganese	1120	*	10/18/2016	0212
7440-66-6	Zinc	739	*	10/18/2016	0212

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H60

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-11

% Solids: 84.1 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	10700	*	10/18/2016	0216
7440-38-2	Arsenic	13.1	*	10/18/2016	0216
7440-70-2	Calcium	2160	*	10/18/2016	0216
7440-50-8	Copper	49.6	*	10/18/2016	0216
7439-89-6	Iron	27300	*	10/18/2016	0216
7439-92-1	Lead	211	*	10/18/2016	0216
7439-95-4	Magnesium	3380	*	10/18/2016	0216
7439-96-5	Manganese	467	*	10/18/2016	0216
7440-66-6	Zinc	142	*	10/18/2016	0216

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H61

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-12

% Solids: 63.8 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	8330	*	10/18/2016	0220
7440-38-2	Arsenic	10.5	*	10/18/2016	0220
7440-70-2	Calcium	1840	*	10/18/2016	0220
7440-50-8	Copper	32.2	*	10/18/2016	0220
7439-89-6	Iron	18800	*	10/18/2016	0220
7439-92-1	Lead	29.4	*	10/18/2016	0220
7439-95-4	Magnesium	1930	*	10/18/2016	0220
7439-96-5	Manganese	954	*	10/18/2016	0220
7440-66-6	Zinc	798	*	10/18/2016	0220

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H62

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-13

% Solids: 81.5 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	10500	*	10/18/2016	0233
7440-38-2	Arsenic	18.6	*	10/18/2016	0233
7440-70-2	Calcium	2620	*	10/18/2016	0233
7440-50-8	Copper	21.3	*	10/18/2016	0233
7439-89-6	Iron	24700	*	10/18/2016	0233
7439-92-1	Lead	100	*	10/18/2016	0233
7439-95-4	Magnesium	3380	*	10/18/2016	0233
7439-96-5	Manganese	705	*	10/18/2016	0233
7440-66-6	Zinc	211	*	10/18/2016	0233

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H63

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-14

% Solids: 79.1 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7210	*	10/18/2016	0237
7440-38-2	Arsenic	25.6	*	10/18/2016	0237
7440-70-2	Calcium	1080	*	10/18/2016	0237
7440-50-8	Copper	30.8	*	10/18/2016	0237
7439-89-6	Iron	68200	D*	10/18/2016	1351
7439-92-1	Lead	96.4	*	10/18/2016	0237
7439-95-4	Magnesium	1990	*	10/18/2016	0237
7439-96-5	Manganese	2180	*	10/18/2016	0237
7440-66-6	Zinc	102	*	10/18/2016	0237

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H64

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-15

% Solids: 67.9 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	5190	*	10/18/2016	0242
7440-38-2	Arsenic	57.6	*	10/18/2016	0242
7440-70-2	Calcium	1180	*	10/18/2016	0242
7440-50-8	Copper	14.3	*	10/18/2016	0242
7439-89-6	Iron	44300	*	10/18/2016	0242
7439-92-1	Lead	767	*	10/18/2016	0242
7439-95-4	Magnesium	516	J*	10/18/2016	0242
7439-96-5	Manganese	189	*	10/18/2016	0242
7440-66-6	Zinc	65.8	*	10/18/2016	0242

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H65

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-16

% Solids: 77.3 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	3520	*	10/18/2016	0246
7440-38-2	Arsenic	44.8	*	10/18/2016	0246
7440-70-2	Calcium	57.8	J*	10/18/2016	0246
7440-50-8	Copper	8.7	*	10/18/2016	0246
7439-89-6	Iron	55600	*	10/18/2016	0246
7439-92-1	Lead	664	*	10/18/2016	0246
7439-95-4	Magnesium	171	J*	10/18/2016	0246
7439-96-5	Manganese	9.0	*	10/18/2016	0246
7440-66-6	Zinc	24.7	*	10/18/2016	0246

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H66

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-17

% Solids: 67.5 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7100	*	10/18/2016	0250
7440-38-2	Arsenic	68.4	*	10/18/2016	0250
7440-70-2	Calcium	957	*	10/18/2016	0250
7440-50-8	Copper	47.0	*	10/18/2016	0250
7439-89-6	Iron	30900	*	10/18/2016	0250
7439-92-1	Lead	430	*	10/18/2016	0250
7439-95-4	Magnesium	1330	*	10/18/2016	0250
7439-96-5	Manganese	965	*	10/18/2016	0250
7440-66-6	Zinc	156	*	10/18/2016	0250

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H67

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-18

% Solids: 74.0 Date Received: 10/13/2016

Analytical method: ICP-AES

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	8720	*	10/18/2016	0254
7440-38-2	Arsenic	55.8	*	10/18/2016	0254
7440-70-2	Calcium	1320	*	10/18/2016	0254
7440-50-8	Copper	14.7	*	10/18/2016	0254
7439-89-6	Iron	41500	*	10/18/2016	0254
7439-92-1	Lead	600	*	10/18/2016	0254
7439-95-4	Magnesium	1510	*	10/18/2016	0254
7439-96-5	Manganese	145	*	10/18/2016	0254
7440-66-6	Zinc	48.4	*	10/18/2016	0254

NOTE: Hardness (total) is reported in mg/L

Comments:

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Initial Calibration Verification Source: In House, Lot: USEPA(0307) + ICV-3

Continuing Calibration Verification Source: In-House, Lot: B6G0037

Run Batch: BJ62521MH1H50 Analytical method: ICP-AES

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV01				ID: CCV01				ID: CCV02		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Aluminum	2521.0	2550	101	0	140000	143000	102	0	133000	95	0
Arsenic	999.00	973	97	0	2000.0	2110	105	0	1970	98	1
Calcium	10026	10300	103	0	200000	201000	101	0	194000	97	0
Copper	492.00	479	97	0	5000.0	5130	103	0	4910	98	0
Iron	5082.0	5350	105	0	125000	131000	105	0	123000	98	0
Lead	1002.0	995	99	0	5750.0	5620	98	0	5250	91	0
Magnesium	6074.0	6050	100	1	200000	199000	99	0	189000	94	0
Manganese	499.00	508	102	0	9000.0	8890	99	0	8400	93	0
Zinc	1025.0	1030	101	0	8000.0	8160	102	0	7720	97	0

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 , MA No.: SDG No.: MH1H50

Initial Calibration Verification Source: In House, Lot: USEPA(0307) + ICV-3

Continuing Calibration Verification Source: In-House, Lot: B6G0037

Run Batch: BJ62521MH1H50 Analytical method: ICP-AES

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID: CCV03				ID: CCV04		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Aluminum					140000	133000	95	0	133000	95	0
Arsenic					2000.0	1970	98	0	1960	98	0
Calcium					200000	192000	96	1	193000	97	0
Copper					5000.0	4940	99	0	4950	99	0
Iron					125000	122000	98	1	121000	97	0
Lead					5750.0	5260	92	0	5240	91	0
Magnesium					200000	187000	94	1	187000	93	0
Manganese					9000.0	8360	93	0	8340	93	0
Zinc					8000.0	7730	97	0	7680	96	0

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Initial Calibration Verification Source: In House, Lot: USEPA(0307) + ICV-3

Continuing Calibration Verification Source: In-House, Lot: B6G0037

Run Batch: BJ62521MH1H50 Analytical method: ICP-AES

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID:CCV05				ID:		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Aluminum					140000	131000	93	0			
Arsenic					2000.0	1930	96	0			
Calcium					200000	190000	95	1			
Copper					5000.0	4850	97	0			
Iron					125000	119000	95	1			
Lead					5750.0	5160	90	0			
Magnesium					200000	183000	92	1			
Manganese					9000.0	8190	91	0			
Zinc					8000.0	7570	95	0			

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Initial Calibration Verification Source: In House, Lot: USEPA(0307) + ICV-3

Continuing Calibration Verification Source: In-House, Lot: B6G0037

Run Batch: BJ62522101816 CLP A Analytical method: ICP-AES

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV01				ID: CCV01				ID: CCV02		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Copper	492.00	477	97	0	5000.0	5130	103	0	5150	103	0
Iron	5082.0	5160	102	0	125000	124000	100	1	124000	100	1
Manganese	499.00	522	105	0	9000.0	9020	100	0	9030	100	0

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Initial Calibration Verification Source: In House, Lot: USEPA(0307) + ICV-3

Continuing Calibration Verification Source: In-House, Lot: B6G0037

Run Batch: BJ62522101816 CLP A Analytical method: ICP-AES

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID: CCV03				ID: CCV04		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Copper					5000.0	5140	103	0	5120	102	0
Iron					125000	124000	99	0	123000	98	1
Manganese					9000.0	9010	100	0	8930	99	0

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Initial Calibration Verification Source: In House, Lot: USEPA(0307) + ICV-3

Continuing Calibration Verification Source: In-House, Lot: B6G0037

Run Batch: BJ62522101816 CLP A Analytical method: ICP-AES

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID:CCV05				ID:CCV06		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Copper					5000.0	5120	102	0	5110	102	0
Iron					125000	122000	98	0	121000	97	1
Manganese					9000.0	8860	99	0	8760	97	0

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: ICP-AES Preparation Batch: QJ14019

Run Batch: BJ62521MH1H50 Preparation Method: 3050B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB01	Q	ID: CCB01	Q	ID: CCB02	Q	ID: CCB03	Q	ID: PBS01	Q
Aluminum	-19.0	J	200	U	-18.3	J	-16.6	J	-2.5	J
Arsenic	10	U	10	U	10	U	10	U	-0.13	J
Calcium	5000	U	5000	U	5000	U	5000	U	-5.9	J
Copper	25.0	U	25.0	U	25.0	U	25.0	U	-0.054	J
Iron	-22.9	J	-13.8	J	-19.7	J	-17.9	J	-3.2	J
Lead	10	U	10	U	10	U	10	U	1.0	U
Magnesium	-50.1	J	-28.2	J	-34.5	J	-34.4	J	-6.1	J
Manganese	-1.6	J	-0.80	J	-1.1	J	-0.85	J	-0.18	J
Zinc	60.0	U	60.0	U	60.0	U	60.0	U	6.0	U

NOTE: Hardness (total) is reported in mg/L

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: ICP-AES Preparation Batch: QJ14019

Run Batch: BJ62521MH1H50 Preparation Method: 3050B

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
	ID:	Q	ID: CCB04	Q	ID: CCB05	Q	ID:	Q	ID:	Q
Aluminum			200	U	200	U				
Arsenic			10	U	10	U				
Calcium			5000	U	5000	U				
Copper			25.0	U	25.0	U				
Iron			100	U	-15.0	J				
Lead			10	U	10	U				
Magnesium			-35.9	J	-36.6	J				
Manganese			-0.77	J	-0.73	J				
Zinc			60.0	U	60.0	U				

NOTE: Hardness (total) is reported in mg/L

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: ICP-AES Preparation Batch:

Run Batch: BJ62522101816 CLP A Preparation Method:

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB01	Q	ID: CCB01	Q	ID: CCB02	Q	ID: CCB03	Q	ID:	Q
Copper	25.0	U	25.0	U	-1.9	J	-1.9	J		
Iron	100	U	100	U	100	U	12.8	J		
Manganese	15.0	U	0.61	J	15.0	U	0.64	J		

NOTE: Hardness (total) is reported in mg/L

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: ICP-AES Preparation Batch:

Run Batch: BJ62522101816_CLP_A Preparation Method:

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
	ID:	Q	ID: CCB04	Q	ID: CCB05	Q	ID: CCB06	Q	ID:	Q
Copper			-1.8	J	-1.6	J	-1.7	J		
Iron			15.6	J	16.0	J	18.5	J		
Manganese			0.77	J	1.1	J	0.94	J		

NOTE: Hardness (total) is reported in mg/L

FORM 4-IN
ICP INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Analytical Method: ICP-AES
ICSA Source: USEPA, Lot:ICSA-1211
Instrument ID: ICAPP02
ICSB Source: USEPA, Lot:ICSA-1211 & ICSB-071C
Run Batch: BJ62521MH1H50

Concentration Units: ug/L

Analyte	True		Found			
	ICSA	ICSAB	ICSA	%R	ICSAB	%R
Aluminum	254900	246800	258000	101	257000	104
Arsenic	0	104	-9.0		95.9	92
Calcium	244500	234900	245000	100	243000	103
Copper	2	511	-11	-550	495	97
Iron	100700	99320	103000	102	103000	104
Lead	0	49	7.4		55.2	113
Magnesium	255400	248000	256000	100	255000	103
Manganese	7	507	10.9	156	508	100
Zinc	0	952	2.0		1050	110

FORM 4-IN
ICP INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Analytical Method: ICP-AES
ICSA Source: USEPA, Lot:ICSA-1211
Instrument ID: ICAPP02
ICSB Source: USEPA, Lot:ICSA-1211 & ICSB-071C
Run Batch: BJ62522101816 CLP A

Concentration Units: ug/L

Analyte	True		Found			
	ICSA	ICSAB	ICSA	%R	ICSAB	%R
Aluminum	254900	246800	257000	101	257000	104
Calcium	244500	234900	242000	99	243000	103
Copper	2	511	-13	-650	494	97
Iron	100700	99320	97800	97	97900	99
Magnesium	255400	248000	254000	99	254000	102
Manganese	7	507	12.7	181	521	103

EPA SAMPLE NO.

MH1H52S

FORM 5A-IN
MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Analytical Method: ICP-AES

% Solids: 92.4

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	Q	Sample Result (SR)	Q	Spike Added (SA)	%R	Q
Arsenic		53.4		63.3		8.66	-114	
Copper	75-125	97.3		61.4		54.1	66	*
Lead		446		568		4.33	-2807	
Manganese	75-125	305		289		108	15	*
Zinc		903		898		108	5	

EPA SAMPLE NO.

MH1H52A

FORM 5B-IN
POST-DIGESTION/DISTILLATION SPIKE
SAMPLE RECOVERY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No. 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Analytical Method: ICP-AES

% Solids: 92.4

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	Q	Sample Result (SR)	Q	Spike Added (SA)	%R	Q
Copper	75-125	178		61.4		113.0	91	
Manganese	75-125	879		289		530.0	99	

EPA SAMPLE NO.

FORM 6-IN
DUPLICATES

MH1H52D

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.:46282 MA No.: SDG No.: MH1H50

Matrix: Soil Analytical Method: ICP-AES

% Solids: 92.4

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

Analyte	Control Limit	Sample (S)	Q	Duplicate (D)	Q	RPD	Q
Aluminum		6880		6350		8	
Arsenic		63.3		41.9		41	*
Calcium	541	1010		829		19	
Copper		61.4		44.3		32	*
Iron		42100		31100		30	*
Lead		568		382		39	*
Magnesium	541	1970		1960		1	
Manganese		289		274		5	
Zinc		898		562		46	*

NOTE: Hardness (total) is reported in mg/L

EPA SAMPLE NO.

LCS01

FORM 7-IN
LABORATORY CONTROL SAMPLE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Preparation Method: 3050B

Analytical method: ICP-AES Preparation Batch: QJ14019

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

Analyte	True	Found	%R
Aluminum	40.000	35.0	88
Arsenic	2.0000	1.7	85
Calcium	1000.0	1020	102
Copper	5.0000	4.6	92
Iron	20.000	17.2	86
Lead	2.0000	2.1	105
Magnesium	1000.0	969	97
Manganese	3.0000	2.8	93
Zinc	12.000	11.9	99

EPA SAMPLE NO.

MH1H52L

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

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Analytical method: ICP-AES

% Solids: 92.4

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

Analyte	Initial Sample Result (I)	Q	Serial Dilution Result (S)	Q	% Difference	Q
Aluminum	6880		8080		17	*
Arsenic	63.3		69.6		10	
Calcium	1010		1140	J	14	*
Copper	61.4		69.7		14	*
Iron	42100		49400		17	*
Lead	568		643		13	*
Magnesium	1970		2320	J	18	*
Manganese	289		340		18	*
Zinc	898		1010		13	*

NOTE: Hardness (total) is reported in mg/L

FORM 9-IN
METHOD DETECTION LIMIT

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Analytical Method: ICP-AES Instrument ID: ICAPP02

Preparation Method: 3050B

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

Analyte	Wavelength/Mass	MDL	Date Analyzed
Aluminum	396.10 nm	2.0	01/28/2016
Arsenic	189.00 nm	0.13	01/28/2016
Calcium	318.10 nm	5.8	01/28/2016
Copper	324.70 nm	0.051	01/28/2016
Iron	258.90 nm	0.83	01/28/2016
Lead	220.30 nm	0.11	02/03/2016
Magnesium	279.00 nm	2.2	01/28/2016
Manganese	257.60 nm	0.061	01/28/2016
Zinc	206.20 nm	0.26	01/28/2016

FORM 10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Instrument ID: ICAPP02 Date: 01/27/2016

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Cr
Aluminum	396.1	0	0	0	0	0
Arsenic	189	0	0	0	0	-0.000524
Calcium	318.1	0	0	0	0	0
Copper	324.7	0	0	0	0	0
Iron	258.9	0	0	0	0	0
Lead	220.3	0.000141	0.000001	0.00002	0	0
Magnesium	279	0	0	0	0	0
Manganese	257.6	0	0	0	0	0
Zinc	206.2	0	0	0	0	0

FORM 10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Instrument ID: ICAPP02 Date: 01/27/2016

Analyte	Wave-length (nm)	Interelement Correction Factors for: Cu	Mo			
Aluminum	396.1	0	0.038865			
Arsenic	189	0	0			
Calcium	318.1	0	0			
Copper	324.7	0	0			
Iron	258.9	0	0			
Lead	220.3	0.00009	0			
Magnesium	279	0	0			
Manganese	257.6	0	0			
Zinc	206.2	0	0			

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: ICAPP02
Analytical Method: ICP-AES
Start Date: 10/17/2016
End Date: 10/18/2016
Run Batch: BJ62521MH1H50

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	
S01	1.0	2213	X		X				X			X	X	X	X	X									X		
S02	1.0	2218	X		X				X			X	X	X	X	X									X		
S03	1.0	2222	X		X				X			X	X	X	X	X									X		
S04	1.0	2226	X		X				X			X	X	X	X	X									X		
S05	1.0	2230	X		X				X			X	X	X	X	X									X		
S06	1.0	2235	X		X				X			X	X	X	X	X									X		
S07	1.0	2239	X						X				X	X	X	X											
S08	1.0	2243	X										X	X													
S09	1.0	2248											X			X											
ICV01	1.0	2252	X		X				X			X	X	X	X	X									X		
ICB01	1.0	2256	X		X				X			X	X	X	X	X									X		
ICSA01	1.0	2301	X		X				X			X	X	X	X	X									X		
ICSAB01	1.0	2305	X		X				X			X	X	X	X	X									X		
CCV01	1.0	2309	X		X				X			X	X	X	X	X									X		
CCB01	1.0	2313	X		X				X			X	X	X	X	X									X		
CCV02	1.0	0039	X		X				X			X	X	X	X	X									X		
CCB02	1.0	0043	X		X				X			X	X	X	X	X									X		
CCV03	1.0	0105	X		X				X			X	X	X	X	X									X		
CCB03	1.0	0109	X		X				X			X	X	X	X	X									X		
PBS01	1.0	0113	X		X				X			X	X	X	X	X									X		
LCS01	1.0	0118	X		X				X			X	X	X	X	X									X		
MH1H50	1.0	0122	X		X				X			X	X	X	X	X									X		
MH1H51	1.0	0126	X		X				X			X	X	X	X	X									X		
MH1H52	1.0	0130	X		X				X			X	X	X	X	X									X		
MH1H52S	1.0	0134			X							X		X		X									X		
MH1H52D	1.0	0139	X		X				X			X	X	X	X	X									X		
MH1H52L	5.0	0143	X		X				X			X	X	X	X	X									X		
MH1H53	1.0	0147	X		X				X			X	X	X	X	X									X		
MH1H54	1.0	0151	X		X				X			X	X	X	X	X									X		
MH1H55	1.0	0155	X		X				X			X	X	X	X	X									X		

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: ICAPP02
Analytical Method: ICP-AES
Start Date: 10/17/2016
End Date: 10/18/2016
Run Batch: BJ62521MH1H50

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	
MH1H56	1.0	0200	X		X				X			X	X	X	X	X									X		
MH1H57	1.0	0204	X		X				X			X	X	X	X	X									X		
MH1H58	1.0	0208	X		X				X			X	X	X	X	X									X		
MH1H59	1.0	0212	X		X				X			X	X	X	X	X									X		
MH1H60	1.0	0216	X		X				X			X	X	X	X	X									X		
MH1H61	1.0	0220	X		X				X			X	X	X	X	X									X		
CCV04	1.0	0225	X		X				X			X	X	X	X	X									X		
CCB04	1.0	0229	X		X				X			X	X	X	X	X									X		
MH1H62	1.0	0233	X		X				X			X	X	X	X	X									X		
MH1H63	1.0	0237	X		X				X			X		X	X	X									X		
MH1H64	1.0	0242	X		X				X			X	X	X	X	X									X		
MH1H65	1.0	0246	X		X				X			X	X	X	X	X									X		
MH1H66	1.0	0250	X		X				X			X	X	X	X	X									X		
MH1H67	1.0	0254	X		X				X			X	X	X	X	X									X		
CCV05	1.0	0258	X		X				X			X	X	X	X	X									X		
CCB05	1.0	0303	X		X				X			X	X	X	X	X									X		

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: ICAPP02
Analytical Method: ICP-AES
Start Date: 10/18/2016
End Date: 10/18/2016
Run Batch: BJ62522101816_CLP_A

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	
S01	1.0	1038										X	X			X											
S02	1.0	1043										X	X			X											
S03	1.0	1047										X	X			X											
S04	1.0	1051										X	X			X											
S05	1.0	1055										X	X			X											
S06	1.0	1059										X	X			X											
S07	1.0	1104											X			X											
S08	1.0	1108											X														
S09	1.0	1112														X											
ICV01	1.0	1117										X	X			X											
ICB01	1.0	1121										X	X			X											
ICSA01	1.0	1125	X						X			X	X		X	X											
ICSAB01	1.0	1130	X						X			X	X		X	X											
CCV01	1.0	1134										X	X			X											
CCB01	1.0	1138										X	X			X											
CCV02	1.0	1147										X	X			X											
CCB02	1.0	1151										X	X			X											
CCV03	1.0	1200										X	X			X											
CCB03	1.0	1204										X	X			X											
ZZZZZZ	1.0	1208																									
MH1H52A	1.0	1212										X				X											
CCV04	1.0	1217										X	X			X											
CCB04	1.0	1221										X	X			X											
CCV05	1.0	1325										X	X			X											
CCB05	1.0	1329										X	X			X											
ZZZZZZ	1.0	1333																									
ZZZZZZ	1.0	1343																									
ZZZZZZ	1.0	1347																									
MH1H63	3.0	1351											X														
CCV06	1.0	1356										X	X			X											

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.

Contract: EPW14029

Lab Code: BON

Case No.: 46282

MA No.:

SDG No.: MH1H50

Instrument ID: ICAPP02

Analytical Method: ICP-AES

Start Date: 10/18/2016

End Date: 10/18/2016

Run Batch: BJ62522101816_CLP_A

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	
CCB06	1.0	1400										X	X			X											

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: ICAPP02
Start Date: 10/17/2016
Analytical method: ICP-AES
Run Batch: BJ62521MH1H50

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	0.0	22.8		100	96.9	3	800	805	-1
Arsenic	0.0	0.89		10.0	10.8	-8	80.0	76.7	4
Calcium	0.0	23.0		250	236	6	2000	2040	-2
Copper	0.0	3.0		25.0	26.9	-7	200	193	4
Iron	0.0	-1.6		100	77.8	22	800	834	-4
Lead	0.0	0.46		10.0	11.0	-10	80.0	78.2	2
Magnesium	0.0	45.5		250	248	1	2000	2030	-1
Manganese	0.0	-0.061		15.0	14.6	3	120	122	-2
Zinc	0.0	-4.7		40.0	38.5	4	320	324	-1

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.

Contract: EPW14029

Lab Code: BON

Case No.: 46282

MA No.:

SDG No.: MH1H50

Instrument ID: ICAPP02

Start Date: 10/17/2016

Analytical method: ICP-AES

Run Batch: BJ62521MH1H50

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	4000	4040	-1	20000	20000	0	40000	40300	-1
Arsenic	400	385	4	2000	1990	1	4000	4030	-1
Calcium	10000	10300	-3	50000	50600	-1	100000	99800	0
Copper	1000	958	4	5000	4980	0	10000	10100	-1
Iron	4000	4260	-7	20000	21200	-6	40000	41500	-4
Lead	400	392	2	2000	1940	3	4000	3830	4
Magnesium	10000	10100	-1	50000	49800	0	100000	98600	1
Manganese	600	612	-2	3000	3010	0	6000	5930	1
Zinc	1600	1630	-2	8000	8110	-1	16000	15900	1

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: ICAPP02
Start Date: 10/17/2016
Analytical method: ICP-AES
Run Batch: BJ62521MH1H50

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	320000	333000	-4	400000	387000	3			
Arsenic									
Calcium	400000	399000	0						
Copper									
Iron	280000	292000	-4	350000	361000	-3	450000	424000	6
Lead	10000	10100	-1	25000	25200	-1			
Magnesium	400000	402000	0						
Manganese	16000	15700	2				22500	22900	-2
Zinc									

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.

Contract: EPW14029

Lab Code: BON

Case No.: 46282

MA No.:

SDG No.: MH1H50

Instrument ID: ICAPP02

Start Date: 10/18/2016

Analytical method: ICP-AES

Run Batch: BJ62522101816 CLP A

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Copper	0.0	4.2		25.0	26.6	-6	200	195	3
Iron	0.0	-42		100	69.8	30	800	837	-5
Manganese	0.0	-3.8		15.0	12.9	14	120	125	-4

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: ICAPP02
Start Date: 10/18/2016
Analytical method: ICP-AES
Run Batch: BJ62522101816 CLP A

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Copper	1000	959	4	5000	4990	0	10000	10100	-1
Iron	4000	4320	-8	20000	21600	-8	40000	43000	-8
Manganese	600	630	-5	3000	3110	-4	6000	6170	-3

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: ICAPP02
Start Date: 10/18/2016
Analytical method: ICP-AES
Run Batch: BJ62522101816 CLP A
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Copper									
Iron	280000	292000	-4	350000	372000	-6			
Manganese	16000	15900	1				22500	22300	1

FORM 16-IN
INITIAL CALIBRATION SUMMARY

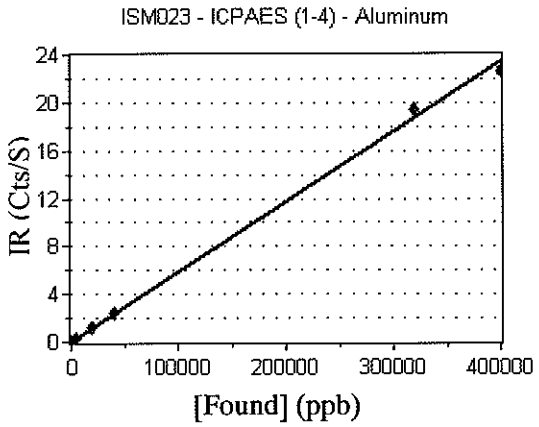
Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: ICAPP02
Start Date: 10/17/2016
Analytical method: ICP-AES
Run Batch: BJ62521MH1H50

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Aluminum	0.998197	0.000058584	-31.1743479	WLR	Inverse Conc
Arsenic	0.9999115	0.0001700185	-1.7764584	WLR	Inverse Conc
Calcium	0.9999917	0.00001315368	21.0995706	WLR	Inverse Conc
Copper	0.9999187	0.0003781499	2.7438616	WLR	Inverse Conc
Iron	0.9961363	0.00003438119	30.3762901	WLR	Inverse Conc
Lead	0.9998796	0.0005119475	1.7322276	WLR	Inverse Conc
Magnesium	0.9999639	0.00001395547	11.0804867	WLR	Inverse Conc
Manganese	0.9995613	0.0006722826	1.8161663	WLR	Inverse Conc
Zinc	0.9998376	0.001926143	5.5141596	WLR	Inverse Conc

FORM 16-IN
INITIAL CALIBRATION SUMMARY

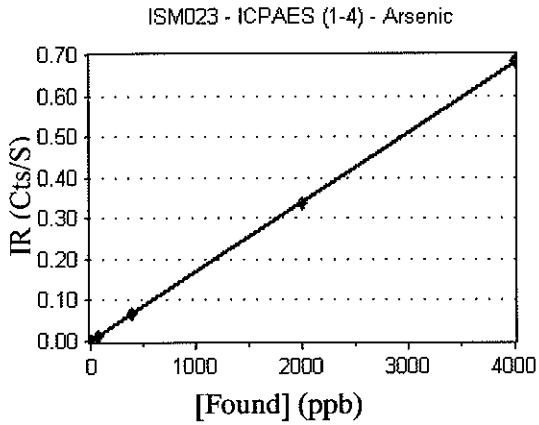
Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: ICAPP02
Start Date: 10/18/2016
Analytical method: ICP-AES
Run Batch: BJ62522101816 CLP A

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Copper	0.9999398	0.0003948081	2.5574653	WLR	Inverse Conc
Iron	0.9998887	0.00003066555	11.1704698	WLR	Inverse Conc
Manganese	0.9998155	0.0005503931	3.7011129	WLR	Inverse Conc



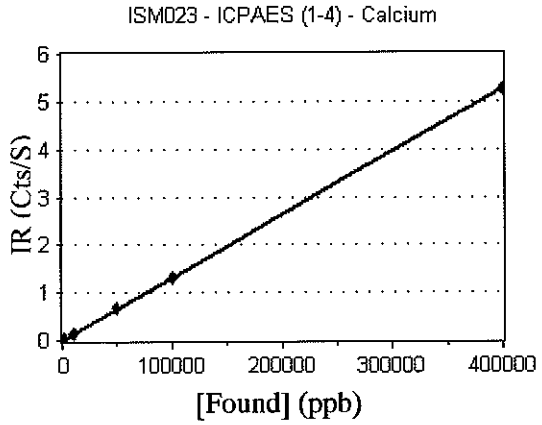
Calibration Plot: Aluminum
Calibration Type: Linear Regression Weighted 1/X
Corr. Coeff.: 0.998197
Fit: [Y] = 5.8584E-05 * [X] + -1.826318E-03
[y-intercept] = 31.17

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62521-CAL1	B6I0028	0	22.81	-0.00049	0
BJ62521-CAL2	B6G0026	100	96.89	0.00385	3
BJ62521-CAL3	B6G0027	800	805.28	0.04535	-1
BJ62521-CAL4	B6G0028	4000	4,040.80	0.2349	-1
BJ62521-CAL5	B6G0029	20000	20,005.91	1.1702	0
BJ62521-CAL6	B6G0030	40000	40,272.54	2.3575	-1
BJ62521-CAL7	B6G0031	320000	332,767.07	19.493	-4
BJ62521-CAL8	B6G0032	400000	386,911.55	22.665	3



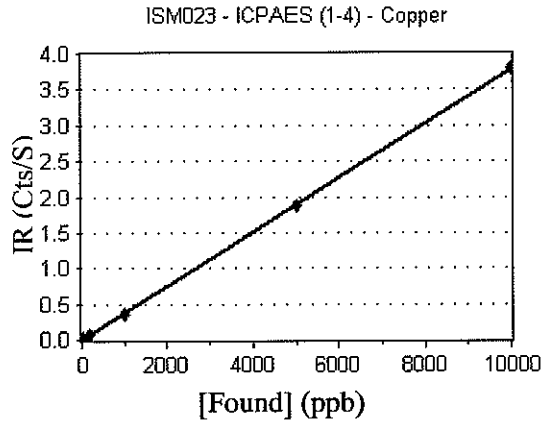
Calibration Plot: Arsenic
Calibration Type: Linear Regression Weighted 1/X
Corr. Coeff.: 0.9999115
Fit: [Y] = 1.700185E-04 * [X] + -3.020308E-04
[y-intercept] = 1.78

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62521-CAL1	B6I0028	0	0.89	-0.00015	0
BJ62521-CAL2	B6G0026	10	10.78	0.00153	-8
BJ62521-CAL3	B6G0027	80	76.71	0.01274	4
BJ62521-CAL4	B6G0028	400	384.73	0.06511	4
BJ62521-CAL5	B6G0029	2000	1,989.21	0.3379	1
BJ62521-CAL6	B6G0030	4000	4,028.57	0.68463	-1



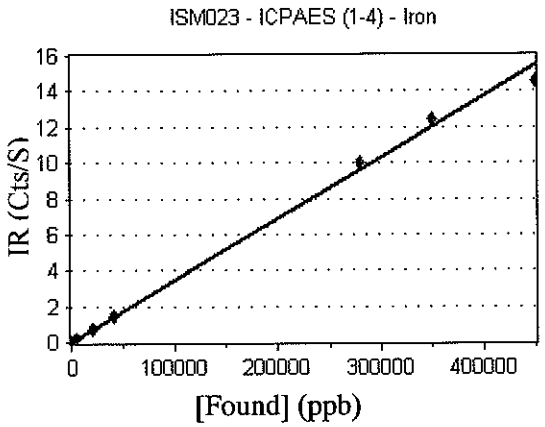
Calibration Plot: Calcium
Calibration Type: Linear Regression Weighted 1/X
Corr. Coeff.: 0.9999917
Fit: [Y] = 1.315368E-05 * [X] + 2.77537E-04
[y-intercept] = -21.10

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62521-CAL1	B6I0028	0	22.99	0.00058	0
BJ62521-CAL2	B6G0026	250	235.86	0.00338	6
BJ62521-CAL3	B6G0027	2000	2,039.16	0.0271	-2
BJ62521-CAL4	B6G0028	10000	10,283.24	0.13554	-3
BJ62521-CAL5	B6G0029	50000	50,633.93	0.6663	-1
BJ62521-CAL6	B6G0030	100000	99,776.07	1.3127	0
BJ62521-CAL7	B6G0031	400000	399,281.61	5.2523	0



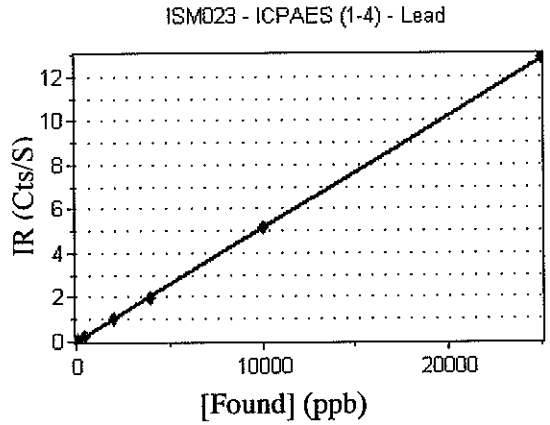
Calibration Plot: Copper
Calibration Type: Linear Regression Weighted 1/X
Corr. Coeff.: 0.9999187
Fit: [Y] = 3.781499E-04 * [X] + 1.037591E-03
[y-intercept] = -2.74

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62521-CAL1	B6I0028	0	2.97	0.00216	0
BJ62521-CAL2	B6G0026	25	26.87	0.0112	-7
BJ62521-CAL3	B6G0027	200	192.87	0.07397	4
BJ62521-CAL4	B6G0028	1000	957.99	0.3633	4
BJ62521-CAL5	B6G0029	5000	4,979.94	1.8842	0
BJ62521-CAL6	B6G0030	10000	10,067.34	3.808	-1



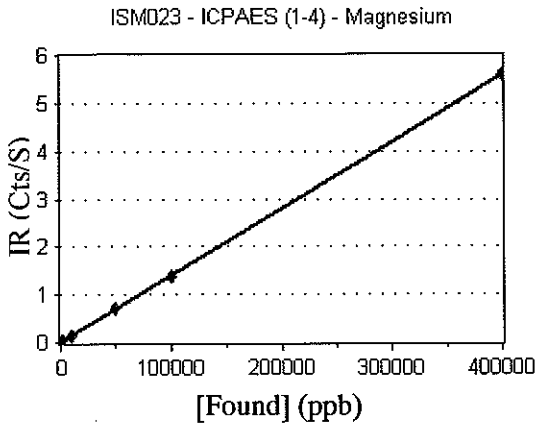
Calibration Plot: Iron
Calibration Type: Linear Regression Weighted 1/X
Corr. Coeff.: 0.9961363
Fit: [Y] = 3.438119E-05 * [X] + 1.044373E-03
[y-intercept] = -30.38

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62521-CAL1	B6I0028	0	-1.58	0.00099	0
BJ62521-CAL2	B6G0026	100	77.82	0.00372	22
BJ62521-CAL3	B6G0027	800	833.76	0.02971	-4
BJ62521-CAL4	B6G0028	4000	4,264.70	0.14767	-7
BJ62521-CAL5	B6G0029	20000	21,175.41	0.72908	-6
BJ62521-CAL6	B6G0030	40000	41,509.78	1.4282	-4
BJ62521-CAL7	B6G0031	280000	292,047.94	10.042	-4
BJ62521-CAL8	B6G0032	350000	361,359.09	12.425	-3
BJ62521-CAL9	B6J0169	450000	423,631.52	14.566	6



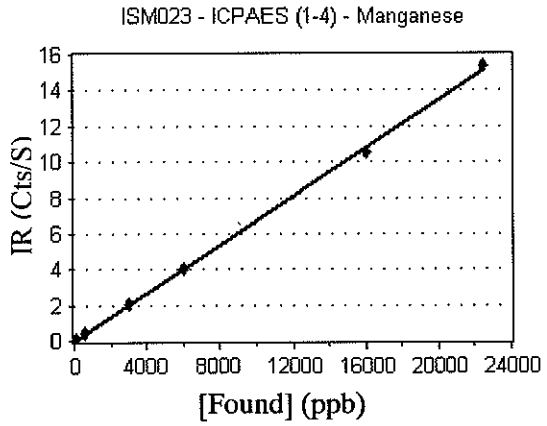
Calibration Plot: Lead
Calibration Type: Linear Regression Weighted 1/X
Corr. Coeff.: 0.9998796
Fit: [Y] = 5.119475E-04 * [X] + 8.868096E-04
[y-intercept] = -1.73

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62521-CAL1	B6I0028	0	0.46	0.00112	0
BJ62521-CAL2	B6G0026	10	11.00	0.00652	-10
BJ62521-CAL3	B6G0027	80	78.24	0.04094	2
BJ62521-CAL4	B6G0028	400	391.65	0.20139	2
BJ62521-CAL5	B6G0029	2000	1,942.53	0.99536	3
BJ62521-CAL6	B6G0030	4000	3,834.99	1.9642	4
BJ62521-CAL7	B6G0031	10000	10,054.96	5.1485	-1
BJ62521-CAL8	B6G0032	25000	25,176.63	12.89	-1



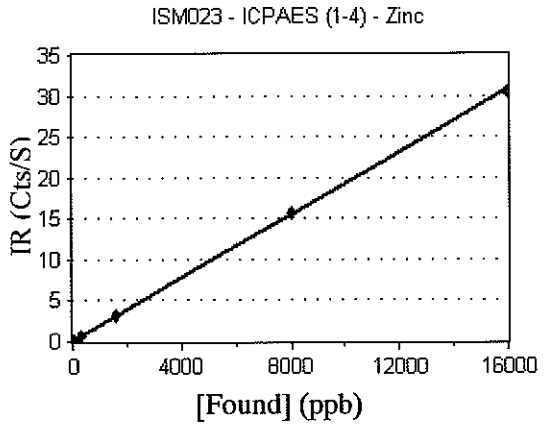
Calibration Plot: Magnesium
Calibration Type: Linear Regression Weighted 1/X
Corr. Coeff.: 0.9999639
Fit: [Y] = 1.395547E-05 * [X] + 1.546334E-04
[y-intercept] = -11.08

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62521-CAL1	B6I0028	0	45.53	0.00079	0
BJ62521-CAL2	B6G0026	250	248.32	0.00362	1
BJ62521-CAL3	B6G0027	2000	2,029.70	0.02848	-1
BJ62521-CAL4	B6G0028	10000	10,068.84	0.14067	-1
BJ62521-CAL5	B6G0029	50000	49,777.28	0.69482	0
BJ62521-CAL6	B6G0030	100000	98,552.42	1.3755	1
BJ62521-CAL7	B6G0031	400000	401,573.39	5.6043	0



Calibration Plot: Manganese
Calibration Type: Linear Regression Weighted 1/X
Corr. Coeff.: 0.9995613
Fit: [Y] = 6.722826E-04 * [X] + 1.220977E-03
[y-intercept] = -1.82

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62521-CAL1	B6I0028	0	-0.06	0.00118	0
BJ62521-CAL2	B6G0026	15	14.62	0.01105	3
BJ62521-CAL3	B6G0027	120	121.97	0.08322	-2
BJ62521-CAL4	B6G0028	600	612.26	0.41283	-2
BJ62521-CAL5	B6G0029	3000	3,010.76	2.0253	0
BJ62521-CAL6	B6G0030	6000	5,931.25	3.9887	1
BJ62521-CAL7	B6G0031	16000	15,688.01	10.548	2
BJ62521-CAL9	B6J0169	22500	22,856.13	15.367	-2



Calibration Plot: Zinc
Calibration Type: Linear Regression Weighted 1/X
Corr. Coeff.: 0.9998376
Fit: [Y] = 1.926143E-03 * [X] + 1.062106E-02
[y-intercept] = -5.51

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62521-CAL1	B6I0028	0	-4.75	0.00148	0
BJ62521-CAL2	B6G0026	40	38.51	0.0848	4
BJ62521-CAL3	B6G0027	320	324.10	0.63488	-1
BJ62521-CAL4	B6G0028	1600	1,631.49	3.1531	-2
BJ62521-CAL5	B6G0029	8000	8,109.67	15.631	-1
BJ62521-CAL6	B6G0030	16000	15,856.24	30.552	1

Sample Name: SEQ-CAL1@S01 Acquired: 10/17/2016 22:13:40 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00070**	**-.00049**	**-.00015**	**.01086**	**-.00194**	**.00058**	**.00057**	**-.00027**	**.00020**	**.00216**
#1	-.00069	-.00071	-.00001	.01075	-.00193	.00035	.00059	-.00039	.00024	.00214
#2	-.00068	-.00111	-.00002	.01132	-.00196	.00066	.00044	-.00041	.00017	.00210
#3	-.00074	.00034	-.00043	.01050	-.00193	.00072	.00067	-.00003	.00019	.00225

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00099**	**.00310**	**.00079**	**.00118**	**.00012**	**.00407**	**-.00095**	**.00112**	**-.00104**	**.00044**
#1	.00086	.00319	.00051	.00103	-.00006	.00370	-.00081	.00108	-.00105	.00046
#2	.00100	.00331	.00101	.00125	.00014	.00517	-.00084	.00130	-.00112	.00042
#3	.00110	.00279	.00086	.00127	.00027	.00333	-.00119	.00097	-.00096	.00045

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00280**	**-.00007**	**-.00014**	**.00148**
#1	.00278	-.00013	-.00017	.00147
#2	.00285	-.00003	-.00015	.00156
#3	.00277	-.00004	-.00009	.00140

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CAL1@S01 Acquired: 10/17/2016 22:13:40 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4135.4**	**2297.0**	**26284.**	**125690.**	**3767.0**	**57619.**	**11159.**
#1	4126.3	2296.2	26261.	125860.	3763.2	57835.	11145.
#2	4135.1	2292.5	26290.	125560.	3760.6	57626.	11185.
#3	4144.8	2302.3	26301.	125640.	3777.3	57395.	11148.

Sample Name: SEQ-CAL2@S02 Acquired: 10/17/2016 22:18:05 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00128**	**.00385**	**.00153**	**.42012**	**.00101**	**.00338**	**.02319**	**.01188**	**.00155**	**.01120**	**.00372**
#1	.00123	.00376	.00183	.41891	.00098	.00330	.02345	.01198	.00156	.01123	.00376
#2	.00128	.00375	.00134	.41940	.00106	.00358	.02285	.01171	.00155	.01116	.00369
#3	.00134	.00404	.00143	.42206	.00099	.00327	.02326	.01196	.00154	.01120	.00372

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01219**	**.00362**	**.01105**	**.00604**	**.03734**	**.01791**	**.00652**	**.00253**	**.00238**	**.00407**	**.00386**
#1	.01176	.00354	.01110	.00607	.03784	.01823	.00676	.00262	.00245	.00410	.00376
#2	.01261	.00362	.01121	.00605	.03630	.01755	.00643	.00265	.00236	.00416	.00398
#3	.01222	.00368	.01084	.00599	.03790	.01794	.00636	.00232	.00232	.00395	.00383

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.00341**	**.08480**
#1	.00344	.08480
#2	.00341	.08443
#3	.00337	.08518

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CAL2@S02 Acquired: 10/17/2016 22:18:05 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4136.0**	**2308.1**	**26328.**	**126670.**	**3784.9**	**58005.**	**11107.**
#1	4138.9	2312.5	26163.	126580.	3787.0	57911.	11049.
#2	4132.8	2304.1	26497.	126680.	3782.6	58000.	11169.
#3	4136.2	2307.6	26325.	126750.	3785.0	58105.	11102.

Sample Name: SEQ-CAL3@S03 Acquired: 10/17/2016 22:22:28 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00350**	**.04535**	**.01274**	**3.2613**	**.02169**	**.02710**	**.18005**	**.09605**	**.01207**	**.07397**	**.02971**
#1	.00353	.04496	.01295	3.2609	.02176	.02749	.18015	.09640	.01210	.07394	.02944
#2	.00354	.04580	.01261	3.2632	.02171	.02667	.18053	.09581	.01202	.07404	.02971
#3	.00344	.04529	.01266	3.2598	.02162	.02713	.17949	.09596	.01210	.07393	.02998

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.08799**	**.02848**	**.08322**	**.04652**	**.27789**	**.14385**	**.04094**	**.02700**	**.01658**	**.01258**	**.03183**
#1	.08894	.02845	.08325	.04644	.27723	.14450	.04108	.02685	.01658	.01258	.03166
#2	.08753	.02878	.08338	.04652	.27834	.14350	.04143	.02730	.01653	.01258	.03180
#3	.08750	.02821	.08303	.04659	.27810	.14357	.04031	.02685	.01662	.01260	.03204

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.02854**	**.63488**
#1	.02868	.63703
#2	.02847	.63392
#3	.02847	.63371

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Sample Name: SEQ-CAL3@S03 Acquired: 10/17/2016 22:22:28 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4088.2**	**2316.5**	**26445.**	**126780.**	**3775.1**	**57483.**	**11157.**
#1	4079.3	2310.2	26415.	126530.	3769.2	57387.	11159.
#2	4091.4	2321.2	26361.	127130.	3773.7	57728.	11120.
#3	4094.0	2318.1	26560.	126680.	3782.5	57334.	11190.

Sample Name: SEQ-CAL4@S04 Acquired: 10/17/2016 22:26:43 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02064**	**.23490**	**.06511**	**16.348**	**.11662**	**.13554**	**.88793**	**.47543**	**.06004**	**.36330**	**.14767**
#1	.02056	.23514	.06496	16.342	.11689	.13547	.88826	.47475	.06002	.36343	.14786
#2	.02065	.23465	.06500	16.365	.11630	.13574	.88583	.47499	.05999	.36290	.14799
#3	.02072	.23489	.06536	16.335	.11667	.13540	.88970	.47655	.06011	.36358	.14716

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.43870**	**.14067**	**.41283**	**.23347**	**1.3716**	**.71988**	**.20139**	**.13858**	**.07995**	**.05268**	**.16079**
#1	.44033	.14059	.41394	.23273	1.3707	.71852	.20134	.13823	.07970	.05279	.16060
#2	.43884	.14096	.41198	.23326	1.3747	.72119	.20080	.13807	.08000	.05285	.16068
#3	.43693	.14046	.41258	.23442	1.3694	.71992	.20202	.13945	.08015	.05239	.16109

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.14404**	**3.1531**
#1	.14339	3.1539
#2	.14410	3.1480
#3	.14462	3.1575

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Sample Name: SEQ-CAL4@S04 Acquired: 10/17/2016 22:26:43 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3954.4**	**2279.7**	**26666.**	**126560.**	**3756.0**	**57013.**	**11205.**
#1	3956.6	2282.9	26430.	126610.	3757.4	57060.	11110.
#2	3954.1	2280.6	26772.	126360.	3760.9	56919.	11249.
#3	3952.5	2275.5	26796.	126720.	3749.5	57060.	11257.

Sample Name: SEQ-CAL5@S05 Acquired: 10/17/2016 22:30:51 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.10547**	**1.1702**	**.33790**	**79.505**	**.58366**	**.66630**	**4.3143**	**2.3125**	**.29411**	**1.8842**	**.72908**
#1	.10549	1.1680	.33883	80.054	.58428	.66597	4.3062	2.3096	.29491	1.8845	.72746
#2	.10564	1.1715	.33685	79.824	.58347	.66717	4.3166	2.3125	.29455	1.8851	.73035
#3	.10528	1.1711	.33803	78.638	.58323	.66577	4.3200	2.3155	.29288	1.8828	.72941

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.1822**	**.69482**	**2.0253**	**1.1648**	**6.8539**	**3.5708**	**.99536**	**.69644**	**.38889**	**.24836**	**.79745**
#1	2.1826	.69524	2.0232	1.1627	6.8609	3.5721	.99575	.69593	.38862	.24805	.79672
#2	2.1832	.69541	2.0277	1.1652	6.8570	3.5678	.99433	.69569	.38866	.24904	.79695
#3	2.1807	.69381	2.0250	1.1664	6.8438	3.5726	.99601	.69769	.38939	.24799	.79869

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.71951**	**15.631**
#1	.72107	15.625
#2	.72085	15.614
#3	.71662	15.654

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Sample Name: SEQ-CAL5@S05 Acquired: 10/17/2016 22:30:51 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3607.2**	**2130.8**	**26588.**	**123080.**	**3600.0**	**55023.**	**11054.**
#1	3611.2	2129.1	26545.	122840.	3604.7	54883.	11041.
#2	3610.6	2132.9	26516.	123050.	3600.2	54975.	11039.
#3	3599.9	2130.3	26702.	123340.	3595.1	55211.	11083.

Sample Name: SEQ-CAL6@S06 Acquired: 10/17/2016 22:35:02 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.21297**	**2.3575**	**.68463**	**157.30**	**1.1491**	**1.3127**	**8.4732**	**4.5666**	**.58250**	**3.8080**	**1.4282**
#1	.21243	2.3554	.68445	159.84	1.1540	1.3173	8.4620	4.5633	.57862	3.7960	1.4331
#2	.21324	2.3635	.68533	156.95	1.1458	1.3111	8.4806	4.5698	.58412	3.8132	1.4304
#3	.21324	2.3536	.68411	155.11	1.1475	1.3098	8.4769	4.5669	.58475	3.8148	1.4210

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4.3730**	**1.3755**	**3.9887**	**2.3231**	**13.577**	**7.0727**	**1.9642**	**1.3984**	**.76592**	**.49081**	**1.5713**
#1	4.3790	1.3787	3.9959	2.3211	13.612	7.0671	1.9630	1.3968	.76485	.48966	1.5685
#2	4.3749	1.3775	3.9941	2.3233	13.579	7.0746	1.9645	1.4006	.76709	.49129	1.5754
#3	4.3652	1.3703	3.9761	2.3249	13.542	7.0763	1.9651	1.3979	.76583	.49146	1.5701

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**1.4374**	**30.552**
#1	1.4277	30.521
#2	1.4427	30.562
#3	1.4418	30.572

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Sample Name: SEQ-CAL6@S06 Acquired: 10/17/2016 22:35:02 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3397.4**	**2038.3**	**26224.**	**120910.**	**3483.3**	**53624.**	**10904.**
#1	3400.0	2040.0	26120.	121260.	3487.6	53889.	10839.
#2	3399.0	2039.9	26284.	120800.	3485.6	53553.	10912.
#3	3393.3	2035.2	26268.	120670.	3476.6	53429.	10963.

Sample Name: SEQ-CAL7@S07 Acquired: 10/17/2016 22:39:13 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Al3961	Ca3181	Cr2677	Fe2598	K_7664	Mg2790	Mn2576	Na5895	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**19.493**	**5.2523**	**1.4370**	**10.042**	**10.844**	**5.6043**	**10.548**	**27.838**	**5.1485**
#1	19.439	5.2314	1.4398	9.9691	10.826	5.5732	10.518	27.400	5.1484
#2	19.528	5.2616	1.4363	10.085	10.850	5.6221	10.566	28.379	5.1509
#3	19.511	5.2640	1.4351	10.071	10.857	5.6176	10.558	27.736	5.1463

Int. Std.	Sc2273	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**1711.2**	**49441.**	**10350.**
#1	1711.9	49244.	10412.
#2	1708.0	49433.	10332.
#3	1713.6	49646.	10307.

Sample Name: SEQ-CAL8@S08 Acquired: 10/17/2016 22:43:37 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Al3961	Fe2598	Pb2203
Units	Cts/S	Cts/S	Cts/S
Avg	**22.665**	**12.425**	**12.890**
#1	22.684	12.408	12.877
#2	22.360	12.425	12.890
#3	22.952	12.442	12.904

Int. Std.	Sc2273	Y_3710
Units	Cts/S	Cts/S
Avg	**2081.7**	**11323.**
#1	2085.1	11329.
#2	2078.6	11327.
#3	2081.2	11314.

Sample Name: SEQ-CAL9@S09 Acquired: 10/17/2016 22:48:02 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Fe2598	Mn2576
Units	Cts/S	Cts/S
Avg	**14.566**	**15.367**
#1	14.648	15.437
#2	14.581	15.381
#3	14.469	15.285

Int. Std.	Y_3710
Units	Cts/S
Avg	**10309.**
#1	10297.
#2	10301.
#3	10328.

Sample Name: SEQ-ICV@ICV01 Acquired: 10/17/2016 22:52:33 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**504.90**	**2553.4**	**973.45**	**514.00**	**510.77**	**10346.**	**516.93**	**519.10**	**517.60**	**479.39**	**5354.2**
Stddev	.85	7.5	2.33	.29	.56	48.	.78	.45	.80	.34	10.2
%RSD	.16914	.29228	.23969	.05600	.10965	.46605	.15009	.08621	.15435	.07159	.19064
#1	505.05	2546.5	973.17	513.69	511.34	10344.	517.39	518.82	517.55	479.04	5365.8
#2	505.68	2561.3	971.26	514.04	510.74	10299.	516.03	518.86	516.83	479.72	5349.7
#3	503.99	2552.5	975.90	514.26	510.22	10396.	517.36	519.61	518.43	479.40	5346.9

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**10098.**	**6049.9**	**507.70**	**-.09715**	**10076.**	**515.34**	**995.32**	**997.20**	**1022.0**	**-.37990**	**1047.7**
Stddev	47.	33.5	.97	.21346	22.	1.44	1.39	4.87	2.1	.81393	.6
%RSD	.46529	.55312	.19150	219.73	.22146	.27938	.13954	.48799	.20422	214.25	.05719
#1	10144.	6066.3	506.98	-.25174	10096.	514.49	994.76	997.14	1020.3	-1.1088	1047.4
#2	10050.	6011.4	507.30	-.18611	10052.	514.52	994.30	992.36	1021.4	.49838	1048.4
#3	10098.	6072.1	508.80	.14641	10081.	517.00	996.90	1002.1	1024.4	-.52930	1047.3

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Sample Name: SEQ-ICV@ICV01 Acquired: 10/17/2016 22:52:33 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**506.32**	**1033.6**
Stddev	1.42	3.2
%RSD	.27955	.30972
#1	507.91	1034.9
#2	505.19	1029.9
#3	505.87	1035.9

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3985.7**	**2274.3**	**26455.**	**125450.**	**3772.7**	**56642.**	**11137.**
Stddev	4.4	.1	60.	279.	3.2	149.	35.
%RSD	.11091	.00347	.22529	.22219	.08564	.26378	.31347
#1	3981.9	2274.2	26387.	125180.	3770.0	56505.	11097.
#2	3984.6	2274.4	26478.	125740.	3771.9	56801.	11162.
#3	3990.5	2274.3	26500.	125430.	3776.3	56618.	11151.

Sample Name: SEQ-ICB@ICB01 Acquired: 10/17/2016 22:56:42 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.25105**	**-19.049**	**.38847**	**-.13111**	**.05481**	**-51.805**	**.06443**	**.02491**	**-1.0506**	**-.03268**	**-22.852**
Stddev	.26929	1.503	.76284	.02088	.01306	16.793	.03192	.05827	.1118	.08203	1.704
%RSD	107.27	7.8907	196.37	15.922	23.833	32.417	49.544	233.88	10.639	251.03	7.4564
#1	-.34557	-17.436	-.39068	-.15364	.04444	-71.011	.03591	.02205	-.92822	-.11415	-21.896
#2	-.46034	-20.411	1.1339	-.12729	.06948	-44.514	.05847	-.03187	-1.0763	.04991	-21.840
#3	.05276	-19.300	.42221	-.11241	.05051	-39.888	.09892	.08457	-1.1473	-.03380	-24.819

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**115.97**	**-50.132**	**-1.6210**	**-.05138**	**6.8648**	**-.16090**	**.67123**	**.86699**	**-1.3237**	**-.14842**	**.26235**
Stddev	20.01	15.657	.1474	.14234	2.5263	.26262	.70667	.74268	1.6554	.48588	.26108
%RSD	17.252	31.231	9.0923	277.03	36.801	163.22	105.28	85.662	125.06	327.37	99.518
#1	100.14	-51.758	-1.6645	-.20370	5.6758	.11959	-.14467	.52304	-1.4594	-.45221	.21145
#2	109.31	-64.913	-1.4567	-.02871	5.1524	-.20133	1.0893	.35863	-2.9071	-.40500	.03046
#3	138.45	-33.726	-1.7416	.07827	9.7663	-.40096	1.0691	1.7193	.39536	.41196	.54513

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Sample Name: SEQ-ICB@ICB01 Acquired: 10/17/2016 22:56:42 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.24339**	**-.09308**
Stddev	.29019	.12700
%RSD	119.23	136.44
#1	.57603	.05356
#2	.04206	-.16744
#3	.11210	-.16536

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4145.2**	**2307.6**	**25985.**	**124780.**	**3803.0**	**57012.**	**11075.**
Stddev	5.5	7.2	141.	255.	11.0	161.	21.
%RSD	.13219	.31271	.54104	.20418	.28863	.28235	.19246
#1	4151.1	2314.5	26005.	125070.	3815.6	57193.	11079.
#2	4140.2	2300.1	25835.	124680.	3795.5	56885.	11052.
#3	4144.2	2308.2	26114.	124590.	3797.8	56958.	11094.

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-IFA@ICSA01 Acquired: 10/17/2016 23:01:04 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.1931**	**257820.**	**-9.0482**	**5.6126**	**-.10252**	**244660.**	**2.9470**	**-.71750**	**56.847**	**-10.981**
Stddev	.4391	275.	1.7880	.1166	.03775	417.	.0539	.04116	.443	.126
%RSD	20.022	.10658	19.761	2.0773	36.824	.17061	1.8271	5.7366	.77952	1.1496
#1	-2.5927	257610.	-7.0705	5.6662	-.14610	244180.	2.9398	-.73351	57.351	-10.852
#2	-2.2635	258140.	-9.5239	5.6927	-.08155	244940.	2.8972	-.74826	56.677	-10.986
#3	-1.7230	257720.	-10.550	5.4788	-.07991	244860.	3.0041	-.67074	56.515	-11.105

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**103380.**	**151.75**	**256480.**	**10.922**	**.43190**	**22.704**	**-3.6629**	**7.3514**	**-1.7664**	**-2.5346**
Stddev	97.	22.44	266.	.152	.00729	4.043	.3101	1.4364	1.7173	2.9839
%RSD	.09401	14.787	.10359	1.3924	1.6883	17.805	8.4658	19.539	97.222	117.73
#1	103280.	175.04	256290.	10.813	.42447	20.283	-3.5677	5.9487	-3.6302	.37924
#2	103470.	130.28	256780.	11.096	.43904	27.371	-4.0094	7.2863	-.24798	-2.3991
#3	103400.	149.92	256360.	10.857	.43218	20.459	-3.4116	8.8192	-1.4211	-5.5840

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-IFA@ICSA01 Acquired: 10/17/2016 23:01:04 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Tl3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**4.5128**	**-3.0452**	**.39562**	**1.9644**
Stddev	1.1030	.3869	.05772	.2465
%RSD	24.442	12.704	14.590	12.549
#1	3.6821	-2.6005	.37581	1.9993
#2	4.0919	-3.3040	.35041	2.1916
#3	5.7643	-3.2312	.46064	1.7023

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3332.8**	**1901.2**	**26025.**	**116170.**	**3471.2**	**52457.**	**10740.**
Stddev	2.6	.8	24.	176.	5.1	92.	14.
%RSD	.07849	.04185	.09154	.15115	.14670	.17623	.12840
#1	3331.8	1901.9	26002.	116160.	3477.0	52395.	10731.
#2	3335.8	1901.4	26022.	116340.	3469.1	52563.	10732.
#3	3330.9	1900.4	26050.	115990.	3467.5	52414.	10755.

Sample Name: SEQ-IFB@ICSAB01 Acquired: 10/17/2016 23:05:21 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**206.09**	**256940.**	**95.876**	**522.78**	**513.86**	**243170.**	**974.27**	**484.01**	**567.94**	**494.64**
Stddev	.82	538.	1.686	.42	.23	438.	1.22	.46	2.24	1.40
%RSD	.39557	.20941	1.7581	.08128	.04412	.17997	.12551	.09466	.39500	.28242
#1	206.52	256610.	96.759	522.85	513.75	243070.	975.67	484.52	570.46	496.00
#2	206.60	256650.	93.932	522.32	514.12	243650.	973.42	483.64	566.17	493.21
#3	205.15	257560.	96.937	523.17	513.71	242790.	973.72	483.88	567.19	494.71

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**102560.**	**99.434**	**254760.**	**508.22**	**.44419**	**27.772**	**1037.6**	**55.160**	**593.94**	**45.951**
Stddev	185.	14.095	511.	.81	.10358	2.873	1.3	.634	2.40	2.390
%RSD	.18056	14.175	.20051	.15883	23.319	10.345	.12192	1.1501	.40365	5.2006
#1	102460.	90.539	254480.	507.91	.56378	29.055	1038.2	54.427	594.60	46.122
#2	102780.	115.69	255340.	509.14	.38588	29.780	1036.1	55.530	595.93	48.250
#3	102450.	92.078	254440.	507.62	.38290	24.481	1038.4	55.522	591.28	43.480

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-IFB@ICSAB01 Acquired: 10/17/2016 23:05:21 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**4.0849**	**99.529**	**501.62**	**1053.0**
Stddev	.2189	.381	1.99	1.7
%RSD	5.3597	.38277	.39726	.16010
#1	4.0854	99.872	503.67	1054.5
#2	3.8657	99.119	501.49	1051.2
#3	4.3036	99.595	499.70	1053.4

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3352.2**	**1909.0**	**26176.**	**117120.**	**3490.0**	**52794.**	**10827.**
Stddev	.9	2.5	129.	314.	3.7	183.	43.
%RSD	.02637	.13335	.49302	.26801	.10641	.34646	.39582
#1	3352.7	1910.6	26298.	116860.	3486.5	52635.	10861.
#2	3351.2	1910.5	26041.	117470.	3493.9	52994.	10779.
#3	3352.7	1906.1	26188.	117040.	3489.8	52753.	10840.

Sample Name: SEQ-CCV@CCV01 Acquired: 10/17/2016 23:09:29 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**512.36**	**142700.**	**2106.6**	**16242.**	**400.22**	**201040.**	**974.59**	**2430.9**	**5827.4**	**5125.6**
Stddev	.36	439.	2.4	319.	.99	336.	2.47	4.3	7.8	5.8
%RSD	.06951	.30734	.11377	1.9641	.24735	.16696	.25375	.17652	.13357	.11340
#1	512.65	142200.	2106.3	15904.	399.74	200660.	975.93	2433.3	5835.4	5120.2
#2	511.96	143000.	2104.3	16284.	401.36	201300.	971.74	2426.0	5819.8	5124.8
#3	512.46	142900.	2109.1	16537.	399.57	201160.	976.11	2433.5	5826.9	5131.8

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**131050.**	**139150.**	**198830.**	**8891.8**	**990.92**	**125790.**	**4062.0**	**5618.4**	**4026.0**	**3469.9**
Stddev	284.	206.	433.	16.2	1.26	52.	5.7	7.7	9.7	9.0
%RSD	.21634	.14807	.21758	.18197	.12667	.04122	.14022	.13710	.24049	.25854
#1	130750.	138910.	198470.	8875.0	991.58	125850.	4055.8	5615.3	4030.3	3477.1
#2	131310.	139240.	199310.	8907.3	989.47	125750.	4067.0	5627.1	4014.9	3459.9
#3	131090.	139290.	198720.	8893.1	991.70	125780.	4063.1	5612.7	4032.8	3472.7

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV01 Acquired: 10/17/2016 23:09:29 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**1974.9**	**3941.6**	**4009.6**	**8163.2**
Stddev	5.1	9.9	4.7	7.9
%RSD	.25794	.25157	.11744	.09694
#1	1969.4	3945.7	4014.6	8154.4
#2	1979.5	3930.3	4005.2	8169.8
#3	1975.8	3948.8	4009.0	8165.3

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3237.9**	**1913.9**	**26105.**	**116840.**	**3412.8**	**52305.**	**10794.**
Stddev	4.1	4.5	54.	315.	1.8	191.	28.
%RSD	.12668	.23481	.20736	.26933	.05348	.36585	.25482
#1	3240.3	1917.1	26120.	116500.	3411.3	52085.	10806.
#2	3240.3	1908.7	26045.	116910.	3414.9	52398.	10763.
#3	3233.2	1915.8	26150.	117110.	3412.3	52432.	10814.

Sample Name: SEQ-CCB@CCB01 Acquired: 10/17/2016 23:13:40 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.26773	-9.7348	.59296	1.5879	.07960	-40.718	.17404	.30320	-.07203	.73355	-13.818
Stddev	.13650	7.0955	.61771	.2819	.02581	9.380	.00921	.11457	.24439	.05826	5.802
%RSD	50.985	72.888	104.17	17.753	32.427	23.036	5.2948	37.787	339.30	7.9421	41.992
#1	.33538	-17.352	1.1226	1.3318	.09071	-33.852	.16790	.43511	-.07584	.67471	-14.230
#2	.35721	-3.3131	-.08558	1.5418	.09800	-36.896	.18463	.24585	.17425	.79121	-19.403
#3	.11062	-8.5390	.74184	1.8899	.05009	-51.405	.16958	.22863	-.31448	.73473	-7.8201

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	119.50	-28.211	-.79764	.20170	12.502	.30422	.48715	1.6230	-.00949	-.00748	.40725
Stddev	16.83	6.615	.32517	.06855	8.090	.32711	.70341	.8452	.77516	.33499	.61050
%RSD	14.086	23.450	40.766	33.984	64.710	107.52	144.39	52.079	8164.6	4480.0	149.91
#1	100.08	-35.849	-.89282	.16135	15.510	.51414	1.2356	2.4966	.67858	.33409	-.28387
#2	129.85	-24.447	-1.0646	.16291	3.3388	.47120	-.16023	.80939	-.84929	-.02105	.87315
#3	128.58	-24.335	-.43550	.28084	18.657	-.07267	.38603	1.5629	.14223	-.33548	.63247

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCB@CCB01 Acquired: 10/17/2016 23:13:40 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	.84321	.52402
Stddev	.24672	.15393
%RSD	29.259	29.376
#1	.90725	.67692
#2	1.0516	.52605
#3	.57079	.36908

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4153.0	2314.4	26023.	124910.	3810.7	57053.	11124.
Stddev	14.5	10.5	142.	422.	12.8	231.	62.
%RSD	.34931	.45242	.54440	.33801	.33554	.40405	.56111
#1	4168.2	2325.1	26030.	124460.	3824.9	56792.	11120.
#2	4151.4	2313.9	26160.	125300.	3807.1	57227.	11188.
#3	4139.3	2304.1	25877.	124950.	3800.1	57141.	11063.

Sample Name: SEQ-CCV@CCV02 Acquired: 10/18/2016 00:39:15 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**490.59**	**133400.**	**1966.8**	**15114.**	**386.57**	**193550.**	**927.53**	**2324.1**	**5680.0**	**4908.8**
Stddev	.57	659.	9.9	32.	1.91	442.	2.32	5.4	15.0	6.3
%RSD	.11696	.49379	.50213	.21194	.49478	.22818	.24976	.23380	.26429	.12806
#1	491.25	132680.	1962.0	15145.	386.94	193910.	925.64	2319.3	5692.1	4912.1
#2	490.25	133560.	1960.3	15081.	384.50	193670.	926.85	2323.0	5684.6	4912.8
#3	490.26	133970.	1978.2	15114.	388.28	193060.	930.12	2330.0	5663.2	4901.6

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**123020.**	**130500.**	**188570.**	**8395.4**	**937.21**	**121310.**	**3846.9**	**5253.7**	**3721.5**	**3213.0**
Stddev	445.	57.	502.	21.6	2.28	329.	10.9	14.6	15.8	12.8
%RSD	.36140	.04331	.26641	.25764	.24282	.27152	.28417	.27817	.42371	.39842
#1	122520.	130560.	188030.	8371.7	935.04	121540.	3843.0	5248.5	3715.6	3207.7
#2	123180.	130500.	188670.	8400.5	937.01	121450.	3838.5	5242.4	3709.5	3203.7
#3	123370.	130450.	189020.	8414.1	939.58	120930.	3859.3	5270.2	3739.4	3227.6

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV02 Acquired: 10/18/2016 00:39:15 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**1863.1**	**3808.6**	**3913.0**	**7717.9**
Stddev	9.0	18.1	13.0	23.5
%RSD	.48182	.47470	.33132	.30479
#1	1852.8	3792.6	3923.8	7713.7
#2	1867.7	3805.1	3916.5	7696.8
#3	1868.9	3828.2	3898.6	7743.3

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3384.7**	**2009.9**	**26467.**	**120250.**	**3602.8**	**53378.**	**10983.**
Stddev	15.9	6.6	39.	319.	12.1	109.	7.
%RSD	.46938	.32768	.14861	.26534	.33564	.20340	.06312
#1	3393.6	2012.2	26508.	119950.	3608.0	53255.	10991.
#2	3394.0	2015.0	26430.	120580.	3611.3	53419.	10982.
#3	3366.3	2002.5	26461.	120230.	3588.9	53460.	10977.

Sample Name: SEQ-CCB@CCB02 Acquired: 10/18/2016 00:43:29 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.42063**	**-18.324**	**.64086**	**1.2022**	**.12597**	**-35.984**	**.10437**	**.18710**	**-.64318**	**.14034**	**-19.741**
Stddev	.07634	5.751	.64449	.2193	.01710	12.712	.06865	.04036	.36485	.02566	2.868
%RSD	18.150	31.386	100.57	18.244	13.572	35.326	65.782	21.571	56.725	18.285	14.526
#1	-.34753	-21.397	1.0585	.98243	.13516	-49.536	.09839	.14063	-.73665	.13474	-19.994
#2	-.41450	-21.887	.96547	1.2030	.13650	-24.325	.17581	.20732	-.95220	.16834	-22.474
#3	-.49985	-11.689	-.10139	1.4211	.10624	-34.091	.03889	.21335	-.24069	.11795	-16.755

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5.8277**	**-34.532**	**-1.1236**	**.13774**	**-4.9984**	**.32502**	**1.1141**	**1.8537**	**-1.2340**	**-1.2734**	**.84598**
Stddev	7.3500	18.391	.0765	.04030	.8158	.26756	.8800	.8823	.4792	.5525	.32032
%RSD	126.12	53.257	6.8093	29.258	16.321	82.320	78.994	47.598	38.829	43.385	37.864
#1	13.659	-39.701	-1.1134	.10764	-4.5820	.23532	.59745	.85870	-1.0741	-1.2970	1.0296
#2	4.7445	-49.785	-1.2047	.18352	-4.4749	.62591	2.1302	2.1616	-.85529	-1.8137	.47611
#3	-.92064	-14.110	-1.0527	.12206	-5.9384	.11384	.61453	2.5409	-1.7727	-.70953	1.0322

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCB@CCB02 Acquired: 10/18/2016 00:43:29 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.77719**	**.67502**
Stddev	.05263	.11963
%RSD	6.7723	17.722
#1	.82450	.66414
#2	.72050	.79972
#3	.78657	.56121

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4377.8**	**2448.2**	**26724.**	**129730.**	**4059.9**	**58726.**	**11498.**
Stddev	6.2	4.3	74.	334.	11.2	192.	31.
%RSD	.14276	.17732	.27738	.25748	.27530	.32748	.26949
#1	4380.7	2448.2	26669.	129440.	4065.8	58585.	11499.
#2	4382.1	2452.6	26696.	130090.	4066.8	58945.	11467.
#3	4370.6	2443.9	26809.	129650.	4047.0	58648.	11529.

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV03 Acquired: 10/18/2016 01:05:09 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**492.40**	**133430.**	**1966.9**	**15461.**	**387.43**	**192420.**	**928.63**	**2325.1**	**5742.7**	**4936.4**
Stddev	.70	237.	5.9	104.	.84	1508.	2.01	4.7	9.8	8.7
%RSD	.14302	.17728	.29801	.67409	.21698	.78345	.21626	.20299	.17046	.17574
#1	492.13	133160.	1963.7	15473.	386.47	192930.	927.49	2320.5	5742.9	4937.5
#2	491.88	133610.	1963.4	15352.	388.03	190730.	927.46	2324.9	5732.8	4927.2
#3	493.20	133510.	1973.7	15559.	387.79	193610.	930.95	2329.9	5752.4	4944.4

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**121850.**	**130280.**	**187350.**	**8360.2**	**937.89**	**120310.**	**3852.9**	**5261.3**	**3723.6**	**3224.7**
Stddev	1123.	158.	1315.	35.0	2.05	1279.	13.9	22.2	6.6	4.1
%RSD	.92144	.12154	.70188	.41847	.21843	1.0632	.36148	.42104	.17801	.12568
#1	121890.	130420.	187740.	8363.8	936.42	120590.	3845.4	5243.2	3720.5	3225.2
#2	120700.	130110.	185880.	8323.6	937.01	118920.	3844.4	5254.8	3719.1	3220.4
#3	122950.	130320.	188420.	8393.3	940.23	121430.	3869.0	5286.0	3731.2	3228.4

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV03 Acquired: 10/18/2016 01:05:09 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**1872.9**	**3818.4**	**3949.1**	**7729.5**
Stddev	14.7	14.5	7.8	25.4
%RSD	.78575	.38052	.19781	.32872
#1	1865.8	3808.6	3954.5	7715.8
#2	1889.9	3811.6	3940.1	7713.9
#3	1863.2	3835.1	3952.6	7758.8

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3382.6**	**2011.9**	**26421.**	**119710.**	**3608.6**	**53056.**	**11022.**
Stddev	6.9	7.5	125.	99.	6.5	23.	102.
%RSD	.20316	.37148	.47342	.08258	.17877	.04252	.92731
#1	3386.7	2018.6	26279.	119810.	3614.3	53082.	10931.
#2	3386.5	2013.3	26517.	119620.	3610.0	53048.	11132.
#3	3374.7	2003.8	26466.	119690.	3601.6	53039.	11003.

Sample Name: SEQ-CCB@CCB03 Acquired: 10/18/2016 01:09:22 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.34308**	**-16.600**	**.30028**	**1.5780**	**.13905**	**-45.075**	**.16081**	**.42316**	**-.27696**	**.48733**	**-17.874**
Stddev	.26475	3.683	.72435	.0548	.02493	16.307	.05420	.05880	.04396	.12254	3.458
%RSD	77.169	22.190	241.23	3.4749	17.931	36.177	33.704	13.894	15.872	25.146	19.346
#1	-.36180	-14.391	-.46610	1.5249	.11566	-62.392	.17908	.47882	-.32480	.35956	-15.254
#2	-.59798	-20.852	.39334	1.6345	.13620	-42.819	.20351	.42898	-.23836	.60387	-21.794
#3	-.06947	-14.556	.97360	1.5747	.16528	-30.013	.09983	.36167	-.26772	.49857	-16.575

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**43.942**	**-34.378**	**-.85416**	**.14583**	**3.4272**	**.64140**	**1.1463**	**1.4020**	**-.49849**	**-1.9312**	**.57671**
Stddev	10.830	7.168	.15025	.14374	2.8323	.50378	.5860	.4131	1.5058	.7385	.83963
%RSD	24.646	20.849	17.591	98.570	82.641	78.543	51.117	29.469	302.07	38.240	145.59
#1	35.932	-30.437	-.87998	.02584	6.4581	.93752	1.6636	1.8544	-2.0994	-1.6581	1.4983
#2	56.264	-42.651	-.69266	.30513	.84784	.92697	1.2654	1.0448	-.28552	-2.7674	.37671
#3	39.631	-30.046	-.98982	.10650	2.9756	.05972	.50996	1.3068	.88949	-1.3682	-.14485

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCB@CCB03 Acquired: 10/18/2016 01:09:22 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.77751**	**.89022**
Stddev	.32340	.23109
%RSD	41.595	25.959
#1	.41636	1.1556
#2	1.0404	.73324
#3	.87580	.78183

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4387.8**	**2456.4**	**26824.**	**130310.**	**4066.7**	**59029.**	**11481.**
Stddev	5.8	8.2	145.	230.	8.8	95.	30.
%RSD	.13208	.33190	.54200	.17650	.21640	.16132	.26149
#1	4391.3	2460.5	26703.	130190.	4075.8	58938.	11456.
#2	4391.1	2461.6	26783.	130580.	4066.2	59128.	11474.
#3	4381.2	2447.0	26985.	130160.	4058.2	59020.	11514.

Sample Name: QJ14019-BLK1 Acquired: 10/18/2016 01:13:45 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: PBS01 SDG: MH1H50 Case: 46282
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.37571**	**-25.146**	**-1.3143**	**-.36655**	**.08290**	**-58.546**	**.03079**	**-.12571**	**-1.2127**	**-.54369**	**-32.058**
Stddev	.50219	5.777	.5562	.08531	.01058	19.999	.02344	.18695	.2463	.28579	.443
%RSD	133.66	22.973	42.317	23.273	12.758	34.159	76.122	148.72	20.309	52.565	1.3819
#1	-.67323	-27.823	-.68294	-.28658	.07697	-38.670	.05148	-.31488	-1.2692	-.68827	-32.192
#2	-.65801	-18.516	-1.7318	-.45634	.09511	-58.304	.03555	.05893	-1.4258	-.72831	-32.418
#3	.20410	-29.099	-1.5283	-.35672	.07661	-78.665	.00534	-.12117	-.94306	-.21450	-31.563

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**34.774**	**-61.472**	**-1.8114**	**.08512**	**-13.875**	**.01959**	**.54434**	**.92124**	**1.5477**	**-1.6504**	**-1.0345**
Stddev	11.500	13.132	.1436	.11412	5.723	.12209	.32579	1.0259	.3028	.7860	.4435
%RSD	33.070	21.363	7.9299	134.07	41.247	623.20	59.851	111.36	19.567	47.624	42.873
#1	27.875	-74.711	-1.6853	-.04651	-10.745	.08395	.65208	.47853	1.3416	-1.7602	-1.0943
#2	48.049	-61.256	-1.7811	.15638	-10.399	.09604	.80261	2.0942	1.8954	-2.3757	-.56409
#3	28.397	-48.450	-1.9677	.14548	-20.480	-.12122	.17832	.19100	1.4061	-.81530	-1.4450

Bonner Analytical Testing Co. ICAPP02

Sample Name: QJ14019-BLK1 Acquired: 10/18/2016 01:13:45 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: PBS01 SDG: MH1H50 Case: 46282
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.08734**	**-.20690**
Stddev	.55207	.02637
%RSD	632.13	12.743
#1	.61682	-.19227
#2	-.48484	-.23734
#3	.13003	-.19110

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4248.1**	**2313.7**	**26541.**	**129740.**	**3996.7**	**58400.**	**11328.**
Stddev	15.6	8.0	31.	888.	14.5	381.	14.
%RSD	.36782	.34572	.11509	.68418	.36282	.65166	.12092
#1	4230.2	2304.4	26574.	128720.	3980.1	57961.	11340.
#2	4259.3	2318.7	26514.	130230.	4006.8	58597.	11313.
#3	4254.6	2317.9	26535.	130290.	4003.2	58642.	11331.

Bonner Analytical Testing Co. ICAPP02

Sample Name: QJ14019-BS1 Acquired: 10/18/2016 01:18:05 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: LCS01 SDG: MH1H50 Case: 46282
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**18.579**	**350.23**	**16.554**	**395.99**	**9.7533**	**10152.**	**9.8072**	**99.910**	**19.864**	**46.359**	**171.97**
Stddev	.171	3.61	.404	.72	.0446	24.	.0540	.492	.009	.368	6.07
%RSD	.91771	1.0317	2.4399	.18129	.45718	.23639	.55100	.49243	.04732	.79343	3.5289
#1	18.757	354.05	16.787	395.60	9.7304	10124.	9.7732	99.528	19.874	45.992	178.79
#2	18.562	346.87	16.087	395.55	9.8046	10166.	9.7790	99.737	19.860	46.728	167.15
#3	18.417	349.77	16.786	396.82	9.7247	10165.	9.8695	100.47	19.857	46.356	169.98

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**9308.0**	**9691.1**	**27.699**	**-.04432**	**9877.7**	**80.957**	**20.668**	**112.04**	**60.443**	**-1.4927**	**47.756**
Stddev	31.5	13.1	.283	.05612	12.0	.279	1.935	.70	1.000	1.3811	.326
%RSD	.33813	.13489	1.0218	126.65	.12167	.34439	9.3607	.62756	1.6539	92.524	.68236
#1	9275.4	9679.6	27.815	-.09350	9867.1	81.135	21.264	112.85	61.049	-1.3278	47.872
#2	9310.4	9688.3	27.376	-.05627	9875.4	80.636	22.235	111.75	59.289	-.20143	47.388
#3	9338.2	9705.3	27.905	.01682	9890.8	81.101	18.506	111.54	60.992	-2.9488	48.007

Bonner Analytical Testing Co. ICAPP02

Sample Name: QJ14019-BS1 Acquired: 10/18/2016 01:18:05 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: LCS01 SDG: MH1H50 Case: 46282
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**101.52**	**119.23**
Stddev	.57	.20
%RSD	.56515	.16617
#1	101.74	119.36
#2	101.96	119.00
#3	100.87	119.33

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4074.2**	**2252.4**	**26443.**	**129230.**	**3916.2**	**57724.**	**11178.**
Stddev	3.3	4.4	140.	327.	7.5	177.	34.
%RSD	.08123	.19422	.52847	.25265	.19084	.30727	.30118
#1	4072.6	2247.8	26429.	128990.	3912.4	57579.	11165.
#2	4078.0	2256.5	26311.	129100.	3924.8	57671.	11152.
#3	4071.9	2252.9	26590.	129600.	3911.4	57921.	11216.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-01 Acquired: 10/18/2016 01:22:19 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H50 SDG: MH1H50 Case: 46282
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**3.6952**	**25591.**	**427.13**	**841.74**	**1.3318**	**1180.9**	**9.1120**	**8.2407**	**32.667**	**216.16**
#1	3.5934	25738.	428.12	841.98	1.3139	1180.5	9.0666	8.1798	32.617	215.73
#2	3.1884	25527.	425.46	840.07	1.3389	1183.9	9.1410	8.1534	32.692	215.93
#3	4.3040	25507.	427.82	843.16	1.3425	1178.1	9.1285	8.3890	32.692	216.83

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**298620.**	**7556.6**	**5569.0**	**976.74**	**10.211**	**143.81**	**-5.7657**	**2268.2**	**81.386**	**20.065**
#1	298180.	7594.9	5564.2	975.08	10.240	147.42	-5.5053	2267.9	81.416	19.865
#2	297360.	7560.1	5553.5	973.54	10.094	140.76	-5.6474	2266.1	82.107	19.080
#3	300330.	7514.7	5589.5	981.59	10.300	143.26	-6.1443	2270.5	80.635	21.251

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**286.23**	**-7.5439**	**114.26**	**620.35**
#1	317.03	-7.2239	114.19	619.84
#2	265.66	-7.3939	114.41	621.13
#3	276.01	-8.0141	114.20	620.08

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-01 Acquired: 10/18/2016 01:22:19 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H50 SDG: MH1H50 Case: 46282
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4046.7**	**2229.3**	**26950.**	**129730.**	**3994.2**	**57821.**	**11447.**
#1	4041.4	2227.0	27162.	129960.	3987.1	57953.	11531.
#2	4048.8	2233.3	26854.	129800.	3996.1	57757.	11434.
#3	4049.9	2227.6	26834.	129420.	3999.4	57753.	11376.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-02 Acquired: 10/18/2016 01:26:31 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H50S SDG: MH1H50 Case: 46282
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5.8934**	**64853.**	**331.63**	**680.22**	**4.7907**	**9014.7**	**17.862**	**38.049**	**26.343**	**1103.0**
#1	5.9727	64687.	330.16	679.18	4.8102	8978.5	17.963	38.225	26.107	1103.6
#2	6.2805	64908.	333.31	680.56	4.7760	9012.7	17.870	37.847	26.299	1101.5
#3	5.4270	64964.	331.44	680.93	4.7860	9053.0	17.753	38.076	26.622	1103.9

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**226470.**	**10069.**	**12056.**	**2510.9**	**12.596**	**250.14**	**17.304**	**4726.6**	**23.652**	**11.215**
#1	226780.	10040.	12065.	2511.3	12.795	250.91	17.399	4727.2	23.259	12.143
#2	225560.	10102.	11989.	2501.8	12.534	250.63	16.993	4734.2	23.904	11.189
#3	227070.	10066.	12115.	2519.6	12.459	248.90	17.518	4718.2	23.792	10.313

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**358.32**	**-7.2533**	**133.49**	**4361.4**
#1	343.50	-6.9076	133.86	4361.8
#2	388.25	-7.5345	133.34	4366.6
#3	343.19	-7.3179	133.27	4355.9

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-02 Acquired: 10/18/2016 01:26:31 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H50S SDG: MH1H50 Case: 46282
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3972.7**	**2213.1**	**27115.**	**129500.**	**4164.8**	**60484.**	**12106.**
#1	3973.2	2213.4	27029.	129190.	4162.2	60288.	12035.
#2	3973.1	2212.6	27207.	129520.	4162.4	60564.	12174.
#3	3971.9	2213.2	27107.	129790.	4169.9	60600.	12109.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-03 Acquired: 10/18/2016 01:30:41 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H50D SDG: MH1H50 Case: 46282
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**6.8461**	**63528.**	**584.59**	**1074.8**	**2.9091**	**9284.4**	**38.392**	**45.742**	**35.806**
#1	6.7356	63313.	586.38	1072.2	2.8831	9241.7	38.399	45.790	35.299
#2	6.9606	63537.	584.45	1074.3	2.9195	9294.7	38.309	45.732	35.835
#3	6.8420	63735.	582.94	1077.8	2.9248	9316.7	38.467	45.705	36.284

Elem	Cu3247	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**566.99**	**F 388520.**	**12376.**	**18183.**	**2667.2**	**12.731**	**323.84**	**9.3853**	**5242.0**
#1	567.49	386910.	12369.	18124.	2656.7	12.817	320.72	9.0086	5246.0
#2	566.67	387540.	12390.	18141.	2666.9	12.684	320.92	9.6241	5236.4
#3	566.80	391110.	12367.	18286.	2678.0	12.691	329.87	9.5232	5243.7

Elem	Sb2068	Se1960	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**42.479**	**22.833**	**372.40**	**-11.883**	**210.96**	**8290.9**
#1	43.756	21.296	370.97	-12.277	210.42	8291.2
#2	41.983	22.436	368.10	-11.738	211.26	8281.7
#3	41.699	24.768	378.11	-11.635	211.20	8299.8

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-03 Acquired: 10/18/2016 01:30:41 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H50D SDG: MH1H50 Case: 46282
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3920.4**	**2169.8**	**26858.**	**127970.**	**4034.3**	**58153.**	**11628.**
#1	3919.6	2169.6	26751.	127890.	4032.4	58103.	11576.
#2	3924.3	2172.9	26844.	128270.	4035.5	58289.	11650.
#3	3917.2	2167.0	26978.	127740.	4034.9	58066.	11658.

Bonner Analytical Testing Co. ICAPP02

Sample Name: QJ14019-MS1 Acquired: 10/18/2016 01:34:52 Type: RQC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H50 SDG: MH1H50 Case: 46282
Comment:

VCT 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**86.108**	**58378.**	F **493.41**	**4548.5**	**94.104**	**7491.4**	**118.24**	**908.50**	**409.47**
Stddev	.568	168.	4.35	11.8	.226	40.7	.40	1.87	1.87
%RSD	.65963	.28794	.88148	.26043	.24009	.54333	.34004	.20635	.45712
#1	85.801	58207.	493.17	4534.9	93.869	7538.4	117.80	906.68	408.98
#2	86.764	58543.	489.18	4554.1	94.320	7467.1	118.33	908.39	407.89
#3	85.760	58382.	497.87	4556.6	94.123	7468.8	118.59	910.42	411.54
Check ?	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value			80.000						
Range			-25.000%						
	79.262	None		3473.8	91.195	None	79.846	862.75	373.66
Recovery	79.262%		-91.186	86.844%	91.195%		79.846%	86.275%	93.416%
% Recovery			-113.98%						

Bonner Analytical Testing Co. ICAPP02

Sample Name: QJ14019-MS1 Acquired: 10/18/2016 01:34:52 Type: RQC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H50 SDG: MH1H50 Case: 46282
Comment:

VCT 10/26/16

Elem	Cu3247	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F **898.65**	F **434050.**	**11273.**	**13978.**	F **2816.3**	**10.630**	F **287.17**	**947.21**	F **4118.6**
Stddev	2.37	1481.	76.	68.	11.6	.087	2.78	2.25	9.7
%RSD	.26419	.34124	.67835	.48881	.41350	.82283	.96721	.23710	.23483
#1	901.10	432340.	11354.	13899.	2802.9	10.532	290.15	945.59	4109.8
#2	896.36	434990.	11264.	14014.	2822.3	10.659	284.66	946.27	4117.2
#3	898.50	434820.	11202.	14020.	2823.8	10.699	286.71	949.77	4128.9
Check ?	Chk Fail	Chk Fail	None	None	Chk Fail	None	Chk Fail	Chk Pass	Chk Fail
Value	500.00	100.00			1000.0		4000.0		40.000
Range	-25.000%	25.000%			-25.000%		-25.000%		-25.000%
			None	None		None		937.83	
Recovery	331.66	45530.			149.15		-36.666	93.783%	-1123.4
% Recovery	66.333%	45530.%			14.915%		-.9166%		-2808.5%

Bonner Analytical Testing Co. ICAPP02

Sample Name: QJ14019-MS1 Acquired: 10/18/2016 01:34:52 Type: RQC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H50~~E~~ S SDG: MH1H50 Case: 46282
Comment:

VCT 10/26/16

Elem	Sb2068	Se1960	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 93.427	F 171.91	F 329.85	73.607	1114.3	F 8335.9
Stddev	1.157	1.72	5.92	.843	2.2	19.7
%RSD	1.2385	.99899	1.7961	1.1449	.20097	.23617
#1	92.187	170.36	334.98	74.513	1112.2	8318.2
#2	93.617	171.60	331.20	73.464	1114.1	8332.5
#3	94.478	173.75	323.37	72.846	1116.7	8357.1
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail
Value	200.00	100.00	100.00			1000.0
Range	-25.000%	25.000%	-25.000%			-25.000%
				85.490	903.35	
Recovery	50.948	149.07	-42.546	85.490%	90.335%	45.051
% Recovery	25.474%	149.07%	-42.546%			4.5051%

Bonner Analytical Testing Co. ICAPP02

Sample Name: QJ14019-MS1 Acquired: 10/18/2016 01:34:52 Type: RQC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H50~~E~~ S SDG: MH1H50 Case: 46282
Comment:

VCT 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3925.3	2169.5	26888.	128120.	4010.7	57968.	11639.
Stddev	2.1	3.1	19.	321.	2.3	120.	14.
%RSD	.05290	.14066	.06913	.25064	.05635	.20775	.12413
#1	3927.7	2166.0	26868.	128480.	4013.3	58083.	11622.
#2	3924.0	2171.6	26905.	128050.	4009.6	57978.	11646.
#3	3924.2	2170.8	26890.	127850.	4009.2	57843.	11648.

Bonner Analytical Testing Co. ICAPP02

Sample Name: QJ14019-DUP1 Acquired: 10/18/2016 01:39:00 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H50D SDG: MH1H50 Case: 46282
Comment:

vcf 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4.6451**	**58629.**	**387.32**	**762.17**	**2.3148**	**7654.3**	**26.794**	**41.483**	**25.225**	**408.87**
#1	4.8560	58527.	390.32	762.35	2.2926	7652.0	26.796	41.690	25.491	408.72
#2	4.6934	58570.	386.79	762.27	2.3367	7638.5	26.797	41.201	25.190	408.46
#3	4.3860	58789.	384.85	761.91	2.3152	7672.4	26.790	41.557	24.995	409.42

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**286860.**	**10301.**	**18079.**	**2530.1**	**10.075**	**231.04**	**9.0240**	**3525.0**	**28.440**	**15.045**
#1	286440.	10363.	18050.	2522.9	10.087	233.06	9.1235	3526.3	28.143	15.846
#2	286800.	10267.	18041.	2527.0	10.164	229.19	8.6836	3530.6	28.533	13.699
#3	287360.	10274.	18145.	2540.3	9.9750	230.88	9.2648	3518.2	28.644	15.590

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**273.05**	**-8.6897**	**169.67**	**5194.2**
#1	278.68	-9.1509	169.59	5199.1
#2	264.38	-8.4212	169.65	5201.3
#3	276.10	-8.4971	169.78	5182.1

Bonner Analytical Testing Co. ICAPP02

Sample Name: QJ14019-DUP1 Acquired: 10/18/2016 01:39:00 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H50D SDG: MH1H50 Case: 46282
Comment:

vcf 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3979.4**	**2211.3**	**26863.**	**128490.**	**4051.4**	**58182.**	**11657.**
#1	3976.9	2210.9	26747.	127880.	4042.7	57975.	11606.
#2	3984.7	2205.8	27037.	128740.	4049.7	58266.	11736.
#3	3976.7	2217.1	26805.	128860.	4061.8	58306.	11628.

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-SRD1 Acquired: 10/18/2016 01:43:11 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H5L SDG: MH1H50 Case: 46282
Comment: VCS 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.1314**	**14918.**	**128.62**	**249.86**	**.75256**	**2111.4**	**9.3382**	**10.891**	**7.8808**	**128.78**	**91231.**
#1	1.2160	14893.	129.35	249.92	.75398	2114.8	9.2843	10.867	7.7917	128.59	91602.
#2	1.0948	14960.	128.78	250.18	.71714	2120.2	9.3727	10.922	7.6439	128.98	91345.
#3	1.0835	14901.	127.73	249.49	.78658	2099.3	9.3575	10.884	8.2067	128.78	90746.

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2921.3**	**4285.1**	**627.21**	**2.8825**	**47.399**	**1.1077**	**1187.4**	**10.349**	**3.5535**	**89.351**	**-2.3859**
#1	2933.0	4298.4	630.29	2.8660	48.152	1.1186	1188.1	12.366	3.5408	81.071	-1.9330
#2	2917.5	4284.7	627.86	2.9110	49.460	.93190	1187.2	8.3050	2.9021	90.299	-3.0949
#3	2913.4	4272.2	623.46	2.8704	44.584	1.2726	1186.9	10.375	4.2174	96.682	-2.1297

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**49.883**	**1874.4**
#1	49.715	1879.2
#2	50.008	1869.6
#3	49.927	1874.4

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-SRD1 Acquired: 10/18/2016 01:43:11 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H5L SDG: MH1H50 Case: 46282
Comment: VCS 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4278.5**	**2420.8**	**27360.**	**132430.**	**4137.3**	**59165.**	**11700.**
#1	4287.1	2422.0	27400.	132520.	4143.3	59221.	11683.
#2	4276.9	2421.2	27411.	132590.	4140.3	59258.	11721.
#3	4271.4	2419.1	27269.	132180.	4128.5	59016.	11696.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-04 Acquired: 10/18/2016 01:47:25 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H5~~2~~3 SDG: MH1H50 Case: 46282
Comment:
VCT 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.6583**	**45627.**	**235.93**	**557.86**	**3.1201**	**6393.1**	**9.1504**	**25.262**	**21.300**	**654.51**
#1	-3.0220	45555.	236.30	556.07	3.1113	6343.8	9.2175	25.432	21.468	654.89
#2	-2.4197	45626.	234.53	558.42	3.1031	6407.1	9.1424	25.155	21.398	654.59
#3	-2.5333	45699.	236.95	559.08	3.1460	6428.2	9.0914	25.198	21.033	654.06

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**240770.**	**8190.5**	**13306.**	**1798.4**	**5.7503**	**193.06**	**7.3079**	**1527.4**	**18.432**	**10.599**
#1	238790.	8189.7	13225.	1788.1	5.7867	195.51	7.4854	1525.0	17.717	9.7708
#2	241600.	8195.1	13315.	1800.1	5.8685	191.95	7.3578	1528.1	19.176	10.552
#3	241910.	8186.8	13378.	1807.1	5.5957	191.72	7.0804	1529.1	18.404	11.473

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**243.07**	**-6.7585**	**128.83**	**1464.6**
#1	239.99	-7.1640	128.71	1466.8
#2	236.79	-6.5608	128.50	1462.9
#3	252.44	-6.5508	129.28	1464.1

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-04 Acquired: 10/18/2016 01:47:25 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H5~~2~~3 SDG: MH1H50 Case: 46282
Comment:
VCT 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3985.9**	**2215.2**	**26967.**	**128000.**	**4082.5**	**58451.**	**11793.**
#1	3974.5	2208.1	26884.	127520.	4069.7	58236.	11780.
#2	3993.3	2217.6	27060.	128440.	4089.0	58624.	11824.
#3	3990.0	2219.9	26957.	128040.	4088.8	58492.	11775.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-05 Acquired: 10/18/2016 01:51:37 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H5~~3~~4 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.4335**	**35805.**	**350.63**	**977.66**	**1.1155**	**965.16**	**6.6610**	**7.1408**	**28.808**	**175.45**
#1	-2.1696	35830.	350.36	975.50	1.1209	959.27	6.6257	6.9174	28.405	174.88
#2	-2.6645	35845.	352.58	978.81	1.0813	977.03	6.6656	7.2350	28.933	176.05
#3	-2.4664	35740.	348.96	978.67	1.1444	959.18	6.6916	7.2699	29.084	175.41

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**256030.**	**10966.**	**8666.4**	**628.02**	**21.942**	**322.07**	**-1.3677**	**867.61**	**18.486**	**18.997**
#1	254880.	10941.	8596.8	624.42	21.936	322.83	-1.2280	865.29	17.529	18.724
#2	256710.	11026.	8726.2	628.57	21.779	322.64	-1.6249	866.03	17.941	18.989
#3	256490.	10931.	8676.1	631.07	22.112	320.74	-1.2502	871.51	19.987	19.276

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**292.38**	**-7.9239**	**184.19**	**287.94**
#1	293.69	-8.6040	184.65	287.41
#2	284.31	-8.3759	184.37	287.36
#3	299.14	-6.7918	183.55	289.05

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-05 Acquired: 10/18/2016 01:51:37 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H5~~3~~4 SDG: MH1H50 Case: 46282
Comment: 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4056.7**	**2259.5**	**27110.**	**129590.**	**4040.1**	**57673.**	**11559.**
#1	4051.3	2258.1	27116.	129770.	4037.0	57775.	11564.
#2	4066.3	2266.2	26997.	129650.	4047.1	57645.	11511.
#3	4052.4	2254.2	27216.	129370.	4036.2	57598.	11604.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-06 Acquired: 10/18/2016 01:55:49 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H5~~4~~5 SDG: MH1H50 Case: 46282
Comment: vcl 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**35.411**	**34178.**	**3835.9**	**460.75**	**1.6972**	**4296.0**	**6.8190**	**13.326**	**17.144**	**3350.4**
#1	35.605	33971.	3849.6	459.30	1.6861	4304.2	6.7957	13.608	17.389	3355.6
#2	35.273	34233.	3821.1	461.14	1.7090	4312.9	6.7930	13.150	16.692	3343.2
#3	35.355	34329.	3837.1	461.81	1.6965	4271.0	6.8683	13.221	17.351	3352.3

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**265820.**	**10367.**	**10115.**	**1465.4**	**5.8435**	**168.47**	**-1.1055**	**3911.8**	**94.701**	**12.127**
#1	266530.	10320.	10083.	1464.0	5.7167	170.92	-1.4590	3916.7	94.804	11.207
#2	264890.	10393.	10119.	1466.7	5.9534	168.40	-1.3580	3903.1	94.812	12.446
#3	266050.	10390.	10144.	1465.5	5.8604	166.09	-.49968	3915.5	94.486	12.728

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**143.64**	**-7.1718**	**108.86**	**297.53**
#1	134.67	-6.8703	109.30	297.68
#2	152.16	-7.3323	108.31	296.97
#3	144.08	-7.3129	108.96	297.96

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-06 Acquired: 10/18/2016 01:55:49 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H5~~4~~5 SDG: MH1H50 Case: 46282
Comment: vcl 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4031.7**	**2237.7**	**26793.**	**129260.**	**4023.8**	**57698.**	**11466.**
#1	4030.0	2231.5	26805.	128570.	4018.5	57422.	11438.
#2	4037.3	2243.4	26826.	129620.	4033.3	57844.	11506.
#3	4027.6	2238.0	26749.	129600.	4019.5	57828.	11454.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-07 Acquired: 10/18/2016 02:00:00 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H55 6 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-3.5719**	**63476.**	**261.21**	**905.78**	**1.7744**	**3794.0**	**5.8020**	**12.593**	**40.767**	**112.07**
#1	-3.8111	63090.	261.27	900.94	1.7690	3773.6	5.8253	12.529	40.661	112.32
#2	-3.5148	63622.	259.82	907.81	1.7606	3780.4	5.7443	12.809	40.918	111.92
#3	-3.3898	63715.	262.54	908.58	1.7937	3828.1	5.8365	12.442	40.722	111.96

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**209810.**	**13103.**	**18167.**	**1223.8**	**8.8199**	**328.70**	**2.5217**	**604.53**	**18.093**	**10.750**
#1	208710.	13045.	18055.	1216.1	8.8192	331.26	2.2902	605.73	18.193	11.087
#2	210010.	13139.	18194.	1224.7	8.7211	325.53	2.7920	601.12	17.634	9.6884
#3	210720.	13124.	18250.	1230.7	8.9193	329.31	2.4828	606.74	18.450	11.474

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**395.72**	**-6.3987**	**165.73**	**395.88**
#1	397.93	-6.4659	166.37	396.66
#2	391.76	-6.1775	164.98	393.84
#3	397.46	-6.5527	165.83	397.15

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-07 Acquired: 10/18/2016 02:00:00 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H55 6 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3973.2**	**2227.0**	**26997.**	**129130.**	**4042.4**	**57962.**	**11637.**
#1	3970.7	2224.5	26863.	129000.	4043.6	57820.	11603.
#2	3968.6	2228.1	27137.	129280.	4041.2	58026.	11691.
#3	3980.5	2228.4	26992.	129120.	4042.4	58040.	11617.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-08 Acquired: 10/18/2016 02:04:13 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H5~~6~~7 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**30.329**	**37486.**	**540.28**	**557.75**	**1.0246**	**1071.4**	**24.766**	**4.1775**	**22.408**	**399.29**
#1	30.584	37397.	536.49	556.13	1.0148	1055.9	24.698	4.3163	22.391	400.24
#2	30.217	37439.	543.72	557.30	1.0325	1079.3	24.661	4.0880	22.084	399.22
#3	30.187	37623.	540.62	559.82	1.0264	1079.0	24.939	4.1281	22.748	398.42

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**247370.**	**8636.4**	**7487.3**	**464.59**	**10.379**	**165.40**	**-1.2530**	**F 10435.**	**50.334**	**22.525**
#1	247350.	8590.8	7463.2	463.91	10.627	165.44	-1.3166	10414.	50.131	23.677
#2	246490.	8618.8	7482.1	463.30	10.293	167.54	-1.5643	10427.	50.082	22.074
#3	248270.	8699.7	7516.5	466.56	10.219	163.23	-.87818	10462.	50.790	21.823

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**317.39**	**-8.0655**	**115.55**	**4023.9**
#1	316.80	-7.1498	116.54	4013.5
#2	319.30	-8.0722	114.88	4020.0
#3	316.08	-8.9746	115.24	4038.1

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-08 Acquired: 10/18/2016 02:04:13 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H5~~6~~7 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4033.5**	**2230.7**	**26827.**	**128650.**	**4014.4**	**57637.**	**11515.**
#1	4032.1	2235.4	26672.	127900.	4014.8	57228.	11447.
#2	4041.3	2234.5	26872.	128740.	4030.4	57697.	11571.
#3	4027.3	2222.3	26936.	129330.	3997.8	57985.	11528.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-09 Acquired: 10/18/2016 02:08:25 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H5~~7~~8 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.8654**	**75272.**	**288.08**	**955.98**	**2.3462**	**6258.5**	**7.0304**	**21.450**	**46.765**	**200.20**
#1	2.0369	75162.	288.89	955.16	2.3614	6261.3	7.0212	21.314	46.644	200.20
#2	1.9000	75250.	288.82	956.89	2.3368	6246.8	7.0516	21.609	46.703	200.04
#3	1.6592	75405.	286.53	955.89	2.3405	6267.4	7.0185	21.426	46.947	200.34

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**214230.**	**11955.**	**15839.**	**1510.4**	**7.1012**	**245.16**	**11.058**	**1347.8**	**18.366**	**9.4169**
#1	213990.	11978.	15792.	1507.1	7.0733	242.43	10.721	1346.8	19.018	8.4802
#2	214280.	11927.	15864.	1511.8	7.0336	244.58	10.795	1343.3	17.755	12.148
#3	214430.	11960.	15861.	1512.3	7.1968	248.45	11.659	1353.4	18.325	7.6224

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**422.76**	**-5.9042**	**168.96**	**620.16**
#1	418.32	-6.0260	168.54	619.27
#2	416.74	-5.5572	168.82	620.28
#3	433.21	-6.1293	169.53	620.92

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-09 Acquired: 10/18/2016 02:08:25 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H5~~7~~8 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3967.1**	**2225.1**	**27055.**	**129430.**	**4047.0**	**58270.**	**11661.**
#1	3966.9	2222.9	26905.	129320.	4049.9	58220.	11576.
#2	3972.1	2226.6	27203.	129860.	4046.1	58523.	11727.
#3	3962.4	2225.8	27058.	129120.	4045.1	58066.	11679.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-10 Acquired: 10/18/2016 02:12:38 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H59 SDG: MH1H50 Case: 46282
Comment: vcf 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-3.4504	89107.	248.78	614.07	7.0075	19318.	22.968	112.98	28.512	674.48
#1	-3.0642	88802.	249.22	613.40	6.9772	19316.	22.925	113.20	28.781	675.46
#2	-3.4726	89124.	248.52	612.79	7.0303	19221.	23.060	113.23	28.377	674.18
#3	-3.8143	89395.	248.60	616.00	7.0150	19416.	22.920	112.50	28.377	673.80

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	300390.	10721.	28695.	8605.5	3.5041	357.04	55.330	2112.9	21.495	10.057
#1	300250.	10702.	28702.	8602.5	3.6673	363.08	56.227	2112.8	20.483	11.226
#2	298380.	10701.	28528.	8571.2	3.3487	354.07	54.770	2114.9	23.309	10.812
#3	302530.	10759.	28854.	8642.8	3.4963	353.97	54.991	2110.9	20.693	8.1326

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	324.70	-6.6640	197.84	5672.2
#1	327.79	-6.1144	198.66	5672.4
#2	320.90	-6.7978	197.04	5676.5
#3	325.40	-7.0797	197.82	5667.8

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-10 Acquired: 10/18/2016 02:12:38 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H59 SDG: MH1H50 Case: 46282
Comment: vcf 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3877.8	2170.7	27060.	127890.	4206.4	60380.	12212.
#1	3878.3	2167.4	26948.	127950.	4193.0	60403.	12120.
#2	3880.0	2172.6	27019.	128080.	4207.2	60543.	12257.
#3	3875.1	2172.2	27214.	127640.	4219.1	60193.	12258.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-11 Acquired: 10/18/2016 02:16:47 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H~~50~~ 60 SDG: MH1H50 Case: 46282
Comment: VCT 10/20/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-3.4302	89782.	110.11	942.35	4.0901	18146.	7.6612	68.608	31.778	417.51
#1	-3.2071	89596.	109.24	941.28	4.0881	18172.	7.6527	68.844	31.963	417.96
#2	-3.2739	89719.	110.21	941.61	4.0728	18153.	7.6285	68.658	31.584	417.04
#3	-3.8095	90031.	110.89	944.16	4.1095	18113.	7.7025	68.321	31.786	417.54

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	229690.	10436.	28448.	3925.2	3.5416	310.27	35.106	1771.3	12.663	7.0240
#1	230230.	10443.	28508.	3929.2	3.6705	312.73	35.410	1772.7	12.128	9.5390
#2	229020.	10428.	28375.	3916.9	3.4057	311.12	34.851	1771.1	12.818	5.2087
#3	229820.	10438.	28461.	3929.7	3.5485	306.96	35.056	1770.0	13.042	6.3243

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	386.51	-7.2611	182.69	1191.1
#1	378.13	-6.3798	182.03	1190.6
#2	385.59	-7.3869	182.58	1192.4
#3	395.82	-8.0168	183.48	1190.5

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-11 Acquired: 10/18/2016 02:16:47 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H~~50~~ 60 SDG: MH1H50 Case: 46282
Comment: VCT 10/20/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3935.1	2216.4	27037.	129660.	4143.9	59761.	11868.
#1	3937.0	2217.6	26931.	130040.	4146.9	59937.	11798.
#2	3937.3	2216.6	27079.	129660.	4144.1	59815.	11910.
#3	3930.9	2215.0	27100.	129290.	4140.8	59531.	11898.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-12 Acquired: 10/18/2016 02:20:58 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H6~~0~~1 SDG: MH1H50 Case: 46282
Comment: 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.7187	53203.	66.875	379.45	7.3400	11769.	14.043	70.730	11.473	205.85
#1	-2.8300	53048.	66.449	378.01	7.2967	11761.	14.050	70.826	10.918	205.53
#2	-2.9832	53318.	67.684	379.79	7.3537	11720.	13.989	70.524	11.812	205.90
#3	-2.3429	53243.	66.491	380.54	7.3695	11825.	14.091	70.841	11.689	206.13

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	119750.	6441.1	12298.	6091.0	1.5554	221.00	58.625	187.76	7.0527	5.6972
#1	119200.	6429.8	12257.	6069.5	1.3520	217.53	58.533	185.58	7.5212	5.9530
#2	119720.	6460.6	12318.	6097.8	1.5358	217.73	58.806	189.42	6.8165	5.7428
#3	120320.	6432.9	12319.	6105.7	1.7785	227.75	58.535	188.27	6.8204	5.3957

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	178.32	-1.4628	82.287	5095.7
#1	179.49	-2.1904	82.191	5084.2
#2	178.47	-2.0070	82.106	5100.7
#3	177.00	-.19106	82.566	5102.2

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-12 Acquired: 10/18/2016 02:20:58 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H6~~0~~1 SDG: MH1H50 Case: 46282
Comment: 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4083.8	2309.0	27313.	131240.	4411.4	63387.	12612.
#1	4088.7	2311.2	27068.	131160.	4414.1	63348.	12516.
#2	4085.1	2308.8	27517.	131640.	4416.4	63636.	12716.
#3	4077.7	2306.9	27353.	130930.	4403.8	63176.	12604.

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV04 Acquired: 10/18/2016 02:25:11 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**492.69**	**133000.**	**1963.2**	**15402.**	**388.50**	**193140.**	**926.54**	**2329.9**	**5756.0**	**4951.7**
Stddev	.77	456.	3.7	176.	.61	456.	2.62	4.0	11.3	8.8
%RSD	.15708	.34268	.18728	1.1457	.15804	.23588	.28317	.17331	.19675	.17790
#1	492.48	132520.	1960.0	15248.	388.27	192780.	926.08	2326.5	5762.2	4954.9
#2	493.54	133420.	1962.4	15362.	388.03	192990.	924.18	2328.9	5763.0	4958.6
#3	492.04	133060.	1967.2	15595.	389.19	193650.	929.36	2334.4	5743.0	4941.8

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**121360.**	**129900.**	**186730.**	**8341.0**	**936.12**	**121050.**	**3847.7**	**5235.8**	**3707.1**	**3192.9**
Stddev	472.	112.	287.	26.4	1.60	155.	6.6	5.2	10.8	8.0
%RSD	.38871	.08636	.15346	.31670	.17138	.12819	.17182	.09992	.29142	.25132
#1	120820.	129820.	186400.	8310.7	935.14	120990.	3840.2	5230.3	3699.1	3183.6
#2	121690.	130030.	186880.	8359.4	935.25	120940.	3852.6	5236.2	3702.9	3197.4
#3	121560.	129840.	186910.	8352.9	937.97	121230.	3850.4	5240.8	3719.4	3197.6

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV04 Acquired: 10/18/2016 02:25:11 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**1867.1**	**3838.6**	**3959.5**	**7681.7**
Stddev	10.2	15.8	9.3	13.1
%RSD	.54513	.41261	.23552	.17096
#1	1855.4	3842.4	3963.0	7667.6
#2	1874.1	3821.2	3966.6	7683.8
#3	1871.8	3852.1	3948.9	7693.6

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3380.0**	**2008.6**	**26241.**	**119510.**	**3615.9**	**52889.**	**10964.**
Stddev	13.5	4.4	86.	96.	10.9	66.	44.
%RSD	.39857	.22120	.32949	.08040	.30086	.12443	.39711
#1	3378.8	2011.3	26145.	119610.	3620.8	52964.	10916.
#2	3394.0	2011.0	26312.	119490.	3623.4	52839.	11000.
#3	3367.1	2003.5	26267.	119420.	3603.4	52865.	10976.

Sample Name: SEQ-CCB@CCB04 Acquired: 10/18/2016 02:29:24 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.49136**	**-9.6644**	**.72049**	**1.9718**	**.15835**	**-29.251**	**.11664**	**.31472**	**-.27457**	**.11222**	**-8.6414**
Stddev	.15239	5.9901	.21779	.3679	.03005	3.441	.05428	.11154	.02802	.07415	4.3041
%RSD	31.014	61.981	30.228	18.657	18.977	11.762	46.539	35.441	10.206	66.070	49.808
#1	-.52456	-16.318	.64169	1.6286	.18985	-26.880	.17459	.24336	-.24262	.19506	-6.5846
#2	-.62442	-7.9753	.96672	1.9267	.15520	-33.197	.10837	.44326	-.29498	.08955	-13.588
#3	-.32511	-4.7003	.55307	2.3601	.13000	-27.677	.06697	.25755	-.28611	.05206	-5.7516

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**29.567**	**-35.914**	**-.76561**	**.22302**	**6.6032**	**.39266**	**.99954**	**1.7806**	**-1.6454**	**-1.0900**	**.77818**
Stddev	9.728	10.645	.30150	.08947	3.7018	.35130	.51545	.2255	.9884	.6116	1.0258
%RSD	32.902	29.641	39.381	40.116	56.060	89.466	51.569	12.663	60.070	56.115	131.83
#1	40.755	-48.204	-1.0368	.32624	2.5433	.76577	1.1558	2.0224	-2.0602	-1.4978	-.20170
#2	23.109	-29.949	-.81912	.17490	7.4751	.34396	.42403	1.7432	-.51719	-.38670	.69172
#3	24.836	-29.588	-.44094	.16790	9.7912	.06825	1.4188	1.5761	-2.3588	-1.3854	1.8445

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCB@CCB04 Acquired: 10/18/2016 02:29:24 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.89266**	**.84039**
Stddev	.21221	.06634
%RSD	23.773	7.8940
#1	.82204	.86314
#2	.72476	.89235
#3	1.1312	.76566

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4388.4**	**2457.0**	**26771.**	**129510.**	**4079.6**	**58480.**	**11526.**
Stddev	9.1	2.0	87.	513.	5.3	225.	76.
%RSD	.20833	.07940	.32625	.39576	.13002	.38481	.66252
#1	4384.9	2458.4	26772.	130060.	4082.6	58726.	11549.
#2	4398.8	2457.9	26857.	129040.	4082.7	58286.	11588.
#3	4381.6	2454.8	26683.	129450.	4073.5	58427.	11441.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-13 Acquired: 10/18/2016 02:33:47 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H6~~1~~2 SDG: MH1H50 Case: 46282
Comment: vcf 10/24/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**13.760**	**85373.**	**151.99**	**964.73**	**5.8932**	**21344.**	**10.286**	**76.422**	**32.341**	**173.29**
#1	13.496	85052.	151.96	961.79	5.8811	21377.	10.333	76.302	32.001	173.52
#2	13.867	85568.	152.39	966.92	5.8728	21361.	10.277	76.744	32.202	172.82
#3	13.916	85499.	151.63	965.48	5.9258	21294.	10.246	76.219	32.818	173.53

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**201340.**	**13886.**	**27553.**	**5751.0**	**3.3772**	**365.33**	**32.227**	**818.54**	**10.616**	**6.9864**
#1	201680.	13898.	27608.	5740.9	3.2470	362.77	32.206	817.86	9.8990	7.0691
#2	201010.	13910.	27501.	5754.5	3.2050	369.08	31.532	818.08	9.5947	7.8906
#3	201340.	13850.	27551.	5757.7	3.6797	364.13	32.943	819.68	12.355	5.9995

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**327.64**	**-4.9590**	**178.60**	**1717.3**
#1	322.17	-4.2149	178.38	1721.9
#2	331.96	-5.8307	179.11	1715.6
#3	328.78	-4.8314	178.30	1714.5

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-13 Acquired: 10/18/2016 02:33:47 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H6~~1~~2 SDG: MH1H50 Case: 46282
Comment: vcf 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3884.9**	**2193.8**	**27106.**	**128020.**	**4164.1**	**59694.**	**12136.**
#1	3881.4	2191.3	26700.	127510.	4157.5	59420.	11945.
#2	3879.3	2188.8	27283.	127960.	4155.0	59612.	12220.
#3	3894.0	2201.3	27333.	128600.	4179.7	60052.	12244.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-14 Acquired: 10/18/2016 02:37:57 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H6~~2~~3 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-9.0099	57041.	202.56	914.85	5.4771	8539.7	12.810	135.96	26.980
#1	-8.9842	56940.	202.29	912.75	5.4984	8504.5	12.767	136.19	27.434
#2	-9.0474	57113.	203.42	915.67	5.4832	8572.3	12.746	135.33	26.671
#3	-8.9981	57071.	201.97	916.13	5.4496	8542.3	12.917	136.36	26.836

Elem	Cu3247	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	243.23	F 467560.	8982.7	15698.	F 17240.	3.0618	271.35	41.982	762.00
#1	243.86	465740.	8953.9	15648.	17208.	3.0412	268.46	41.811	765.09
#2	242.30	468420.	9005.1	15723.	17239.	3.0112	271.71	42.100	759.13
#3	243.53	468540.	8989.1	15723.	17273.	3.1330	273.87	42.034	761.78

Elem	Sb2068	Se1960	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24.148	15.769	133.66	-8.4040	155.24	804.79
#1	24.131	12.566	131.93	-8.6249	155.66	806.47
#2	23.576	16.775	136.30	-7.3625	155.25	801.98
#3	24.738	17.966	132.74	-9.2247	154.82	805.93

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-14 Acquired: 10/18/2016 02:37:57 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H6~~2~~3 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3891.7	2147.5	26838.	126980.	4079.5	58622.	11899.
#1	3885.9	2139.7	26712.	126620.	4074.5	58417.	11845.
#2	3896.0	2157.0	26783.	127020.	4087.2	58711.	11873.
#3	3893.3	2145.6	27020.	127300.	4077.0	58739.	11978.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-15 Acquired: 10/18/2016 02:42:07 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H6~~2~~4 SDG: MH1H50 Case: 46282
Comment: vcr 10/20/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.31590**	**35286.**	**391.65**	**1209.0**	**3.8107**	**8024.6**	**7.8238**	**23.196**	**8.7700**	**97.411**
#1	-.26978	35206.	393.00	1205.7	3.7948	7986.3	7.8496	23.443	8.7246	97.151
#2	-.30866	35395.	390.26	1212.4	3.8130	8069.9	7.8202	22.966	8.8347	97.764
#3	-.36926	35259.	391.70	1209.0	3.8244	8017.7	7.8016	23.180	8.7506	97.319

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**300880.**	**12022.**	**3506.8**	**1283.4**	**4.1835**	**792.35**	**12.707**	**5212.3**	**18.054**	**12.699**
#1	300020.	12021.	3494.4	1276.9	4.3697	792.07	12.028	5208.9	18.048	11.445
#2	302260.	12050.	3527.8	1286.5	4.1140	796.38	13.173	5219.3	18.364	12.805
#3	300360.	11997.	3498.2	1286.7	4.0667	788.60	12.921	5208.7	17.751	13.848

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**206.54**	**-9.0789**	**163.82**	**446.72**
#1	213.33	-9.9847	163.86	446.36
#2	205.83	-7.5295	164.81	446.73
#3	200.47	-9.7225	162.78	447.08

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-15 Acquired: 10/18/2016 02:42:07 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H6~~2~~4 SDG: MH1H50 Case: 46282
Comment: 10/20/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4014.8**	**2224.1**	**26922.**	**129030.**	**4104.2**	**59265.**	**11792.**
#1	4010.1	2222.4	26787.	128910.	4104.3	59078.	11738.
#2	4019.3	2226.9	26948.	129120.	4102.4	59313.	11773.
#3	4015.0	2223.1	27029.	129060.	4106.0	59404.	11864.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-16 Acquired: 10/18/2016 02:46:20 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H6~~4~~5 SDG: MH1H50 Case: 46282
Comment: vCT 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.0782**	**27224.**	**346.06**	**1659.0**	**1.5230**	**446.85**	**10.431**	**-.30966**	**6.4210**
#1	1.5001	27193.	347.23	1657.2	1.5550	439.84	10.501	-.23869	6.5941
#2	.89224	27273.	344.50	1661.0	1.5075	456.74	10.344	-.39623	6.1985
#3	.84218	27205.	346.45	1658.8	1.5065	443.96	10.449	-.29405	6.4705

Elem	Cu3247	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**67.358**	**F 430050.**	**14318.**	**1321.4**	**69.623**	**4.4027**	**850.51**	**-15.858**	**5132.8**
#1	67.902	428630.	14304.	1302.2	69.647	4.7030	850.37	-15.480	5140.2
#2	66.580	431280.	14361.	1339.8	69.693	4.3974	847.64	-15.820	5127.5
#3	67.593	430240.	14288.	1322.2	69.530	4.1076	853.52	-16.275	5130.8

Elem	Sb2068	Se1960	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**25.305**	**13.426**	**140.08**	**-13.169**	**145.45**	**191.28**
#1	26.156	13.360	137.95	-13.735	145.60	192.15
#2	24.508	14.109	142.02	-13.065	145.72	190.44
#3	25.251	12.810	140.27	-12.707	145.04	191.25

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-16 Acquired: 10/18/2016 02:46:20 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H6~~4~~5 SDG: MH1H50 Case: 46282
Comment: vCT 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3982.6**	**2188.7**	**26724.**	**128200.**	**3946.3**	**57063.**	**11417.**
#1	3988.8	2188.8	26754.	128310.	3942.1	57118.	11421.
#2	3986.8	2195.0	26691.	127600.	3956.4	56842.	11402.
#3	3972.1	2182.5	26728.	128700.	3940.6	57229.	11428.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-17 Acquired: 10/18/2016 02:50:34 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H66 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.8157**	**47921.**	**461.29**	**620.43**	**2.4792**	**6456.4**	**8.4705**	**89.614**	**21.900**	**317.16**
#1	-2.7773	47795.	460.82	619.78	2.4800	6452.6	8.4317	89.647	21.838	317.53
#2	-2.7275	47912.	460.25	620.25	2.4894	6419.0	8.4624	89.297	22.316	316.56
#3	-2.9422	48056.	462.80	621.25	2.4681	6497.6	8.5173	89.897	21.545	317.40

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**208410.**	**8301.4**	**8982.9**	**6508.9**	**4.3421**	**125.57**	**6.0397**	**2902.7**	**26.813**	**11.235**
#1	207230.	8272.9	8942.3	6483.4	4.4480	123.89	6.1178	2901.6	26.733	11.737
#2	208410.	8270.7	8986.4	6508.4	4.2934	124.55	6.0450	2901.7	26.910	9.5699
#3	209590.	8360.7	9020.0	6535.0	4.2848	128.25	5.9564	2904.7	26.798	12.398

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**313.49**	**-2.5883**	**130.76**	**1050.6**
#1	312.05	-2.2802	131.45	1048.9
#2	313.73	-2.8146	129.85	1048.7
#3	314.68	-2.6703	130.98	1054.3

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-17 Acquired: 10/18/2016 02:50:34 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H66 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4005.2**	**2225.9**	**26835.**	**129430.**	**4012.7**	**57905.**	**11462.**
#1	4009.1	2223.6	26737.	128990.	4011.5	57704.	11420.
#2	4002.1	2227.8	26938.	129870.	4015.6	58153.	11515.
#3	4004.3	2226.3	26830.	129430.	4011.0	57858.	11449.

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-18 Acquired: 10/18/2016 02:54:46 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H~~66~~7 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.3706**	**64595.**	**413.19**	**1270.3**	**2.6579**	**9777.6**	**7.8335**	**13.814**	**44.082**	**108.50**
#1	-2.5182	64295.	410.67	1263.6	2.6693	9703.5	7.7783	13.893	43.749	108.59
#2	-2.1269	64612.	413.66	1273.1	2.6416	9798.5	7.8884	13.699	44.332	108.98
#3	-2.4667	64878.	415.23	1274.0	2.6629	9830.8	7.8337	13.850	44.166	107.92

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**307040.**	**13102.**	**11205.**	**1073.6**	**11.933**	**410.57**	**1.3693**	**4444.9**	**35.227**	**15.970**
#1	303380.	13110.	11072.	1066.4	11.887	411.35	1.4911	4423.2	36.569	15.397
#2	309050.	13090.	11279.	1076.1	11.887	410.65	1.3038	4437.7	34.803	17.947
#3	308710.	13105.	11262.	1078.4	12.025	409.71	1.3128	4473.9	34.307	14.567

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**439.19**	**-8.1390**	**224.29**	**358.60**
#1	443.75	-8.3555	224.09	356.41
#2	433.29	-7.8270	224.50	358.79
#3	440.53	-8.2346	224.28	360.61

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-18 Acquired: 10/18/2016 02:54:46 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: MH1H~~66~~7 SDG: MH1H50 Case: 46282
Comment: VCT 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3936.0**	**2193.0**	**26860.**	**127940.**	**4021.2**	**57646.**	**11606.**
#1	3947.0	2203.4	26798.	128120.	4035.5	57741.	11621.
#2	3942.7	2197.2	26950.	128070.	4026.7	57673.	11611.
#3	3918.4	2178.5	26834.	127640.	4001.3	57523.	11586.

Sample Name: SEQ-CCV@CCV05 Acquired: 10/18/2016 02:58:58 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**484.03**	**130690.**	**1927.4**	**15004.**	**381.68**	**189570.**	**911.34**	**2287.7**	**5654.0**	**4854.2**
Stddev	.84	182.	2.8	177.	.99	1278.	2.02	5.3	6.9	4.9
%RSD	.17279	.13906	.14764	1.1801	.25880	.67391	.22167	.23017	.12195	.10077
#1	483.95	130880.	1925.4	14894.	381.43	191030.	909.68	2283.7	5652.0	4849.9
#2	483.23	130650.	1926.1	14909.	382.77	189020.	910.75	2285.8	5648.4	4853.1
#3	484.90	130520.	1930.6	15208.	380.84	188660.	913.59	2293.7	5661.7	4859.5

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**118930.**	**127820.**	**183350.**	**8186.1**	**918.29**	**118940.**	**3785.5**	**F 5159.3**	**3634.9**	**F 3144.7**
Stddev	1200.	497.	1410.	27.7	1.72	1176.	8.7	10.4	7.1	6.4
%RSD	1.0094	.38875	.76914	.33879	.18752	.98849	.22863	.20147	.19466	.20348
#1	120290.	128390.	184910.	8217.7	916.61	120280.	3778.9	5155.5	3631.7	3138.9
#2	118480.	127470.	182960.	8174.4	918.20	118500.	3782.4	5151.3	3630.0	3143.7
#3	118020.	127600.	182170.	8166.0	920.05	118050.	3795.3	5171.0	3643.0	3151.6

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV05 Acquired: 10/18/2016 02:58:58 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**1839.5**	**3770.4**	**3891.2**	**7574.5**
Stddev	3.2	5.7	4.7	16.2
%RSD	.17189	.15102	.12194	.21330
#1	1836.2	3767.2	3887.4	7565.4
#2	1839.6	3767.0	3889.7	7564.9
#3	1842.6	3777.0	3896.5	7593.1

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3434.0**	**2037.8**	**26627.**	**121060.**	**3669.4**	**53532.**	**11135.**
Stddev	7.0	5.0	247.	280.	9.1	132.	151.
%RSD	.20383	.24623	.92800	.23156	.24863	.24652	1.3521
#1	3437.4	2041.2	26342.	120770.	3678.7	53407.	10961.
#2	3438.6	2040.1	26776.	121330.	3668.9	53670.	11214.
#3	3425.9	2032.0	26763.	121090.	3660.5	53518.	11230.

Sample Name: SEQ-CCB@CCB05 Acquired: 10/18/2016 03:03:12 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.52347**	**-10.370**	**1.3479**	**1.5995**	**.11713**	**-30.174**	**.15964**	**.38437**	**-.43541**	**.06045**	**-15.048**
Stddev	.18082	3.573	.8799	.1941	.02112	7.260	.02873	.16151	.23031	.09672	1.004
%RSD	34.542	34.451	65.279	12.133	18.035	24.063	17.999	42.019	52.896	160.01	6.6742
#1	-.53113	-6.6570	1.6453	1.4381	.13745	-29.275	.17844	.19902	-.58463	.14419	-14.597
#2	-.70033	-13.783	.35782	1.5456	.11867	-37.842	.17390	.49490	-.55144	.08256	-16.198
#3	-.33894	-10.670	2.0404	1.8148	.09528	-23.404	.12656	.45920	-.17016	-.04541	-14.348

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**30.765**	**-36.593**	**-.73435**	**.25581**	**7.4865**	**.70128**	**.24464**	**2.5132**	**-.94777**	**-.92949**	**.73811**
Stddev	25.679	10.949	.24363	.18613	5.3712	.33616	.98419	.7724	.60376	.16293	.62358
%RSD	83.470	29.922	33.176	72.760	71.745	47.935	402.31	30.734	63.703	17.528	84.483
#1	37.360	-36.973	-1.0103	.25554	12.859	1.0875	1.1837	3.3981	-1.6294	-.80035	1.2310
#2	2.4308	-25.459	-.64352	.06982	2.1164	.54206	-.77917	2.1675	-.73372	-.87559	.03707
#3	52.503	-47.348	-.54919	.44207	7.4844	.47431	.32935	1.9740	-.48020	-1.1125	.94631

Bonner Analytical Testing Co. ICAPP02

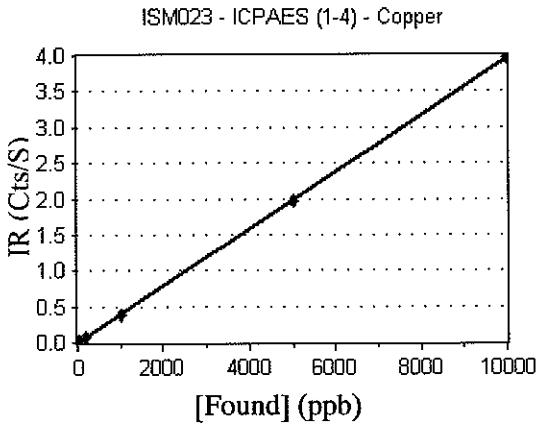
Sample Name: SEQ-CCB@CCB05 Acquired: 10/18/2016 03:03:12 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: LEM EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.65719**	**.78730**
Stddev	.13382	.10630
%RSD	20.362	13.502
#1	.50357	.90438
#2	.71963	.76070
#3	.74838	.69683

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4339.2**	**2427.5**	**26487.**	**127900.**	**4040.6**	**57698.**	**11443.**
Stddev	14.1	4.6	182.	618.	11.4	250.	101.
%RSD	.32544	.18924	.68714	.48310	.28305	.43327	.88363
#1	4346.3	2431.1	26277.	128490.	4047.4	57911.	11327.
#2	4348.4	2429.0	26608.	127940.	4047.1	57761.	11512.
#3	4322.9	2422.3	26575.	127260.	4027.4	57423.	11491.

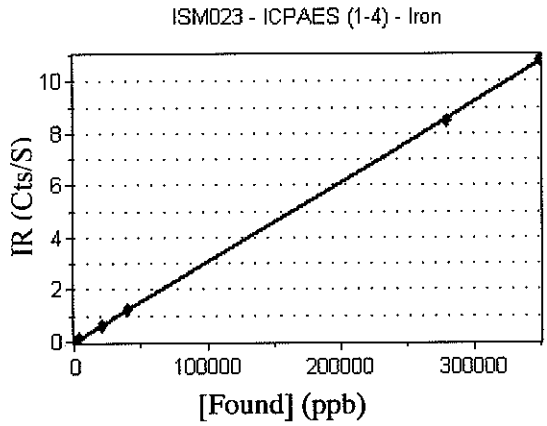
Bonner Analytical Testing Company

Instrument ID: ICAPP02 Calibration ID: B644036 Calibration Date: 10/18/2016



Calibration Plot: Copper
Calibration Type: Linear Regression Weighted 1/X
Corr. Coeff.: 0.9999398
Fit: [Y] = 3.948081E-04 * [X] + 1.009708E-03
[y-intercept] = -2.56

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62522-CAL1	B6I0028	0	4.21	0.00267	0
BJ62522-CAL2	B6G0026	25	26.57	0.0115	-6
BJ62522-CAL3	B6G0027	200	194.98	0.07799	3
BJ62522-CAL4	B6G0028	1000	958.97	0.37962	4
BJ62522-CAL5	B6G0029	5000	4,988.47	1.9705	0
BJ62522-CAL6	B6G0030	10000	10,056.00	3.9712	-1



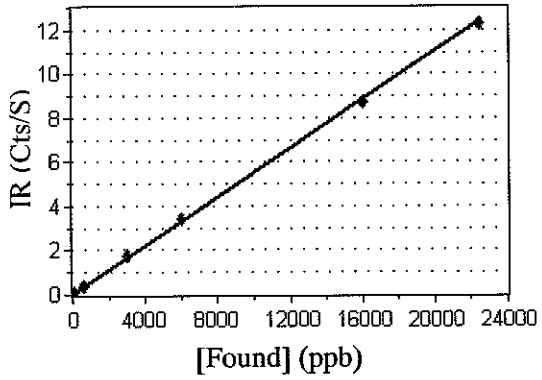
Calibration Plot: Iron
Calibration Type: Linear Regression Weighted 1/X
Corr. Coeff.: 0.9998887
Fit: [Y] = 3.066555E-05 * [X] + 3.425486E-04
[y-intercept] = -11.17

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62522-CAL1	B6I0028	0	-14.43	-0.0001	0
BJ62522-CAL2	B6G0026	100	91.55	0.00315	8
BJ62522-CAL3	B6G0027	800	817.45	0.02541	-2
BJ62522-CAL4	B6G0028	4000	4,110.07	0.12638	-3
BJ62522-CAL5	B6G0029	20000	20,462.94	0.62785	-2
BJ62522-CAL6	B6G0030	40000	40,725.10	1.2492	-2
BJ62522-CAL7	B6G0031	280000	276,680.43	8.4849	1
BJ62522-CAL8	B6G0032	350000	352,012.52	10.795	-1

Bonner Analytical Testing Company

Instrument ID: ICAPP02 Calibration ID: B644036 Calibration Date: 10/18/2016

ISM023 - ICPAES (1-4) - Manganese



Calibration Plot: Manganese
Calibration Type: Linear Regression Weighted 1/X
Corr. Coeff.: 0.9998155
Fit: [Y] = 5.503931E-04 * [X] + 2.037067E-03
[y-intercept] = -3.70

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62522-CAL1	B6I0028	0	-3.76	-0.00003	0
BJ62522-CAL2	B6G0026	15	12.89	0.00913	14
BJ62522-CAL3	B6G0027	120	125.12	0.0709	-4
BJ62522-CAL4	B6G0028	600	629.74	0.34864	-5
BJ62522-CAL5	B6G0029	3000	3,108.80	1.7131	-4
BJ62522-CAL6	B6G0030	6000	6,169.70	3.3978	-3
BJ62522-CAL7	B6G0031	16000	15,886.58	8.7459	1
BJ62522-CAL9	B6J0169	22500	22,302.17	12.277	1

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CAL1@S01 Acquired: 10/18/2016 10:38:39 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00081	-.00282	-.00023	.01212	-.00161	.00012	.00067	-.00023	.00004	.00267
#1	-.00077	-.00302	-.00033	.01243	-.00156	.00008	.00059	-.00023	.00003	.00270
#2	-.00082	-.00298	-.00034	.01222	-.00165	-.00000	.00062	-.00037	.00003	.00272
#3	-.00084	-.00246	-.00003	.01172	-.00162	.00029	.00079	-.00008	.00005	.00260

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00010	.00258	.00001	-.00003	.00013	.01908	.00468	.00082	-.00088	.00052
#1	-.00022	.00286	-.00003	.00015	.00012	.01944	.00464	.00135	-.00109	.00059
#2	-.00012	.00344	.00012	-.00028	.00005	.01931	.00481	.00070	-.00090	.00063
#3	.00003	.00143	-.00006	.00003	.00021	.01850	.00458	.00042	-.00066	.00033

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00310	-.00005	-.00004	.01218
#1	.00305	-.00006	-.00009	.01222
#2	.00309	.00004	-.00005	.01231
#3	.00317	-.00012	.00003	.01200

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CAL1@S01 Acquired: 10/18/2016 10:38:39 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3756.7	2162.8	21871.	119600.	3675.1	54375.	9339.5
#1	3765.6	2165.9	21844.	119470.	3692.4	54223.	9330.3
#2	3749.2	2161.3	21856.	119180.	3674.4	54218.	9329.9
#3	3755.2	2161.3	21914.	120140.	3658.6	54685.	9358.2

Sample Name: SEQ-CAL2@S02 Acquired: 10/18/2016 10:43:04 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00140**	**.00359**	**.00161**	**.46379**	**.00157**	**.00354**	**.02556**	**.01244**	**.00170**	**.01150**	**.00315**
#1	.00144	.00305	.00171	.46351	.00154	.00346	.02554	.01221	.00174	.01161	.00322
#2	.00133	.00383	.00178	.46372	.00157	.00370	.02557	.01248	.00168	.01147	.00304
#3	.00144	.00390	.00135	.46414	.00159	.00346	.02556	.01263	.00167	.01143	.00317

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01297**	**.00348**	**.00913**	**.00622**	**.04315**	**.01914**	**.00704**	**.00263**	**.00256**	**.00428**	**.00424**
#1	.01300	.00358	.00907	.00623	.04330	.01922	.00682	.00236	.00273	.00437	.00416
#2	.01329	.00349	.00922	.00610	.04269	.01893	.00714	.00257	.00248	.00427	.00435
#3	.01262	.00337	.00910	.00632	.04346	.01928	.00717	.00297	.00248	.00420	.00423

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.00382**	**.09627**
#1	.00380	.09589
#2	.00388	.09648
#3	.00378	.09644

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CAL2@S02 Acquired: 10/18/2016 10:43:04 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3760.5**	**2168.5**	**22126.**	**119920.**	**3680.5**	**54451.**	**9446.3**
#1	3765.4	2175.5	21999.	120370.	3685.8	54535.	9407.2
#2	3769.5	2171.5	22161.	120060.	3689.8	54569.	9463.9
#3	3746.5	2158.5	22217.	119340.	3666.0	54249.	9467.9

Sample Name: SEQ-CAL3@S03 Acquired: 10/18/2016 10:47:27 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00368**	**.04944**	**.01358**	**3.6067**	**.02363**	**.02867**	**.19701**	**.10096**	**.01351**	**.07799**	**.02541**
#1	.00362	.04940	.01365	3.6074	.02367	.02870	.19667	.10062	.01363	.07800	.02537
#2	.00365	.04922	.01340	3.6075	.02371	.02846	.19694	.10046	.01344	.07795	.02527
#3	.00375	.04971	.01369	3.6053	.02352	.02886	.19740	.10180	.01345	.07803	.02558

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.10165**	**.02759**	**.07090**	**.04854**	**.33259**	**.15623**	**.04469**	**.02793**	**.01768**	**.01315**	**.03431**
#1	.10185	.02742	.07134	.04858	.33135	.15609	.04396	.02796	.01757	.01314	.03471
#2	.10164	.02766	.07079	.04824	.33202	.15659	.04417	.02767	.01770	.01307	.03411
#3	.10147	.02769	.07057	.04879	.33441	.15602	.04595	.02816	.01776	.01323	.03412

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.03143**	**.71312**
#1	.03137	.71249
#2	.03157	.71487
#3	.03133	.71199

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CAL3@S03 Acquired: 10/18/2016 10:47:27 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3739.8**	**2191.2**	**22231.**	**120860.**	**3678.5**	**54140.**	**9365.5**
#1	3745.5	2197.3	22183.	120990.	3687.8	54132.	9337.8
#2	3746.3	2192.2	22182.	120620.	3682.2	54080.	9360.3
#3	3727.8	2183.9	22330.	120970.	3665.5	54208.	9398.5

Sample Name: SEQ-CAL4@S04 Acquired: 10/18/2016 10:51:43 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02153**	**.25466**	**.06948**	**17.963**	**.12472**	**.14261**	**.96940**	**.50284**	**.06705**	**.37962**	**.12638**
#1	.02164	.25257	.06927	17.933	.12484	.14222	.96878	.50298	.06714	.37975	.12605
#2	.02141	.25609	.06894	17.966	.12441	.14301	.97009	.50286	.06715	.38039	.12626
#3	.02155	.25532	.07021	17.991	.12492	.14261	.96932	.50269	.06685	.37872	.12684

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.50924**	**.13501**	**.34864**	**.24426**	**1.6354**	**.77210**	**.21620**	**.14337**	**.08552**	**.05323**	**.17373**
#1	.50913	.13491	.34829	.24421	1.6370	.77203	.21666	.14292	.08540	.05301	.17310
#2	.50933	.13509	.34835	.24465	1.6323	.76973	.21634	.14326	.08544	.05323	.17442
#3	.50927	.13502	.34927	.24392	1.6368	.77453	.21560	.14394	.08571	.05347	.17368

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.15811**	**3.5087**
#1	.15854	3.5082
#2	.15821	3.4966
#3	.15758	3.5213

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CAL4@S04 Acquired: 10/18/2016 10:51:43 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3655.0**	**2178.1**	**22362.**	**120890.**	**3662.9**	**53797.**	**9391.5**
#1	3658.3	2180.0	22440.	120730.	3664.4	53724.	9416.2
#2	3652.5	2180.4	22350.	121340.	3660.6	53975.	9392.7
#3	3654.2	2173.9	22297.	120580.	3663.8	53692.	9365.5

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CAL5@S05 Acquired: 10/18/2016 10:55:49 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.11007**	**1.2762**	**.35479**	**88.119**	**.62263**	**.70659**	**4.7165**	**2.4618**	**.32947**	**1.9705**	**.62785**
#1	.11018	1.2744	.35575	87.336	.62247	.70454	4.7207	2.4630	.32932	1.9714	.62544
#2	.11015	1.2800	.35438	89.525	.62055	.70801	4.7124	2.4593	.32986	1.9729	.63131
#3	.10986	1.2743	.35423	87.497	.62487	.70722	4.7166	2.4631	.32923	1.9674	.62679

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.5578**	**.66574**	**1.7131**	**1.2223**	**8.1666**	**3.7912**	**1.0622**	**.72151**	**.41574**	**.25151**	**.87123**
#1	2.5573	.66459	1.7074	1.2202	8.1545	3.7957	1.0628	.72118	.41598	.25129	.86979
#2	2.5621	.66849	1.7194	1.2232	8.1832	3.7856	1.0599	.72104	.41592	.25185	.87239
#3	2.5539	.66414	1.7125	1.2234	8.1622	3.7922	1.0639	.72232	.41533	.25139	.87150

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.79060**	**17.123**
#1	.79017	17.153
#2	.79192	17.100
#3	.78972	17.115

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CAL5@S05 Acquired: 10/18/2016 10:55:49 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3381.7**	**2070.0**	**22286.**	**117650.**	**3509.9**	**51929.**	**9248.4**
#1	3381.0	2068.2	22219.	117680.	3507.5	51953.	9237.2
#2	3379.9	2071.7	22235.	117870.	3510.6	51966.	9203.4
#3	3384.2	2070.0	22405.	117380.	3511.5	51867.	9304.5

Sample Name: SEQ-CAL6@S06 Acquired: 10/18/2016 10:59:59 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.22201**	**2.5742**	**.71955**	**173.55**	**1.2277**	**1.3955**	**9.2749**	**4.8719**	**.64891**	**3.9712**	**1.2492**
#1	.22210	2.5692	.71898	173.59	1.2281	1.3944	9.2793	4.8715	.64588	3.9695	1.2461
#2	.22158	2.5688	.71792	173.10	1.2306	1.3943	9.2615	4.8638	.64914	3.9659	1.2448
#3	.22234	2.5847	.72174	173.97	1.2244	1.3977	9.2840	4.8805	.65171	3.9781	1.2566

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.1307**	**1.3296**	**3.3978**	**2.4448**	**16.269**	**7.4986**	**2.0958**	**1.4531**	**.81909**	**.49725**	**1.7244**
#1	5.1338	1.3272	3.3927	2.4462	16.282	7.4967	2.0993	1.4519	.81929	.49605	1.7297
#2	5.1246	1.3258	3.3866	2.4399	16.210	7.4898	2.0902	1.4507	.81653	.49753	1.7208
#3	5.1337	1.3358	3.4142	2.4482	16.315	7.5091	2.0979	1.4568	.82145	.49817	1.7227

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**1.5746**	**33.311**
#1	1.5715	33.309
#2	1.5745	33.306
#3	1.5778	33.318

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Sample Name: SEQ-CAL6@S06 Acquired: 10/18/2016 10:59:59 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3208.9**	**1995.8**	**22127.**	**115260.**	**3394.3**	**50557.**	**9129.1**
#1	3207.1	1996.4	22232.	115600.	3398.4	50737.	9164.0
#2	3209.7	1998.2	22031.	114830.	3398.1	50455.	9114.7
#3	3209.8	1992.7	22119.	115350.	3386.3	50479.	9108.6

Sample Name: SEQ-CAL7@S07 Acquired: 10/18/2016 11:04:10 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Al3961	Ca3181	Cr2677	Fe2598	K_7664	Mg2790	Mn2576	Na5895	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**20.912**	**5.4025**	**1.5856**	**8.4849**	**12.468**	**5.2369**	**8.7459**	**32.205**	**5.4224**
#1	20.848	5.3801	1.5887	8.4393	12.464	5.2156	8.7197	32.160	5.4404
#2	20.905	5.4024	1.5830	8.4665	12.461	5.2320	8.7361	32.294	5.4151
#3	20.982	5.4250	1.5851	8.5488	12.477	5.2631	8.7820	32.163	5.4118

Int. Std.	Sc2273	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**1715.8**	**46915.**	**8886.7**
#1	1709.4	46967.	8948.7
#2	1720.3	47101.	8864.8
#3	1717.7	46677.	8846.4

Sample Name: SEQ-CAL8@S08 Acquired: 10/18/2016 11:08:34 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Al3961	Fe2598	Pb2203
Units	Cts/S	Cts/S	Cts/S
Avg	**25.099**	**10.795**	**13.893**
#1	24.747	10.740	13.884
#2	25.310	10.820	13.876
#3	25.242	10.825	13.918

Int. Std.	Sc2273	Y_3710
Units	Cts/S	Cts/S
Avg	**2024.4**	**9534.3**
#1	2025.7	9543.6
#2	2026.3	9529.6
#3	2021.1	9529.8

Sample Name: SEQ-CAL9@S09 Acquired: 10/18/2016 11:12:56 Type: Cal
Method: ISM023_New_TotalMetals(v20) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Fe2598	Mn2576
Units	Cts/S	Cts/S
Avg	**11.905**	**12.277**
#1	11.881	12.275
#2	11.919	12.288
#3	11.914	12.269

Int. Std.	Y_3710
Units	Cts/S
Avg	**8810.8**
#1	8802.7
#2	8796.9
#3	8832.8

Sample Name: SEQ-ICV@ICV01 Acquired: 10/18/2016 11:17:26 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**503.76**	**2596.0**	**1000.1**	**511.85**	**508.66**	**10435.**	**514.13**	**511.51**	**513.90**	**477.12**	**5161.0**
Stddev	.88	19.3	3.7	.90	.57	29.	.82	.44	1.78	1.28	19.7
%RSD	.17467	.74488	.37019	.17659	.11225	.27424	.15869	.08527	.34707	.26879	.38120
#1	504.77	2591.5	996.79	510.81	508.08	10406.	513.25	511.02	515.82	478.60	5151.2
#2	503.20	2617.1	999.31	512.39	508.67	10464.	514.86	511.85	512.29	476.43	5183.7
#3	503.31	2579.3	1004.1	512.35	509.22	10434.	514.26	511.68	513.58	476.34	5148.1

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**10063.**	**6174.3**	**522.19**	**-.24272**	**9961.3**	**518.62**	**1004.7**	**997.73**	**1021.7**	**-.64107**	**1029.6**
Stddev	64.	42.8	1.31	.10461	18.5	1.75	2.4	.22	3.0	.45083	5.0
%RSD	.63222	.69384	.25063	43.099	.18559	.33724	.24304	.02166	.29541	70.325	.48959
#1	10131.	6176.2	521.24	-.31219	9977.0	518.35	1004.4	997.92	1018.7	-.27637	1025.4
#2	10052.	6216.1	523.69	-.29357	9966.0	517.02	1002.4	997.78	1021.8	-.50171	1028.2
#3	10005.	6130.5	521.65	-.12241	9940.9	520.49	1007.3	997.50	1024.7	-1.1451	1035.1

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-ICV@ICV01 Acquired: 10/18/2016 11:17:26 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**499.98**	**1058.7**
Stddev	1.05	4.4
%RSD	.20960	.41502
#1	500.84	1057.6
#2	500.28	1054.9
#3	498.81	1063.5

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3671.2**	**2159.7**	**22472.**	**121070.**	**3673.0**	**54309.**	**9467.5**
Stddev	6.6	4.5	94.	277.	5.1	60.	49.4
%RSD	.18108	.21052	.41742	.22881	.13774	.11136	.52188
#1	3676.5	2163.0	22406.	121350.	3678.3	54354.	9439.5
#2	3673.4	2161.6	22432.	120790.	3668.2	54240.	9438.5
#3	3663.7	2154.5	22580.	121080.	3672.4	54332.	9524.6

Sample Name: SEQ-ICB@ICB01 Acquired: 10/18/2016 11:21:37 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.48043**	**2.6731**	**.68440**	**-.16194**	**.05051**	**10.678**	**.06029**	**.02630**	**.02724**	**-.10812**	**.23285**
Stddev	.40832	5.3880	.72071	.15350	.01822	9.465	.01169	.24197	.29572	.05421	2.7364
%RSD	84.991	201.56	105.31	94.788	36.081	88.640	19.387	920.07	1085.6	50.144	1175.2
#1	.92556	6.2671	.73455	-.13746	.04005	20.920	.06095	.28568	.25649	-.04954	1.1395
#2	.39246	-3.5220	-.06007	-.02215	.07156	2.2538	.04829	-.01347	-.30656	-.15653	2.4008
#3	.12326	5.2742	1.3787	-.32621	.03992	8.8599	.07164	-.19332	.13178	-.11829	-2.8418

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**112.86**	**3.4046**	**.25366**	**.02705**	**20.381**	**-.01541**	**2.1211**	**.86067**	**-.62990**	**.94673**	**-.27854**
Stddev	24.83	9.0144	.57553	.05051	8.085	.33034	.4109	1.2135	1.0040	.66390	.87384
%RSD	22.001	264.77	226.89	186.75	39.672	2143.0	19.373	141.00	159.40	70.126	313.72
#1	115.12	6.5857	-.28004	-.00762	11.961	-.38395	1.6559	2.2613	-1.1576	.19022	-1.0699
#2	136.48	10.397	.86346	.08499	28.084	.08366	2.2730	.19509	-1.2600	1.4324	-.42498
#3	86.974	-6.7691	.17757	.00377	21.096	.25405	2.4345	.12558	.52794	1.2176	.65926

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-ICB@ICB01 Acquired: 10/18/2016 11:21:37 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**-.10681**	**-.10019**
Stddev	.22736	.23623
%RSD	212.85	235.78
#1	-.04010	.10518
#2	-.36007	-.35836
#3	.07973	-.04741

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3790.1**	**2175.5**	**22031.**	**120590.**	**3705.4**	**55041.**	**9438.5**
Stddev	7.4	6.6	118.	162.	10.0	37.	41.9
%RSD	.19454	.30358	.53497	.13471	.26866	.06756	.44373
#1	3796.8	2181.3	22034.	120700.	3716.9	55063.	9437.7
#2	3791.4	2177.0	22148.	120400.	3698.9	54998.	9480.7
#3	3782.2	2168.3	21912.	120670.	3700.5	55062.	9397.0

Sample Name: SEQ-IFA@ICSA01 Acquired: 10/18/2016 11:25:59 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.3020**	**257250.**	**-8.5250**	**5.5636**	**-.07885**	**242090.**	**2.7877**	**-.51368**	**56.812**	**-13.133**
Stddev	.0271	1309.	2.0974	.0167	.01646	422.	.0269	.21134	.380	.030
%RSD	1.1761	.50896	24.603	.30013	20.879	.17434	.96509	41.142	.66864	.23031
#1	-2.3058	255770.	-8.2005	5.5793	-.07519	241610.	2.7621	-.47722	56.481	-13.158
#2	-2.2733	257680.	-6.6088	5.5461	-.06453	242280.	2.8157	-.32295	56.728	-13.099
#3	-2.3270	258280.	-10.766	5.5653	-.09684	242380.	2.7854	-.74089	57.227	-13.141

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**97848.**	**148.89**	**253980.**	**12.746**	**.44488**	**-47.349**	**-10.139**	**8.8665**	**-1.7152**	**-2.8964**
Stddev	342.	14.58	1060.	.228	.17433	5.803	.123	.5601	.4434	.9922
%RSD	.34925	9.7927	.41737	1.7863	39.186	12.256	1.2094	6.3164	25.851	34.258
#1	97468.	132.94	252750.	13.004	.38644	-53.635	-10.047	8.2202	-1.7345	-2.4015
#2	98130.	161.54	254580.	12.573	.30727	-46.215	-10.091	9.2091	-2.1486	-2.2490
#3	97946.	152.20	254590.	12.660	.64092	-42.196	-10.278	9.1702	-1.2625	-4.0388

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-IFA@ICSA01 Acquired: 10/18/2016 11:25:59 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**3.1334**	**-2.8845**	**.03297**	**-3.0075**
Stddev	.5316	.9627	.19882	.1447
%RSD	16.966	33.373	603.03	4.8124
#1	3.1041	-3.4226	.13757	-3.0332
#2	2.6170	-3.4579	.15765	-2.8516
#3	3.6790	-1.7731	-.19632	-3.1377

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3204.3**	**1876.8**	**22618.**	**112860.**	**3408.3**	**50558.**	**9318.6**
Stddev	1.0	2.4	138.	161.	11.4	55.	60.0
%RSD	.03163	.12807	.60985	.14234	.33357	.10836	.64410
#1	3203.2	1875.2	22776.	112680.	3419.5	50552.	9386.6
#2	3204.6	1875.7	22558.	112990.	3408.6	50616.	9296.1
#3	3205.1	1879.6	22520.	112890.	3396.8	50507.	9273.0

Sample Name: SEQ-IFB@ICSAB01 Acquired: 10/18/2016 11:30:16 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**207.22**	**257240.**	**98.542**	**521.24**	**511.22**	**242600.**	**967.96**	**486.18**	**557.40**	**493.54**
Stddev	.12	1405.	2.077	1.51	.56	1139.	.74	1.26	1.53	.47
%RSD	.05928	.54612	2.1078	.28971	.10927	.46937	.07696	.25864	.27479	.09476
#1	207.11	256180.	97.681	520.08	511.45	243160.	968.46	485.11	556.90	493.42
#2	207.35	258830.	97.034	522.95	511.63	243350.	968.31	485.87	559.12	494.06
#3	207.19	256700.	100.91	520.69	510.58	241290.	967.10	487.57	556.17	493.15

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**97941.**	**90.522**	**253750.**	**521.22**	**.15989**	**-39.576**	**1039.3**	**56.551**	**600.48**	**47.081**
Stddev	540.	6.914	1692.	2.69	.24443	4.031	.7	.271	2.84	1.251
%RSD	.55130	7.6375	.66686	.51616	152.87	10.186	.06920	.47924	.47363	2.6580
#1	97944.	83.271	253630.	520.15	.06757	-44.001	1040.1	56.333	603.52	46.703
#2	98480.	97.039	255490.	524.28	.43703	-36.112	1039.0	56.854	600.05	48.477
#3	97400.	91.257	252110.	519.23	-.02493	-38.616	1038.8	56.466	597.88	46.061

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-IFB@ICSAB01 Acquired: 10/18/2016 11:30:16 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**4.1037**	**98.936**	**491.59**	**1041.3**
Stddev	.3089	.818	.52	.3
%RSD	7.5266	.82691	.10528	.02979
#1	4.2618	98.329	492.05	1041.6
#2	4.3015	98.612	491.71	1041.2
#3	3.7478	99.866	491.03	1041.1

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3212.9**	**1873.1**	**22686.**	**113110.**	**3413.3**	**50732.**	**9349.1**
Stddev	1.9	.3	193.	205.	4.1	105.	100.1
%RSD	.05777	.01498	.84916	.18145	.12092	.20683	1.0704
#1	3214.7	1873.4	22649.	113300.	3417.8	50808.	9333.7
#2	3211.0	1872.9	22514.	112890.	3412.3	50612.	9257.6
#3	3212.9	1873.0	22894.	113150.	3409.7	50777.	9455.9

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV01 Acquired: 10/18/2016 11:34:25 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**512.76**	**142150.**	**2118.3**	**16019.**	**397.33**	**199080.**	**962.30**	**2424.3**	**5661.1**	**5127.0**
Stddev	.88	149.	4.3	196.	.91	837.	2.25	7.3	18.2	3.2
%RSD	.17092	.10496	.20275	1.2219	.22813	.42059	.23372	.30255	.32091	.06199
#1	511.84	142010.	2120.5	15911.	396.31	200000.	961.18	2421.3	5653.9	5128.7
#2	512.86	142130.	2113.4	16245.	398.03	198890.	960.83	2419.0	5681.8	5128.9
#3	513.59	142310.	2121.2	15902.	397.66	198360.	964.89	2432.7	5647.7	5123.3

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**124470.**	**138110.**	**197230.**	**9021.0**	**994.63**	**123230.**	**4058.8**	**5605.3**	**4061.6**	**3480.6**
Stddev	697.	199.	613.	7.5	1.82	970.	8.5	7.8	6.2	7.8
%RSD	.55996	.14412	.31101	.08276	.18312	.78711	.20862	.13963	.15267	.22384
#1	125270.	138310.	197930.	9029.3	993.02	124310.	4052.6	5596.7	4067.9	3487.9
#2	124190.	138110.	196890.	9019.0	994.25	122920.	4055.3	5607.2	4055.5	3472.4
#3	123960.	137910.	196850.	9014.8	996.61	122440.	4068.4	5612.0	4061.3	3481.5

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV01 Acquired: 10/18/2016 11:34:25 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**1972.6**	**3936.2**	**3915.9**	**8067.0**
Stddev	4.5	5.5	10.5	12.7
%RSD	.23004	.14066	.26937	.15701
#1	1969.8	3931.1	3909.9	8053.8
#2	1970.1	3935.6	3928.1	8068.1
#3	1977.8	3942.1	3909.7	8079.1

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3111.6**	**1883.7**	**22653.**	**113000.**	**3349.8**	**50334.**	**9325.1**
Stddev	7.8	6.7	88.	584.	11.4	264.	53.4
%RSD	.25113	.35413	.38715	.51683	.33921	.52454	.57308
#1	3119.6	1888.7	22552.	113280.	3355.1	50423.	9263.6
#2	3111.2	1886.3	22703.	112330.	3357.6	50037.	9351.6
#3	3104.0	1876.1	22705.	113390.	3336.8	50541.	9360.1

Sample Name: SEQ-CCB@CCB01 Acquired: 10/18/2016 11:38:36 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.03522**	**9.5905**	**1.7751**	**.56769**	**-.01245**	**25.840**	**.09148**	**.06467**	**.03733**	**.12791**	**10.958**
Stddev	.35093	5.5761	.5778	.12399	.02298	15.749	.00700	.18385	.19113	.26774	4.059
%RSD	996.39	58.143	32.548	21.840	184.60	60.949	7.6544	284.28	512.04	209.32	37.044
#1	-.29435	3.2506	1.1863	.67528	-.01968	7.9193	.09342	-.06115	-.06216	.14814	13.634
#2	.40419	13.734	2.3412	.43210	.01328	37.478	.08371	-.02049	-.08354	-.14938	12.952
#3	-.00417	11.787	1.7980	.59569	-.03094	32.123	.09731	.27566	.25768	.38497	6.2873

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**145.70**	**7.7498**	**.61465**	**.09758**	**31.837**	**-.18104**	**1.8603**	**1.0821**	**-1.0083**	**-.27813**	**.05181**
Stddev	19.96	5.5975	.15461	.00432	4.470	.03203	.5409	.6540	.6502	.31996	.17164
%RSD	13.702	72.228	25.155	4.4270	14.039	17.692	29.073	60.432	64.486	115.04	331.28
#1	133.57	1.5010	.52462	.09421	35.022	-.19772	1.5218	1.6947	-1.1492	-.63050	.21258
#2	168.74	12.305	.79318	.10245	26.727	-.20129	2.4841	1.1583	-.29916	-.00578	-.12895
#3	134.78	9.4437	.52614	.09608	33.760	-.14411	1.5751	.39343	-1.5764	-.19811	.07181

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCB@CCB01 Acquired: 10/18/2016 11:38:36 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**-.24916**	**.04284**
Stddev	.28441	.10974
%RSD	114.14	256.14
#1	.05135	.07999
#2	-.28471	.12918
#3	-.51412	-.08065

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3818.3**	**2187.8**	**22574.**	**121790.**	**3715.4**	**55570.**	**9654.5**
Stddev	3.8	3.9	42.	469.	13.2	286.	66.5
%RSD	.09956	.17690	.18635	.38528	.35405	.51447	.68860
#1	3822.7	2188.5	22541.	121950.	3723.2	55690.	9580.0
#2	3816.6	2191.2	22622.	122160.	3722.7	55776.	9707.9
#3	3815.8	2183.6	22560.	121270.	3700.2	55243.	9675.5

Sample Name: SEQ-CCV@CCV02 Acquired: 10/18/2016 11:47:14 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**514.67**	**142820.**	**2135.0**	**16330.**	**401.86**	**198710.**	**970.86**	**2442.9**	**5680.2**	**5147.5**
Stddev	.98	403.	.6	128.	.89	1154.	1.48	4.8	17.9	5.3
%RSD	.18999	.28205	.03001	.78254	.22265	.58064	.15240	.19564	.31481	.10352
#1	515.79	142460.	2134.8	16209.	400.87	197850.	971.24	2445.0	5661.3	5141.6
#2	514.12	143250.	2135.7	16463.	402.62	200020.	969.23	2437.5	5682.6	5148.9
#3	514.08	142730.	2134.4	16318.	402.08	198260.	972.12	2446.3	5696.9	5151.9

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**124320.**	**138420.**	**197200.**	**9027.9**	**999.45**	**123100.**	**4097.0**	**5642.1**	**4086.3**	**3507.6**
Stddev	665.	294.	1046.	38.8	1.35	651.	3.8	13.2	5.6	2.8
%RSD	.53463	.21220	.53066	.42948	.13493	.52846	.09307	.23478	.13744	.07842
#1	123750.	138340.	196430.	9007.8	999.88	122680.	4099.0	5650.7	4085.1	3508.3
#2	125050.	138740.	198390.	9072.6	997.94	123850.	4092.6	5626.8	4081.4	3504.6
#3	124170.	138170.	196770.	9003.3	1000.5	122760.	4099.4	5648.7	4092.4	3510.0

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV02 Acquired: 10/18/2016 11:47:14 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**1990.2**	**3961.4**	**3934.7**	**8141.4**
Stddev	2.9	5.0	6.1	8.6
%RSD	.14472	.12652	.15618	.10576
#1	1987.6	3966.8	3928.2	8145.5
#2	1993.3	3956.8	3935.4	8131.6
#3	1989.6	3960.7	3940.5	8147.3

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3109.1**	**1878.1**	**22660.**	**112510.**	**3339.2**	**50094.**	**9338.1**
Stddev	5.4	1.2	144.	457.	6.1	215.	80.7
%RSD	.17444	.06347	.63689	.40606	.18313	.42912	.86382
#1	3112.7	1877.9	22777.	112960.	3342.5	50286.	9393.9
#2	3111.6	1879.3	22499.	112520.	3343.0	50134.	9245.6
#3	3102.8	1876.9	22704.	112040.	3332.2	49862.	9374.7

Sample Name: SEQ-CCB@CCB02 Acquired: 10/18/2016 11:51:28 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.07388**	**2.1358**	**.49597**	**.51545**	**.02024**	**-6.6600**	**.18983**	**.41682**	**.40347**	**-1.8997**	**3.0724**
Stddev	.25695	4.5923	1.8579	.09956	.01845	14.672	.05905	.09915	.40649	.1532	4.2727
%RSD	347.80	215.01	374.60	19.315	91.174	220.29	31.104	23.787	100.75	8.0634	139.07
#1	.36055	2.9319	2.5743	.51474	.02808	-15.465	.22015	.50619	-.06561	-2.0528	7.3703
#2	-.00322	6.2781	-1.0041	.41625	-.00084	-14.792	.12179	.43410	.65258	-1.7465	3.0215
#3	-.13569	-2.8024	-.08230	.61536	.03348	10.277	.22756	.31017	.62343	-1.8998	-1.1746

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**100.25**	**8.6406**	**.30373**	**.15827**	**-74.222**	**-5.5881**	**1.5788**	**.69613**	**-1.2143**	**-.30078**	**.10329**
Stddev	36.28	8.8923	.20727	.10852	2.515	.3856	.6194	1.6181	1.2731	.54501	.32547
%RSD	36.194	102.91	68.241	68.563	3.3886	6.8996	39.234	232.44	104.84	181.20	315.10
#1	141.93	15.100	.17054	.27540	-71.946	-6.0262	2.0992	2.2173	-2.2476	-.29097	-.11535
#2	83.093	-1.5014	.54253	.13828	-76.922	-5.3003	1.7436	-1.0040	.20787	-.85063	.47734
#3	75.723	12.323	.19811	.06114	-73.797	-5.4379	.89364	.87511	-1.6032	.23927	-.05212

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCB@CCB02 Acquired: 10/18/2016 11:51:28 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**-.13542**	**-3.6898**
Stddev	.09843	.2772
%RSD	72.682	7.5132
#1	-.04862	-3.4113
#2	-.11529	-3.6925
#3	-.24236	-3.9657

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3831.1**	**2186.0**	**22653.**	**122150.**	**3730.3**	**55770.**	**9696.4**
Stddev	2.3	3.1	127.	450.	7.1	203.	72.9
%RSD	.06109	.14112	.55959	.36825	.18957	.36473	.75219
#1	3833.8	2185.0	22666.	122090.	3725.8	55711.	9686.4
#2	3830.3	2189.4	22520.	121730.	3738.4	55603.	9629.1
#3	3829.3	2183.5	22772.	122620.	3726.6	55997.	9773.9

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV03 Acquired: 10/18/2016 12:00:02 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**514.26**	**143360.**	**2132.5**	**16408.**	**401.80**	**197890.**	**967.98**	**2432.8**	**5664.2**	**5136.3**
Stddev	.54	408.	9.3	231.	.75	232.	.89	.7	21.0	13.0
%RSD	.10520	.28490	.43524	1.4054	.18736	.11733	.09202	.03002	.37069	.25371
#1	514.88	142890.	2123.5	16142.	401.54	198140.	968.76	2433.0	5676.9	5140.5
#2	514.00	143580.	2142.0	16521.	401.20	197690.	968.17	2432.0	5640.0	5121.7
#3	513.90	143610.	2132.0	16559.	402.64	197830.	967.01	2433.5	5675.7	5146.7

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**124220.**	**138290.**	**197260.**	**9013.7**	**996.44**	**122550.**	**4098.8**	**5644.4**	**4070.9**	**3490.2**
Stddev	76.	94.	249.	13.4	1.70	127.	10.8	10.6	4.6	8.5
%RSD	.06144	.06810	.12600	.14904	.17081	.10403	.26269	.18783	.11295	.24417
#1	124180.	138330.	197190.	9001.8	998.33	122670.	4086.9	5632.3	4075.9	3500.0
#2	124170.	138350.	197050.	9010.9	995.03	122420.	4108.0	5652.0	4069.8	3485.7
#3	124300.	138180.	197530.	9028.3	995.96	122570.	4101.3	5649.0	4066.9	3484.8

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV03 Acquired: 10/18/2016 12:00:02 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**1986.8**	**3953.1**	**3924.1**	**8154.7**
Stddev	5.8	4.2	7.9	29.8
%RSD	.29284	.10745	.20141	.36525
#1	1980.6	3948.2	3926.4	8124.8
#2	1992.2	3955.3	3915.3	8184.4
#3	1987.7	3955.9	3930.6	8154.9

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3110.3**	**1881.8**	**22714.**	**112770.**	**3350.9**	**50345.**	**9356.7**
Stddev	11.0	6.6	57.	179.	4.3	92.	26.4
%RSD	.35285	.35158	.24913	.15852	.12743	.18308	.28262
#1	3122.8	1889.4	22731.	112950.	3355.7	50381.	9355.8
#2	3106.0	1877.5	22759.	112760.	3349.4	50413.	9383.6
#3	3102.2	1878.4	22650.	112590.	3347.6	50240.	9330.8

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCB@CCB03 Acquired: 10/18/2016 12:04:17 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.02343**	**10.439**	**-.06523**	**.90341**	**-.00230**	**-3.5695**	**.11972**	**.00057**	**.32290**	**-1.8891**	**12.817**
Stddev	.27472	3.539	.16721	.06240	.00582	3.9383	.01474	.10459	.15456	.1032	7.434
%RSD	1172.4	33.905	256.35	6.9074	252.64	110.33	12.313	18378.	47.865	5.4601	58.004
#1	-.23924	7.8117	-.16946	.93706	-.00810	-6.8688	.10284	-.05637	.43676	-1.8122	19.382
#2	.00074	9.0423	-.15387	.83140	.00355	.79051	.12625	.12128	.14696	-2.0063	14.323
#3	.30880	14.464	.12764	.94176	-.00236	-4.6300	.13007	-.06320	.38500	-1.8488	4.7447

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**115.74**	**8.0586**	**.63810**	**.08639**	**-72.423**	**-5.4287**	**1.6737**	**.99446**	**-1.2309**	**-.13819**	**.34570**
Stddev	22.29	3.9097	.13038	.21407	1.906	.1646	.5372	1.7329	.7926	1.1876	.74299
%RSD	19.261	48.516	20.433	247.79	2.6313	3.0311	32.097	174.26	64.389	859.43	214.92
#1	134.19	6.4289	.68000	.26199	-73.593	-5.6164	2.0694	2.9667	-2.1434	-.26806	.19771
#2	122.07	12.519	.49191	.14925	-70.224	-5.3601	1.8895	-.28437	-.71410	1.1091	1.1515
#3	90.971	5.2273	.74237	-.15207	-73.452	-5.3095	1.0621	.30106	-.83523	-1.2556	-.31215

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCB@CCB03 Acquired: 10/18/2016 12:04:17 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.04937**	**-4.1100**
Stddev	.12759	.1058
%RSD	258.42	2.5747
#1	-.07357	-4.2276
#2	.18115	-4.0224
#3	.04054	-4.0800

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3835.5**	**2185.8**	**22608.**	**122590.**	**3739.6**	**56013.**	**9645.6**
Stddev	8.8	4.6	77.	398.	4.7	161.	26.5
%RSD	.22918	.21077	.34097	.32435	.12475	.28680	.27444
#1	3843.8	2188.7	22562.	123040.	3744.5	56194.	9621.5
#2	3836.4	2188.2	22566.	122390.	3739.1	55960.	9641.4
#3	3826.3	2180.5	22697.	122330.	3735.2	55887.	9673.9

Sample Name: SEQ-IBL1 Acquired: 10/18/2016 12:08:40 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: ZZZZZZ SDG: MH1H50 Case: 46282
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5.5020**	**33094.**	**53.013**	**365.25**	**2.0249**	**7767.3**	**3.8198**	**28.160**	**11.718**	**61.006**	**72978.**
#1	5.5428	33011.	54.297	364.79	2.0249	7760.2	3.7748	28.262	11.729	61.161	73007.
#2	5.3277	33115.	50.864	365.51	2.0487	7791.7	3.8076	28.281	11.820	61.064	73159.
#3	5.6355	33156.	53.879	365.45	2.0010	7749.9	3.8769	27.937	11.605	60.791	72769.

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5609.0**	**10459.**	**2213.7**	**1.1009**	**67.471**	**5.2343**	**296.53**	**4.3485**	**-.32729**	**159.96**	**-2.3653**
#1	5596.4	10427.	2208.1	1.2553	72.884	5.4237	298.07	4.2790	-1.7316	155.76	-2.7037
#2	5622.5	10487.	2217.1	.94185	66.894	4.6711	294.13	5.2863	-.37227	166.37	-1.9285
#3	5608.1	10462.	2215.8	1.1056	62.635	5.6082	297.39	3.4804	1.1221	157.76	-2.4636

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**63.309**	**617.85**
#1	62.902	618.84
#2	63.650	616.71
#3	63.373	617.99

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-IBL1 Acquired: 10/18/2016 12:08:40 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: ZZZZZZ SDG: MH1H50 Case: 46282
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3679.8**	**2141.1**	**23144.**	**123170.**	**3788.2**	**56350.**	**9914.5**
#1	3672.9	2139.1	23241.	122840.	3791.8	56256.	9942.4
#2	3688.9	2143.8	23018.	123040.	3790.3	56228.	9878.9
#3	3677.5	2140.4	23173.	123620.	3782.5	56567.	9922.2

Sample Name: QJ14019-PS1 Acquired: 10/18/2016 12:12:51 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MH1H52A SDG: MH1H50 Case: 46282
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**8.4072**	**71732.**	**609.29**	**1131.9**	**2.8325**	**9197.8**	**38.431**	**46.504**	**37.747**
#1	8.1156	71667.	609.87	1132.0	2.8655	9190.2	38.308	46.416	37.571
#2	8.5324	71797.	606.11	1134.3	2.8263	9218.5	38.416	46.193	37.819
#3	8.5737	71733.	611.90	1129.3	2.8056	9184.8	38.569	46.904	37.853

Elem	Cu3247	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1641.3**	**F 375210.**	**14530.**	**18814.**	**8119.4**	**12.876**	**288.27**	**3.8057**	**5365.1**
#1	1637.8	374950.	14593.	18726.	8096.4	12.905	297.19	4.2570	5365.4
#2	1639.9	376000.	14553.	18877.	8132.9	13.117	285.63	3.3541	5366.2
#3	1646.2	374670.	14443.	18838.	8129.1	12.606	281.99	3.8061	5363.6

Elem	Sb2068	Se1960	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**45.628**	**20.100**	**567.89**	**-8.7709**	**210.02**	**8395.3**
#1	44.963	18.952	576.11	-8.3544	210.41	8393.1
#2	45.400	19.297	583.39	-9.1532	209.99	8393.6
#3	46.520	22.050	544.18	-8.8051	209.67	8399.2

Bonner Analytical Testing Co. ICAPP02

Sample Name: QJ14019-PS1 Acquired: 10/18/2016 12:12:51 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MH1H52A SDG: MH1H50 Case: 46282
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3549.2**	**2013.9**	**22984.**	**121620.**	**3735.4**	**55698.**	**9883.9**
#1	3550.0	2010.2	23063.	121060.	3729.3	55465.	9899.6
#2	3550.1	2015.2	22938.	121320.	3740.6	55629.	9859.4
#3	3547.6	2016.5	22950.	122500.	3736.3	56000.	9892.6

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV04 Acquired: 10/18/2016 12:17:04 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**513.08**	**142110.**	**2123.1**	**16010.**	**399.33**	**197560.**	**967.02**	**2435.4**	**5646.4**	**5124.9**
Stddev	.68	310.	4.8	92.	.90	662.	3.60	5.9	6.5	4.7
%RSD	.13246	.21781	.22761	.57474	.22599	.33487	.37191	.24336	.11452	.09165
#1	513.63	141820.	2117.9	15916.	399.88	197480.	968.03	2441.2	5653.7	5130.0
#2	513.28	142070.	2127.4	16014.	398.29	196940.	963.02	2429.4	5641.3	5124.1
#3	512.32	142430.	2124.0	16100.	399.83	198250.	970.00	2435.7	5644.3	5120.8

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**122890.**	**137500.**	**195430.**	**8927.9**	**994.05**	**122220.**	**4079.2**	**5617.4**	**4061.2**	**3485.7**
Stddev	615.	141.	945.	26.4	2.55	615.	3.9	11.3	4.3	8.1
%RSD	.50048	.10241	.48357	.29624	.25692	.50299	.09468	.20128	.10574	.23283
#1	122920.	137610.	195540.	8920.8	995.93	122270.	4075.1	5608.2	4058.1	3483.1
#2	122270.	137340.	194430.	8905.8	991.15	121580.	4079.9	5614.0	4059.4	3479.2
#3	123500.	137560.	196310.	8957.2	995.09	122810.	4082.7	5630.0	4066.1	3494.8

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV04 Acquired: 10/18/2016 12:17:04 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**1972.2**	**3941.4**	**3909.8**	**8107.8**
Stddev	2.5	24.8	3.0	21.2
%RSD	.12711	.63044	.07659	.26092
#1	1971.5	3941.5	3910.9	8089.8
#2	1975.0	3916.4	3906.5	8102.5
#3	1970.2	3966.1	3912.1	8131.1

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3129.3**	**1887.0**	**22798.**	**113460.**	**3356.7**	**50592.**	**9426.3**
Stddev	12.5	2.8	12.	118.	10.5	66.	24.6
%RSD	.40052	.14977	.05246	.10426	.31293	.13070	.26066
#1	3128.5	1888.2	22784.	113340.	3353.8	50525.	9423.8
#2	3142.2	1889.0	22802.	113580.	3368.3	50657.	9452.1
#3	3117.2	1883.7	22807.	113470.	3347.9	50595.	9403.1

Sample Name: SEQ-CCB@CCB04 Acquired: 10/18/2016 12:21:17 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.05603**	**8.0421**	**.67182**	**1.3848**	**.00886**	**13.752**	**.12418**	**.32077**	**.41656**	**-1.7539**	**15.569**
Stddev	.35803	5.8466	.24143	.1367	.00880	13.170	.03054	.09660	.24885	.0853	4.388
%RSD	639.04	72.700	35.936	9.8691	99.335	95.765	24.594	30.117	59.739	4.8615	28.186
#1	-.28287	7.0945	.91136	1.5330	.01725	28.586	.14781	.25188	.70105	-1.6595	18.937
#2	.02043	2.7271	.42855	1.3576	-.00030	9.2384	.08969	.27923	.30932	-1.8253	10.606
#3	.43052	14.305	.67554	1.2638	.00964	3.4329	.13503	.43119	.23931	-1.7770	17.165

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**150.32**	**22.793**	**.76855**	**.26712**	**-74.450**	**-5.5003**	**.54518**	**1.7426**	**.34035**	**-1.0864**	**.70835**
Stddev	19.25	7.390	.14177	.05526	.280	.1510	1.2712	.6390	1.5408	.4339	.35451
%RSD	12.809	32.422	18.447	20.688	.37625	2.7454	233.18	36.667	452.70	39.940	50.047
#1	168.69	19.059	.93221	.32554	-74.773	-5.6476	-.91167	2.1057	1.9829	-1.2219	.44108
#2	151.99	31.305	.68985	.26016	-74.283	-5.5076	1.1179	1.0048	-1.0731	-.60094	1.1105
#3	130.29	18.015	.68358	.21567	-74.292	-5.3458	1.4293	2.1173	.11124	-1.4365	.57347

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCB@CCB04 Acquired: 10/18/2016 12:21:17 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.12838**	**-4.0896**
Stddev	.37414	.0568
%RSD	291.43	1.3879
#1	.08536	-4.0288
#2	-.22239	-4.1411
#3	.52217	-4.0990

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3833.1**	**2188.5**	**22687.**	**122220.**	**3735.0**	**55745.**	**9661.8**
Stddev	5.3	5.5	162.	335.	10.8	166.	58.9
%RSD	.13899	.25260	.71413	.27433	.28950	.29851	.60996
#1	3831.1	2193.8	22549.	121970.	3745.2	55580.	9597.2
#2	3839.1	2188.8	22648.	122600.	3736.0	55913.	9675.4
#3	3829.0	2182.8	22865.	122080.	3723.7	55743.	9712.7

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV05 Acquired: 10/18/2016 13:25:05 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**511.85**	**142340.**	**2111.2**	**16407.**	**396.42**	**197780.**	**960.43**	**2423.4**	**5648.3**	**5121.6**
Stddev	1.35	64.	3.3	286.	.71	456.	2.82	12.4	18.5	3.8
%RSD	.26430	.04518	.15732	1.7422	.18007	.23032	.29381	.51320	.32737	.07429
#1	512.86	142380.	2111.5	16270.	396.18	197990.	957.19	2410.3	5669.6	5125.5
#2	512.37	142370.	2107.7	16216.	397.23	197260.	962.34	2435.0	5638.0	5117.9
#3	510.31	142260.	2114.3	16736.	395.86	198090.	961.76	2424.9	5637.2	5121.5

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**122460.**	**136780.**	**194480.**	**8864.7**	**992.06**	**123610.**	**4062.4**	**5586.2**	**4054.5**	**3466.9**
Stddev	488.	102.	538.	8.9	2.40	549.	8.0	11.0	8.0	3.3
%RSD	.39818	.07420	.27687	.10052	.24177	.44384	.19629	.19650	.19698	.09391
#1	122800.	136860.	194830.	8872.3	989.29	123920.	4062.9	5594.0	4046.1	3466.1
#2	121900.	136670.	193860.	8854.9	993.40	122980.	4054.3	5573.7	4062.1	3464.2
#3	122680.	136830.	194750.	8866.9	993.50	123940.	4070.2	5591.0	4055.2	3470.5

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV05 Acquired: 10/18/2016 13:25:05 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**1952.0**	**3939.6**	**3910.5**	**8046.7**
Stddev	6.5	9.0	12.0	27.8
%RSD	.33221	.22749	.30791	.34576
#1	1949.3	3933.7	3924.4	8050.2
#2	1959.4	3935.1	3902.8	8017.3
#3	1947.3	3949.9	3904.2	8072.6

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3123.5**	**1893.6**	**22907.**	**113590.**	**3367.1**	**50610.**	**9399.7**
Stddev	5.8	3.9	5.	397.	13.6	196.	28.9
%RSD	.18456	.20390	.02304	.34937	.40513	.38760	.30767
#1	3125.2	1897.8	22909.	113170.	3382.0	50389.	9375.0
#2	3128.2	1892.8	22912.	113640.	3355.3	50678.	9431.5
#3	3117.1	1890.3	22902.	113950.	3364.0	50763.	9392.5

Sample Name: SEQ-CCB@CCB05 Acquired: 10/18/2016 13:29:18 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.18905**	**13.559**	**.34532**	**1.7053**	**.02770**	**4.4268**	**.13905**	**.12442**	**.21777**	**-1.6289**	**15.997**
Stddev	.30160	2.075	.64844	.1600	.01199	19.733	.05764	.14073	.19010	.2277	2.040
%RSD	159.54	15.306	187.78	9.3799	43.291	445.77	41.456	113.11	87.295	13.978	12.752
#1	.05462	11.253	-.23171	1.5384	.01404	6.7470	.16266	.26420	.08387	-1.4623	13.673
#2	-.02196	14.149	1.0471	1.8573	.03259	-16.364	.07335	.12629	.43535	-1.5359	17.489
#3	.53449	15.276	.22060	1.7200	.03649	22.898	.18114	-.01724	.13408	-1.8883	16.830

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**66.279**	**31.596**	**1.1162**	**.25761**	**-73.226**	**-5.2866**	**1.4664**	**1.4103**	**.05635**	**-.60438**	**.38486**
Stddev	8.326	8.540	.1489	.02904	1.832	.1575	1.2109	1.5537	.41694	.16384	.91958
%RSD	12.562	27.029	13.338	11.271	2.5020	2.9785	82.579	110.17	739.91	27.109	238.94
#1	68.897	32.783	.94714	.26425	-73.688	-5.2306	.64852	2.8694	-.41198	-.73705	1.4039
#2	56.959	22.525	1.2277	.28275	-71.207	-5.4644	.89313	1.5848	.38715	-.42124	.13378
#3	72.981	39.481	1.1737	.22583	-74.782	-5.1648	2.8575	-.22331	.19388	-.65486	-.38310

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCB@CCB05 Acquired: 10/18/2016 13:29:18 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**-.04099**	**-3.8100**
Stddev	.23616	.0899
%RSD	576.19	2.3588
#1	.10649	-3.7257
#2	.08391	-3.9046
#3	-.31337	-3.7996

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3858.3**	**2204.2**	**22907.**	**122930.**	**3751.3**	**55981.**	**9792.1**
Stddev	1.4	2.5	87.	156.	5.4	97.	60.1
%RSD	.03707	.11452	.37882	.12679	.14497	.17333	.61419
#1	3859.7	2204.0	22818.	122960.	3751.7	55992.	9722.8
#2	3856.9	2206.8	22992.	123070.	3745.7	56072.	9830.7
#3	3858.3	2201.8	22909.	122770.	3756.5	55879.	9822.9

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-IBL2 Acquired: 10/18/2016 13:33:40 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: ZZZZZZ SDG: Case:
Comment: @4X

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**18.249**	**101220.**	**192.95**	**1150.9**	**6.8184**	**25057.**	**12.384**	**90.107**	**36.616**	**221.94**
#1	18.361	100790.	195.20	1148.8	6.7992	25016.	12.350	90.347	36.528	221.94
#2	18.024	101390.	190.77	1151.3	6.8123	24993.	12.405	89.478	36.766	222.73
#3	18.363	101470.	192.88	1152.6	6.8438	25163.	12.396	90.496	36.553	221.15

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**231780.**	**15801.**	**32685.**	**6973.3**	**4.0829**	**299.60**	**35.649**	**1036.4**	**12.331**	**3.6851**
#1	231240.	15717.	32530.	6960.4	3.9994	306.97	35.810	1037.7	11.608	3.1452
#2	231580.	15826.	32645.	6969.2	4.0735	293.31	35.751	1035.4	12.794	3.0996
#3	232530.	15861.	32881.	6990.1	4.1757	298.50	35.388	1036.0	12.589	4.8104

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**301.78**	**-7.3386**	**198.86**	**2176.0**
#1	299.96	-6.2852	197.98	2177.5
#2	303.97	-7.0587	199.29	2173.0
#3	301.42	-8.6720	199.31	2177.6

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-IBL2 Acquired: 10/18/2016 13:33:40 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: ZZZZZZ SDG: Case:
Comment: @4X

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3473.2**	**2009.5**	**23146.**	**120840.**	**3874.9**	**57440.**	**10308.**
#1	3460.2	2000.7	23258.	120970.	3857.4	57547.	10338.
#2	3482.3	2013.3	23108.	120680.	3881.8	57314.	10313.
#3	3477.1	2014.6	23071.	120880.	3885.6	57460.	10273.

Sample Name: SEQ-IBL3 Acquired: 10/18/2016 13:43:16 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: ZZZZZZ SDG: Case:
Comment: @3X

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-2.9390**	*****	**79.403**	*****	**2.0306**	**3300.5**	**5.1760**	**54.774**	**10.406**	**94.008**	*****
#1	-2.5543	-----	80.371	-----	2.0388	3084.6	5.1807	54.741	10.341	94.837	-----
#2	-3.0475	22980.	80.123	371.28	2.0263	3395.8	5.1684	54.946	10.588	93.593	186210.
#3	-3.2151	22842.	77.715	368.11	2.0268	3421.0	5.1788	54.636	10.290	93.595	184880.

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**3355.4**	**6279.5**	*****	**.96357**	**-14.971**	**8.1277**	**308.99**	**9.9481**	**-10.651**	**25.503**	**-3.5554**
#1	3198.9	5902.3	-----	.89474	-19.976	8.5276	316.47	8.5322	-40.088	23.783	-3.5546
#2	3453.4	6515.4	7134.3	.84915	-12.532	7.9910	304.65	10.886	3.9024	26.868	-3.0467
#3	3413.7	6420.8	7133.4	1.1468	-12.404	7.8646	305.84	10.426	4.2340	25.858	-4.0650

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**57.209**	**316.54**
#1	57.154	315.65
#2	57.312	317.08
#3	57.160	316.89

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-IBL3 Acquired: 10/18/2016 13:43:16 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: ZZZZZZ SDG: Case:
Comment: @3X

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3676.8**	**2125.7**	**24797.**	**123690.**	**3788.3**	**56195.**	**10469.**
#1	3679.1	2127.7	27738.	123670.	3782.0	56212.	11579.
#2	3674.8	2127.5	23417.	123750.	3800.0	56271.	9949.8
#3	3676.6	2121.9	23237.	123640.	3782.8	56102.	9877.2

Sample Name: SEQ-IBL4 Acquired: 10/18/2016 13:47:31 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: ZZZZZZ SDG: MH1H50 Case: 46282
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**510.97**	**142560.**	**2117.5**	**16063.**	**395.99**	**195570.**	**956.78**	**2410.0**	**5614.9**	**5108.9**
#1	511.00	142420.	2115.0	16066.	397.17	194680.	955.86	2408.7	5601.7	5105.2
#2	511.02	143180.	2119.6	16164.	395.25	196060.	953.04	2401.8	5625.2	5105.3
#3	510.91	142090.	2117.8	15960.	395.55	195970.	961.45	2419.4	5617.8	5116.4

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**121390.**	**136330.**	**192950.**	**8808.3**	**989.31**	**122200.**	**4066.6**	**5599.4**	**4050.0**	**3465.8**
#1	120880.	136190.	192710.	8789.3	987.42	121500.	4063.6	5603.1	4046.5	3462.5
#2	122010.	136470.	193700.	8848.5	986.93	122440.	4066.0	5596.7	4038.1	3459.3
#3	121290.	136320.	192450.	8787.1	993.57	122660.	4070.3	5598.5	4065.3	3475.6

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**1952.6**	**3932.4**	**3892.6**	**8067.6**
#1	1951.6	3927.9	3887.4	8063.6
#2	1960.0	3921.5	3891.1	8068.6
#3	1946.1	3947.9	3899.3	8070.5

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-IBL4 Acquired: 10/18/2016 13:47:31 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: ZZZZZZ SDG: MH1H50 Case: 46282
Comment:

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3133.1**	**1895.5**	**22971.**	**113970.**	**3384.9**	**50869.**	**9459.9**
#1	3136.6	1898.3	22923.	114070.	3391.8	50974.	9450.4
#2	3135.3	1896.7	22907.	114110.	3394.0	50892.	9423.3
#3	3127.3	1891.5	23082.	113720.	3368.9	50743.	9506.0

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-14RE1 Acquired: 10/18/2016 13:51:43 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MH1H6~~2~~3 SDG: MH1H50 Case: 46282
Comment: @3X

VCT 10/26/16

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.8879	22390.	78.821	362.34	1.9922	3284.2	5.1371	54.781	10.500	92.688
#1	-2.6369	22338.	78.301	361.27	1.9923	3261.6	5.1006	54.990	10.858	92.132
#2	-3.0540	22401.	77.571	363.33	1.9875	3305.6	5.1656	54.603	10.177	93.690
#3	-2.9727	22431.	80.590	362.42	1.9967	3285.5	5.1450	54.752	10.465	92.243

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	179900.	3531.3	6246.4	6961.0	1.1538	26.235	8.0222	304.35	9.9357	2.5442
#1	179200.	3535.6	6243.2	6945.4	1.1070	30.620	7.8729	303.04	9.5253	1.2165
#2	180330.	3546.0	6289.4	6979.4	1.2011	27.102	7.9559	305.92	11.247	2.9077
#3	180190.	3512.2	6206.6	6958.2	1.1532	20.983	8.2378	304.10	9.0352	3.5084

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	24.508	-2.7677	56.971	313.29
#1	25.194	-2.5213	57.144	313.26
#2	24.281	-3.0804	56.985	313.34
#3	24.050	-2.7014	56.783	313.28

Bonner Analytical Testing Co. ICAPP02

Sample Name: 6100167-14RE1 Acquired: 10/18/2016 13:51:43 Type: Unk
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MH1H6~~2~~3 SDG: MH1H50 Case: 46282
Comment: @3X

VCT 10/26/16

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3691.9	2126.4	23524.	123760.	3776.1	56277.	10043.
#1	3688.9	2123.6	23551.	123480.	3766.1	56227.	10059.
#2	3694.3	2129.8	23452.	123910.	3780.8	56305.	10002.
#3	3692.6	2126.0	23570.	123890.	3781.4	56298.	10067.

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV06 Acquired: 10/18/2016 13:56:01 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**510.33**	**141880.**	**2113.7**	**16079.**	**394.82**	**195690.**	**956.28**	**2413.0**	**5633.8**	**5113.2**
Stddev	.24	276.	3.5	139.	.56	907.	2.45	6.0	29.5	12.8
%RSD	.04614	.19418	.16653	.86731	.14193	.46327	.25574	.24680	.52282	.24999
#1	510.53	141570.	2110.3	15933.	395.44	194930.	955.85	2414.9	5640.1	5114.1
#2	510.39	142010.	2113.4	16211.	394.34	195450.	954.07	2406.4	5659.6	5125.5
#3	510.07	142070.	2117.4	16091.	394.67	196690.	958.91	2417.9	5601.7	5099.9

Elem	Fe2598	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**121000.**	**136050.**	**192140.**	**8759.9**	**989.42**	**122560.**	**4060.0**	**5579.6**	**4044.6**	**3460.5**
Stddev	842.	281.	988.	33.2	3.46	871.	7.1	7.3	12.3	9.8
%RSD	.69621	.20618	.51412	.37926	.35018	.71088	.17577	.13024	.30325	.28308
#1	120160.	135750.	191170.	8725.2	988.89	121930.	4059.4	5571.3	4040.0	3453.7
#2	120980.	136090.	192110.	8763.0	986.25	122200.	4053.1	5583.0	4035.2	3456.1
#3	121840.	136310.	193140.	8791.4	993.12	123550.	4067.4	5584.6	4058.5	3471.7

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCV@CCV06 Acquired: 10/18/2016 13:56:01 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ti3234	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb
Avg	**1943.0**	**3930.5**	**3901.9**	**8023.3**
Stddev	6.4	6.2	17.9	8.7
%RSD	.32726	.15760	.45920	.10901
#1	1946.2	3930.7	3903.7	8014.1
#2	1947.2	3924.1	3918.8	8024.4
#3	1935.7	3936.5	3883.1	8031.5

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3134.5**	**1894.8**	**23159.**	**113860.**	**3377.6**	**50736.**	**9525.5**
Stddev	3.8	1.5	12.	428.	7.5	261.	36.8
%RSD	.12096	.08002	.05064	.37577	.22320	.51483	.38685
#1	3130.4	1893.6	23146.	113640.	3375.7	50625.	9559.9
#2	3135.5	1896.5	23162.	113590.	3385.9	50549.	9529.8
#3	3137.8	1894.3	23169.	114360.	3371.2	51035.	9486.6

Sample Name: SEQ-CCB@CCB06 Acquired: 10/18/2016 14:00:14 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3131	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2598
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.10478**	**13.762**	**1.0742**	**1.4048**	**.02789**	**1.5738**	**.09345**	**.05147**	**.64107**	**-1.6866**	**18.522**
Stddev	.15531	7.086	.7913	.1195	.02643	23.500	.02257	.09915	.23316	.1537	6.653
%RSD	148.23	51.490	73.664	8.5087	94.753	1493.2	24.150	192.63	36.371	9.1147	35.919
#1	.18058	20.797	1.6855	1.5400	.05789	23.057	.11094	-.03742	.90946	-1.5327	26.074
#2	.20763	13.864	1.3568	1.3130	.01775	5.1878	.10144	.15841	.48854	-1.8401	13.527
#3	-.07388	6.6257	.18043	1.3615	.00804	-23.524	.06798	.03344	.52520	-1.6870	15.965

Elem	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Ti3234	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**151.32**	**17.078**	**.93534**	**.34578**	**-71.296**	**-5.7435**	**1.5184**	**1.4616**	**-.74605**	**-1.8076**	**.67641**
Stddev	22.15	4.817	.33586	.09407	6.372	.3074	.6702	1.4244	.61352	.6388	1.1061
%RSD	14.635	28.203	35.908	27.205	8.9373	5.3522	44.140	97.458	82.236	35.337	163.52
#1	151.29	16.860	1.3107	.32816	-64.280	-5.3992	1.1872	1.4627	-.53231	-1.5887	-.53369
#2	173.48	12.374	.66313	.26176	-72.886	-5.8412	2.2897	.03662	-1.4379	-2.5271	.92775
#3	129.19	22.000	.83222	.44741	-76.723	-5.9903	1.0782	2.8855	-.26799	-1.3071	1.6352

Bonner Analytical Testing Co. ICAPP02

Sample Name: SEQ-CCB@CCB06 Acquired: 10/18/2016 14:00:14 Type: QC
Method: ISM023_New_TotalMetals(v20) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: Case:
Comment:

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.04120**	**-4.2268**
Stddev	.06417	.0642
%RSD	155.74	1.5198
#1	.02759	-4.1928
#2	-.01507	-4.3009
#3	.11109	-4.1868

Int. Std.	In2306	Sc2273	Sc3630	Sc3642	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3855.2**	**2201.3**	**23058.**	**122990.**	**3745.8**	**56119.**	**9869.4**
Stddev	.8	2.6	74.	202.	7.0	90.	33.1
%RSD	.02015	.11913	.32142	.16444	.18781	.15984	.33549
#1	3854.5	2202.4	23056.	122940.	3737.9	56147.	9845.6
#2	3856.0	2203.1	23134.	123220.	3751.1	56191.	9907.2
#3	3854.9	2198.3	22986.	122820.	3748.6	56018.	9855.4

PREPARATION BENCH SHEET

QJ14019

Bonner Analytical Testing Co.

Matrix: Soil

Analysis: ISM023 - ICPAES (1-4)

Prepared: 10/17/2016 15:00 using METALS - 3050B

Case: 46282

SDG: MH1H50

Work Order: 6100167

Lab Number	Sample ID	Initial (g)	Final (mL)	Spike ID	Spike Amount (uL)	Spike ID	Spike Amount (uL)
6100167-01	MH1H50	1	100				
6100167-02	MH1H51	1	100				
6100167-03	MH1H52	1	100				
6100167-04	MH1H53	1	100				
6100167-05	MH1H54	1	100				
6100167-06	MH1H55	1	100				
6100167-07	MH1H56	1	100				
6100167-08	MH1H57	1	100				
6100167-09	MH1H58	1	100				
6100167-10	MH1H59	1	100				
6100167-11	MH1H60	1	100				
6100167-12	MH1H61	1	100				
6100167-13	MH1H62	1	100				
6100167-14	MH1H63	1	100				
6100167-14RE1	MH1H63	1	100				
6100167-15	MH1H64	1	100				
6100167-16	MH1H65	1	100				
6100167-17	MH1H66	1	100				
6100167-18	MH1H67	1	100				
QJ14019-PS1	MH1H52A	1	100	B6J0170	100000		
QJ14019-MS1	MH1H52S	1	100				
QJ14019-BS1	LCS01	1	100				
QJ14019-DUP1	MH1H52D	1	100				
QJ14019-BLK1	PBS01	1	100				

Table 1: Quality Controls (QC), Reagents (R) and Standards (Std)

LIMS ID	Description	Vendor	LotNum	Expiration
B3E0023	R - Distilled Water	In-House	NA	04/25/20
B6E0054	R - Hydrogen Peroxide 30%	Fisher	143279	05/16/19
B6H0063	R - Nitric Acid - 1:1	In House	NA	08/15/17
B6I0064	R - Hydrochloric - Concentrate	Fisher	4116040	05/13/19
B6I0123	R - Nitric Acid, Concentrated	Fisher	1116020	04/17/18
B6J0170	PS - MH1H50	In House	NA	02/19/17

Table 2: Metals Apparatus

Balance ID		Mettler IV	
Dig. Block ID		4	
Start Temp	Stop Temp	95	96
Start Time	Stop Time	1500	2145

Comments:

MSB2 10/17/2016

Perpared By Date

Preparation Reviewed By Date

Bonner Analytical Testing Company
Analytical Run Log

Instrument ID: ICAPP02 **Case:** 46282 **FileID:** MH1H50 **Std. Prep Date:** 101716

Analyst: MSB2 **SDG:** MH1H50 **Calibration ID:** B644035 **Std. Log Page No.:** ~~30~~ 31 10/25/16

Lab Number	EPA ID	Analyzed Date/Time	STD ID	ISTD ID	DF	Elements list are used per QC/sample
BJ62521-CAL1	S01	10/17/16 22:13	B6I0028	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CAL2	S02	10/17/16 22:18	B6G0026	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CAL3	S03	10/17/16 22:22	B6G0027	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CAL4	S04	10/17/16 22:26	B6G0028	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CAL5	S05	10/17/16 22:30	B6G0029	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CAL6	S06	10/17/16 22:35	B6G0030	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CAL7	S07	10/17/16 22:39	B6G0031	B6I0029	1	Al Ca Fe Mg Mn Pb
BJ62521-CAL8	S08	10/17/16 22:43	B6G0032	B6I0029	1	Al Fe Pb
BJ62521-CAL9	S09	10/17/16 22:48	B6J0169	B6I0029	1	Fe Mn
BJ62521-ICV1	ICV01	10/17/16 22:52	B6G0039	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-ICB1	ICB01	10/17/16 22:56	B6I0028	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-IFA1	ICSA01	10/17/16 23:01	B6H0021	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-IFB1	ICSAB01	10/17/16 23:05	B6H0022	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CCV1	CCV01	10/17/16 23:09	B6G0037	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CCB1	CCB01	10/17/16 23:13	B6I0028	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CCV2	CCV02	10/18/16 0:39	B6G0037	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CCB2	CCB02	10/18/16 0:43	B6I0028	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CCV3	CCV03	10/18/16 1:05	B6G0037	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CCB3	CCB03	10/18/16 1:09	B6I0028	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
QJ14019-BLK1	PBS01	10/18/16 1:13		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
QJ14019-BS1	LCS01	10/18/16 1:18		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-01	MH1H50	10/18/16 1:22		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-02	MH1H51	10/18/16 1:26		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-03	MH1H52	10/18/16 1:30		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
QJ14019-MS1	MH1H52S	10/18/16 1:34		B6I0029	1	As Cu Mn Pb Zn
QJ14019-DUP1	MH1H52D	10/18/16 1:39		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-SRD1	MH1H52L	10/18/16 1:43		B6I0029	5	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-04	MH1H53	10/18/16 1:47		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-05	MH1H54	10/18/16 1:51		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-06	MH1H55	10/18/16 1:55		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-07	MH1H56	10/18/16 2:00		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-08	MH1H57	10/18/16 2:04		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-09	MH1H58	10/18/16 2:08		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn

Bonner Analytical Testing Company
Analytical Run Log

Instrument ID: ICAPP02 **Case:** 46282 **FileID:** MH1H50 **Std. Prep Date:** 101716 vg 10/25/16

Analyst: MSB2 **SDG:** MH1H50 **Calibration ID:** B644035 **Std. Log Page No.:** ~~30~~ 31

Lab Number	EPA ID	Analyzed Date/Time	STD ID	ISTD ID	DF	Elements list are used per QC/sample
6100167-10	MH1H59	10/18/16 2:12		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-11	MH1H60	10/18/16 2:16		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-12	MH1H61	10/18/16 2:20		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CCV4	CCV04	10/18/16 2:25	B6G0037	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CCB4	CCB04	10/18/16 2:29	B6I0028	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-13	MH1H62	10/18/16 2:33		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-14	MH1H63	10/18/16 2:37		B6I0029	1	Al As Ca Cu Mg Mn Pb Zn
6100167-15	MH1H64	10/18/16 2:42		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-16	MH1H65	10/18/16 2:46		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-17	MH1H66	10/18/16 2:50		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
6100167-18	MH1H67	10/18/16 2:54		B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CCV5	CCV05	10/18/16 2:58	B6G0037	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn
BJ62521-CCB5	CCB05	10/18/16 3:03	B6I0028	B6I0029	1	Al As Ca Cu Fe Mg Mn Pb Zn

Bonner Analytical Testing Company
Analytical Run Log

Instrument ID: ICAPP02 **Case:** 46282 **FileID:** 101816_CLP_A **Std. Prep Date:** 101816 ✓ 10/25/16
Analyst: MSB2 **SDG:** MH1H50 **Calibration ID:** B644036 **Std. Log Page No.:** ~~31~~ 32

Lab Number	EPA ID	Analyzed Date/Time	STD ID	ISTD ID	DF	Elements list are used per QC/sample
BJ62522-CAL1	S01	10/18/16 10:38	B6I0028	B6I0029	1	Cu Fe Mn
BJ62522-CAL2	S02	10/18/16 10:43	B6G0026	B6I0029	1	Cu Fe Mn
BJ62522-CAL3	S03	10/18/16 10:47	B6G0027	B6I0029	1	Cu Fe Mn
BJ62522-CAL4	S04	10/18/16 10:51	B6G0028	B6I0029	1	Cu Fe Mn
BJ62522-CAL5	S05	10/18/16 10:55	B6G0029	B6I0029	1	Cu Fe Mn
BJ62522-CAL6	S06	10/18/16 10:59	B6G0030	B6I0029	1	Cu Fe Mn
BJ62522-CAL7	S07	10/18/16 11:04	B6G0031	B6I0029	1	Fe Mn
BJ62522-CAL8	S08	10/18/16 11:08	B6G0032	B6I0029	1	Fe
BJ62522-CAL9	S09	10/18/16 11:12	B6J0169	B6I0029	1	10/25 Fe Mn
BJ62522-ICV1	ICV01	10/18/16 11:17	B6G0039	B6I0029	1	Cu Fe Mn
BJ62522-ICB1	ICB01	10/18/16 11:21	B6I0028	B6I0029	1	Cu Fe Mn
BJ62522-IFA1	ICSA01	10/18/16 11:25	B6H0021	B6I0029	1	Al Ca Cu Fe Mg Mn
BJ62522-IFB1	ICSAB01	10/18/16 11:30	B6H0022	B6I0029	1	Al Ca Cu Fe Mg Mn
BJ62522-CCV1	CCV01	10/18/16 11:34	B6G0037	B6I0029	1	Cu Fe Mn
BJ62522-CCB1	CCB01	10/18/16 11:38	B6I0028	B6I0029	1	Cu Fe Mn
BJ62522-CCV2	CCV02	10/18/16 11:47	B6G0037	B6I0029	1	Cu Fe Mn
BJ62522-CCB2	CCB02	10/18/16 11:51	B6I0028	B6I0029	1	Cu Fe Mn
BJ62522-CCV3	CCV03	10/18/16 12:00	B6G0037	B6I0029	1	Cu Fe Mn
BJ62522-CCB3	CCB03	10/18/16 12:04	B6I0028	B6I0029	1	Cu Fe Mn
BJ62522-IBL1	ZZZZZZ	10/18/16 12:08		B6I0029	1	non-report
QJ14019-PS1	MH1H52A	10/18/16 12:12		B6I0029	1	Cu Mn
BJ62522-CCV4	CCV04	10/18/16 12:17	B6G0037	B6I0029	1	Cu Fe Mn
BJ62522-CCB4	CCB04	10/18/16 12:21	B6I0028	B6I0029	1	Cu Fe Mn
BJ62522-CCV5	CCV05	10/18/16 13:25	B6G0037	B6I0029	1	Cu Fe Mn
BJ62522-CCB5	CCB05	10/18/16 13:29	B6I0028	B6I0029	1	Cu Fe Mn
BJ62522-IBL2	ZZZZZZ	10/18/16 13:33		B6I0029	1	non-report
BJ62522-IBL3	ZZZZZZ	10/18/16 13:43		B6I0029	1	non-report
BJ62522-IBL4	ZZZZZZ	10/18/16 13:47		B6I0029	1	non-report
6100167-14RE1	MH1H63	10/18/16 13:51		B6I0029	3	Fe
BJ62522-CCV6	CCV06	10/18/16 13:56	B6G0037	B6I0029	1	Cu Fe Mn
BJ62522-CCB6	CCB06	10/18/16 14:00	B6I0028	B6I0029	1	Cu Fe Mn

Bonner Analytical Testing Company

ISM02.3 STANDARD & QC LOG

Standards for ICAPP01 and ICAPP02 daily analysis were prepared on: 10/17/16

QC for ICAPP01 and ICAPP02 daily analysis were prepared on: 10/17/16

Description	EPA ID	Amount Spiked	Volume Made	Manufacturer	Lot#	Date Lot Expires	LIMS ID
Initial Calibration High	S8		50 mL	NA	NA	2 weeks	B6G0032
Pb @ 1000 ppm		1.25 Ml	Composite	Inorganic Ventures	J2-PB03066	Mar-17	B6G0036
Al @ 10000 ppm		2.0 mL		Inorganic Ventures	J2-AL05009	Mar-17	B6G0034
Fe @ 10000 ppm		1.75 mL		Inorganic Ventures	K2-FE04057	Mar-17	B6G0035
Initial Calibration High	S7		50 mL	Inorganic Ventures	NA	2 weeks	B6G0031
BAT-12		4.0 mL	Composite		J2-MEB613057	Feb-17	B6G0025
Initial Calibration High	S6		50 mL	Inorganic Ventures	NA	2 weeks	B6G0030
BAT-5		5.0 mL	Composite		K2-MEB619108	Mar-17	B6G0023
BAT-14		5.0 mL			K2-MEB619109	Mar-17	B6G0024
Initial Calibration Mid	S5		50 mL	Inorganic Ventures	NA	2 weeks	B6G0029
BAT-5		2.5 mL	Composite		K2-MEB619108	Mar-17	B6G0023
BAT-14		2.5 mL			K2-MEB619109	Mar-17	B6G0024
Initial Calibration Low	S4		50 mL	Inorganic Ventures	NA	2 weeks	B6G0028
BAT-5		0.5 mL	Composite		K2-MEB619108	Mar-17	B6G0023
BAT-14		0.5 mL			K2-MEB619109	Mar-17	B6G0024
Initial Calibration Low	S3	2.0 mL	50 mL	Inorganic Ventures	From S5	2 weeks	B6G0027
Initial Calibration Low	S2		50 mL	NA	NA	2 weeks	B6G0026
Initial Calibration Mid (S4)		0.25 mL	Composite	Inorganic Ventures	From S5	2 weeks	B6G0029
Ag @ 350 ppb		1.0 mL		In-house	NA	Mar-17	B6G0033
Initial Calibration Blank	S1	NA	50 mL	In-house	NA	1 yr	
Continuing Calibration Blank	CCB						
Initial Calibration Blank	ICB						
Initial Calibration Verification	ICV	NA	50 mL	NA	NA	1 week	B6G0039
ICV-1		5.0 mL	Composite	EPA REF MATERIAL	0307	NA	B3A0040
ICV-3		1.0 mL		In-House	NA	Mar-17	B6G0038
Interelement Check Standard A	ICSA	25 mL	250 mL	EPA REF Material	1211	2 weeks	B5L0034
Interelement Check Standard AB	ICSAB	NA	250 mL	EPA REF Material	NA	2 weeks	B5L0033
ICS PART A		25 mL	Composite		1211	NA	B5L0034
ICS PART B		25 mL			0710	NA	B5L0033
Continuing Calibration Verification	CCV		100 mL	Inorganic Ventures	NA	2 weeks	B6G0037
BAT-5		5.0 mL	Composite		K2-MEB619108	Mar-17	B6G0023
BAT-14		5.0 mL			K2-MEB619109	Mar-17	B6G0024
BAT-12		3.0 mL			J2-MEB613057	Feb-17	B6G0025
Matrix Spike (see Note 3)	MS	NA	50 mL	Inorganic Ventures	NA	NA	
CLPP-SPK-1		200 uL (soil)	Composite		J2-MEB568046	Feb-17	B6B0060
CLPP-SPK-5-REV1		50uL (water)			K2-MEB619111	Feb-17	B6B0061
Lab Control Sample	LCS		50 mL	Inorganic Ventures	NA	NA	
BA-AES-CRQL-A		500uL (soil) 250uL (water)	Composite		K2-MEB650368	Aug-17	B6I0067

Note[1]: All standards and QC (exception: MS & LCS) are brought to final volume with the same acidified water source that is used for the S0, CCB & ICB.

Note[2]: ICV-3 includes all non-routine target metals.

Prepared By: _____ Analyst

Reviewed By: _____ Supervisor/Date 10/18/2016

Document Number: MH-L-047
Revision Number: 2.7

LOG BOOK#: 31

Date Effective: 09/01/2016
MSB2

Bonner Analytical Testing Company
ISM02.3 STANDARD & QC LOG

Standards for ICAPP01 and ICAPP02 daily analysis were prepared on: 10/18/16

QC for ICAPP01 and ICAPP02 daily analysis were prepared on: 10/18/16

Description	EPA ID	Amount Spiked	Volume Made	Manufacturer	Lot#	Date Lot Expires	LIMS ID
Initial Calibration High	S8		50 mL	NA	NA	2 weeks	B6G0032
Pb @ 1000 ppm		1.25 Ml	Composite	Inorganic Ventures	J2-PB03066	Mar-17	B6G0036
Al @ 10000 ppm		2.0 mL		Inorganic Ventures	J2-AL05009	Mar-17	B6G0034
Fe @ 10000 ppm		1.75 mL		Inorganic Ventures	K2-FE04057	Mar-17	B6G0035
Initial Calibration High	S7		50 mL	Inorganic Ventures	NA	2 weeks	B6G0031
BAT-12		4.0 mL	Composite		J2-MEB613057	Feb-17	B6G0025
Initial Calibration High	S6		50 mL	Inorganic Ventures	NA	2 weeks	B6G0030
BAT-5		5.0 mL	Composite		K2-MEB619108	Mar-17	B6G0023
BAT-14		5.0 mL			K2-MEB619109	Mar-17	B6G0024
Initial Calibration Mid	S5		50 mL	Inorganic Ventures	NA	2 weeks	B6G0029
BAT-5		2.5 mL	Composite		K2-MEB619108	Mar-17	B6G0023
BAT-14		2.5 mL			K2-MEB619109	Mar-17	B6G0024
Initial Calibration Low	S4		50 mL	Inorganic Ventures	NA	2 weeks	B6G0028
BAT-5		0.5 mL	Composite		K2-MEB619108	Mar-17	B6G0023
BAT-14		0.5 mL			K2-MEB619109	Mar-17	B6G0024
Initial Calibration Low	S3	2.0 mL	50 mL	Inorganic Ventures	From S5	2 weeks	B6G0027
Initial Calibration Low	S2		50 mL	NA	NA	2 weeks	B6G0026
Initial Calibration Mid (S4)		0.25 mL	Composite	Inorganic Ventures	From S5	2 weeks	B6G0029
Ag @ 350 ppb		1.0 mL		In-house	NA	Mar-17	B6G0033
Initial Calibration Blank	S1	NA	50 mL	In-house	NA	1 yr	
Continuing Calibration Blank	CCB						
Initial Calibration Blank	ICB						
Initial Calibration Verification	ICV	NA	50 mL	NA	NA	1 week	B6G0039
ICV-1		5.0 mL	Composite	EPA REF MATERIAL	0307	NA	B3A0040
ICV-3		1.0 mL		In-House	NA	Mar-17	B6G0038
Interelement Check Standard A	ICSA	25 mL	250 mL	EPA REF Material	1211	2 weeks	B5L0034
Interelement Check Standard AB	ICSAB	NA	250 mL	EPA REF Material	NA	2 weeks	B5L0033
ICS PART A		25 mL	Composite		1211	NA	B5L0034
ICS PART B		25 mL			0710	NA	B5L0033
Continuing Calibration Verification	CCV		100 mL	Inorganic Ventures	NA	2 weeks	B6G0037
BAT-5		5.0 mL	Composite		K2-MEB619108	Mar-17	B6G0023
BAT-14		5.0 mL			K2-MEB619109	Mar-17	B6G0024
BAT-12		3.0 mL			J2-MEB613057	Feb-17	B6G0025
Matrix Spike (see Note 3)	MS	NA	50 mL	Inorganic Ventures	NA	NA	
CLPP-SPK-1		200 uL (soil) 50uL (water)	Composite		J2-MEB568046	Feb-17	B6B0060
CLPP-SPK-5-REV1					K2-MEB619111	Feb-17	B6B0061
Lab Control Sample	LCS		50 mL	Inorganic Ventures	NA	NA	
BA-AES-CRQL-A		500uL (soil) 250uL (water)	Composite		K2-MEB650368	Aug-17	B6I0067

Note[1]: All standards and QC (exception: MS & LCS) are brought to final volume with the same acidified water source that is used for the S0, CCB & ICB.

Note[2]: ICV-3 includes all non-routine target metals.

Prepared By: [signature] Analyst

Reviewed By: [signature] 10/18/2016 Supervisor/Date

Document Number: MH-L-047
Revision Number: 2.7

LOG BOOK#: 32

Date Effective: 09/01/2016
MSB2

Analytical Standard Record
Bonner Analytical Testing Co.

LIMS ID: B6J0170

Description: PS - MH1H50
Vendor: In House
Lot No.: NA
Final Volume (mL): 10

Department: METALS
Prepared By: Maxwell S. Bonner
Prepared: 10/25/2016
Expires: 2/19/2017

Analyte	CAS Number	Concentration	Units
Manganese	7439-96-5	5.3	ug/mL
Copper	7440-50-8	1.13	ug/mL

Parent Standards used in this standard:

Standard	Description	Vendor	Lot No.	Expires	Mass/Vol Used
B6A0021	Std - Manganese - 1000ppm	High-Purity Standards	1426734	6/29/2017	0.053
B6A0060	Std - Copper - 10ppm	High-Purity Standards	1530818	6/29/2017	1.13

Reviewed By

10/25/16
Date

REAGENTS PREPARATION LOG

ICAPP Reference Standard

LIMS ID: BGI0029

Preparation Date: 8/9/16

Prepared By: MHX BONNER

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled H2O	Neat	~20 L	BATCO	NA	NA	NA
Scandium	NEAT ~~10,000~~	~~0.309g~~ ~~10.0 mL~~ 0.614	ALDRICH	MKBS4651V	8/4/15	8/4/15
Indium (III) Chloride	Neat	1.98g	ALDRICH	MKBS6036V	8/4/15	8/4/15
Yttrium (III) Oxide	Neat	0.130g	ALDRICH	MKBT0144V	12/20/12	NA

Balance ID: Mettler IV

Instrument: ICAPP01 & ICAPP02

Fil Volume: 20 Liters

Concentration: Sc (10ppm); In (50ppm); Y (2.5ppm)

Used For: ICAPP Reference Standard

Expiration Date: 12 months after preparation date

Comments: Added 200 mL of conc. HNO_3 to acidify & stabilize soln.

Reviewed By: [signature] 8/9/16

Supervisor/Date

REAGENTS PREPARATION LOG

Acidified Water

LIMS ID: B61008

Preparation Date: 9/8/2016

Prepared By: MATT JOHNSON

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled H2O	Neat	18800 mL	BATCO	NA	NA	NA
Nitric Acid	Neat	200 mL	Fisher	111 6020	08/04/16	02/17/18
Hydrochloric Acid	Neat	1000 mL	FISHER	4116040	08/04/16	05/13/A

Balance ID NA

Instrument ICAPP01 & ICAPP02

Final Volume 20 Liters

Concentration 1% HNO3 / 5% HCl

Used For ICAPP Acidified Water

Expiration Date 12 months after preparation date

Comments

Reviewed By: 9/8/16

Supervisor/Date

Bonner Analytical Testing Company
ISM02.3 ICP-AES Standards Concentration Page

Element	Wavelength (nm)	Stock Std. (mg/L)	Cal1@S1 (mg/L)	Cal2@S2 (mg/L)	Cal3@S3 (mg/L)	Cal4@S4 (mg/L)	Cal5@S5 (mg/L)	Cal6@S6 (mg/L)	Stock Std. (mg/L)	Cal7@S7 (mg/L)	Stock Std. (mg/L)	Cal8@S7 (mg/L)	CCV (mg/L)	ICV (µg/L)	ICSA (µg/L)	ICSAB (µg/L)	MS Water (µg/L)	MS Soil (mg/kg)	LCS (µg/L)	CRQL (µg/L)
Ag	328.0	10	0.00	0.010	0.02	0.1	0.5	1.0					0.5	501	(0)	201	50	10	20	10
Al	396.1	400	0.00	0.10	0.80	4.0	20.0	40.0	4000	320	10000	400	140.0	2521	254900	246800	2000		400	200
As	189.0	40	0.00	0.01	0.08	0.4	2.0	4.0					2.0	999	(0)	104	40	8	20	10
Ba	455.4	320	0.00	0.08	0.64	3.2	16.0	32.0					16.0	497	(6)	(537)	2000	400	400	200
Be	313.1	8	0.00	0.002	0.016	0.08	0.4	0.8					0.4	495	(0)	495	50	10	10	5
Ca	318.1	1000	0.00	0.250	2.0	10.0	50.0	100	5000	400			200.0	10026	244500	234900			10000	5000
Cd	214.4	20	0.00	0.005	0.04	0.2	1.0	2.0					1.0	496	(1)	972	50	10	10	5
Co	228.6	50	0.00	0.0125	0.10	0.5	2.5	5.0					2.5	499	(0)	476	500	100	100	50
Cr	267.7	40	0.00	0.01	0.08	0.4	2.0	4.0	125	10.0			5.8	490	52	542	200	40	20	10
Cu	324.7	100	0.00	0.025	0.20	1.0	5.0	10.0					5.0	492	(2)	511	250	50	50	25
Fe	259.8	400	0.00	0.1000	0.80	4.0	20.0	40.0	3500	280	10000	350	125.0	5082	100700	99320	1000		200	100
K	766.4	1000	0.00	0.25	2.0	10.0	50.0	100	3000	240			140.0	10021					1000	500
Mg	279.0	1000	0.00	0.25	2.0	10.0	50.0	100	5000	400			200.0	6074	255400	248000			10000	5000
Mn	257.6	60	0.00	0.015	0.12	0.6	3.0	6.0	200	16.0			9.0	499	(7)	507	500	100	30	15
Na	589.5	1000	0.00	0.25	2.0	10.0	50.0	100	2500	200			125.0	10097					1000	500
Ni	231.6	80	0.00	0.02	0.16	0.8	4.0	8.0					4.0	503	(2)	954	500	100	80	40
Pb	220.3	40	0.00	0.01	0.08	0.4	2.0	4.0	125	10.0	1000	25.0	5.8	1002	(0)	(49)	20	4	20	10
Sb	206.8	80	0.00	0.02	0.16	0.8	4.0	8.0					4.0	994	(0)	618	100	20	120	60
Se	196.0	70	0.00	0.0175	0.14	0.7	3.5	7.0					3.5	1029	(0)	(46)	100	20	70	35
Tl	190.8	80	0.00	0.02	0.16	0.8	4.0	8.0					4.0	1028	(0)	(108)	50	10	50	25
V	292.4	80	0.00	0.02	0.16	0.8	4.0	8.0					4.0	501	(0)	491	500	100	100	50
Zn	206.2	160	0.00	0.04	0.32	1.6	8.0	16.0					8.0	1025	(0)	952	500	100	120	60

() Indicates analyte value(s) that are less than the CRQL, and the value should be used as a set point for the +/- the CRQL acceptance criteria calculation.
The following calibration curve and QC concentrations coincide with the EPA IDs of the Standard & QC Log (ISM).

Metals Weekly Digestion Block Temperature Verification

Date	10/02/2016	10/02/2016	10/10/2016	10/10/2016	10/17/16	10/17/16	10/24/16	10/24/16
Initials	LEM	LEM	LEM	LEM	[illegible]	[illegible]	[illegible]	[illegible]
	Temp Read Out	Thermometer	Temp Read Out	Thermometer	Temp Read Out	Thermometer	Temp Read Out	Thermometer
ICP Digester 01	115.0	95.0	95.0	96.5	115.0	96.4	115.0	95.0
ICP Digester 02	114.0	96.5	115.0	94.5	115.5	96.6	115.0	95.6
ICP Digester 03	NOT IN USE	NOT IN USE	NIU	NIU	NOT IN USE	NOT IN USE	NOT IN USE	NOT IN USE
ICP Digester 04	92.0	94.0	NIU	NIU	[illegible]	93.5	not in use	Not in use
Reviewed/Date:	[illegible]	10/03/16	[illegible]	10/18/16	[illegible]	10/18/2016	[illegible]	10/24/16

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.

**Certification cannot exceed 1 year

Thermometer Serial No./ID: H157522

**Date of certification: 03/10/2016

EPA SAMPLE NO.

MH1H50

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-01

% Solids: 82.5 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	1.8	*	10/19/2016	0101
7440-39-3	Barium	46.5	*	10/19/2016	0101
7440-41-7	Beryllium	0.062	J	10/19/2016	0101
7440-43-9	Cadmium	0.065	J*	10/19/2016	0101
7440-47-3	Chromium	1.5		10/19/2016	0101
7440-48-4	Cobalt	0.48	J*	10/19/2016	0101
7439-98-7	Molybdenum	1.2	J*	10/19/2016	0101
7440-02-0	Nickel	0.33	J	10/19/2016	0101
7782-49-2	Selenium	1.4	J	10/19/2016	0101
7440-22-4	Silver	0.57	J	10/19/2016	0101
7440-28-0	Thallium	0.26	J	10/19/2016	0101
7440-62-2	Vanadium	6.6		10/19/2016	0101

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H51

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-02

% Solids: 71.2 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	2.1	*	10/19/2016	0105
7440-39-3	Barium	61.1	*	10/19/2016	0105
7440-41-7	Beryllium	0.41	J	10/19/2016	0105
7440-43-9	Cadmium	1.4	*	10/19/2016	0105
7440-47-3	Chromium	1.6		10/19/2016	0105
7440-48-4	Cobalt	7.4	*	10/19/2016	0105
7439-98-7	Molybdenum	0.89	J*	10/19/2016	0105
7440-02-0	Nickel	3.1		10/19/2016	0105
7782-49-2	Selenium	1.5	J	10/19/2016	0105
7440-22-4	Silver	1.4		10/19/2016	0105
7440-28-0	Thallium	0.21	J	10/19/2016	0105
7440-62-2	Vanadium	8.9		10/19/2016	0105

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H52

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-03

% Solids: 92.4 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	2.1	*	10/24/2016	1648
7440-39-3	Barium	35.2	*	10/24/2016	1648
7440-41-7	Beryllium	0.17	J	10/24/2016	1648
7440-43-9	Cadmium	3.5	*	10/24/2016	1648
7440-47-3	Chromium	1.9		10/24/2016	1648
7440-48-4	Cobalt	2.1	*	10/24/2016	1648
7439-98-7	Molybdenum	0.91	J*	10/24/2016	1648
7440-02-0	Nickel	1.3		10/24/2016	1648
7782-49-2	Selenium	1.6	J	10/24/2016	1648
7440-22-4	Silver	1.3		10/24/2016	1648
7440-28-0	Thallium	0.17	J	10/24/2016	1648
7440-62-2	Vanadium	12.1		10/24/2016	1648

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H53

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-04

% Solids: 68.9 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	1.7	*	10/19/2016	0125
7440-39-3	Barium	77.1	*	10/19/2016	0125
7440-41-7	Beryllium	0.40	J	10/19/2016	0125
7440-43-9	Cadmium	0.60	J*	10/19/2016	0125
7440-47-3	Chromium	2.4		10/19/2016	0125
7440-48-4	Cobalt	3.8	*	10/19/2016	0125
7439-98-7	Molybdenum	1.3	J*	10/19/2016	0125
7440-02-0	Nickel	2.7		10/19/2016	0125
7782-49-2	Selenium	2.1	J	10/19/2016	0125
7440-22-4	Silver	0.64	J	10/19/2016	0125
7440-28-0	Thallium	0.18	J	10/19/2016	0125
7440-62-2	Vanadium	13.3		10/19/2016	0125

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H54

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-05

% Solids: 85.7 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	1.2	*	10/19/2016	0129
7440-39-3	Barium	114	*	10/19/2016	0129
7440-41-7	Beryllium	0.063	J	10/19/2016	0129
7440-43-9	Cadmium	0.25	J *	10/19/2016	0129
7440-47-3	Chromium	2.0		10/19/2016	0129
7440-48-4	Cobalt	0.65	*	10/19/2016	0129
7439-98-7	Molybdenum	2.6	*	10/19/2016	0129
7440-02-0	Nickel	0.92		10/19/2016	0129
7782-49-2	Selenium	2.4	J	10/19/2016	0129
7440-22-4	Silver	0.62		10/19/2016	0129
7440-28-0	Thallium	0.21	J	10/19/2016	0129
7440-62-2	Vanadium	11.4		10/19/2016	0129

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H55

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-06

% Solids: 79.6 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	7.0	*	10/19/2016	0133
7440-39-3	Barium	46.1	*	10/19/2016	0133
7440-41-7	Beryllium	0.093	J	10/19/2016	0133
7440-43-9	Cadmium	0.68	*	10/19/2016	0133
7440-47-3	Chromium	1.9		10/19/2016	0133
7440-48-4	Cobalt	1.8	*	10/19/2016	0133
7439-98-7	Molybdenum	1.0	J*	10/19/2016	0133
7440-02-0	Nickel	1.2		10/19/2016	0133
7782-49-2	Selenium	2.2	J	10/19/2016	0133
7440-22-4	Silver	2.8		10/19/2016	0133
7440-28-0	Thallium	0.32	J	10/19/2016	0133
7440-62-2	Vanadium	11.7		10/19/2016	0133

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H56

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-07

% Solids: 83.4 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	1.3	*	10/19/2016	0138
7440-39-3	Barium	78.3	*	10/19/2016	0138
7440-41-7	Beryllium	0.11	J	10/19/2016	0138
7440-43-9	Cadmium	0.60	U*	10/19/2016	0138
7440-47-3	Chromium	2.6		10/19/2016	0138
7440-48-4	Cobalt	0.94	*	10/19/2016	0138
7439-98-7	Molybdenum	1.1	J*	10/19/2016	0138
7440-02-0	Nickel	0.84		10/19/2016	0138
7782-49-2	Selenium	1.5	J	10/19/2016	0138
7440-22-4	Silver	0.24	J	10/19/2016	0138
7440-28-0	Thallium	0.15	J	10/19/2016	0138
7440-62-2	Vanadium	11.4		10/19/2016	0138

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H57

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-08

% Solids: 58.9 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	6.4	*	10/19/2016	0142
7440-39-3	Barium	113	*	10/19/2016	0142
7440-41-7	Beryllium	0.12	J	10/19/2016	0142
7440-43-9	Cadmium	3.1	*	10/19/2016	0142
7440-47-3	Chromium	3.4		10/19/2016	0142
7440-48-4	Cobalt	0.89	*	10/19/2016	0142
7439-98-7	Molybdenum	1.7	J *	10/19/2016	0142
7440-02-0	Nickel	0.99		10/19/2016	0142
7782-49-2	Selenium	2.1	J	10/19/2016	0142
7440-22-4	Silver	8.0		10/19/2016	0142
7440-28-0	Thallium	0.41	J	10/19/2016	0142
7440-62-2	Vanadium	21.1		10/19/2016	0142

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H58

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-09

% Solids: 79.8 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	1.3	*	10/19/2016	0146
7440-39-3	Barium	111	*	10/19/2016	0146
7440-41-7	Beryllium	0.26	J	10/19/2016	0146
7440-43-9	Cadmium	0.29	J*	10/19/2016	0146
7440-47-3	Chromium	3.7		10/19/2016	0146
7440-48-4	Cobalt	2.4	*	10/19/2016	0146
7439-98-7	Molybdenum	1.2	J*	10/19/2016	0146
7440-02-0	Nickel	1.9		10/19/2016	0146
7782-49-2	Selenium	1.4	J	10/19/2016	0146
7440-22-4	Silver	0.88		10/19/2016	0146
7440-28-0	Thallium	0.29	J	10/19/2016	0146
7440-62-2	Vanadium	17.9		10/19/2016	0146

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H59

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-10

% Solids: 76.7 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	1.2	J *	10/19/2016	0150
7440-39-3	Barium	66.9	*	10/19/2016	0150
7440-41-7	Beryllium	0.73		10/19/2016	0150
7440-43-9	Cadmium	2.1	*	10/19/2016	0150
7440-47-3	Chromium	3.0		10/19/2016	0150
7440-48-4	Cobalt	13.1	*	10/19/2016	0150
7439-98-7	Molybdenum	0.74	J *	10/19/2016	0150
7440-02-0	Nickel	7.1		10/19/2016	0150
7782-49-2	Selenium	1.9	J	10/19/2016	0150
7440-22-4	Silver	0.45	J	10/19/2016	0150
7440-28-0	Thallium	0.22	J	10/19/2016	0150
7440-62-2	Vanadium	19.0		10/19/2016	0150

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H60

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-11

% Solids: 84.1 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	0.44	J*	10/19/2016	0202
7440-39-3	Barium	84.1	*	10/19/2016	0202
7440-41-7	Beryllium	0.48	J	10/19/2016	0202
7440-43-9	Cadmium	0.40	J *	10/19/2016	0202
7440-47-3	Chromium	3.2		10/19/2016	0202
7440-48-4	Cobalt	8.7	*	10/19/2016	0202
7439-98-7	Molybdenum	0.75	J *	10/19/2016	0202
7440-02-0	Nickel	4.5		10/19/2016	0202
7782-49-2	Selenium	1.6	J	10/19/2016	0202
7440-22-4	Silver	0.45	J	10/19/2016	0202
7440-28-0	Thallium	0.14	J	10/19/2016	0202
7440-62-2	Vanadium	18.1		10/19/2016	0202

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H61

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-12

% Solids: 63.8 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	0.37	JD *	10/19/2016	0909
7440-39-3	Barium	82.3	D *	10/19/2016	0909
7440-41-7	Beryllium	1.5		10/19/2016	0206
7440-43-9	Cadmium	3.6	D *	10/19/2016	0909
7440-47-3	Chromium	2.4		10/19/2016	0206
7440-48-4	Cobalt	23.9	D *	10/19/2016	0909
7439-98-7	Molybdenum	0.58	JD *	10/19/2016	0909
7440-02-0	Nickel	19.3	D	10/19/2016	0909
7782-49-2	Selenium	3.3	J	10/19/2016	0206
7440-22-4	Silver	0.27	JD	10/19/2016	0909
7440-28-0	Thallium	0.18	JD	10/19/2016	0909
7440-62-2	Vanadium	17.5		10/19/2016	0206

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H62

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-13

% Solids: 81.5 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	0.50	J*	10/19/2016	0210
7440-39-3	Barium	120	*	10/19/2016	0210
7440-41-7	Beryllium	0.57	J	10/19/2016	0210
7440-43-9	Cadmium	0.76	*	10/19/2016	0210
7440-47-3	Chromium	2.5		10/19/2016	0210
7440-48-4	Cobalt	10.4	*	10/19/2016	0210
7439-98-7	Molybdenum	0.68	J*	10/19/2016	0210
7440-02-0	Nickel	4.7		10/19/2016	0210
7782-49-2	Selenium	1.3	J	10/19/2016	0210
7440-22-4	Silver	0.36	J	10/19/2016	0210
7440-28-0	Thallium	0.15	J	10/19/2016	0210
7440-62-2	Vanadium	15.2		10/19/2016	0210

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H63

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-14

% Solids: 79.1 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	0.87	J*	10/19/2016	0215
7440-39-3	Barium	63.9	*	10/19/2016	0215
7440-41-7	Beryllium	0.68		10/19/2016	0215
7440-43-9	Cadmium	0.20	J*	10/19/2016	0215
7440-47-3	Chromium	1.9		10/19/2016	0215
7440-48-4	Cobalt	10.6	*	10/19/2016	0215
7439-98-7	Molybdenum	1.1	J*	10/19/2016	0215
7440-02-0	Nickel	6.4		10/19/2016	0215
7782-49-2	Selenium	1.7	J	10/19/2016	0215
7440-22-4	Silver	0.55	J	10/19/2016	0215
7440-28-0	Thallium	0.12	J	10/19/2016	0215
7440-62-2	Vanadium	17.2		10/19/2016	0215

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H64

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-15

% Solids: 67.9 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	0.57	J *	10/19/2016	0219
7440-39-3	Barium	158	*	10/19/2016	0219
7440-41-7	Beryllium	0.47	J	10/19/2016	0219
7440-43-9	Cadmium	0.13	J *	10/19/2016	0219
7440-47-3	Chromium	1.2	J	10/19/2016	0219
7440-48-4	Cobalt	3.9	*	10/19/2016	0219
7439-98-7	Molybdenum	0.97	J *	10/19/2016	0219
7440-02-0	Nickel	3.9		10/19/2016	0219
7782-49-2	Selenium	1.8	J	10/19/2016	0219
7440-22-4	Silver	1.0		10/19/2016	0219
7440-28-0	Thallium	0.26	J	10/19/2016	0219
7440-62-2	Vanadium	20.2		10/19/2016	0219

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H65

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-16

% Solids: 77.3 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	0.55	J *	10/19/2016	0223
7440-39-3	Barium	128	*	10/19/2016	0223
7440-41-7	Beryllium	0.056	J	10/19/2016	0223
7440-43-9	Cadmium	0.65	U *	10/19/2016	0223
7440-47-3	Chromium	0.74	J	10/19/2016	0223
7440-48-4	Cobalt	0.26	J *	10/19/2016	0223
7439-98-7	Molybdenum	0.88	J *	10/19/2016	0223
7440-02-0	Nickel	0.26	J	10/19/2016	0223
7782-49-2	Selenium	1.5	J	10/19/2016	0223
7440-22-4	Silver	1.9		10/19/2016	0223
7440-28-0	Thallium	0.28	J	10/19/2016	0223
7440-62-2	Vanadium	19.0		10/19/2016	0223

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H66

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-17

% Solids: 67.5 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	1.7	*	10/19/2016	0227
7440-39-3	Barium	71.7	*	10/19/2016	0227
7440-41-7	Beryllium	0.36	J	10/19/2016	0227
7440-43-9	Cadmium	0.52	J*	10/19/2016	0227
7440-47-3	Chromium	3.0		10/19/2016	0227
7440-48-4	Cobalt	20.4	*	10/19/2016	0227
7439-98-7	Molybdenum	1.1	J*	10/19/2016	0227
7440-02-0	Nickel	3.4		10/19/2016	0227
7782-49-2	Selenium	1.1	J	10/19/2016	0227
7440-22-4	Silver	0.46	J	10/19/2016	0227
7440-28-0	Thallium	0.42	J	10/19/2016	0227
7440-62-2	Vanadium	18.0		10/19/2016	0227

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H67

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-18

% Solids: 74.0 Date Received: 10/13/2016

Analytical method: ICP-MS

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7440-36-0	Antimony	2.6	*	10/19/2016	0231
7440-39-3	Barium	152	*	10/19/2016	0231
7440-41-7	Beryllium	0.24	J	10/19/2016	0231
7440-43-9	Cadmium	0.13	J *	10/19/2016	0231
7440-47-3	Chromium	3.8		10/19/2016	0231
7440-48-4	Cobalt	2.3	*	10/19/2016	0231
7439-98-7	Molybdenum	1.7	J *	10/19/2016	0231
7440-02-0	Nickel	1.9		10/19/2016	0231
7782-49-2	Selenium	1.8	J	10/19/2016	0231
7440-22-4	Silver	0.59	J	10/19/2016	0231
7440-28-0	Thallium	0.31	J	10/19/2016	0231
7440-62-2	Vanadium	20.5		10/19/2016	0231

NOTE: Hardness (total) is reported in mg/L

Comments:

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

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

Continuing Calibration Verification Source: In-House, Lot: B6A0045

Run Batch: BJ61904101816B Analytical method: ICP-MS

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV01				ID: CCV01				ID: CCV02		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Antimony	199.00	195	98	3	500.00	532	106	1	534	107	2
Barium	99.000	100	101	2	500.00	524	105	1	519	104	2
Beryllium	99.000	106	107	1	500.00	494	99	0	507	101	2
Cadmium	99.000	97.8	99	2	500.00	514	103	1	512	102	2
Chromium	98.000	98.9	101	1	500.00	507	101	0	493	99	2
Cobalt	100.00	102	102	2	500.00	496	99	1	500	100	1
Molybdenum	10.000	10.5	105	2	1250.0	1240	99	0	1240	99	1
Nickel	101.00	100	99	2	500.00	499	100	1	506	101	1
Selenium	206.00	205	100	1	500.00	507	101	1	489	98	3
Silver	100.00	99.7	100	1	65.000	65.7	101	1	65.7	101	2
Thallium	206.00	211	102	0	500.00	483	97	1	484	97	0
Vanadium	100.00	98.1	98	1	500.00	499	100	0	485	97	2

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

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

Continuing Calibration Verification Source: In-House, Lot: B6A0045

Run Batch: BJ61904101816B Analytical method: ICP-MS

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID: CCV03				ID: CCV04		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Antimony					500.00	530	106	2	543	109	1
Barium					500.00	516	103	1	525	105	0
Beryllium					500.00	491	98	1	504	101	1
Cadmium					500.00	507	101	1	521	104	1
Chromium					500.00	491	98	2	494	99	0
Cobalt					500.00	496	99	1	510	102	0
Molybdenum					1250.0	1220	98	1	1260	101	1
Nickel					500.00	500	100	2	513	103	0
Selenium					500.00	487	98	1	487	97	2
Silver					65.000	65.5	101	1	66.2	102	1
Thallium					500.00	486	97	1	497	100	0
Vanadium					500.00	482	96	1	483	97	0

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

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

Continuing Calibration Verification Source: In-House, Lot: B6A0045

Run Batch: BJ61904101816B Analytical method: ICP-MS

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID:CCV05				ID:CCV06		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Antimony					500.00	523	105	0	534	107	1
Barium					500.00	502	100	0	508	102	0
Beryllium					500.00	505	101	1	484	97	1
Cadmium					500.00	505	101	0	507	101	1
Chromium					500.00	470	94	1	475	95	0
Cobalt					500.00	495	99	1	502	100	0
Molybdenum					1250.0	1250	100	0	1240	99	0
Nickel					500.00	496	99	1	500	100	1
Selenium					500.00	457	91	1	468	94	0
Silver					65.000	64.3	99	1	64.8	100	0
Thallium					500.00	499	100	0	495	99	0
Vanadium					500.00	456	91	1	462	93	0

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029
Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50
Initial Calibration Verification Source: USEPA, Lot: ICV (0307)
Continuing Calibration Verification Source: In-House, Lot: B6A0045
Run Batch: BJ61904101816B Analytical method: ICP-MS
Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID: CCV07				ID: CCV08		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Antimony					500.00	538	108	1	537	107	0
Barium					500.00	512	102	1	514	103	0
Beryllium					500.00	463	93	1	470	94	1
Cadmium					500.00	510	102	1	512	102	0
Chromium					500.00	482	96	2	475	95	1
Cobalt					500.00	506	101	1	509	102	0
Molybdenum					1250.0	1270	102	1	1270	102	1
Nickel					500.00	503	101	0	504	101	1
Selenium					500.00	472	95	2	467	93	2
Silver					65.000	65.2	100	0	65.7	101	0
Thallium					500.00	500	100	1	497	99	0
Vanadium					500.00	469	94	1	464	93	1

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029
Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50
Initial Calibration Verification Source: USEPA, Lot: ICV (0307)
Continuing Calibration Verification Source: In-House, Lot: B6A0045
Run Batch: BJ61904101816B Analytical method: ICP-MS
Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID: CCV09				ID: CCVA		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Antimony					500.00	545	109	1	545	109	1
Barium					500.00	525	105	1	521	104	1
Beryllium					500.00	454	91	1	454	91	2
Cadmium					500.00	517	103	0	512	102	1
Chromium					500.00	479	96	1	477	95	1
Cobalt					500.00	512	102	0	510	102	1
Molybdenum					1250.0	1290	103	0	1280	103	0
Nickel					500.00	507	101	1	504	101	0
Selenium					500.00	469	94	1	467	93	1
Silver					65.000	66.1	102	0	65.6	101	1
Thallium					500.00	485	97	1	493	99	1
Vanadium					500.00	469	94	1	468	94	1

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

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

Continuing Calibration Verification Source: In-House, Lot: B6A0045

Run Batch: BJ62102M101916A Analytical method: ICP-MS

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV01				ID: CCV01				ID: CCV02		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Antimony	199.00	202	101	1	500.00	530	106	0	530	106	2
Barium	99.000	101	102	1	500.00	514	103	0	515	103	0
Cadmium	99.000	102	103	1	500.00	513	103	0	510	102	1
Cobalt	100.00	103	103	0	500.00	501	100	1	503	101	1
Molybdenum	10.000	10.7	107	0	1250.0	1300	104	0	1300	104	1
Nickel	101.00	102	101	0	500.00	498	100	0	501	100	1
Silver	100.00	103	103	1	65.000	66.0	102	0	66.1	102	1
Thallium	206.00	218	106	1	500.00	500	100	1	498	100	1

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

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

Continuing Calibration Verification Source: In-House, Lot: B6A0045

Run Batch: BJ62507M102416A Analytical method: ICP-MS

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV01				ID: CCV01				ID: CCV02		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Antimony	199.00	191	96	0	500.00	489	98	1	490	98	0
Barium	99.000	93.5	94	1	500.00	464	93	1	466	93	0
Beryllium	99.000	105	106	1	500.00	539	108	0	528	106	1
Cadmium	99.000	104	105	0	500.00	507	101	1	512	102	0
Chromium	98.000	95.5	98	1	500.00	511	102	1	515	103	1
Cobalt	100.00	100	100	0	500.00	514	103	1	520	104	0
Molybdenum	10.000	10.9	109	1	1250.0	1240	100	0	1290	103	3
Nickel	101.00	104	103	1	500.00	501	100	1	513	103	1
Selenium	206.00	201	98	0	500.00	517	103	1	513	103	0
Silver	100.00	106	106	0	65.000	66.2	102	1	67.2	103	1
Thallium	206.00	221	107	0	500.00	512	102	1	509	102	0
Vanadium	100.00	95.3	95	1	500.00	512	102	1	516	103	1

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

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

Continuing Calibration Verification Source: In-House, Lot: B6A0045

Run Batch: BJ62507M102416A Analytical method: ICP-MS

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID: CCV03				ID: CCV04		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Antimony					500.00	493	99	1	495	99	1
Barium					500.00	467	93	1	465	93	0
Beryllium					500.00	523	105	1	515	103	1
Cadmium					500.00	514	103	1	518	104	1
Chromium					500.00	512	102	1	518	104	2
Cobalt					500.00	521	104	0	525	105	1
Molybdenum					1250.0	1260	101	0	1270	101	1
Nickel					500.00	514	103	0	517	103	1
Selenium					500.00	509	102	0	511	102	3
Silver					65.000	67.4	104	1	67.9	104	0
Thallium					500.00	512	102	0	518	104	1
Vanadium					500.00	512	102	1	517	103	3

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

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

Continuing Calibration Verification Source: In-House, Lot: B6A0045

Run Batch: BJ62515M102516A Analytical method: ICP-MS

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV01				ID: CCV01				ID: CCV02		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Molybdenum	10.000	10.2	102	0	1250.0	1260	100	2	1270	101	2

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: ICP-MS Preparation Batch: QJ14032

Run Batch: BJ61904101816B Preparation Method: 200.8

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB01	Q	ID: CCB01	Q	ID: CCB02	Q	ID: CCB03	Q	ID: PBS01	Q
Antimony	2.0	U	0.21	J	0.20	J	0.13	J	1.0	U
Barium	10	U	0.19	J	0.18	J	0.10	J	5.0	U
Beryllium	1.0	U	0.22	J	0.22	J	0.14	J	0.50	U
Cadmium	0.052	J	0.19	J	0.16	J	0.087	J	0.50	U
Chromium	2.0	U	2.0	U	2.0	U	2.0	U	-0.083	J
Cobalt	0.053	J	0.19	J	0.17	J	0.11	J	0.50	U
Molybdenum	4.0	U	0.49	J	0.44	J	0.35	J	2.0	U
Nickel	1.0	U	0.28	J	0.19	J	1.0	U	0.15	J
Selenium	5.0	U	5.0	U	5.0	U	5.0	U	2.5	U
Silver	0.051	J	0.036	J	0.027	J	0.014	J	0.50	U
Thallium	0.12	J	0.24	J	0.21	J	0.14	J	0.50	U
Vanadium	5.0	U	5.0	U	5.0	U	5.0	U	2.5	U

NOTE: Hardness (total) is reported in mg/L

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: ICP-MS Preparation Batch: QJ14032

Run Batch: BJ61904101816B Preparation Method: 200.8

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID:	Q	ID: CCB04	Q	ID: CCB05	Q	ID: CCB06	Q	ID:	Q
Antimony			2.0	U	2.0	U	2.0	U		
Barium			0.093	J	10	U	0.062	J		
Beryllium			0.13	J	0.12	J	0.12	J		
Cadmium			0.093	J	0.067	J	0.072	J		
Chromium			2.0	U	2.0	U	2.0	U		
Cobalt			0.085	J	0.080	J	0.083	J		
Molybdenum			0.29	J	0.41	J	0.43	J		
Nickel			1.0	U	1.0	U	1.0	U		
Selenium			5.0	U	5.0	U	5.0	U		
Silver			0.014	J	0.010	J	0.012	J		
Thallium			0.12	J	0.10	J	0.11	J		
Vanadium			5.0	U	5.0	U	5.0	U		

NOTE: Hardness (total) is reported in mg/L

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: ICP-MS Preparation Batch: QJ14032

Run Batch: BJ61904101816B Preparation Method: 200.8

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID:	Q	ID: CCB07	Q	ID: CCB08	Q	ID: CCB09	Q	ID:	Q
Antimony			2.0	U	2.0	U	2.0	U		
Barium			0.066	J	10	U	10	U		
Beryllium			0.11	J	1.0	U	1.0	U		
Cadmium			0.057	J	0.047	J	0.044	J		
Chromium			2.0	U	2.0	U	2.0	U		
Cobalt			0.055	J	0.047	J	0.047	J		
Molybdenum			0.39	J	0.36	J	0.32	J		
Nickel			1.0	U	1.0	U	1.0	U		
Selenium			5.0	U	5.0	U	5.0	U		
Silver			0.0074	J	0.0068	J	0.0065	J		
Thallium			0.090	J	0.077	J	0.076	J		
Vanadium			5.0	U	5.0	U	5.0	U		

NOTE: Hardness (total) is reported in mg/L

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: ICP-MS Preparation Batch: QJ14032

Run Batch: BJ61904101816B Preparation Method: 200.8

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID:	Q	ID: CCBA	Q	ID:	Q	ID:	Q	ID:	Q
Antimony			2.0	U						
Barium			10	U						
Beryllium			1.0	U						
Cadmium			0.043	J						
Chromium			2.0	U						
Cobalt			0.041	J						
Molybdenum			0.33	J						
Nickel			1.0	U						
Selenium			5.0	U						
Silver			0.0065	J						
Thallium			0.076	J						
Vanadium			5.0	U						

NOTE: Hardness (total) is reported in mg/L

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: ICP-MS Preparation Batch:

Run Batch: BJ62102M101916A Preparation Method:

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB01	Q	ID: CCB01	Q	ID: CCB02	Q	ID:	Q	ID:	Q
Antimony	2.0	U	2.0	U	2.0	U				
Barium	10	U	0.084	J	0.072	J				
Cadmium	1.0	U	1.0	U	0.053	J				
Cobalt	0.015	J	0.042	J	0.040	J				
Molybdenum	4.0	U	0.29	J	0.32	J				
Nickel	1.0	U	1.0	U	1.0	U				
Silver	0.017	J	0.0069	J	1.0	U				
Thallium	1.0	U	0.082	J	0.075	J				

NOTE: Hardness (total) is reported in mg/L

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: ICP-MS Preparation Batch: QJ24005

Run Batch: BJ62507M102416A Preparation Method: 200.8

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB01	Q	ID: CCB01	Q	ID: CCB02	Q	ID: CCB03	Q	ID: PBS02	Q
Antimony	0.30	J	2.0	U	2.0	U	0.14	J	1.0	U
Barium	10	U	10	U	0.081	J	10	U	5.0	U
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	0.50	U
Cadmium	0.062	J	0.059	J	0.057	J	0.066	J	0.50	U
Chromium	2.0	U	2.0	U	2.0	U	2.0	U	-0.12	J
Cobalt	0.038	J	0.052	J	0.061	J	0.049	J	0.50	U
Molybdenum	4.0	U	0.36	J	0.49	J	0.65	J	0.068	J
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	0.50	U
Selenium	5.0	U	5.0	U	5.0	U	5.0	U	2.5	U
Silver	0.031	J	0.0080	J	0.014	J	0.0070	J	0.50	U
Thallium	0.066	J	0.090	J	0.096	J	0.068	J	0.50	U
Vanadium	0.13	J	0.20	J	0.17	J	0.19	J	0.084	J

NOTE: Hardness (total) is reported in mg/L

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: ICP-MS Preparation Batch: QJ24005

Run Batch: BJ62507M102416A Preparation Method: 200.8

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID:	Q	ID: CCB04	Q	ID:	Q	ID:	Q	ID:	Q
Antimony			0.18	J						
Barium			10	U						
Beryllium			1.0	U						
Cadmium			0.066	J						
Chromium			2.0	U						
Cobalt			0.051	J						
Molybdenum			0.52	J						
Nickel			1.0	U						
Selenium			5.0	U						
Silver			0.013	J						
Thallium			0.090	J						
Vanadium			0.21	J						

NOTE: Hardness (total) is reported in mg/L

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: ICP-MS Preparation Batch:

Run Batch: BJ62515M102516A Preparation Method:

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB01	Q	ID: CCB01	Q	ID: CCB02	Q	ID:	Q	ID:	Q
Molybdenum	4.0	U	0.50	J	0.47	J				

NOTE: Hardness (total) is reported in mg/L

FORM 4-IN
ICP INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Analytical Method: ICP-MS ICSA Source: USEPA, Lot:ICSA-0803

Instrument ID: ICPMS01 ICSB Source: USEPA, Lot:ICSA-0803 & ICSB-0803

Run Batch: BJ61904101816B

Concentration Units: ug/L

Analyte	True		Found			
	ICSA	ICSAB	ICSA	%R	ICSAB	%R
Antimony	1.5	22	1.2	80	21.1	96
Barium	1.2	22	2.1	175	23.1	105
Beryllium	0	19	0.34		18.8	99
Cadmium	0.7	20	0.48	69	19.3	97
Chromium	21	40	21.5	102	43.4	109
Cobalt	1	20	1.4	140	20.8	104
Molybdenum	2000	2000	2060	103	2050	103
Nickel	6	24	5.7	95	24.1	100
Selenium	0.3	19	-0.016	-5	19.7	104
Silver	0	18	0.026		18.2	101
Thallium	0	21	0.062		19.6	93
Vanadium	0.5	19	-0.55	-110	21.2	112

FORM 4-IN
ICP INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Analytical Method: ICP-MS ICSA Source: USEPA, Lot:ICSA-0803

Instrument ID: ICPMS01 ICSB Source: USEPA, Lot:ICSA-0803 & ICSB-0803

Run Batch: BJ62102M101916A

Concentration Units: ug/L

Analyte	True		Found			
	ICSA	ICSAB	ICSA	%R	ICSAB	%R
Antimony	1.5	22	1.1	73	20.8	95
Barium	1.2	22	2.0	167	22.7	103
Cadmium	0.7	20	0.41	59	19.1	96
Cobalt	1	20	1.3	130	20.5	103
Molybdenum	2000	2000	2180	109	2140	107
Nickel	6	24	5.7	95	24.2	101
Silver	0	18	0.012		18.4	102
Thallium	0	21	0.024		19.6	93

FORM 4-IN
ICP INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Analytical Method: ICP-MS ICSA Source: USEPA, Lot:ICSA-0803

Instrument ID: ICPMS01 ICSB Source: USEPA, Lot:ICSA-0803 & ICSB-0803

Run Batch: BJ62507M102416A

Concentration Units: ug/L

Analyte	True		Found			
	ICSA	ICSAB	ICSA	%R	ICSAB	%R
Antimony	1.5	22	1.1	73	19.8	90
Barium	1.2	22	1.9	158	20.6	94
Beryllium	0	19	0.34		22.5	118
Cadmium	0.7	20	0.59	84	19.5	98
Chromium	21	40	20.6	98	41.9	105
Cobalt	1	20	1.4	140	20.6	103
Molybdenum	2000	2000	2150	108	2150	108
Nickel	6	24	5.9	98	25.6	107
Selenium	0.3	19	0.11	37	18.3	96
Silver	0	18	0.014		18.6	103
Thallium	0	21	0.027		18.7	89
Vanadium	0.5	19	-0.28	-56	21.1	111

FORM 4-IN
ICP INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Analytical Method: ICP-MS ICSA Source: USEPA, Lot:ICSA-0803

Instrument ID: ICPMS01 ICSB Source: USEPA, Lot:ICSA-0803 & ICSB-0803

Run Batch: BJ62515M102516A

Concentration Units: ug/L

Analyte	True		Found			
	ICSA	ICSAB	ICSA	%R	ICSAB	%R
Molybdenum	2000	2000	2110	106	2150	108

EPA SAMPLE NO.

MH1H52S

FORM 5A-IN
MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Analytical Method: ICP-MS

% Solids: 92.4

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	Q	Sample Result (SR)	Q	Spike Added (SA)	%R	Q
Antimony	75-125	8.8		2.1		10.8	62	*
Barium	75-125	200		35.2		217	77	
Beryllium	75-125	4.9		0.17	J	5.41	87	
Cadmium	75-125	8.5		3.5		5.41	92	
Chromium	75-125	21.0		1.9		21.7	87	
Cobalt	75-125	46.0		2.1		54.1	81	
Molybdenum	75-125	82.0		0.91	J	108	74	*
Nickel	75-125	45.0		1.3		54.1	81	
Selenium	75-125	10.0		1.6	J	10.8	81	
Silver	75-125	6.0		1.3		5.41	87	
Thallium	75-125	4.3		0.17	J	5.41	76	
Vanadium	75-125	59.0		12.1		54.1	87	

EPA SAMPLE NO.

MH1H52A

FORM 5B-IN
POST-DIGESTION/DISTILLATION SPIKE
SAMPLE RECOVERY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No. #6282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Analytical Method: ICP-MS

% Solids: 92.4

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	Q	Sample Result (SR)	Q	Spike Added (SA)	%R	Q
Antimony	75-125	6.2		2.1		4.3	94	
Molybdenum	75-125	5.8		0.91	J	4.3	113	

EPA SAMPLE NO.

FORM 6-IN
DUPLICATES

MH1H52D

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.:46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Analytical Method: ICP-MS

% Solids: 92.4

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

Analyte	Control Limit	Sample (S)	Q	Duplicate (D)	Q	RPD	Q
Antimony	1.1	2.1		3.0		35	
Barium		35.2		45.4		25	*
Beryllium		0.17	J	0.14	J		
Cadmium		3.5		3.2		11	
Chromium	1.1	1.9		2.0		3	
Cobalt	0.54	2.1		2.8		26	*
Molybdenum		0.91	J	1.2	J		
Nickel	0.54	1.3		1.5		18	
Selenium		1.6	J	1.9	J		
Silver	0.54	1.3		1.5		16	
Thallium		0.17	J	0.22	J		
Vanadium	2.7	12.1		12.5		3	

NOTE: Hardness (total) is reported in mg/L

EPA SAMPLE NO.

LCS01

FORM 7-IN
LABORATORY CONTROL SAMPLE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Preparation Method: 200.8

Analytical method: ICP-MS Preparation Batch: QJ14032

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

Analyte	True	Found	%R
Antimony	2.0000	2.1	105
Barium	10.000	10.2	102
Beryllium	1.0000	1.0	100
Cadmium	1.0000	1.0	100
Chromium	2.0000	1.9	95
Cobalt	1.0000	1.0	100
Molybdenum	4.0000	4.0	100
Nickel	1.0000	0.99	99
Selenium	5.0000	4.8	96
Silver	1.0000	1.0	100
Thallium	1.0000	1.0	100
Vanadium	5.0000	4.9	98

EPA SAMPLE NO.

LCS02

FORM 7-IN
LABORATORY CONTROL SAMPLE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Preparation Method: 200.8

Analytical method: ICP-MS Preparation Batch: QJ24005

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

Analyte	True	Found	%R
Antimony	2.0000	1.9	95
Barium	10.000	9.3	93
Beryllium	1.0000	1.1	110
Cadmium	1.0000	1.1	110
Chromium	2.0000	2.0	100
Cobalt	1.0000	1.0	100
Molybdenum	4.0000	3.9	98
Nickel	1.0000	1.0	100
Selenium	5.0000	5.0	100
Silver	1.0000	1.1	110
Thallium	1.0000	0.91	91
Vanadium	5.0000	5.2	104

EPA SAMPLE NO.

MH1H52L

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

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Matrix: Soil Analytical method: ICP-MS

% Solids: 92.4

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

Analyte	Initial Sample Result (I)	Q	Serial Dilution Result (S)	Q	% Difference	Q
Antimony	2.1		2.3	J	8	
Barium	35.2		37.7		7	
Beryllium	0.17	J	2.7	U	100	
Cadmium	3.5		3.9		11	*
Chromium	1.9		1.2	J	36	
Cobalt	2.1		2.4	J	15	*
Molybdenum	0.91	J	1.1	J	20	
Nickel	1.3		1.3	J	1	
Selenium	1.6	J	1.7	J	2	
Silver	1.3		1.4	J	4	
Thallium	0.17	J	0.22	J	27	
Vanadium	12.1		13.0	J	7	

NOTE: Hardness (total) is reported in mg/L

FORM 9-IN
METHOD DETECTION LIMIT

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

Analytical Method: ICP-MS Instrument ID: ICPMS01

Preparation Method: 200.8

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

Analyte	Wavelength/Mass		MDL	Date Analyzed
Antimony	121.00	u	0.03	06/28/2016
Barium	137.00	u	0.044	06/27/2016
Beryllium	9.00	u	0.04	06/28/2016
Cadmium	111.00	u	0.042	06/29/2016
Chromium	52.00	u	0.082	06/29/2016
Cobalt	59.00	u	0.03	06/28/2016
Nickel	60.00	u	0.045	06/28/2016
Selenium	78.00	u	0.068	06/29/2016
Silver	107.00	u	0.027	06/28/2016
Thallium	205.00	u	0.038	06/29/2016
Vanadium	51.00	u	0.082	06/28/2016
Molybdenum	95.00	u	0.045	06/28/2016

FORM 11-IN
ICP-MS INTERNAL STANDARD ASSOCIATION

Lab Name: Bonner Analytical Testing Co
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Date: 10/18/2016
Run Batch: BJ61904101816B

Analyte	Assoc. Internal Standard 1	Assoc. Internal Standard 2
Antimony	Sc	Tb
Barium	Sc	Tb
Beryllium	Sc	
Cadmium	Sc	Tb
Chromium	Rh	
Cobalt	Sc	Tb
Molybdenum	Sc	Tb
Nickel	Sc	Tb
Selenium	Rh	
Silver	Sc	Tb
Thallium	Ho	
Vanadium	Rh	

FORM 11-IN
ICP-MS INTERNAL STANDARD ASSOCIATION

Lab Name: Bonner Analytical Testing Co
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Date: 10/19/2016
Run Batch: BJ62102M101916A

Analyte	Assoc. Internal Standard 1	Assoc. Internal Standard 2
Antimony	Sc	Tb
Barium	Sc	Tb
Cadmium	Sc	Tb
Cobalt	Sc	Tb
Molybdenum	Sc	Tb
Nickel	Sc	Tb
Silver	Sc	Tb
Thallium	Ho	

FORM 11-IN
ICP-MS INTERNAL STANDARD ASSOCIATION

Lab Name: Bonner Analytical Testing Co
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Date: 10/24/2016
Run Batch: BJ62507M102416A

Analyte	Assoc. Internal Standard 1	Assoc. Internal Standard 2
Antimony	Sc	Tb
Barium	Sc	Tb
Beryllium	Li	Sc
Cadmium	Sc	Tb
Chromium	Rh	
Cobalt	Sc	Tb
Molybdenum	Sc	Tb
Nickel	Sc	Tb
Selenium	Rh	
Silver	Sc	Tb
Thallium	Ho	
Vanadium	Rh	

FORM 11-IN
ICP-MS INTERNAL STANDARD ASSOCIATION

Lab Name: Bonner Analytical Testing Co
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Date: 10/25/2016
Run Batch: BJ62515M102516A

Analyte	Assoc. Internal Standard 1	Assoc. Internal Standard 2
Molybdenum	Tb	

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Analytical Method: ICP-MS
Start Date: 10/18/2016
End Date: 10/19/2016
Run Batch: BJ61904101816B

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	1736																									
S01	1.0	1747		X		X	X	X		X	X							X		X	X		X	X			
S02	1.0	1751																									
S03	1.0	1756				X																					
S04	1.0	1800		X			X	X		X	X							X		X	X		X	X			
S05	1.0	1804		X		X	X	X		X	X							X		X	X		X	X			
S06	1.0	1808		X		X	X	X		X	X							X		X	X		X	X			
S07	1.0	1811		X		X	X	X		X	X							X		X	X		X	X			
S08	1.0	1815		X		X	X	X		X	X							X		X	X		X	X			
ICV01	1.0	1820		X		X	X	X		X	X							X		X	X		X	X			
ICB01	1.0	1823		X		X	X	X		X	X							X		X	X		X	X			
ICSA01	1.0	1827		X		X	X	X		X	X							X		X	X		X	X			
ICSAB01	1.0	1831		X		X	X	X		X	X							X		X	X		X	X			
CCV01	1.0	1835		X		X	X	X		X	X							X		X	X		X	X			
CCB01	1.0	1839		X		X	X	X		X	X							X		X	X		X	X			
CCV02	1.0	1910		X		X	X	X		X	X							X		X	X		X	X			
CCB02	1.0	1914		X		X	X	X		X	X							X		X	X		X	X			
CCV03	1.0	1945		X		X	X	X		X	X							X		X	X		X	X			
CCB03	1.0	1949		X		X	X	X		X	X							X		X	X		X	X			
CCV04	1.0	2006		X		X	X	X		X	X							X		X	X		X	X			
CCB04	1.0	2010		X		X	X	X		X	X							X		X	X		X	X			
CCV05	1.0	2108		X		X	X	X		X	X							X		X	X		X	X			
CCB05	1.0	2112		X		X	X	X		X	X							X		X	X		X	X			
CCV06	1.0	2250		X		X	X	X		X	X							X		X	X		X	X			
CCB06	1.0	2254		X		X	X	X		X	X							X		X	X		X	X			
CCV07	1.0	2359		X		X	X	X		X	X							X		X	X		X	X			
CCB07	1.0	0004		X		X	X	X		X	X							X		X	X		X	X			
CCV08	1.0	0045		X		X	X	X		X	X							X		X	X		X	X			
CCB08	1.0	0049		X		X	X	X		X	X							X		X	X		X	X			
PBS01	1.0	0053		X		X	X	X		X	X							X		X	X		X	X			

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Analytical Method: ICP-MS
Start Date: 10/18/2016
End Date: 10/19/2016
Run Batch: BJ61904101816B

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	
LCS01	1.0	0057		X		X	X	X		X	X							X		X	X		X	X			
MH1H50	1.0	0101		X		X	X	X		X	X							X		X	X		X	X			
MH1H51	1.0	0105		X		X	X	X		X	X							X		X	X		X	X			
ZZZZZZ	1.0	0109																									
ZZZZZZ	1.0	0113																									
ZZZZZZ	1.0	0117																									
ZZZZZZ	1.0	0121																									
MH1H53	1.0	0125		X		X	X	X		X	X							X		X	X		X	X			
MH1H54	1.0	0129		X		X	X	X		X	X							X		X	X		X	X			
MH1H55	1.0	0133		X		X	X	X		X	X							X		X	X		X	X			
MH1H56	1.0	0138		X		X	X	X		X	X							X		X	X		X	X			
MH1H57	1.0	0142		X		X	X	X		X	X							X		X	X		X	X			
MH1H58	1.0	0146		X		X	X	X		X	X							X		X	X		X	X			
MH1H59	1.0	0150		X		X	X	X		X	X							X		X	X		X	X			
CCV09	1.0	0154		X		X	X	X		X	X							X		X	X		X	X			
CCB09	1.0	0158		X		X	X	X		X	X							X		X	X		X	X			
MH1H60	1.0	0202		X		X	X	X		X	X							X		X	X		X	X			
MH1H61	1.0	0206					X			X										X				X			
MH1H62	1.0	0210		X		X	X	X		X	X							X		X	X		X	X			
MH1H63	1.0	0215		X		X	X	X		X	X							X		X	X		X	X			
MH1H64	1.0	0219		X		X	X	X		X	X							X		X	X		X	X			
MH1H65	1.0	0223		X		X	X	X		X	X							X		X	X		X	X			
MH1H66	1.0	0227		X		X	X	X		X	X							X		X	X		X	X			
MH1H67	1.0	0231		X		X	X	X		X	X							X		X	X		X	X			
CCVA	1.0	0239		X		X	X	X		X	X							X		X	X		X	X			
CCBA	1.0	0243		X		X	X	X		X	X							X		X	X		X	X			

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Analytical Method: ICP-MS
Start Date: 10/18/2016
End Date: 10/19/2016
Run Batch: BJ61904101816B

EPA Sample NO.	D/F	Time	Analytes																							
			B	Au	Li	Bi	Mo	Os	Pd	P	Pt	Si	S	Sn	Sr	Ti	U	Zr								
TUNE01	1.0	1736																								
S01	1.0	1747					X																			
S02	1.0	1751					X																			
S03	1.0	1756					X																			
S04	1.0	1800					X																			
S05	1.0	1804					X																			
S06	1.0	1808					X																			
S07	1.0	1811					X																			
S08	1.0	1815					X																			
ICV01	1.0	1820					X																			
ICB01	1.0	1823					X																			
ICSA01	1.0	1827					X																			
ICSAB01	1.0	1831					X																			
CCV01	1.0	1835					X																			
CCB01	1.0	1839					X																			
CCV02	1.0	1910					X																			
CCB02	1.0	1914					X																			
CCV03	1.0	1945					X																			
CCB03	1.0	1949					X																			
CCV04	1.0	2006					X																			
CCB04	1.0	2010					X																			
CCV05	1.0	2108					X																			
CCB05	1.0	2112					X																			
CCV06	1.0	2250					X																			
CCB06	1.0	2254					X																			
CCV07	1.0	2359					X																			
CCB07	1.0	0004					X																			
CCV08	1.0	0045					X																			
CCB08	1.0	0049					X																			
PBS01	1.0	0053					X																			

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.

Contract: EPW14029

Lab Code: BON Case No.: 46282

MA No.: 2658.0 SDG No.: MH1H50

Instrument ID: ICPMS01

Analytical Method: ICP-MS

Start Date: 10/19/2016

End Date: 10/19/2016

Run Batch: BJ62102M101916A

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	0739																									
S01	1.0	0751		X		X		X			X							X			X		X				
S02	1.0	0755																									
S03	1.0	0759				X																					
S04	1.0	0803		X				X			X							X			X		X				
S05	1.0	0807		X		X		X			X							X			X		X				
S06	1.0	0811		X		X		X			X							X			X		X				
S07	1.0	0815		X		X		X			X							X			X		X				
S08	1.0	0819		X		X		X			X							X			X		X				
ICV01	1.0	0823		X		X		X			X							X			X		X				
ICB01	1.0	0828		X		X		X			X							X			X		X				
ICSA01	1.0	0832		X		X		X			X							X			X		X				
ICSAB01	1.0	0836		X		X		X			X							X			X		X				
CCV01	1.0	0840		X		X		X			X							X			X		X				
CCB01	1.0	0845		X		X		X			X							X			X		X				
ZZZZZZ	1.0	0849																									
ZZZZZZ	1.0	0853																									
ZZZZZZ	1.0	0857																									
ZZZZZZ	1.0	0901																									
ZZZZZZ	1.0	0905																									
MH1H61	2.0	0909		X		X		X			X							X			X		X				
CCV02	1.0	0914		X		X		X			X							X			X		X				
CCB02	1.0	0918		X		X		X			X							X			X		X				

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.

Contract: EPW14029

Lab Code: BON

Case No.: 46282

MA No.: 2658.0

SDG No.: MH1H50

Instrument ID: ICPMS01

Analytical Method: ICP-MS

Start Date: 10/18/2016

End Date: 10/19/2016

Run Batch: BJ61904101816B

EPA Sample NO.	D/F	Time	Analytes																							
			B	Au	Li	Bi	Mo	Os	Pd	P	Pt	Si	S	Sn	Sr	Ti	U	Zr								
LCS01	1.0	0057					X																			
MH1H50	1.0	0101					X																			
MH1H51	1.0	0105					X																			
ZZZZZZ	1.0	0109																								
ZZZZZZ	1.0	0113																								
ZZZZZZ	1.0	0117																								
ZZZZZZ	1.0	0121																								
MH1H53	1.0	0125					X																			
MH1H54	1.0	0129					X																			
MH1H55	1.0	0133					X																			
MH1H56	1.0	0138					X																			
MH1H57	1.0	0142					X																			
MH1H58	1.0	0146					X																			
MH1H59	1.0	0150					X																			
CCV09	1.0	0154					X																			
CCB09	1.0	0158					X																			
MH1H60	1.0	0202					X																			
MH1H61	1.0	0206																								
MH1H62	1.0	0210					X																			
MH1H63	1.0	0215					X																			
MH1H64	1.0	0219					X																			
MH1H65	1.0	0223					X																			
MH1H66	1.0	0227					X																			
MH1H67	1.0	0231					X																			
CCVA	1.0	0239					X																			
CCBA	1.0	0243					X																			

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Analytical Method: ICP-MS
Start Date: 10/19/2016
End Date: 10/19/2016
Run Batch: BJ62102M101916A

EPA Sample NO.	D/F	Time	Analytes																							
			B	Au	Li	Bi	Mo	Os	Pd	P	Pt	Si	S	Sn	Sr	Ti	U	Zr								
TUNE01	1.0	0739																								
S01	1.0	0751					X																			
S02	1.0	0755					X																			
S03	1.0	0759					X																			
S04	1.0	0803					X																			
S05	1.0	0807					X																			
S06	1.0	0811					X																			
S07	1.0	0815					X																			
S08	1.0	0819					X																			
ICV01	1.0	0823					X																			
ICB01	1.0	0828					X																			
ICSA01	1.0	0832					X																			
ICSAB01	1.0	0836					X																			
CCV01	1.0	0840					X																			
CCB01	1.0	0845					X																			
ZZZZZZ	1.0	0849																								
ZZZZZZ	1.0	0853																								
ZZZZZZ	1.0	0857																								
ZZZZZZ	1.0	0901																								
ZZZZZZ	1.0	0905																								
MH1H61	2.0	0909					X																			
CCV02	1.0	0914					X																			
CCB02	1.0	0918					X																			

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.

Contract: EPW14029

Lab Code: BON

Case No.: 46282

MA No.: 2658.0

SDG No.: MH1H50

Instrument ID: ICPMS01

Analytical Method: ICP-MS

Start Date: 10/24/2016

End Date: 10/24/2016

Run Batch: BJ62507M102416A

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	1421																									
S01	1.0	1433		X		X	X	X		X	X							X		X	X		X	X			
S02	1.0	1437																									
S03	1.0	1441				X																					
S04	1.0	1445		X			X	X		X	X							X		X	X		X	X			
S05	1.0	1449		X		X	X	X		X	X							X		X	X		X	X			
S06	1.0	1453		X		X	X	X		X	X							X		X	X		X	X			
S07	1.0	1457		X		X	X	X		X	X							X		X	X		X	X			
S08	1.0	1501		X		X	X	X		X	X							X		X	X		X	X			
ICV01	1.0	1505		X		X	X	X		X	X							X		X	X		X	X			
ICB01	1.0	1509		X		X	X	X		X	X							X		X	X		X	X			
ICSA01	1.0	1513		X		X	X	X		X	X							X		X	X		X	X			
ICSAB01	1.0	1527		X		X	X	X		X	X							X		X	X		X	X			
CCV01	1.0	1531		X		X	X	X		X	X							X		X	X		X	X			
CCB01	1.0	1535		X		X	X	X		X	X							X		X	X		X	X			
CCV02	1.0	1555		X		X	X	X		X	X							X		X	X		X	X			
CCB02	1.0	1559		X		X	X	X		X	X							X		X	X		X	X			
CCV03	1.0	1631		X		X	X	X		X	X							X		X	X		X	X			
CCB03	1.0	1636		X		X	X	X		X	X							X		X	X		X	X			
PBS02	1.0	1640		X		X	X	X		X	X							X		X	X		X	X			
LCS02	1.0	1644		X		X	X	X		X	X							X		X	X		X	X			
MH1H52	1.0	1648		X		X	X	X		X	X							X		X	X		X	X			
MH1H52S	1.0	1652		X		X	X	X		X	X							X		X	X		X	X			
MH1H52D	1.0	1656		X		X	X	X		X	X							X		X	X		X	X			
MH1H52L	5.0	1700		X		X	X	X		X	X							X		X	X		X	X			
MH1H52A	1.0	1704		X																							
CCV04	1.0	1708		X		X	X	X		X	X							X		X	X		X	X			
CCB04	1.0	1712		X		X	X	X		X	X							X		X	X		X	X			

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.

Contract: EPW14029

Lab Code: BON Case No.: 46282

MA No.: 2658.0 SDG No.: MH1H50

Instrument ID: ICPMS01

Analytical Method: ICP-MS

Start Date: 10/24/2016

End Date: 10/24/2016

Run Batch: BJ62507M102416A

EPA Sample NO.	D/F	Time	Analytes																							
			B	Au	Li	Bi	Mo	Os	Pd	P	Pt	Si	S	Sn	Sr	Ti	U	Zr								
TUNE01	1.0	1421																								
S01	1.0	1433					X																			
S02	1.0	1437					X																			
S03	1.0	1441					X																			
S04	1.0	1445					X																			
S05	1.0	1449					X																			
S06	1.0	1453					X																			
S07	1.0	1457					X																			
S08	1.0	1501					X																			
ICV01	1.0	1505					X																			
ICB01	1.0	1509					X																			
ICSA01	1.0	1513					X																			
ICSAB01	1.0	1527					X																			
CCV01	1.0	1531					X																			
CCB01	1.0	1535					X																			
CCV02	1.0	1555					X																			
CCB02	1.0	1559					X																			
CCV03	1.0	1631					X																			
CCB03	1.0	1636					X																			
PBS02	1.0	1640					X																			
LCS02	1.0	1644					X																			
MH1H52	1.0	1648					X																			
MH1H52S	1.0	1652					X																			
MH1H52D	1.0	1656					X																			
MH1H52L	5.0	1700					X																			
MH1H52A	1.0	1704																								
CCV04	1.0	1708					X																			
CCB04	1.0	1712					X																			

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Analytical Method: ICP-MS
Start Date: 10/25/2016
End Date: 10/25/2016
Run Batch: BJ62515M102516A

EPA Sample NO.	D/F	Time	Analytes																							
			B	Au	Li	Bi	Mo	Os	Pd	P	Pt	Si	S	Sn	Sr	Ti	U	Zr								
TUNE01	1.0	0831																								
S01	1.0	0850					X																			
S02	1.0	0854					X																			
S03	1.0	0858					X																			
S04	1.0	0902					X																			
S05	1.0	0906					X																			
S06	1.0	0910					X																			
S07	1.0	0913					X																			
S08	1.0	0917					X																			
ICV01	1.0	0921					X																			
ICB01	1.0	0925					X																			
ICSA01	1.0	0929					X																			
ICSAB01	1.0	0933					X																			
CCV01	1.0	0936					X																			
CCB01	1.0	0940					X																			
ZZZZZZ	1.0	0944																								
ZZZZZZ	1.0	0948																								
MH1H52A	1.0	0952					X																			
CCV02	1.0	0956					X																			
CCB02	1.0	1000					X																			

EPA SAMPLE NO.

TUNE01

FORM 13-IN
ICP-MS TUNE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Date: 10/18/16

Run Batch: BJ61904101816B

Element - Mass	Avg. Measured Mass (u)	Average Peak Width (u)	%Height	%RSD
Be - 9	9.0	0.8	5	0.8
Mg - 24	23.9	0.7	5	1.1
Mg - 25	24.9	0.7	5	1.2
Mg - 26	25.9	0.7	5	1.7
Co - 59	58.9	0.7	5	0.8
In - 113	112.9	0.7	5	1.3
In - 115	114.9	0.7	5	1.3
Pb - 206	205.9	0.7	5	1.2
Pb - 207	206.9	0.7	5	1.5
Pb - 208	207.9	0.7	5	1.3

EPA SAMPLE NO.

TUNE01

FORM 13-IN
ICP-MS TUNE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Date: 10/19/16

Run Batch: BJ62102M101916A

Element - Mass	Avg. Measured Mass (u)	Average Peak Width (u)	%Height	%RSD
Be - 9	9.0	0.7	5	0.9
Mg - 24	23.9	0.7	5	0.3
Mg - 25	24.9	0.7	5	0.8
Mg - 26	25.9	0.7	5	0.5
Co - 59	58.9	0.7	5	0.7
In - 113	112.9	0.7	5	0.6
In - 115	114.9	0.7	5	0.6
Pb - 206	205.9	0.7	5	0.9
Pb - 207	206.9	0.7	5	1.0
Pb - 208	207.9	0.7	5	0.7

EPA SAMPLE NO.

TUNE01

FORM 13-IN
ICP-MS TUNE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Date: 10/24/16

Run Batch: BJ62507M102416A

Element - Mass	Avg. Measured Mass (u)	Average Peak Width (u)	%Height	%RSD
Be - 9	9.0	0.7	5	1.0
Mg - 24	23.9	0.7	5	1.2
Mg - 25	24.9	0.7	5	1.2
Mg - 26	25.9	0.7	5	1.3
Co - 59	58.9	0.7	5	0.5
In - 113	112.9	0.7	5	1.3
In - 115	114.9	0.7	5	0.8
Pb - 206	205.9	0.7	5	1.0
Pb - 207	206.9	0.7	5	1.0
Pb - 208	207.9	0.7	5	0.8

EPA SAMPLE NO.

TUNE01

FORM 13-IN
ICP-MS TUNE

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Date: 10/25/16

Run Batch: BJ62515M102516A

Element - Mass	Avg. Measured Mass (u)	Average Peak Width (u)	%Height	%RSD
Be - 9	9.0	0.7	5	0.5
Mg - 24	23.9	0.7	5	0.6
Mg - 25	24.9	0.7	5	1.4
Mg - 26	25.9	0.7	5	0.4
Co - 59	58.9	0.7	5	1.3
In - 113	112.9	0.7	5	1.9
In - 115	114.9	0.7	5	1.3
Pb - 206	205.9	0.7	5	0.7
Pb - 207	206.9	0.7	5	1.1
Pb - 208	207.9	0.7	5	0.9

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA. No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Start Date: 10/18/2016

Run Batch: BJ61904101816B End Date: 10/19/2016

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 In-115	Q
S01	17:47	100		100				100			
S02	17:51	102		102				102			
S03	17:56	102		102				103			
S04	18:00	103		103				104			
S05	18:04	102		101				103			
S06	18:08	102		102				102			
S07	18:11	100		99				97			
S08	18:15	92		86				89			
ICV01	18:20	91		80				91			
ICB01	18:23	92		83				90			
ICSA01	18:27	89		93				90			
ICSAB01	18:31	88		103				95			
CCV01	18:35	95		111				107			
CCB01	18:39	91		100				104			
CCV02	19:10	97		102				100			
CCB02	19:14	93		92				98			
CCV03	19:45	96		100				100			
CCB03	19:49	94		91				97			
CCV04	20:06	96		97				97			
CCB04	20:10	94		90				98			
CCV05	21:08	89		84				92			
CCB05	21:12	87		78				90			
CCV06	22:50	94		93				96			
CCB06	22:54	91		84				95			
CCV07	23:59	89		88				96			
CCB07	0:04	88		84				94			
CCV08	0:45	91		89				95			
CCB08	0:49	85		78				90			
PBS01	0:53	86		77				90			
LCS01	0:57	87		79				91			

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA. No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Start Date: 10/18/2016

Run Batch: BJ61904101816B End Date: 10/19/2016

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 In-115	Q
MH1H50	1:01	89		85				93			
MH1H51	1:05	93		93				98			
ZZZZZZ	1:09										
ZZZZZZ	1:13										
ZZZZZZ	1:17										
ZZZZZZ	1:21										
MH1H53	1:25	98		107				105			
MH1H54	1:29	98		105				103			
MH1H55	1:33	97		102				105			
MH1H56	1:38	99		106				106			
MH1H57	1:42	98		106				105			
MH1H58	1:46	99		105				104			
MH1H59	1:50	101		119				106			
CCV09	1:54	97		98				99			
CCB09	1:58	96		94				102			
MH1H60	2:02	100		113				106			
MH1H61	2:06	100		121				107			
MH1H62	2:10	99		114				110			
MH1H63	2:15	98		120				110			
MH1H64	2:19	97		108				106			
MH1H65	2:23	95		101				99			
MH1H66	2:27	92		95				98			
MH1H67	2:31	97		101				103			
CCVA	2:39	94		96				101			
CCBA	2:43	93		93				99			

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA. No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Start Date: 10/18/2016

Run Batch: BJ61904101816B End Date: 10/19/2016

EPA Sample NO.	Time	Internal Standards %RI For:									
		Element Tb-159	Q	Element Ho-165	Q	Element Bi-209	Q	Element	Q	Element	Q
S01	17:47	100		100							
S02	17:51	102		102							
S03	17:56	102		102							
S04	18:00	103		103							
S05	18:04	102		103							
S06	18:08	104		103							
S07	18:11	108		110							
S08	18:15	103		105							
ICV01	18:20	98		100							
ICB01	18:23	98		100							
ICSA01	18:27	102		103							
ICSAB01	18:31	105		106							
CCV01	18:35	115		116							
CCB01	18:39	104		105							
CCV02	19:10	112		113							
CCB02	19:14	105		105							
CCV03	19:45	113		115							
CCB03	19:49	106		107							
CCV04	20:06	114		115							
CCB04	20:10	107		108							
CCV05	21:08	109		111							
CCB05	21:12	102		104							
CCV06	22:50	116		118							
CCB06	22:54	108		110							
CCV07	23:59	110		112							
CCB07	0:04	105		108							
CCV08	0:45	110		112							
CCB08	0:49	102		105							
PBS01	0:53	99		101							
LCS01	0:57	99		101							

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA. No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Start Date: 10/18/2016

Run Batch: BJ61904101816B End Date: 10/19/2016

EPA Sample NO.	Time	Internal Standards %RI For:									
		Element Tb-159	Q	Element Ho-165	Q	Element Bi-209	Q	Element	Q	Element	Q
MH1H50	1:01	101		103							
MH1H51	1:05	108		109							
ZZZZZZ	1:09										
ZZZZZZ	1:13										
ZZZZZZ	1:17										
ZZZZZZ	1:21										
MH1H53	1:25	112		112							
MH1H54	1:29	109		109							
MH1H55	1:33	107		107							
MH1H56	1:38	109		108							
MH1H57	1:42	109		108							
MH1H58	1:46	110		110							
MH1H59	1:50	114		114							
CCV09	1:54	114		116							
CCB09	1:58	109		110							
MH1H60	2:02	117		116							
MH1H61	2:06	127	R	125							
MH1H62	2:10	117		116							
MH1H63	2:15	112		111							
MH1H64	2:19	112		111							
MH1H65	2:23	107		107							
MH1H66	2:27	107		108							
MH1H67	2:31	110		110							
CCVA	2:39	114		115							
CCBA	2:43	109		109							

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA. No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Start Date: 10/19/2016

Run Batch: BJ62102M101916A End Date: 10/19/2016

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 In-115	Q
S01	7:51	100		100				100			
S02	7:55	101		98				101			
S03	7:59	99		95				98			
S04	8:03	100		95				99			
S05	8:07	101		95				97			
S06	8:11	100		94				97			
S07	8:15	100		95				97			
S08	8:19	97		89				94			
ICV01	8:23	97		86				95			
ICB01	8:28	98		88				95			
ICSA01	8:32	95		97				93			
ICSAB01	8:36	89		104				92			
CCV01	8:40	97		113				108			
CCB01	8:45	95		105				106			
ZZZZZZ	8:49										
ZZZZZZ	8:53										
ZZZZZZ	8:57										
ZZZZZZ	9:01										
ZZZZZZ	9:05										
MH1H61	9:09	100		116				107			
CCV02	9:14	99		107				102			
CCB02	9:18	97		96				100			

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA. No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Start Date: 10/19/2016

Run Batch: BJ62102M101916A End Date: 10/19/2016

EPA Sample NO.	Time	Internal Standards %RI For:									
		Element Tb-159	Q	Element Ho-165	Q	Element Bi-209	Q	Element	Q	Element	Q
S01	7:51	100		100							
S02	7:55	103		103							
S03	7:59	101		100							
S04	8:03	101		101							
S05	8:07	100		100							
S06	8:11	101		102							
S07	8:15	105		105							
S08	8:19	105		105							
ICV01	8:23	104		105							
ICB01	8:28	103		103							
ICSA01	8:32	104		105							
ICSAB01	8:36	109		109							
CCV01	8:40	121		121							
CCB01	8:45	112		113							
ZZZZZZ	8:49										
ZZZZZZ	8:53										
ZZZZZZ	8:57										
ZZZZZZ	9:01										
ZZZZZZ	9:05										
MH1H61	9:09	121		119							
CCV02	9:14	116		118							
CCB02	9:18	107		108							

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA. No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Start Date: 10/24/2016

Run Batch: BJ62507M102416A End Date: 10/24/2016

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 In-115	Q
S01	14:33	100		100				100			
S02	14:37	101		101				99			
S03	14:41	100		99				100			
S04	14:45	101		97				98			
S05	14:49	101		98				99			
S06	14:53	100		96				99			
S07	14:57	94		92				88			
S08	15:01	85		83				84			
ICV01	15:05	87		82				91			
ICB01	15:09	88		81				90			
ICSA01	15:13	79		76				76			
ICSAB01	15:27	79		81				81			
CCV01	15:31	89		91				93			
CCB01	15:35	87		84				98			
CCV02	15:55	89		85				90			
CCB02	15:59	89		82				94			
CCV03	16:31	89		83				90			
CCB03	16:36	89		78				94			
PBS02	16:40	89		78				94			
LCS02	16:44	91		79				95			
MH1H52	16:48	92		89				95			
MH1H52S	16:52	90		90				92			
MH1H52D	16:56	87		84				92			
MH1H52L	17:00	83		72				89			
MH1H52A	17:04	85		79				92			
CCV04	17:08	84		75				87			
CCB04	17:12	87		75				92			

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA. No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Start Date: 10/24/2016

Run Batch: BJ62507M102416A End Date: 10/24/2016

EPA Sample NO.	Time	Internal Standards %RI For:									
		Element Tb-159	Q	Element Ho-165	Q	Element Bi-209	Q	Element	Q	Element	Q
S01	14:33	100		100							
S02	14:37	104		104							
S03	14:41	102		103							
S04	14:45	102		103							
S05	14:49	104		104							
S06	14:53	105		105							
S07	14:57	106		108							
S08	15:01	106		108							
ICV01	15:05	110		114							
ICB01	15:09	104		107							
ICSA01	15:13	98		101							
ICSAB01	15:27	100		102							
CCV01	15:31	113		115							
CCB01	15:35	106		108							
CCV02	15:55	107		109							
CCB02	15:59	104		106							
CCV03	16:31	108		110							
CCB03	16:36	104		106							
PBS02	16:40	102		105							
LCS02	16:44	102		105							
MH1H52	16:48	106		107							
MH1H52S	16:52	108		109							
MH1H52D	16:56	107		109							
MH1H52L	17:00	100		102							
MH1H52A	17:04	104		107							
CCV04	17:08	105		107							
CCB04	17:12	104		107							

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA. No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Start Date: 10/25/2016

Run Batch: BJ62515M102516A End Date: 10/25/2016

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 In-115	Q
S01	8:50	100		100				100			
S02	8:54	100		98				98			
S03	8:58	100		97				99			
S04	9:02	100		97				99			
S05	9:06	100		95				99			
S06	9:10	98		94				100			
S07	9:13	94		90				91			
S08	9:17	85		82				84			
ICV01	9:21	87		81				90			
ICB01	9:25	87		81				91			
ICSA01	9:29	79		76				76			
ICSAB01	9:33	80		83				79			
CCV01	9:36	87		91				92			
CCB01	9:40	85		84				94			
ZZZZZZ	9:44										
ZZZZZZ	9:48										
MH1H52A	9:52	93		102				96			
CCV02	9:56	88		86				89			
CCB02	10:00	86		82				95			

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA. No.: 2658.0 SDG No.: MH1H50

ICP-MS Instrument ID: ICPMS01 Start Date: 10/25/2016

Run Batch: BJ62515M102516A End Date: 10/25/2016

EPA Sample NO.	Time	Internal Standards %RI For:									
		Element Tb-159	Q	Element Ho-165	Q	Element Bi-209	Q	Element	Q	Element	Q
S01	8:50	100		100							
S02	8:54	97		98							
S03	8:58	96		96							
S04	9:02	98		97							
S05	9:06	98		98							
S06	9:10	99		99							
S07	9:13	102		102							
S08	9:17	100		100							
ICV01	9:21	103		104							
ICB01	9:25	98		99							
ICSA01	9:29	91		92							
ICSAB01	9:33	97		97							
CCV01	9:36	107		108							
CCB01	9:40	98		98							
ZZZZZZ	9:44										
ZZZZZZ	9:48										
MH1H52A	9:52	100		100							
CCV02	9:56	102		102							
CCB02	10:00	98		98							

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/18/2016
Analytical method: ICP-MS
Run Batch: BJ61904101816B

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	0.0	0.00010							
Barium	0.0	-0.00020					5.0	5.0	-1
Beryllium	0.0	0.0019							
Cadmium	0.0	0.0							
Chromium	0.0	0.0017							
Cobalt	0.0	0.00010							
Nickel	0.0	0.11							
Selenium	0.0	0.025							
Silver	0.0	0.0							
Thallium	0.0	0.0050							
Vanadium	0.0	-0.081							
Molybdenum	0.0	0.0		2.0	2.0	-1	4.0	4.1	-1

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/18/2016
Analytical method: ICP-MS
Run Batch: BJ61904101816B
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	2.0	2.0	1	10.0	10	0	50.0	49.2	2
Barium				10.0	10.2	-2	50.0	50.4	-1
Beryllium	1.0	0.96	4	10.0	10.3	-3	50.0	49.1	2
Cadmium	1.0	1.0	-3	10.0	9.9	1	50.0	49.1	2
Chromium	2.0	2.0	0	10.0	10.1	-1	50.0	50.0	0
Cobalt	1.0	0.99	1	10.0	10.2	-3	50.0	50.8	-2
Nickel	1.0	0.97	3	10.0	10.1	-1	50.0	50.0	0
Selenium	5.0	4.8	3	10.0	9.7	3	50.0	50.1	0
Silver	1.0	0.99	1	1.3	1.3	0	6.5	6.5	0
Thallium	1.0	0.94	6	10.0	9.5	5	50.0	48.3	3
Vanadium	5.0	5.1	-1	10.0	9.8	2	50.0	49.4	1
Molybdenum	10.0	9.9	1	25.0	24.9	0	125	124	1

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/18/2016
Analytical method: ICP-MS
Run Batch: BJ61904101816B
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	500	523	-5	1000	996	0			
Barium	500	512	-2	1000	990	1			
Beryllium	500	497	1	1000	1040	-4			
Cadmium	500	505	-1	1000	1010	-1			
Chromium	500	497	1	1000	1010	-1			
Cobalt	500	496	1	1000	989	1			
Nickel	500	502	0	1000	1000	0			
Selenium	500	494	1	1000	978	2			
Silver	65.0	65.5	-1	130	129	1			
Thallium	500	480	4	1000	1000	0			
Vanadium	500	491	2	1000	989	1			
Molybdenum	1250	1270	-1	2500	2480	1			

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/19/2016
Analytical method: ICP-MS
Run Batch: BJ62102M101916A

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	0.0	0.0010							
Barium	0.0	0.032					5.0	4.9	2
Cadmium	0.0	0.00060							
Cobalt	0.0	0.00010							
Nickel	0.0	0.0026							
Silver	0.0	0.00010							
Thallium	0.0	0.010							
Molybdenum	0.0	0.00040		2.0	2.0	0	4.0	4.0	-1

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.

Contract: EPW14029

Lab Code: BON Case No.: 46282

MA No.: 2658.0 SDG No.: MH1H50

Instrument ID: ICPMS01

Start Date: 10/19/2016

Analytical method: ICP-MS

Run Batch: BJ62102M101916A

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	2.0	2.0	2	10.0	9.8	2	50.0	48.9	2
Barium				10.0	10	0	50.0	49.1	2
Cadmium	1.0	0.92	8	10.0	9.9	1	50.0	49.2	2
Cobalt	1.0	0.98	2	10.0	10.0	0	50.0	49.6	1
Nickel	1.0	1.0	0	10.0	10	0	50.0	49.7	1
Silver	1.0	0.99	1	1.3	1.3	1	6.5	6.5	0
Thallium	1.0	0.98	2	10.0	9.8	2	50.0	49.3	1
Molybdenum	10.0	9.9	1	25.0	24.8	1	125	124	1

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/19/2016
Analytical method: ICP-MS
Run Batch: BJ62102M101916A
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	500	513	-3	1000	1010	-1			
Barium	500	501	0	1000	1010	-1			
Cadmium	500	501	0	1000	1010	-1			
Cobalt	500	503	-1	1000	996	0			
Nickel	500	501	0	1000	1000	0			
Silver	65.0	65.2	0	130	130	0			
Thallium	500	508	-2	1000	1040	-4			
Molybdenum	1250	1300	-4	2500	2600	-4			

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/24/2016
Analytical method: ICP-MS
Run Batch: BJ62507M102416A

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	0.0	0.0012							
Barium	0.0	0.00090					5.0	4.6	8
Beryllium	0.0	-0.00050							
Cadmium	0.0	-0.00010							
Chromium	0.0	0.017							
Cobalt	0.0	0.00040							
Nickel	0.0	-0.011							
Selenium	0.0	-0.016							
Silver	0.0	0.00060							
Thallium	0.0	0.0							
Vanadium	0.0	0.12							
Molybdenum	0.0	0.016		2.0	2.0	0	4.0	3.9	2

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/24/2016
Analytical method: ICP-MS
Run Batch: BJ62507M102416A
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	2.0	1.9	6	10.0	9.4	6	50.0	47.3	5
Barium				10.0	9.4	6	50.0	46.4	7
Beryllium	1.0	1.0	-1	10.0	10.1	-1	50.0	49.9	0
Cadmium	1.0	0.98	2	10.0	10.3	-3	50.0	50.5	-1
Chromium	2.0	1.9	4	10.0	9.8	2	50.0	47.7	5
Cobalt	1.0	0.97	3	10.0	9.9	1	50.0	49.3	1
Nickel	1.0	1.2	-19	10.0	10.3	-3	50.0	51.6	-3
Selenium	5.0	4.9	2	10.0	10.2	-2	50.0	49.0	2
Silver	1.0	1.0	0	1.3	1.4	-7	6.5	6.8	-5
Thallium	1.0	0.87	13	10.0	9.0	10	50.0	44.9	10
Vanadium	5.0	4.9	2	10.0	9.7	3	50.0	47.0	6
Molybdenum	10.0	9.7	3	25.0	24.2	3	125	120	4

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/24/2016
Analytical method: ICP-MS
Run Batch: BJ62507M102416A
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	500	488	2	1000	1030	-3			
Barium	500	467	7	1000	1010	-1			
Beryllium	500	501	0	1000	993	1			
Cadmium	500	501	0	1000	984	2			
Chromium	500	505	-1	1000	999	0			
Cobalt	500	516	-3	1000	999	0			
Nickel	500	504	-1	1000	976	2			
Selenium	500	500	0	1000	964	4			
Silver	65.0	66.2	-2	130	128	1			
Thallium	500	515	-3	1000	1050	-5			
Vanadium	500	501	0	1000	1000	0			
Molybdenum	1250	1240	1	2500	2580	-3			

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/25/2016
Analytical method: ICP-MS
Run Batch: BJ62515M102516A
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Molybdenum	0.0	-0.058		2.0	2.0	1	4.0	4.2	-5

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.

Contract: EPW14029

Lab Code: BON Case No.: 46282

MA No.: 2658.0 SDG No.: MH1H50

Instrument ID: ICPMS01

Start Date: 10/25/2016

Analytical method: ICP-MS

Run Batch: BJ62515M102516A

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Molybdenum	10.0	10.5	-5	25.0	25.2	-1	125	125	0

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/25/2016
Analytical method: ICP-MS
Run Batch: BJ62515M102516A
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Molybdenum	1250	1240	1	2500	2430	3			

FORM 16-IN
INITIAL CALIBRATION SUMMARY

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/18/2016
Analytical method: ICP-MS
Run Batch: BJ61904101816B

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Antimony	0.9999732	4166.739496	0.008741	WLR	Standard Devi
Barium	0.999863	1446.299669	0.056972	WLR	Standard Devi
Beryllium	0.999762	444.002247	0.033182	WLR	Standard Devi
Cadmium	0.999999	1278.174406	0.007772	WLR	Standard Devi
Chromium	0.999974	1264.243043	0.252178	WLR	Standard Devi
Cobalt	0.999998	7196.422184	0.004695	WLR	Standard Devi
Nickel	0.999999	1547.952558	0.512386	WLR	Standard Devi
Selenium	0.999985	38.394503	0.274057	WLR	Standard Devi
Silver	0.999971	5740.938410	0.002903	WLR	Standard Devi
Thallium	0.999821	10222.798649	-0.002071	WLR	Standard Devi
Vanadium	0.999995	955.099455	0.051503	WLR	Standard Devi
Molybdenum	0.999955	2066.399298	0.004865	WLR	Standard Devi

FORM 16-IN
INITIAL CALIBRATION SUMMARY

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/19/2016
Analytical method: ICP-MS
Run Batch: BJ62102M101916A

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Antimony	0.999969	3942.996329	0.004951	WLR	Standard Devi
Barium	0.999991	1371.712922	0.006599	WLR	Standard Devi
Cadmium	0.999987	1166.223565	0.005134	WLR	Standard Devi
Cobalt	0.999989	6205.718315	0.002618	WLR	Standard Devi
Nickel	1.000000	1306.266297	0.311605	WLR	Standard Devi
Silver	0.999999	5072.188741	0.001372	WLR	Standard Devi
Thallium	0.999954	10040.983697	-0.004897	WLR	Standard Devi
Molybdenum	0.999997	1808.788186	0.009418	WLR	Standard Devi

FORM 16-IN
INITIAL CALIBRATION SUMMARY

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/24/2016
Analytical method: ICP-MS
Run Batch: BJ62507M102416A

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Antimony	0.999658	3306.936763	0.010870	WLR	Standard Devi
Barium	0.999397	1230.672175	0.024393	WLR	Standard Devi
Beryllium	0.999992	447.930827	0.047612	WLR	Standard Devi
Cadmium	0.999961	968.328865	0.005802	WLR	Standard Devi
Chromium	0.999982	1394.128503	0.392728	WLR	Standard Devi
Cobalt	0.999882	6826.723059	0.004994	WLR	Standard Devi
Nickel	0.999881	1379.433623	0.112636	WLR	Standard Devi
Selenium	0.999842	45.171853	0.229803	WLR	Standard Devi
Silver	0.999883	4328.503136	0.000930	WLR	Standard Devi
Thallium	0.999965	7730.861631	0.003447	WLR	Standard Devi
Vanadium	0.999996	1109.000641	-0.182154	WLR	Standard Devi
Molybdenum	0.999830	1758.089320	0.020515	WLR	Standard Devi

FORM 16-IN
INITIAL CALIBRATION SUMMARY

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.: 2658.0
SDG No.: MH1H50
Instrument ID: ICPMS01
Start Date: 10/25/2016
Analytical method: ICP-MS
Run Batch: BJ62515M102516A

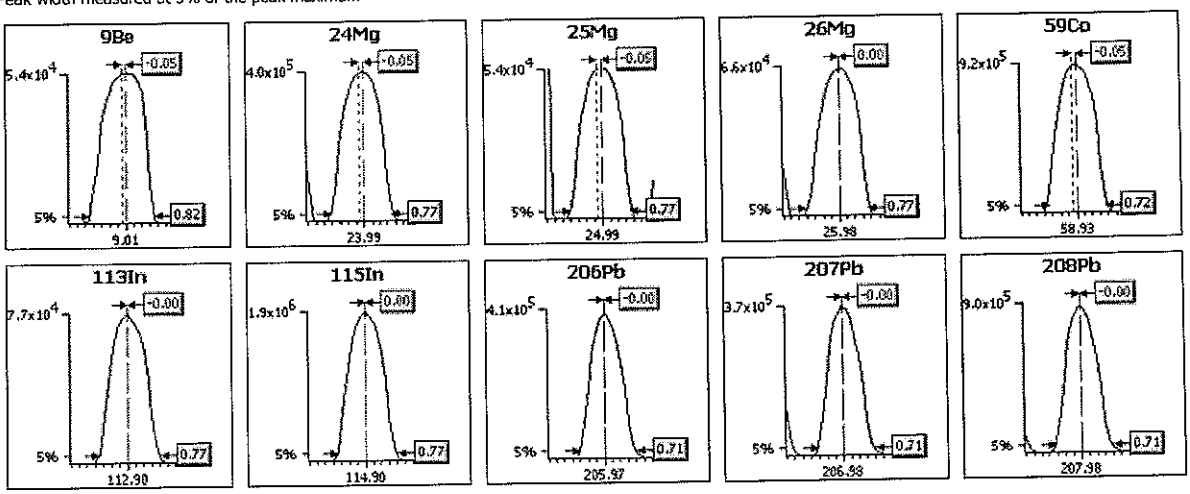
Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Molybdenum	0.999954	1643.237506	0.122682	WLR	Standard Devi

Performance Report

Sample details
Sample name : SEQ-TUN1@TUNE01
Acquired at : 10/18/2016 17:36:27
Report name : 200_8 + IS TEST_NO SCREEN [7/9/2015 09:58:10]

Mass Calibration verification

Acquisition parameters
Sweeps : 10
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	0.11	0.82	-0.05
24Mg	0.85	0.65	0.11	0.77	-0.05
25Mg	0.85	0.65	0.11	0.77	-0.05
26Mg	0.85	0.65	0.11	0.77	0.00
59Co	0.85	0.65	0.11	0.72	-0.05
113In	0.85	0.65	0.11	0.77	-0.00
115In	0.85	0.65	0.11	0.77	0.00
206Pb	0.85	0.65	0.11	0.71	-0.00
207Pb	0.85	0.65	0.11	0.71	-0.00
208Pb	0.85	0.65	0.11	0.71	-0.00

Sample details
Sample name : SEQ-TUN1@TUNE01
Acquired at : 10/18/2016 17:36:27
Report name : 200_8 + IS TEST_NO SCREEN [7/9/2015 09:58:10]

Tune conditions

Major	
Extraction	-200
Lens 1	0.3
Focus	18.4
D1	-41.6
Pole Bias	1.5
Hexapole Bias	-3.5
Nebuliser	0.78
Sampling Depth	130

Minor	
Lens 2	-26.7
Lens 3	-189.0
Forward power	1400
Horizontal	95
Vertical	375
D2	-160
DA	-32.9
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 thing	0.00

Sensitivity and stability results

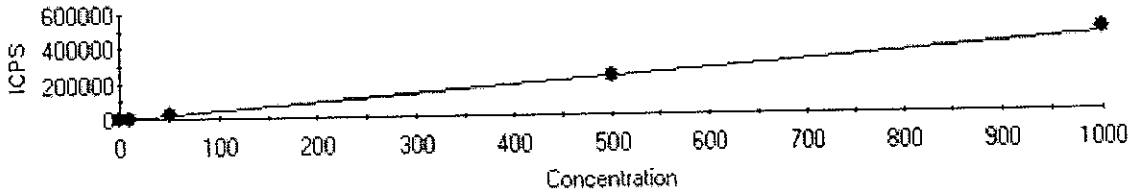
Acquisition parameters
Sweeps : 30

Run	Time	6Li	9Be	24Mg	25Mg	26Mg	45Sc	59Co	89Y	113In	115In	159Tb	206Pb	207Pb	208Pb	209Bi
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	3.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Countrate	>4000	>4000	>4000	>4000	>4000	>5000	>4000	>5000	>10000	>20000	>20000	>20000	>20000	>20000	>20000
1	17:37:06	119230.11	56451.396	414164.14	56374.253	66754.190	1320113.7	950634.16	119669.16	81244.757	1955252.9	175066.24	419486.71	371797.13	919168.45	110406.38
2	17:37:13	120246.70	57313.431	422344.57	56293.756	67177.290	1327372.1	962530.30	120196.04	81772.793	1979319.7	178043.23	430595.08	377317.75	929533.80	113504.18
3	17:37:21	119142.30	57518.051	424791.38	56360.837	68789.277	1335676.8	967431.92	121905.24	82899.597	1996835.9	179188.74	427518.18	381017.36	934580.67	113892.32
4	17:37:28	121283.67	56739.850	425091.60	57749.511	68453.423	1333725.8	970209.15	124871.76	83437.820	2020109.2	181646.80	431999.41	385862.08	943402.51	112569.33
5	17:37:36	120175.77	57263.116	423007.69	57357.038	69592.019	1343158.3	966429.96	123662.06	83747.313	2010595.3	181657.01	430434.40	383804.33	949475.25	114699.04
x		120015.71	57057.169	421879.88	56827.079	68153.240	1332009.4	963447.10	122060.85	82620.456	1992422.6	179120.40	428006.75	379959.73	935232.13	113014.25
σ		875.60	443.89	4466.89	677.98	1169.89	8713.56	7673.22	2218.50	1075.51	25833.83	2757.64	5033.99	5575.51	11838.06	1646.85
%RSD		0.7296	0.7780	1.0588	1.1931	1.7166	0.6542	0.7964	1.8175	1.3017	1.2966	1.5395	1.1761	1.4674	1.2658	1.4572

Result : The performance report passed.

Fully Quant Calibration

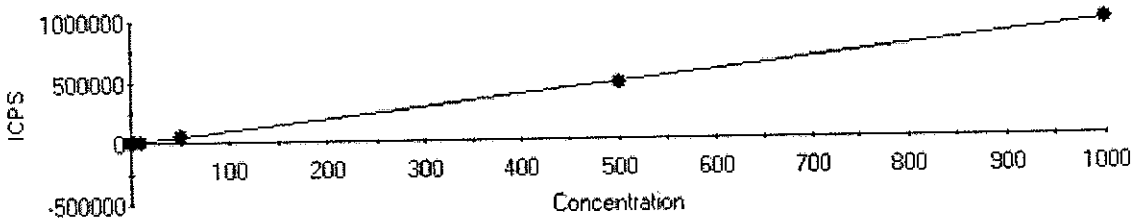
9Be FQ Block 1



Intercept CPS=14.733058 Intercept Conc=0.033182
Sensitivity=444.002247 Correlation Coeff=0.999762

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.002	0.002	15.59	0.00
SEQ-CAL4@S04	1.000	0.957	0.043	439.43	4.35
SEQ-CAL5@S05	10.000	10.310	0.310	4592.55	3.10
SEQ-CAL6@S06	50.000	49.104	0.896	21817.00	1.79
SEQ-CAL7@S07	500.000	497.079	2.921	220718.79	0.58
SEQ-CAL8@S08	1000.000	1042.227	42.227	462766.02	4.22

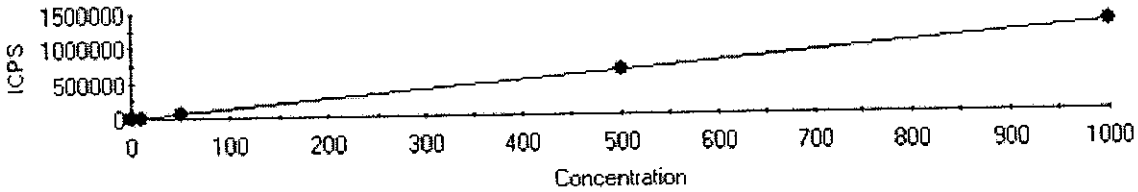
51V FQ Block 1



Intercept CPS=49.190604 Intercept Conc=0.051503
Sensitivity=955.099455 Correlation Coeff=0.999995

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	-0.081	0.081	-28.07	0.00
SEQ-CAL4@S04	5.000	5.072	0.072	4893.88	1.45
SEQ-CAL5@S05	10.000	9.813	0.187	9421.22	1.87
SEQ-CAL6@S06	50.000	49.426	0.574	47256.01	1.15
SEQ-CAL7@S07	500.000	491.206	8.794	469199.83	1.76
SEQ-CAL8@S08	1000.000	989.014	10.986	944656.38	1.10

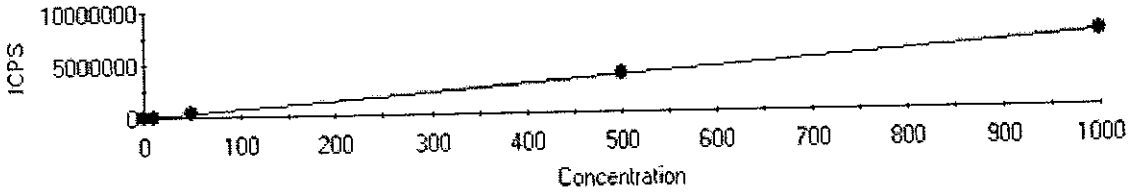
52Cr FQ Block 1



Intercept CPS=318.814905 Intercept Conc=0.252178
Sensitivity=1264.243043 Correlation Coeff=0.999974

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.002	0.002	320.92	0.00
SEQ-CAL4@S04	2.000	1.999	0.001	2846.56	0.03
SEQ-CAL5@S05	10.000	10.074	0.074	13054.81	0.74
SEQ-CAL6@S06	50.000	49.986	0.014	63512.84	0.03
SEQ-CAL7@S07	500.000	497.237	2.763	628946.74	0.55
SEQ-CAL8@S08	1000.000	1009.859	9.859	1277026.30	0.99

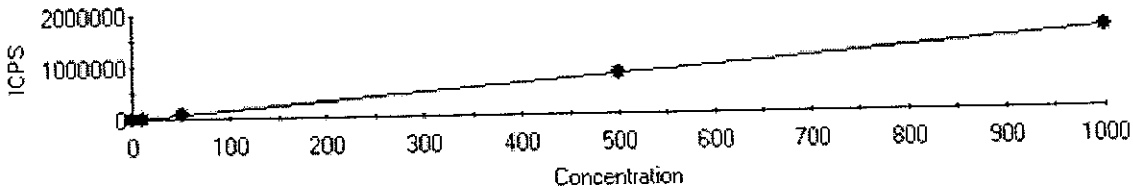
59Co FQ Block 1



Intercept CPS=33.789817 Intercept Conc=0.004695
Sensitivity=7196.422184 Correlation Coeff=0.999998

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.000	0.000	34.57	0.00
SEQ-CAL4@S04	1.000	0.992	0.008	7169.96	0.84
SEQ-CAL5@S05	10.000	10.248	0.248	73780.17	2.48
SEQ-CAL6@S06	50.000	50.807	0.807	365665.12	1.61
SEQ-CAL7@S07	500.000	496.297	3.703	3571592.98	0.74
SEQ-CAL8@S08	1000.000	988.733	11.267	7115372.17	1.13

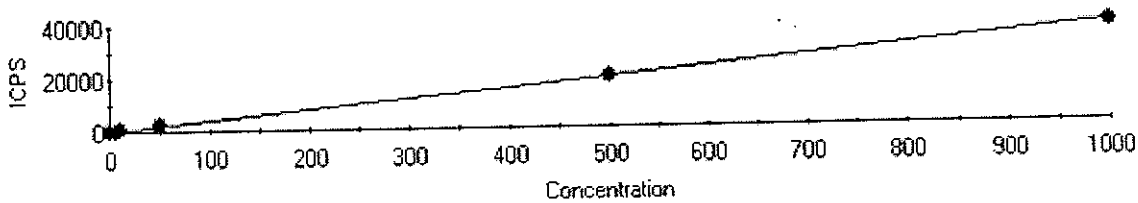
60Ni FQ Block 1



Intercept CPS=793.149529 Intercept Conc=0.512386
Sensitivity=1547.952558 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.113	0.113	967.58	0.00
SEQ-CAL4@S04	1.000	0.967	0.033	2289.46	3.34
SEQ-CAL5@S05	10.000	10.113	0.113	16447.93	1.13
SEQ-CAL6@S06	50.000	49.957	0.043	78124.40	0.09
SEQ-CAL7@S07	500.000	502.302	2.302	778333.06	0.46
SEQ-CAL8@S08	1000.000	1002.506	2.506	1552625.30	0.25

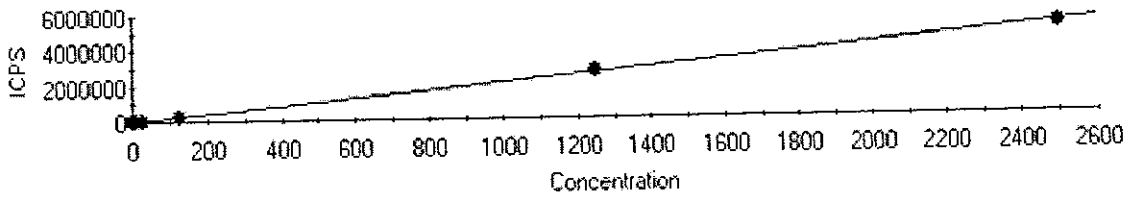
78Se FQ Block 1



Intercept CPS=10.522266 Intercept Conc=0.274057
Sensitivity=38.394503 Correlation Coeff=0.999985

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.025	0.025	11.49	0.00
SEQ-CAL4@S04	5.000	4.826	0.174	195.81	3.48
SEQ-CAL5@S05	10.000	9.747	0.253	384.77	2.53
SEQ-CAL6@S06	50.000	50.065	0.065	1932.74	0.13
SEQ-CAL7@S07	500.000	494.463	5.537	18995.19	1.11
SEQ-CAL8@S08	1000.000	977.586	22.414	37544.44	2.24

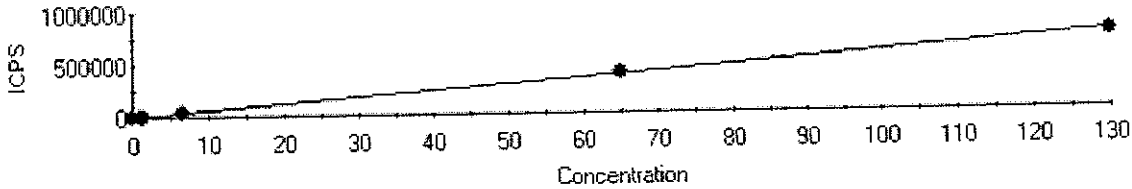
95Mo FQ Block 1



Intercept CPS=10.052072 Intercept Conc=0.004865
Sensitivity=2066.399298 Correlation Coeff=0.999955

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	-0.000	0.000	9.97	0.00
SEQ-CAL2@S02	2.000	2.011	0.011	4164.94	0.53
SEQ-CAL3@S03	4.000	4.056	0.056	8391.56	1.40
SEQ-CAL4@S04	10.000	9.860	0.140	20384.53	1.40
SEQ-CAL5@S05	25.000	24.929	0.071	51524.14	0.28
SEQ-CAL6@S06	125.000	123.518	1.482	255246.79	1.19
SEQ-CAL7@S07	1250.000	1268.025	18.025	2620255.39	1.44
SEQ-CAL8@S08	2500.000	2484.204	15.796	5133368.32	0.63

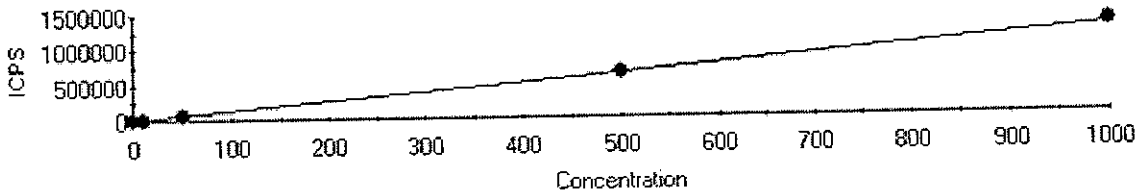
107Ag FQ Block 1



Intercept CPS=16.668477 Intercept Conc=0.002903
Sensitivity=5740.938410 Correlation Coeff=0.999971

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.000	0.000	16.67	0.00
SEQ-CAL4@S04	1.000	0.988	0.012	5688.13	1.21
SEQ-CAL5@S05	1.300	1.294	0.006	7448.17	0.42
SEQ-CAL6@S06	6.500	6.531	0.031	37509.37	0.47
SEQ-CAL7@S07	65.000	65.464	0.464	375841.38	0.71
SEQ-CAL8@S08	130.000	128.854	1.146	739758.29	0.88

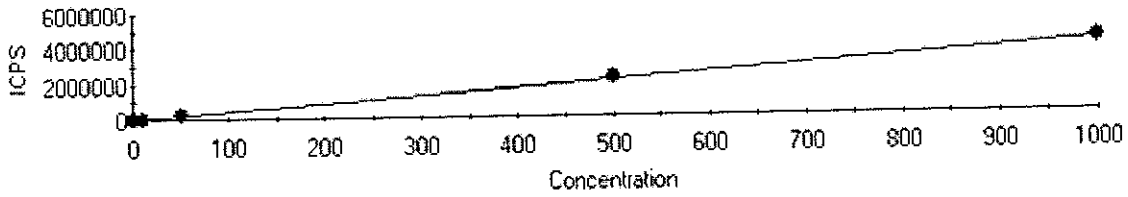
111Cd FQ Block 1



Intercept CPS=9.934010 Intercept Conc=0.007772
Sensitivity=1278.174406 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.000	0.000	9.94	0.00
SEQ-CAL4@S04	1.000	1.028	0.028	1323.46	2.77
SEQ-CAL5@S05	10.000	9.892	0.108	12654.02	1.08
SEQ-CAL6@S06	50.000	49.115	0.885	62787.35	1.77
SEQ-CAL7@S07	500.000	504.534	4.534	644892.16	0.91
SEQ-CAL8@S08	1000.000	1009.226	9.226	1289976.18	0.92

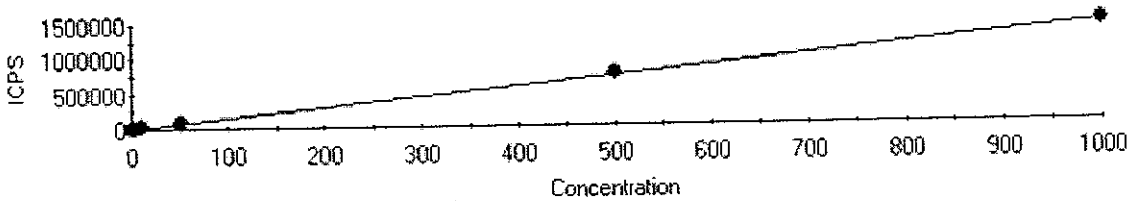
121Sb FQ Block 1



Intercept CPS=36.420725 Intercept Conc=0.008741
Sensitivity=4166.739496 Correlation Coeff=0.999732

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.000	0.000	36.71	0.00
SEQ-CAL4@S04	2.000	1.982	0.018	8294.80	0.90
SEQ-CAL5@S05	10.000	9.983	0.017	41634.57	0.17
SEQ-CAL6@S06	50.000	49.249	0.751	205244.99	1.50
SEQ-CAL7@S07	500.000	522.615	22.615	2177636.83	4.52
SEQ-CAL8@S08	1000.000	996.498	3.502	4152183.40	0.35

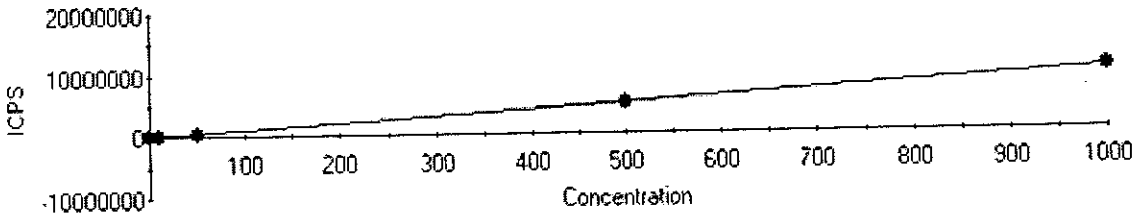
137Ba FQ Block 1



Intercept CPS=82.399248 Intercept Conc=0.056972
Sensitivity=1446.299669 Correlation Coeff=0.999863

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	-0.000	0.000	82.17	0.00
SEQ-CAL3@S03	5.000	5.048	0.048	7383.09	0.96
SEQ-CAL5@S05	10.000	10.163	0.163	14780.98	1.63
SEQ-CAL6@S06	50.000	50.423	0.423	73009.18	0.85
SEQ-CAL7@S07	500.000	512.216	12.216	740900.24	2.44
SEQ-CAL8@S08	1000.000	989.524	10.476	1431230.20	1.05

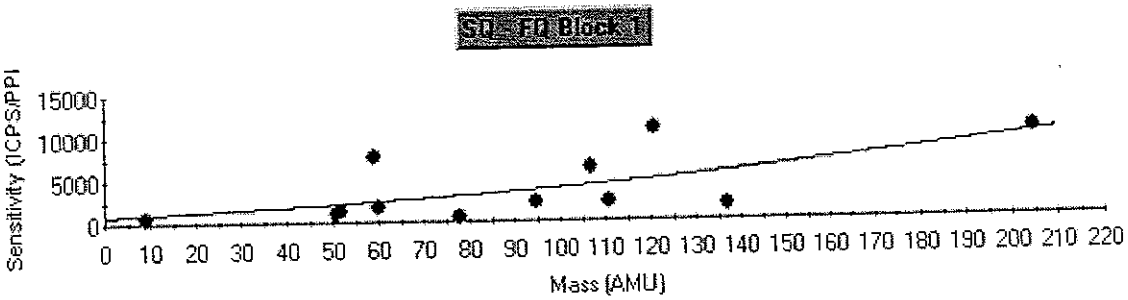
205Tl FQ Block 1



Intercept CPS=-21.172567 Intercept Conc=-0.002071
Sensitivity=10222.798649 Correlation Coeff=0.999821

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.005	0.005	29.72	0.00
SEQ-CAL4@S04	1.000	0.940	0.060	9583.35	6.05
SEQ-CAL5@S05	10.000	9.517	0.483	97264.72	4.83
SEQ-CAL6@S06	50.000	48.257	1.743	493297.48	3.49
SEQ-CAL7@S07	500.000	480.302	19.698	4910009.31	3.94
SEQ-CAL8@S08	1000.000	1000.736	0.736	10230297.55	0.07

Semi Quant Calibration



Coeff 0=781.609626 Coeff 1=19.366098 Coeff 2=0.121073

Symbol	Mass	RSF	Available	Excluded	Sensitivity Measured	Corrected	Calculated	%Error
9Be	9.01	0.7500	1	1	444.00	592.00	965.97	63.2
51V	50.94	0.9900	1	1	955.10	967.07	2082.41	115.3
52Cr	51.94	0.9800	1	1	1264.24	1540.17	2114.13	37.3
59Co	58.93	0.9300	1	1	7196.42	7738.09	2343.42	-69.7
60Ni	59.93	0.9100	1	1	1547.95	6502.47	2377.09	-63.4
78Se	77.92	0.1000	1	1	38.39	1626.20	3025.61	86.1
95Mo	94.91	0.9800	1	1	2066.40	14266.38	3710.08	-74.0
107Ag	106.91	0.9300	1	1	5740.94	12021.52	4235.65	-64.8
111Cd	110.90	0.5660	1	1	1278.17	17560.33	4418.56	-74.8
121Sb	120.90	0.3900	1	1	4166.74	18661.92	4892.86	-73.8
137Ba	136.91	0.9100	1	1	1446.30	14040.11	5702.24	-59.4
205Tl	204.97	1.0000	1	1	10222.80	14500.42	9837.82	-32.2

Dilution Corrected Concentrations

SEQ-CAL1@S01 10/18/2016 17:47:39

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:47:52	98.1%	0.0049	98.6%	-0.0007	-0.1060	0.0070	2.1910	0.0023	0.1118	0.0112	0.0735	0.0104	-0.1153	0.0000	-0.0021	0.0000	-0.0005	-0.0015	0.0010
2	17:48:05	100.0%	0.0192	100.3%	0.0005	-0.0477	-0.0075	-5.3450	-0.0001	0.0660	-0.0112	-0.0724	0.0102	-0.2907	0.0000	0.0025	-0.0032	0.0030	0.0012	-0.0001
3	17:48:18	101.9%	-0.0183	101.1%	0.0002	-0.0889	0.0056	3.1540	-0.0019	0.1602	0.0000	0.0745	-0.0205	0.4061	0.0000	-0.0004	0.0031	-0.0025	0.0003	-0.0010
x		100.0%	0.0019	100.0%	0.0000	-0.0809	0.0017	-0.0000	0.0001	0.1127	0.0000	0.0252	0.0000	-0.0000	0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000
σ		1.9%	0.0190	1.2%	0.0006	0.0300	0.0080	4.6540	0.0022	0.0471	0.0112	0.0845	0.0178	0.3624	0.0000	0.0023	0.0032	0.0028	0.0014	0.0010
%RSD		1.9	985.8000	1.2	0.0000	37.0300	479.9000	0.0000	1974.0000	41.8000	0.0000	335.3000	0.0000	0.0000	0.0000	0.0000	7679.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:47:52	99.9%	-0.0096	0.0000	0.0000	-0.0051	0.0000	0.0022	-0.0006	-0.0010	98.9%	97.7%	0.0027	0.0000
2	17:48:05	100.4%	-0.0002	0.0000	0.0000	0.0001	0.0000	-0.0026	0.0025	-0.0037	99.3%	100.9%	0.0056	0.0000
3	17:48:18	99.6%	0.0098	-0.0000	0.0000	0.0051	0.0000	0.0004	-0.0017	0.0042	101.9%	101.4%	0.0066	0.0000
x		100.0%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000	0.0001	-0.0002	100.0%	100.0%	0.0050	0.0000
σ		0.4%	0.0097	0.0000	0.0000	0.0051	0.0000	0.0024	0.0022	0.0040	1.6%	2.0%	0.0020	0.0000
%RSD		0.4	0.0000	0.0000	0.0000	289000.0000	0.0000	0.0000	3161.0000	2572.0000	1.6	2.0	40.1100	0.0000

SEQ-CAL2@S02 10/18/2016 17:51:52

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:06	102.1%	0.2272	100.9%	0.0003	0.9988	0.4432	5.5960	0.2104	0.1178	0.0218	1.1820	0.0317	0.3852	0.0000	0.6877	1.9210	1.2500	0.6823	1.6860
2	17:52:19	100.8%	0.3047	102.2%	0.0117	0.9826	0.4313	6.4940	0.2211	0.2106	0.0429	0.8769	-0.0086	1.0350	0.0000	0.6786	1.9460	1.2470	0.6917	1.7440
3	17:52:32	101.8%	0.2501	103.4%	-0.0005	0.9498	0.4154	1.5910	0.1996	0.1083	0.0648	1.1900	0.0112	0.5371	0.0000	0.6693	2.1650	1.2080	0.6987	1.7110
x		101.6%	0.2607	102.2%	0.0038	0.9770	0.4300	4.5600	0.2104	0.1456	0.0432	1.0830	0.0114	0.6525	0.0000	0.6785	2.0110	1.2350	0.6909	1.7140
σ		0.7%	0.0398	1.2%	0.0068	0.0250	0.0140	2.6110	0.0107	0.0565	0.0215	0.1785	0.0201	0.3400	0.0000	0.0092	0.1342	0.0235	0.0082	0.0290
%RSD		0.7	15.2700	1.2	178.0000	2.5540	3.2460	57.2500	5.1060	38.8200	49.7500	16.4800	176.0000	52.1000	0.0000	1.3550	6.6760	1.9000	1.1870	1.6930

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:06	101.4%	-0.0007	0.1936	0.0110	0.1805	0.0000	1.5440	0.4098	2.0610	100.1%	99.9%	0.2059	0.0000
2	17:52:19	103.1%	0.0053	0.2100	0.0108	0.2237	0.0000	1.5520	0.4213	2.1490	101.8%	102.1%	0.1953	0.0000
3	17:52:32	102.8%	0.0030	0.2121	0.0080	0.2126	0.0000	1.5190	0.4243	2.2220	103.5%	104.1%	0.2085	0.0000
x		102.4%	0.0026	0.2052	0.0099	0.2056	0.0000	1.5380	0.4185	2.1440	101.8%	102.0%	0.2032	0.0000
σ		0.9%	0.0030	0.0101	0.0017	0.0224	0.0000	0.0172	0.0077	0.0805	1.7%	2.1%	0.0070	0.0000
%RSD		0.9	117.8000	4.9300	16.8900	10.9000	0.0000	1.1170	1.8310	3.7550	1.7	2.1	3.4450	0.0000

SEQ-CAL3@S03 10/18/2016 17:56:04

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:18	101.6%	0.5687	101.0%	-0.0168	2.5190	1.0230	11.9700	0.4613	0.6902	0.0764	2.9900	0.2260	-0.2985	0.0000	1.3450	3.9490	2.4870	1.3710	3.4350
2	17:56:31	101.3%	0.5016	102.5%	0.0182	2.5350	1.0280	-1.9430	0.5374	0.6499	0.1088	2.1590	0.2045	-0.6374	0.0000	1.4170	4.1280	2.4790	1.3820	3.5010
3	17:56:44	103.8%	0.5891	103.8%	0.0027	2.5160	1.0020	3.7410	0.5061	0.6416	0.1068	2.9250	0.2221	0.0232	0.0000	1.3840	4.0910	2.4110	1.3560	3.6040
x		102.3%	0.5531	102.4%	0.0014	2.5230	1.0180	4.5900	0.5016	0.6606	0.0973	2.6910	0.2175	-0.3042	0.0000	1.3820	4.0560	2.4590	1.3700	3.5130
σ		1.4%	0.0458	1.4%	0.0176	0.0103	0.0136	6.9970	0.0382	0.0260	0.0182	0.4617	0.0115	0.3303	0.0000	0.0362	0.0945	0.0419	0.0129	0.0850
%RSD		1.3	8.2730	1.3	1261.0000	0.4087	1.3340	152.4000	7.6250	3.9400	18.6900	17.1500	5.2750	108.6000	0.0000	2.6160	2.3290	1.7030	0.9440	2.4180

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:18	102.0%	0.0479	0.5159	0.0150	0.4913	0.0000	3.0640	1.0130	4.9010	100.7%	99.7%	0.4799	0.0000
2	17:56:31	102.3%	0.0147	0.5068	0.0255	0.4377	0.0000	3.0290	0.9750	5.0550	102.4%	103.5%	0.4950	0.0000
3	17:56:44	104.0%	0.0245	0.4861	0.0053	0.4871	0.0000	3.1360	1.0260	5.1880	103.8%	104.2%	0.4939	0.0000
x		102.8%	0.0290	0.5029	0.0153	0.4721	0.0000	3.0760	1.0050	5.0480	102.3%	102.4%	0.4896	0.0000
σ		1.1%	0.0171	0.0152	0.0101	0.0298	0.0000	0.0545	0.0266	0.1436	1.5%	2.4%	0.0084	0.0000
%RSD		1.1	58.8000	3.0280	66.2000	6.3160	0.0000	1.7710	2.6420	2.8450	1.5	2.4	1.7170	0.0000

SEQ-CAL4@S04 10/18/2016 18:00:14

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:28	100.9%	0.8558	102.2%	0.0066	5.0410	1.9950	15.5400	0.9735	0.9582	0.1606	4.7090	0.1527	0.8539	0.0000	3.3150	9.6060	5.9710	3.4260	8.8160
2	18:00:41	103.2%	1.1090	103.2%	0.0762	5.0840	2.0020	1.6190	0.9982	0.9467	0.2243	4.7240	0.3420	-0.3094	0.0000	3.3010	9.7860	6.0500	3.4500	8.7230
3	18:00:54	103.4%	0.9052	104.8%	0.0040	5.0920	2.0020	14.2000	1.0030	0.9950	0.2154	5.0440	0.3256	0.6958	0.0000	3.4000	10.1900	6.1860	3.4770	8.8960
x		102.5%	0.9565	103.4%	0.0289	5.0720	1.9990	10.4500	0.9916	0.9666	0.2001	4.8260	0.2734	0.4134	0.0000	3.3380	9.8600	6.0690	3.4510	8.8120
σ		1.4%	0.1339	1.3%	0.0409	0.0271	0.0042	7.6790	0.0159	0.0252	0.0345	0.1890	0.1049	0.6310	0.0000	0.0536	0.2984	0.1089	0.0258	0.0866
%RSD		1.3	14.0000	1.3	141.5000	0.5337	0.2121	73.4700	1.6050	2.6120	17.2600	3.9160	38.3500	152.6000	0.0000	1.6040	3.0270	1.7950	0.7463	0.9832

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:28	103.9%	0.0248	1.0010	0.0500	1.0760	0.0000	7.4850	2.0280	9.9300	101.4%	101.2%	0.9464	0.0000
2	18:00:41	104.2%	0.0437	0.9734	0.0531	0.9627	0.0000	7.5290	1.9560	9.9760	103.9%	103.8%	0.9321	0.0000
3	18:00:54	103.4%	0.0374	0.9891	0.0487	1.0450	0.0000	7.7030	1.9610	10.1600	104.2%	104.3%	0.9400	0.0000
x		103.9%	0.0353	0.9879	0.0506	1.0280	0.0000	7.5720	1.9820	10.0200	103.1%	103.1%	0.9395	0.0000
σ		0.4%	0.0096	0.0140	0.0023	0.0584	0.0000	0.1151	0.0402	0.1217	1.5%	1.7%	0.0072	0.0000
%RSD		0.4	27.2000	1.4120	4.4600	5.6790	0.0000	1.5200	2.0270	1.2140	1.5	1.7	0.7621	0.0000

SEQ-CAL5@S05 10/18/2016 18:04:25

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:38	101.5%	10.7100	99.9%	5.8700	9.7030	10.1100	80.7900	10.0500	9.8800	0.4504	9.6170	0.5162	-0.1263	0.0000	7.9480	24.4700	15.0500	8.4840	22.0300
2	18:04:51	103.4%	10.1500	101.2%	6.2400	9.6950	9.9560	53.5600	10.2600	10.1800	0.4034	9.4860	0.6887	-0.6417	0.0000	8.2100	24.8100	15.1100	8.7040	22.1700
3	18:05:05	101.7%	10.0700	101.9%	6.2380	10.0400	10.1500	48.6600	10.4400	10.2800	0.3351	10.1400	0.5899	0.0306	0.0000	8.2100	25.5100	15.5000	8.7140	22.5500
x		102.2%	10.3100	101.0%	6.1160	9.8130	10.0700	61.0000	10.2500	10.1100	0.3963	9.7470	0.5983	-0.2458	0.0000	8.1230	24.9300	15.2200	8.6340	22.2500
σ		1.0%	0.3525	1.0%	0.2131	0.1965	0.1038	17.3100	0.1934	0.2076	0.0580	0.3454	0.0866	0.3518	0.0000	0.1511	0.5322	0.2403	0.1297	0.2685
%RSD		1.0	3.4180	1.0	3.4850	2.0030	1.0310	28.3700	1.8870	2.0530	14.6300	3.5430	14.4700	143.1000	0.0000	1.8610	2.1350	1.5780	1.5020	1.2070

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:38	101.5%	0.4737	1.2620	0.3694	9.7750	0.0000	9.2750	9.8990	9.9950	100.4%	101.1%	9.4190	0.0000
2	18:04:51	105.0%	0.4307	1.3240	0.3378	10.0700	0.0000	9.3880	9.9840	10.1800	102.3%	102.8%	9.5930	0.0000
3	18:05:05	103.1%	0.5219	1.2980	0.3779	9.8270	0.0000	9.6800	10.0700	10.3100	104.0%	104.3%	9.5370	0.0000
x		103.2%	0.4755	1.2940	0.3617	9.8920	0.0000	9.4480	9.9830	10.1600	102.2%	102.8%	9.5170	0.0000
σ		1.7%	0.0457	0.0308	0.0211	0.1599	0.0000	0.2089	0.0842	0.1605	1.8%	1.6%	0.0885	0.0000
%RSD		1.7	9.6040	2.3770	5.8480	1.6170	0.0000	2.2110	0.8435	1.5800	1.7	1.6	0.9301	0.0000

SEQ-CAL6@S06 10/18/2016 18:08:35

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:08:48	101.1%	49.1100	100.4%	30.1900	49.3500	49.9400	270.7000	50.3900	50.0300	1.9320	50.2000	2.9530	0.3754	0.0000	39.5500	122.4000	74.8100	42.4400	109.0000
2	18:09:01	102.3%	48.7000	102.4%	29.7500	49.0600	49.5600	279.1000	50.6700	49.7500	1.7670	49.9400	2.8230	0.8709	0.0000	40.4900	123.4000	75.3500	42.5800	109.7000
3	18:09:14	102.0%	49.5000	102.2%	30.6500	49.8700	50.4600	287.4000	51.3600	50.0900	1.7230	50.0500	2.7430	0.3819	0.0000	41.1400	124.8000	76.4800	43.5600	111.3000
x		101.8%	49.1000	101.7%	30.2000	49.4300	49.9900	279.1000	50.8100	49.9600	1.8070	50.0600	2.8400	0.5427	0.0000	40.3900	123.5000	75.5400	42.8600	110.0000
σ		0.7%	0.3994	1.1%	0.4514	0.4094	0.4517	8.3140	0.5004	0.1860	0.1100	0.1334	0.1063	0.2843	0.0000	0.7985	1.1820	0.8518	0.6104	1.1710
%RSD		0.7	0.8133	1.1	1.4950	0.8283	0.9037	2.9790	0.9848	0.3724	6.0850	0.2664	3.7430	52.3800	0.0000	1.9770	0.9569	1.1280	1.4240	1.0640

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:08:48	102.2%	2.2680	6.4720	1.7420	48.9200	0.0000	45.9900	48.4300	50.0000	102.2%	101.3%	48.0000	0.0000
2	18:09:01	102.9%	2.4990	6.5010	1.8400	48.8000	0.0000	46.7500	49.4200	50.1100	104.8%	104.5%	48.0000	0.0000
3	18:09:14	101.7%	2.3710	6.6190	1.7860	49.6300	0.0000	47.5000	49.9000	51.1500	105.5%	104.5%	48.7700	0.0000
x		102.3%	2.3790	6.5310	1.7890	49.1100	0.0000	46.7400	49.2500	50.4200	104.2%	103.4%	48.2600	0.0000
σ		0.6%	0.1157	0.0779	0.0493	0.4471	0.0000	0.7570	0.7478	0.6330	1.7%	1.8%	0.4450	0.0000
%RSD		0.6	4.8610	1.1920	2.7570	0.9103	0.0000	1.6190	1.5180	1.2550	1.7	1.8	0.9221	0.0000

SEQ-CAL7@S07 10/18/2016 18:11:47

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:00	100.2%	494.6000	98.0%	298.0000	492.4000	497.5000	2596.0000	r494.0000	499.0000	18.7500	501.3000	27.4000	3.8360	0.0000	410.5000	1281.0000	r762.4000	437.5000	r1110.0000
2	18:12:13	99.9%	494.2000	99.7%	299.3000	485.4000	493.4000	2598.0000	r494.1000	501.5000	19.4000	485.4000	27.7200	6.7690	0.0000	412.3000	r1257.0000	r767.2000	443.1000	r1118.0000
3	18:12:26	100.4%	502.4000	98.7%	304.9000	495.7000	500.7000	2526.0000	r500.8000	506.4000	19.0900	496.6000	27.4600	7.2640	0.0000	419.7000	r1266.0000	r772.9000	445.1000	r1125.0000
x		100.2%	497.1000	98.8%	300.7000	491.2000	497.2000	2573.0000	r496.3000	502.3000	19.0800	494.5000	27.5300	5.9560	0.0000	414.2000	r1258.0000	r767.5000	441.9000	r1118.0000
σ		0.3%	4.6100	0.9%	3.6450	5.2620	3.6600	40.9200	r3.8720	3.7690	0.3259	8.1750	0.1733	1.8530	0.0000	4.8810	r12.0100	r5.2610	3.9210	r7.3220
%RSD		0.3	0.9273	0.9	1.2120	1.0710	0.7360	1.5900	r0.7802	0.7504	1.7080	1.6530	0.6296	31.1100	0.0000	1.1780	r0.9468	r0.6855	0.8873	r0.6551

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:00	96.7%	23.9500	64.9600	17.2800	500.7000	0.0000	486.2000	515.2000	504.2000	106.2%	107.4%	r482.7000	0.0000
2	18:12:13	98.0%	24.0600	65.9700	17.5700	507.0000	0.0000	r469.4000	520.3000	514.6000	107.6%	110.8%	r475.6000	0.0000
3	18:12:26	96.2%	24.3000	65.4600	17.7600	505.9000	0.0000	500.8000	532.3000	517.9000	109.1%	110.5%	r482.6000	0.0000
x		96.9%	24.1000	65.4600	17.5400	504.5000	0.0000	r485.5000	522.6000	512.2000	107.6%	109.6%	r480.3000	0.0000
σ		0.9%	0.1767	0.5045	0.2412	3.3980	0.0000	r15.6800	8.8030	7.1660	1.5%	1.9%	r4.0650	0.0000
%RSD		0.9	0.7333	0.7706	1.3760	0.6736	0.0000	r3.2290	1.6840	1.3990	1.4	1.7	r0.8464	0.0000

SEQ-CAL8@S08 10/18/2016 18:15:55

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:08	92.6%	u1029.0000	85.9%	595.9000	984.8000	u1002.0000	4084.0000	r974.5000	981.3000	38.5900	963.5000	54.7500	12.7700	0.0000	r798.4000	r2441.0000	r1501.0000	r852.6000	r2176.0000
2	18:16:22	92.5%	u1051.0000	85.8%	610.0000	982.0000	u1007.0000	4143.0000	r998.4000	u1018.0000	38.9700	975.3000	54.7800	13.4800	0.0000	r816.3000	m2510.0000	r1534.0000	r865.7000	r2213.0000
3	18:16:35	91.6%	u1046.0000	86.5%	608.1000	u1000.0000	u1021.0000	4533.0000	r993.3000	u1009.0000	38.7200	993.9000	54.9300	10.9700	0.0000	r815.0000	m2501.0000	r1533.0000	r875.4000	r2241.0000
x		92.2%	u1042.0000	86.1%	604.7000	u989.0000	u1010.0000	4253.0000	r988.7000	u1003.0000	38.7600	977.6000	54.8200	12.4100	0.0000	r809.9000	m2484.0000	r1523.0000	r864.5000	r2210.0000
σ		0.5%	u11.3600	0.3%	7.6450	u9.7440	u9.7560	244.0000	r12.6100	u18.9300	0.1952	15.3500	0.0968	1.2950	0.0000	r9.9840	m37.5400	r18.6200	r11.4100	r32.6700
%RSD		0.6	u1.0900	0.4	1.2640	u0.9852	u0.9661	5.7360	r1.2750	u1.8880	0.5035	1.5700	0.1766	10.4300	0.0000	r1.2330	m1.5110	r1.2230	r1.3200	r1.4790

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:16:08	89.0%	46.9100	127.4000	34.1200	994.9000	0.0000	r917.3000	r987.1000	r982.2000	102.3%	103.8%	m1001.0000	0.0000
2	18:16:22	89.4%	47.0800	130.0000	35.2700	u1018.0000	0.0000	r935.9000	r994.9000	r991.6000	103.4%	105.4%	m1000.0000	0.0000
3	18:16:35	87.9%	48.0300	129.2000	35.0700	u1015.0000	0.0000	r942.3000	m1007.0000	r994.8000	104.8%	106.7%	m1001.0000	0.0000
x		88.8%	47.3400	128.9000	34.8200	u1009.0000	0.0000	r931.8000	m996.5000	r989.5000	103.5%	105.3%	m1001.0000	0.0000
σ		0.8%	0.6045	1.3510	0.6180	u12.4900	0.0000	r12.9900	m10.3000	r6.5190	1.3%	1.4%	m0.5096	0.0000
%RSD		0.8	1.2770	1.0480	1.7750	u1.2380	0.0000	r1.3940	m1.0340	r0.6588	1.2	1.4	m0.0509	0.0000

SEQ-ICV@ICV01 10/18/2016 18:20:00 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:00	90.3%	105.1000	78.4%	0.2063	97.9100	98.2500	508.2000	99.5200	98.0700	7.2900	202.6000	11.0400	3.5510	0.0000	3.3560	10.3000	6.2970	3.5750	8.9320
2	18:20:14	90.7%	106.7000	80.3%	0.1686	99.0700	99.3600	514.3000	102.2000	99.7800	8.5320	207.9000	11.6500	1.8590	0.0000	3.4550	10.6900	6.5390	3.5540	9.2870
3	18:20:27	91.5%	106.4000	81.4%	0.1637	97.4100	99.0900	593.9000	104.0000	103.0000	8.1890	205.8000	11.4100	3.1680	0.0000	3.4610	10.5700	6.4870	3.6690	9.1510
x		90.8%	107.145%	80.0%	0.1795	98.131%	100.918%	538.8000	102.914%	102.334%	8.0040	102.213%	11.3600	2.8590	0.0000	3.4240	10.5200	6.4410	3.5990	9.1240
σ		0.6%	n/a	1.5%	0.0233	n/a	n/a	47.8300	n/a	n/a	0.6410	n/a	0.3050	0.8875	0.0000	0.0593	0.1981	0.1273	0.0611	0.1792
%RSD		0.7	0.7827	1.9	12.9900	0.8687	0.5872	8.8770	2.2020	2.5000	8.0080	1.2850	2.6840	31.0400	0.0000	1.7310	1.8840	1.9770	1.6970	1.9640

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:20:00	91.1%	4.5040	98.8700	3.2960	95.3900	0.0000	0.2673	190.0000	97.7000	94.7%	96.7%	r210.3000	0.0000
2	18:20:14	90.7%	4.5700	99.7600	3.3280	97.9800	0.0000	0.2558	195.1000	100.2000	98.5%	100.7%	r210.2000	0.0000
3	18:20:27	91.2%	4.8080	100.4000	3.4550	100.1000	0.0000	0.2031	201.2000	102.1000	100.2%	101.5%	r212.0000	0.0000
x		91.0%	4.6270	100.680%	3.3600	98.810%	0.0000	0.2421	98.704%	100.021%	97.8%	99.6%	r102.860%	0.0000
σ		0.3%	0.1602	n/a	0.0842	n/a	0.0000	0.0342	n/a	n/a	2.8%	2.6%	rn/a	0.0000
%RSD		0.3	3.4630	0.7672	2.5070	2.4120	0.0000	14.1400	2.8520	2.2290	2.9	2.6	r0.4748	0.0000

SEQ-ICB@ICB01 10/18/2016 18:23:33 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:46	91.9%	0.0494	81.8%	0.0077	-0.0090	0.0244	-15.5600	0.0508	0.1632	0.0387	-0.0152	0.0454	-0.2272	0.0000	0.0142	0.0649	0.0403	0.0219	0.0455
2	18:23:59	91.8%	0.0739	84.1%	0.0005	-0.0129	0.0040	-11.3400	0.0586	0.1158	0.0136	0.1754	0.0219	-0.2319	0.0000	0.0252	0.0527	0.0364	0.0314	0.0684
3	18:24:12	93.1%	0.1629	84.2%	0.0249	-0.0273	0.0227	-13.6100	0.0492	0.1787	-0.0112	-0.0823	-0.0803	1.4810	0.0000	0.0177	0.0522	0.0480	0.0163	0.0842
x		92.3%	0.0954	83.4%	0.0111	-0.0164	0.0170	-13.5000	0.0529	0.1526	0.0137	0.0260	-0.0043	0.3405	0.0000	0.0191	0.0566	0.0416	0.0232	0.0660
σ		0.7%	0.0597	1.4%	0.0125	0.0096	0.0113	2.1150	0.0050	0.0328	0.0250	0.1337	0.0668	0.9874	0.0000	0.0056	0.0072	0.0059	0.0077	0.0195
%RSD		0.8	62.6100	1.6	113.3000	58.5800	66.2600	15.6600	9.4840	21.4800	182.0000	514.5000	1540.0000	290.0000	0.0000	29.4700	12.7100	14.1800	32.9800	29.5100

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:46	89.4%	-0.0246	0.0627	0.0015	0.0792	0.0000	0.0158	0.1227	0.0563	97.0%	99.4%	0.1291	0.0000
2	18:23:59	90.1%	0.0026	0.0532	0.0015	0.0406	0.0000	0.0111	0.1121	0.0330	97.7%	99.8%	0.1230	0.0000
3	18:24:12	90.5%	-0.0012	0.0355	0.0015	0.0372	0.0000	0.0190	0.1145	0.0123	99.9%	100.7%	0.1067	0.0000
x		90.0%	-0.0077	0.0505	0.0015	0.0524	0.0000	0.0153	0.1164	0.0339	98.2%	99.9%	0.1196	0.0000
σ		0.6%	0.0147	0.0138	0.0000	0.0233	0.0000	0.0040	0.0055	0.0220	1.5%	0.7%	0.0116	0.0000
%RSD		0.6	190.2000	27.2800	1.4920	44.4900	0.0000	26.1400	4.7580	64.9200	1.6	0.7	9.6960	0.0000

SEQ-IFA@ICSA01 10/18/2016 18:27:13 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:27:26	88.5%	0.2918	90.1%	500.7000	-0.8035	21.2200	103.7000	1.3640	5.8600	0.0138	-0.0478	-0.0583	1.1210	0.0000	671.2000	±2051.0000	±1250.0000	713.9000	±1799.0000
2	18:27:40	88.2%	0.3299	93.1%	512.8000	-0.3957	21.8000	48.3700	1.3840	5.6400	0.0014	-0.0789	0.0343	0.1635	0.0000	680.9000	±2053.0000	±1255.0000	728.4000	±1815.0000
3	18:27:54	89.4%	0.3948	94.7%	515.2000	-0.4497	21.5000	55.5900	1.3610	5.6920	-0.0112	0.0777	-0.0349	0.7193	0.0000	±677.2000	±2089.0000	±1273.0000	±722.5000	±1842.0000
x		88.7%	1.#IO%	92.6%	509.6000	-109.929%	102.409%	69.2200	136.973%	95.518%	0.0013	-5.443%	-0.0197	0.6680	0.0000	±676.4000	±2064.0000	±1260.0000	±721.6000	±1819.0000
σ		0.7%	n/a	2.3%	7.8170	n/a	n/a	30.0700	n/a	n/a	0.0125	n/a	0.0482	0.4808	0.0000	±4.9330	±21.5600	±12.3600	±7.2970	±21.3400
%RSD		0.8	15.3700	2.5	1.5340	40.3000	1.3360	43.4500	0.9319	2.0060	950.9000	507.8000	244.8000	71.9800	0.0000	±0.7292	±1.0450	±0.9816	±1.0110	±1.1730

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:27:26	89.5%	-0.0061	0.0252	0.8015	0.4515	0.0000	0.1424	1.1080	2.0910	99.9%	100.3%	0.0726	0.0000
2	18:27:40	89.0%	0.0066	0.0279	0.7578	0.5293	0.0000	0.1533	1.1390	1.9370	102.9%	103.7%	0.0618	0.0000
3	18:27:54	90.5%	-0.0030	0.0262	0.7452	0.4491	0.0000	0.1263	1.2520	2.1570	104.5%	105.3%	0.0522	0.0000
x		89.7%	-0.0009	1.#IO%	0.7682	68.087%	0.0000	0.1407	77.769%	171.816%	102.4%	103.1%	1.#IO%	0.0000
σ		0.8%	0.0066	n/a	0.0295	n/a	0.0000	0.0136	n/a	n/a	2.3%	2.6%	n/a	0.0000
%RSD		0.9	762.8000	5.1720	3.8450	9.5690	0.0000	9.6700	6.5070	5.4790	2.3	2.5	16.4100	0.0000

SEQ-IFB@ICSAB01 10/18/2016 18:31:24 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:37	88.0%	19.3100	100.1%	501.3000	21.8600	43.8600	192.5000	20.9500	23.8900	0.7725	19.9600	1.0160	1.2140	0.0000	673.3000	±2035.0000	±1251.0000	±706.3000	±1803.0000
2	18:31:50	87.8%	18.2800	104.0%	495.8000	21.0400	43.3400	204.4000	20.6500	24.0000	0.7162	19.5700	1.1470	1.3710	0.0000	±668.6000	±2048.0000	±1255.0000	±708.9000	±1819.0000
3	18:32:03	88.9%	18.9100	103.9%	506.9000	20.8100	42.9600	212.1000	20.8000	24.4900	0.8115	19.5300	1.0350	1.3440	0.0000	±670.9000	±2055.0000	±1259.0000	±711.4000	±1816.0000
x		88.3%	99.140%	102.7%	501.3000	111.762%	108.473%	203.0000	103.995%	100.530%	0.7667	103.614%	1.0660	1.3100	0.0000	±670.9000	±2046.0000	±1255.0000	±708.9000	±1813.0000
σ		0.6%	n/a	2.2%	5.5650	n/a	n/a	9.8830	n/a	n/a	0.0479	n/a	0.0710	0.0841	0.0000	±2.3370	±9.9110	±3.9940	±2.5420	±8.8170
%RSD		0.7	2.7660	2.2	1.1100	2.6030	1.0380	4.8690	0.7209	1.3360	6.2430	1.2110	6.6600	6.4240	0.0000	±0.3483	±0.4845	±0.3182	±0.3586	±0.4864

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:31:37	94.0%	0.9212	18.1400	1.4250	19.1900	0.0000	0.1366	20.9100	22.4600	103.0%	103.6%	19.5600	0.0000
2	18:31:50	95.1%	0.8811	18.2000	1.4450	19.4300	0.0000	0.1385	21.3200	23.2900	104.2%	105.3%	19.6300	0.0000
3	18:32:03	96.3%	0.8966	18.2800	1.3850	19.1800	0.0000	0.1297	21.1900	23.5200	107.6%	107.9%	19.6900	0.0000
x		95.1%	0.8996	101.154%	1.4180	96.344%	0.0000	0.1349	96.095%	104.945%	105.0%	105.6%	93.467%	0.0000
σ		1.2%	0.0202	n/a	0.0307	n/a	0.0000	0.0047	n/a	n/a	2.4%	2.1%	n/a	0.0000
%RSD		1.2	2.2420	0.3791	2.1650	0.7280	0.0000	3.4590	0.9779	2.4170	2.3	2.0	0.3259	0.0000

SEQ-CCV@CCV01 10/18/2016 18:35:33 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:46	95.7%	496.6000	109.4%	291.9000	498.8000	507.0000	2463.0000	±493.5000	496.5000	20.5800	510.4000	28.5100	5.4900	0.0000	407.6000	±1238.0000	±755.6000	434.3000	±1097.0000
2	18:35:59	94.5%	494.3000	111.6%	293.1000	499.7000	508.7000	2304.0000	±494.0000	497.4000	19.9300	507.3000	28.1700	8.2200	0.0000	406.8000	±1238.0000	±753.4000	433.7000	±1096.0000
3	18:36:12	95.4%	491.9000	111.8%	295.4000	498.5000	503.8000	2430.0000	±499.0000	503.0000	20.5600	504.5000	28.2700	4.8120	0.0000	411.2000	±1239.0000	±761.8000	442.3000	±1105.0000
x		95.2%	98.853%	110.9%	293.5000	99.805%	101.295%	2399.0000	±99.102%	99.796%	20.3600	101.477%	28.3200	6.1740	0.0000	408.5000	±1238.0000	±756.9000	436.8000	±1099.0000
σ		0.6%	n/a	1.3%	1.7640	n/a	n/a	84.3400	±n/a	n/a	0.3675	n/a	0.1724	1.8040	0.0000	2.3720	±0.4829	±4.3240	4.8250	±4.6450
%RSD		0.7	0.4754	1.2	0.6010	0.1257	0.4911	3.5160	±0.6082	0.6975	1.8050	0.5838	0.6089	29.2200	0.0000	0.5805	±0.0390	±0.5713	1.1050	±0.4225

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:46	106.9%	24.3700	64.9600	18.1700	512.4000	0.0000	±463.9000	526.6000	521.0000	112.6%	114.3%	±480.2000	0.0000
2	18:35:59	107.1%	24.2200	65.9200	18.1300	511.3000	0.0000	488.7000	530.1000	521.1000	116.1%	115.1%	±489.0000	0.0000
3	18:36:12	107.5%	24.5000	66.1600	17.9000	517.4000	0.0000	496.8000	540.6000	531.2000	116.5%	117.5%	±480.3000	0.0000
x		107.1%	24.3600	101.043%	18.0700	102.734%	0.0000	±483.1000	106.485%	104.887%	115.1%	115.7%	±96.635%	0.0000
σ		0.3%	0.1419	n/a	0.1459	n/a	0.0000	±17.1100	n/a	n/a	2.2%	1.7%	±n/a	0.0000
%RSD		0.3	0.5823	0.9684	0.8073	0.6294	0.0000	±3.5410	1.3690	1.1180	1.9	1.4	±1.0530	0.0000

SEQ-CCB@CCB01 10/18/2016 18:39:45 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:58	89.0%	0.2608	99.6%	0.1198	0.0910	0.1428	-7.8280	0.1643	0.2491	0.0319	0.1444	-0.0291	0.6910	0.0000	0.1506	0.4311	0.2943	0.1558	0.4699
2	18:40:11	91.9%	0.1781	99.5%	0.1424	0.0482	0.1104	-7.5370	0.2043	0.3296	0.0211	0.0883	0.0007	0.1910	0.0000	0.1838	0.5179	0.3386	0.1631	0.5108
3	18:40:24	91.3%	0.2353	100.7%	0.1403	0.0713	0.0919	-3.2360	0.1885	0.2725	0.0103	0.0049	-0.0193	0.3580	0.0000	0.1929	0.5263	0.3117	0.1843	0.4846
x		90.7%	0.2248	99.9%	0.1342	0.0702	0.1151	-6.2000	0.1857	0.2837	0.0211	0.0792	-0.0159	0.4133	0.0000	0.1758	0.4917	0.3149	0.1677	0.4884
σ		1.5%	0.0424	0.6%	0.0125	0.0215	0.0258	2.5710	0.0202	0.0414	0.0108	0.0702	0.0152	0.2546	0.0000	0.0223	0.0527	0.0223	0.0148	0.0208
%RSD		1.7	18.8600	0.6	9.3160	30.5800	22.4100	41.4700	10.8600	14.5900	51.0400	88.6900	95.1900	61.5900	0.0000	12.6800	10.7100	7.0930	8.8460	4.2490

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:39:58	103.7%	0.0193	0.0370	0.0095	0.1633	0.0000	0.1719	0.2117	0.1759	103.8%	104.3%	0.2342	0.0000
2	18:40:11	103.8%	0.0070	0.0411	0.0068	0.1917	0.0000	0.1809	0.2215	0.1808	103.5%	105.0%	0.2292	0.0000
3	18:40:24	103.8%	0.0182	0.0309	0.0093	0.2292	0.0000	0.1811	0.2026	0.2035	105.4%	106.4%	0.2447	0.0000
x		103.8%	0.0148	0.0363	0.0085	0.1947	0.0000	0.1780	0.2119	0.1867	104.2%	105.2%	0.2360	0.0000
σ		0.1%	0.0068	0.0051	0.0015	0.0330	0.0000	0.0053	0.0095	0.0147	1.0%	1.1%	0.0079	0.0000
%RSD		0.1	46.0900	14.1500	17.8300	16.9600	0.0000	2.9590	4.4710	7.8890	0.9	1.1	3.3670	0.0000

SEQ-CCV@CCV02 10/18/2016 19:10:27 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:10:40	97.4%	496.8000	102.2%	291.6000	474.4000	484.4000	2690.0000	±495.3000	499.5000	18.0400	475.2000	25.6800	3.9200	0.0000	401.5000	±1219.0000	±745.5000	428.2000	±1087.0000
2	19:10:53	97.7%	512.4000	101.1%	297.0000	496.5000	505.1000	2655.0000	±501.4000	511.3000	19.8000	505.8000	28.4200	4.6490	0.0000	407.4000	±1241.0000	±758.4000	438.0000	±1097.0000
3	19:11:07	97.5%	510.5000	101.6%	296.7000	483.4000	490.6000	2527.0000	±501.8000	508.6000	19.7900	485.7000	27.8500	4.6800	0.0000	412.1000	±1250.0000	±762.5000	443.6000	±1114.0000
x		97.5%	101.310%	101.6%	295.1000	96.947%	98.673%	2624.0000	±99.903%	101.295%	19.2100	97.780%	27.3200	4.4160	0.0000	407.0000	±1237.0000	±755.5000	436.6000	±1100.0000
σ		0.2%	n/a	0.5%	3.0590	n/a	n/a	85.5800	±n/a	n/a	1.0170	n/a	1.4450	0.4298	0.0000	5.2780	±16.4200	±8.8790	7.8040	±13.6600
%RSD		0.2	1.6820	0.5	1.0370	2.2910	2.1490	3.2610	±0.7352	1.2280	5.2960	3.1750	5.2910	9.7320	0.0000	1.2970	±1.3280	±1.1750	1.7870	±1.2420

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:10:40	102.2%	23.6700	64.1800	17.4300	501.4000	0.0000	479.2000	519.3000	509.5000	110.1%	110.6%	±482.8000	0.0000
2	19:10:53	98.1%	24.2000	66.5800	17.9000	518.9000	0.0000	493.9000	539.7000	523.5000	111.8%	113.0%	±481.9000	0.0000
3	19:11:07	100.7%	24.2800	66.1900	17.9900	516.6000	0.0000	496.5000	541.6000	523.9000	113.1%	114.5%	±485.8000	0.0000
x		100.3%	24.0500	100.999%	17.7700	102.459%	0.0000	489.9000	106.708%	103.795%	111.7%	112.7%	±96.697%	0.0000
σ		2.1%	0.3332	n/a	0.2981	n/a	0.0000	9.3060	n/a	n/a	1.5%	2.0%	±n/a	0.0000
%RSD		2.1	1.3860	1.9600	1.6770	1.8620	0.0000	1.9000	2.3140	1.5830	1.4	1.7	±0.4213	0.0000

SEQ-CCB@CCB02 10/18/2016 19:14:39 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:53	91.3%	0.2237	90.6%	0.1819	-0.0208	0.1014	-1.1830	0.1691	0.2338	-0.0112	0.1657	0.0526	-0.8061	0.0000	0.1591	0.4369	0.2750	0.1499	0.3990
2	19:15:05	93.9%	0.2218	91.3%	0.0864	0.0239	0.1040	-9.1720	0.1626	0.2368	0.0346	0.1412	0.0639	-0.2756	0.0000	0.1534	0.4918	0.2708	0.1833	0.4427
3	19:15:18	93.3%	0.2006	93.1%	0.1006	0.1217	0.1016	-16.7500	0.1728	0.1092	0.0003	0.0247	0.0747	-0.6280	0.0000	0.1330	0.3810	0.2372	0.1660	0.3543
x		92.8%	0.2154	91.7%	0.1230	0.0416	0.1024	-9.0340	0.1682	0.1932	0.0079	0.1105	0.0671	-0.5699	0.0000	0.1485	0.4366	0.2610	0.1664	0.3987
σ		1.3%	0.0128	1.3%	0.0516	0.0728	0.0014	7.7830	0.0051	0.0728	0.0238	0.0753	0.0066	0.2700	0.0000	0.0137	0.0554	0.0207	0.0167	0.0442
%RSD		1.4	5.9390	1.4	41.9300	175.1000	1.3960	86.1500	3.0510	37.6900	300.8000	68.1800	9.8670	47.3800	0.0000	9.2220	12.7000	7.9320	10.0200	11.0800

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:14:53	98.7%	0.0016	0.0318	0.0127	0.1418	0.0000	0.1468	0.2056	0.1748	103.1%	103.3%	0.2388	0.0000
2	19:15:05	97.6%	0.0094	0.0278	0.0084	0.1663	0.0000	0.1436	0.1802	0.2007	104.9%	105.7%	0.2048	0.0000
3	19:15:18	96.9%	-0.0029	0.0222	0.0083	0.1745	0.0000	0.1378	0.2032	0.1555	105.8%	107.2%	0.1968	0.0000
x		97.7%	0.0027	0.0273	0.0098	0.1609	0.0000	0.1427	0.1963	0.1770	104.6%	105.4%	0.2135	0.0000
σ		0.9%	0.0062	0.0048	0.0025	0.0170	0.0000	0.0046	0.0140	0.0227	1.4%	1.9%	0.0223	0.0000
%RSD		1.0	230.9000	17.7800	25.9900	10.5600	0.0000	3.2150	7.1420	12.8000	1.3	1.8	10.4400	0.0000

SEQ-CCV@CCV03 10/18/2016 19:45:06 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:19	96.3%	487.9000	99.7%	286.6000	489.3000	499.7000	2608.0000	r490.3000	491.8000	20.1800	494.9000	27.8500	6.7920	0.0000	395.6000	r1209.0000	r739.9000	424.5000	r1081.0000
2	19:45:32	96.3%	492.3000	99.6%	291.2000	479.5000	486.0000	2260.0000	r495.9000	498.8000	19.3300	483.9000	26.7600	6.7150	0.0000	404.6000	r1225.0000	r744.3000	431.8000	r1081.0000
3	19:45:45	95.8%	493.2000	99.6%	297.2000	476.9000	487.8000	2255.0000	r501.0000	509.2000	19.3800	483.1000	27.1600	6.7380	0.0000	409.0000	r1231.0000	r751.5000	435.5000	r1094.0000
x		96.1%	98.228%	99.6%	291.7000	96.382%	98.236%	2374.0000	r99.146%	99.989%	19.6300	97.459%	27.2600	6.7490	0.0000	403.0000	r1222.0000	r745.2000	430.6000	r1085.0000
σ		0.3%	n/a	0.0%	5.3410	n/a	n/a	202.5000	r n/a	n/a	0.4819	n/a	0.5536	0.0394	0.0000	6.8370	r11.5700	r5.8600	5.6040	r7.5680
%RSD		0.3	0.5845	0.0	1.8310	1.3580	1.5180	8.5300	r1.0760	1.7560	2.4550	1.3570	2.0310	0.5844	0.0000	1.6960	r0.9473	r0.7863	1.3020	r0.6975

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:45:19	97.6%	23.7600	65.0300	17.7200	501.7000	0.0000	478.2000	519.8000	511.3000	110.4%	112.0%	r488.5000	0.0000
2	19:45:32	100.9%	23.7600	65.4100	17.9300	507.7000	0.0000	487.0000	535.4000	515.8000	113.8%	115.4%	r488.4000	0.0000
3	19:45:45	100.6%	24.0200	65.9600	17.6800	511.4000	0.0000	488.7000	535.3000	519.4000	115.3%	117.5%	r479.8000	0.0000
x		99.7%	23.8400	100.720%	17.7800	101.384%	0.0000	484.6000	106.034%	103.103%	113.2%	115.0%	r97.109%	0.0000
σ		1.8%	0.1531	n/a	0.1338	n/a	0.0000	5.6580	n/a	n/a	2.5%	2.8%	r n/a	0.0000
%RSD		1.8	0.6420	0.7131	0.7525	0.9693	0.0000	1.1680	1.6960	0.7917	2.2	2.4	r1.0330	0.0000

SEQ-CCB@CCB03 10/18/2016 19:49:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:31	92.7%	0.1175	89.7%	0.0616	0.0242	0.0239	-19.8800	0.1044	0.0881	-0.0112	-0.0374	0.0106	0.0759	0.0000	0.1133	0.3703	0.2026	0.1271	0.3222
2	19:49:44	94.2%	0.1067	91.2%	0.0808	0.0296	0.0309	-15.4100	0.1152	0.1810	0.0120	-0.0637	0.0102	-0.2686	0.0000	0.1215	0.3628	0.2283	0.1599	0.3717
3	19:49:57	93.9%	0.1870	92.0%	0.0667	-0.0500	0.0022	-9.7210	0.1022	0.0986	0.0002	0.1408	0.0001	0.2541	0.0000	0.1182	0.3292	0.2146	0.1289	0.3072
x		93.6%	0.1371	91.0%	0.0697	0.0013	0.0190	-15.0000	0.1072	0.1226	0.0004	0.0133	0.0070	0.0205	0.0000	0.1177	0.3541	0.2152	0.1386	0.3337
σ		0.8%	0.0436	1.2%	0.0099	0.0445	0.0150	5.0910	0.0070	0.0509	0.0116	0.1113	0.0060	0.2658	0.0000	0.0041	0.0219	0.0129	0.0184	0.0338
%RSD		0.9	31.8000	1.3	14.2200	3497.0000	78.8900	33.9300	6.4950	41.5000	3267.0000	839.9000	85.4900	1299.0000	0.0000	3.5240	6.1920	5.9800	13.2800	10.1100

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:49:31	97.8%	0.0041	0.0144	0.0042	0.1010	0.0000	0.1239	0.1425	0.0970	105.2%	106.6%	0.1306	0.0000
2	19:49:44	96.3%	-0.0008	0.0136	0.0014	0.0790	0.0000	0.1006	0.1293	0.1231	105.5%	107.0%	0.1383	0.0000
3	19:49:57	97.6%	0.0014	0.0152	0.0014	0.0806	0.0000	0.0838	0.1276	0.0941	107.0%	108.5%	0.1394	0.0000
x		97.3%	0.0016	0.0144	0.0023	0.0868	0.0000	0.1028	0.1331	0.1047	105.9%	107.4%	0.1361	0.0000
σ		0.8%	0.0025	0.0008	0.0016	0.0123	0.0000	0.0201	0.0081	0.0160	1.0%	1.0%	0.0048	0.0000
%RSD		0.8	157.1000	5.4190	70.2400	14.1700	0.0000	19.5900	6.1000	15.2600	0.9	1.0	3.5240	0.0000

SEQ-CCV@CCV04 10/18/2016 20:06:35 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:06:48	96.5%	500.9000	98.2%	300.4000	481.7000	493.0000	2327.0000	r510.7000	512.5000	19.8100	479.7000	27.0200	7.9340	0.0000	412.4000	r1273.0000	r777.1000	443.5000	r1130.0000
2	20:07:02	95.7%	499.7000	97.2%	303.3000	481.2000	491.6000	2586.0000	r509.2000	513.5000	18.6700	484.0000	27.1200	6.7580	0.0000	415.2000	r1262.0000	r764.9000	442.9000	r1125.0000
3	20:07:15	96.1%	511.2000	96.3%	302.8000	485.0000	496.1000	2437.0000	r511.0000	512.6000	19.9200	497.3000	26.4700	4.6960	0.0000	417.4000	r1259.0000	r763.3000	444.4000	r1120.0000
x		96.1%	100.786%	97.2%	302.2000	96.530%	98.708%	2450.0000	r102.059%	102.571%	19.4700	97.397%	26.8700	6.4630	0.0000	415.0000	r1265.0000	r768.4000	443.6000	r1125.0000
σ		0.4%	n/a	1.0%	1.5770	n/a	n/a	130.1000	r n/a	n/a	0.6901	n/a	0.3476	1.6390	0.0000	2.5400	r7.5490	r7.5500	0.7743	r5.1710
%RSD		0.5	1.2530	1.0	0.5219	0.4264	0.4667	5.3090	r0.1892	0.1029	3.5450	1.8910	1.2930	25.3600	0.0000	0.6121	r0.5969	r0.9826	0.1746	r0.4596

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:06:48	96.7%	24.4800	65.8300	17.9800	518.0000	0.0000	r473.5000	539.8000	524.0000	112.2%	113.6%	r497.6000	0.0000
2	20:07:02	98.1%	24.4700	66.3700	18.1600	520.2000	0.0000	498.4000	542.8000	525.0000	114.1%	115.1%	r499.5000	0.0000
3	20:07:15	97.2%	24.8800	66.4500	18.3900	525.3000	0.0000	497.8000	545.6000	524.6000	115.6%	116.3%	r495.3000	0.0000
x		97.3%	24.6100	101.872%	18.1700	104.233%	0.0000	r489.9000	108.550%	104.900%	114.0%	115.0%	r99.491%	0.0000
σ		0.7%	0.2306	n/a	0.2065	n/a	0.0000	r14.2400	n/a	n/a	1.7%	1.3%	r n/a	0.0000
%RSD		0.7	0.9369	0.5079	1.1370	0.7173	0.0000	r2.9070	0.5367	0.0970	1.5	1.2	r0.4278	0.0000

SEQ-CCB@CCB04 10/18/2016 20:10:57 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:11:10	93.6%	0.1022	88.7%	0.0588	-0.0747	0.0243	-6.2740	0.0844	0.1155	0.0002	-0.0374	0.0428	0.0758	0.0000	0.0917	0.2986	0.1709	0.1047	0.2794
2	20:11:24	93.9%	0.1498	90.3%	0.0743	-0.0762	-0.0039	-6.5040	0.0895	0.0839	0.0117	0.0813	0.0007	0.7831	0.0000	0.0988	0.2987	0.1811	0.1223	0.2566
3	20:11:37	93.2%	0.1416	90.2%	0.0478	0.0080	-0.0056	-21.0200	0.0803	0.0853	0.0002	-0.0668	0.0106	0.0767	0.0000	0.0828	0.2849	0.1807	0.1076	0.2754
x		93.6%	0.1312	89.7%	0.0603	-0.0476	0.0049	-11.2700	0.0847	0.0949	0.0040	-0.0076	0.0180	0.3118	0.0000	0.0911	0.2941	0.1776	0.1115	0.2704
σ		0.4%	0.0254	0.9%	0.0134	0.0482	0.0168	8.4490	0.0046	0.0179	0.0066	0.0784	0.0220	0.4081	0.0000	0.0080	0.0080	0.0058	0.0095	0.0122
%RSD		0.4	19.3900	1.0	22.1400	101.2000	340.9000	74.9900	5.4270	18.8300	163.2000	1029.0000	121.8000	130.9000	0.0000	8.8060	2.7080	3.2530	8.4910	4.5000

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:11:10	97.8%	-0.0158	0.0103	0.0000	0.0831	0.0000	0.0781	0.1175	0.1068	104.9%	106.3%	0.1290	0.0000
2	20:11:24	97.7%	-0.0193	0.0124	0.0014	0.0895	0.0000	0.0983	0.1235	0.0954	106.5%	108.0%	0.1276	0.0000
3	20:11:37	97.7%	-0.0112	0.0187	0.0014	0.1068	0.0000	0.0974	0.1061	0.0754	108.6%	110.0%	0.1156	0.0000
x		97.8%	-0.0154	0.0138	0.0009	0.0931	0.0000	0.0912	0.1157	0.0925	106.6%	108.1%	0.1241	0.0000
σ		0.1%	0.0041	0.0044	0.0008	0.0123	0.0000	0.0114	0.0088	0.0159	1.9%	1.9%	0.0074	0.0000
%RSD		0.1	26.3500	31.7100	86.6100	13.1700	0.0000	12.5100	7.6130	17.2000	1.8	1.7	5.9660	0.0000

SEQ-CCV@CCV05 10/18/2016 21:08:00 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:08:14	88.4%	510.7000	83.0%	296.2000	456.2000	472.1000	2286.0000	r501.7000	499.7000	18.7000	454.6000	25.0200	7.1450	0.0000	397.9000	1253.0000	769.5000	427.1000	r1088.0000
2	21:08:27	89.8%	504.9000	84.5%	293.4000	459.0000	471.9000	2441.0000	r491.5000	494.2000	17.4000	463.3000	25.1200	6.7310	0.0000	395.5000	1245.0000	r736.8000	422.5000	r1073.0000
3	21:08:40	89.2%	499.0000	85.0%	293.6000	452.6000	465.2000	2257.0000	r492.9000	493.9000	18.5400	453.8000	25.5600	5.9020	0.0000	399.7000	1257.0000	r737.8000	424.8000	r1078.0000
x		89.1%	100.970%	84.2%	294.4000	91.189%	93.943%	2328.0000	r99.077%	99.186%	18.2100	91.445%	25.2300	6.5920	0.0000	397.7000	1252.0000	r748.0000	424.8000	r1080.0000
σ		0.7%	n/a	1.1%	1.5480	n/a	n/a	99.0800	rn/a	n/a	0.7054	n/a	0.2904	0.6329	0.0000	2.0730	6.1330	r18.6300	2.2980	r7.7310
%RSD		0.7	1.1620	1.3	0.5259	0.7014	0.8402	4.2570	r1.1120	0.6604	3.8730	1.1610	1.1510	9.6010	0.0000	0.5212	0.4900	r2.4910	0.5411	r0.7160

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:08:14	91.1%	23.7200	64.6700	17.4300	506.0000	0.0000	r458.9000	522.6000	503.3000	106.6%	108.7%	r500.6000	0.0000
2	21:08:27	91.6%	23.7400	63.7200	17.3100	506.2000	0.0000	480.7000	523.1000	499.7000	110.6%	111.2%	r500.6000	0.0000
3	21:08:40	92.6%	23.7100	64.4300	17.7500	503.1000	0.0000	480.5000	523.1000	501.8000	110.8%	112.1%	r497.1000	0.0000
x		91.8%	23.7200	98.880%	17.5000	101.019%	0.0000	r473.4000	104.587%	100.314%	109.3%	110.7%	r99.892%	0.0000
σ		0.7%	0.0156	n/a	0.2317	n/a	0.0000	r12.5500	n/a	n/a	2.4%	1.7%	rn/a	0.0000
%RSD		0.8	0.0658	0.7685	1.3240	0.3415	0.0000	r2.6520	0.0582	0.3608	2.2	1.6	r0.4042	0.0000

SEQ-CCB@CCB05 10/18/2016 21:12:22 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:12:36	87.1%	0.1119	77.6%	0.0540	-0.0031	-0.0228	-23.9500	0.0823	0.1713	0.0135	-0.1463	0.0107	0.1464	0.0000	0.1460	0.4589	0.2005	0.1495	0.3607
2	21:12:49	87.0%	0.1480	78.7%	0.0375	-0.0912	-0.0138	-14.6900	0.0754	0.1004	0.0138	-0.0150	-0.0245	0.1593	0.0000	0.1205	0.4044	0.2141	0.1300	0.3523
3	21:13:02	87.0%	0.0906	78.9%	0.0418	-0.0428	-0.0081	-16.6700	0.0820	0.1071	0.0011	-0.1781	0.0334	-0.2343	0.0000	0.1369	0.3788	0.2183	0.1538	0.3430
x		87.1%	0.1168	78.4%	0.0444	-0.0457	-0.0149	-18.4400	0.0799	0.1263	0.0095	-0.1131	0.0065	0.0238	0.0000	0.1345	0.4140	0.2110	0.1445	0.3520
σ		0.0%	0.0290	0.7%	0.0086	0.0441	0.0074	4.8760	0.0039	0.0391	0.0072	0.0865	0.0291	0.2236	0.0000	0.0129	0.0409	0.0093	0.0127	0.0089
%RSD		0.0	24.8200	0.9	19.2500	96.5200	49.7600	26.4500	4.9360	30.9800	76.1200	76.4300	445.9000	939.4000	0.0000	9.6190	9.8780	4.4170	8.7810	2.5160

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:12:36	90.6%	-0.0179	0.0089	0.0031	0.0765	0.0000	0.0858	0.1048	0.0665	100.7%	102.3%	0.1041	0.0000
2	21:12:49	89.4%	-0.0091	0.0120	0.0061	0.0638	0.0000	0.0951	0.0980	0.0528	102.1%	104.1%	0.0935	0.0000
3	21:13:02	90.5%	-0.0016	0.0099	0.0015	0.0606	0.0000	0.1078	0.0786	0.0473	103.0%	104.8%	0.1107	0.0000
x		90.2%	-0.0095	0.0103	0.0036	0.0670	0.0000	0.0962	0.0938	0.0555	101.9%	103.7%	0.1028	0.0000
σ		0.7%	0.0082	0.0016	0.0023	0.0084	0.0000	0.0111	0.0136	0.0099	1.2%	1.3%	0.0086	0.0000
%RSD		0.8	85.7700	15.1500	65.2000	12.5300	0.0000	11.5100	14.5100	17.7700	1.1	1.2	8.4030	0.0000

SEQ-CCV@CCV06 10/18/2016 22:50:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:50:31	93.9%	478.8000	93.1%	294.8000	460.1000	473.9000	2507.0000	r503.8000	497.9000	18.3200	468.9000	24.9100	7.4640	0.0000	407.8000	r1242.0000	r757.7000	431.7000	r1106.0000
2	22:50:44	94.7%	483.7000	93.3%	295.3000	463.8000	475.0000	2356.0000	r500.2000	498.5000	18.4900	466.5000	27.1600	6.1850	0.0000	407.2000	r1242.0000	r754.2000	433.1000	r1097.0000
3	22:50:57	93.3%	488.0000	92.5%	297.6000	462.9000	476.9000	2554.0000	r501.0000	502.6000	18.0800	468.0000	25.1900	4.4230	0.0000	410.3000	r1243.0000	r759.6000	437.7000	r1108.0000
x		94.0%	96.705%	93.0%	295.9000	92.455%	95.054%	2472.0000	r100.330%	99.930%	18.2900	93.560%	25.7500	6.0240	0.0000	408.5000	r1243.0000	r757.2000	434.1000	r1103.0000
σ		0.7%	n/a	0.4%	1.4780	n/a	n/a	103.5000	rn/a	n/a	0.2092	n/a	1.2280	1.5270	0.0000	1.6190	r0.7311	r2.7550	3.1220	r5.7920
%RSD		0.8	0.9561	0.5	0.4995	0.4162	0.3122	4.1850	r0.3732	0.5118	1.1440	0.2593	4.7700	25.3500	0.0000	0.3965	r0.0588	r0.3639	0.7192	r0.5250

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:50:31	96.0%	23.8900	64.8200	17.6300	504.4000	0.0000	482.3000	530.1000	506.9000	114.5%	116.2%	r495.0000	0.0000
2	22:50:44	96.3%	23.7200	64.5600	17.5800	504.6000	0.0000	488.3000	528.9000	507.9000	116.5%	118.0%	r492.9000	0.0000
3	22:50:57	95.7%	24.2600	64.9100	17.9200	512.2000	0.0000	493.2000	541.6000	509.9000	118.1%	119.0%	r497.3000	0.0000
x		96.0%	23.9600	99.638%	17.7100	101.413%	0.0000	487.9000	106.705%	101.649%	116.4%	117.7%	r99.011%	0.0000
σ		0.3%	0.2754	n/a	0.1838	n/a	0.0000	5.4770	n/a	n/a	1.8%	1.4%	rn/a	0.0000
%RSD		0.3	1.1500	0.2821	1.0380	0.8770	0.0000	1.1230	1.3140	0.2981	1.6	1.2	r0.4407	0.0000

SEQ-CCB@CCB06 10/18/2016 22:54:41 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:54:54	90.3%	0.1033	82.5%	0.0593	0.0183	-0.0230	-27.8400	0.0728	0.1031	0.0006	-0.0292	-0.0335	0.2887	0.0000	0.1403	0.4391	0.2320	0.1564	0.3744
2	22:55:07	91.5%	0.1445	84.5%	0.0490	0.0014	-0.0186	-28.2500	0.0920	0.0724	-0.0112	0.0349	-0.0117	0.1149	0.0000	0.1666	0.4521	0.2861	0.1527	0.3745
3	22:55:20	89.9%	0.1071	85.6%	0.0679	0.0157	-0.0182	-26.4800	0.0848	0.1204	0.0005	-0.0620	-0.0006	-0.0837	0.0000	0.1434	0.4026	0.2406	0.1324	0.3491
x		90.6%	0.1183	84.2%	0.0587	0.0118	-0.0199	-27.5200	0.0832	0.0987	-0.0034	-0.0188	-0.0153	0.1066	0.0000	0.1501	0.4313	0.2529	0.1472	0.3660
σ		0.8%	0.0228	1.6%	0.0095	0.0091	0.0027	0.9288	0.0097	0.0243	0.0068	0.0493	0.0167	0.1864	0.0000	0.0144	0.0257	0.0291	0.0129	0.0146
%RSD		0.9	19.2700	1.9	16.1100	77.3000	13.4600	3.3740	11.6200	24.6700	202.2000	262.4000	109.8000	174.7000	0.0000	9.5820	5.9530	11.4900	8.7610	4.0010

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:54:54	94.6%	0.0081	0.0150	0.0015	0.0607	0.0000	0.2313	0.1173	0.0573	106.6%	108.5%	0.1015	0.0000
2	22:55:07	93.7%	-0.0122	0.0080	0.0029	0.0758	0.0000	0.2118	0.1025	0.0582	107.4%	109.4%	0.1109	0.0000
3	22:55:20	95.5%	-0.0057	0.0138	0.0014	0.0799	0.0000	0.2549	0.1007	0.0718	109.4%	110.8%	0.1074	0.0000
x		94.6%	-0.0033	0.0123	0.0019	0.0721	0.0000	0.2327	0.1069	0.0624	107.8%	109.6%	0.1066	0.0000
σ		0.9%	0.0104	0.0037	0.0008	0.0101	0.0000	0.0216	0.0091	0.0081	1.4%	1.1%	0.0047	0.0000
%RSD		1.0	317.3000	30.3800	43.3000	14.0400	0.0000	9.2880	8.5020	13.0500	1.3	1.0	4.4310	0.0000

SEQ-CCV@CCV07 10/18/2016 23:59:56 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:00:09	88.5%	464.6000	86.9%	298.8000	474.6000	487.0000	2320.0000	r508.9000	504.2000	18.2200	470.8000	27.3700	5.3960	0.0000	405.1000	1274.0000	r766.6000	434.3000	r1120.0000
2	00:00:22	89.1%	468.7000	88.9%	297.0000	468.9000	485.3000	2720.0000	r505.5000	500.9000	19.4600	481.7000	26.0700	4.6110	0.0000	407.4000	1287.0000	r765.4000	436.0000	r1117.0000
3	00:00:36	88.8%	455.3000	89.6%	297.2000	462.2000	473.1000	2382.0000	r503.9000	504.4000	18.0600	464.4000	26.1600	6.2140	0.0000	409.4000	r1256.0000	r766.0000	434.5000	r1120.0000
x		88.8%	92.571%	88.5%	297.7000	93.717%	96.363%	2474.0000	r101.223%	100.641%	18.5800	94.457%	26.5300	5.4070	0.0000	407.3000	r1273.0000	r766.0000	434.9000	r1119.0000
σ		0.3%	n/a	1.4%	0.9701	n/a	n/a	214.9000	rn/a	n/a	0.7660	n/a	0.7293	0.8017	0.0000	2.1880	r15.5500	r0.6195	0.9406	r1.9380
%RSD		0.3	1.4870	1.6	0.3259	1.3310	1.5690	8.6870	r0.5005	0.3902	4.1230	1.8490	2.7490	14.8300	0.0000	0.5372	r1.2220	r0.0809	0.2163	r0.1732

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:00:09	94.6%	24.4000	65.4400	17.8900	507.0000	0.0000	484.3000	533.7000	508.9000	108.0%	109.4%	r502.4000	0.0000
2	00:00:22	95.6%	24.0700	64.8900	17.9900	508.5000	0.0000	489.8000	543.5000	511.0000	111.0%	111.9%	r503.6000	0.0000
3	00:00:36	98.3%	24.2800	65.1600	18.2700	513.2000	0.0000	492.8000	535.5000	514.7000	112.1%	115.2%	r494.1000	0.0000
x		96.2%	24.2500	100.251%	18.0500	101.920%	0.0000	489.0000	107.515%	102.310%	110.4%	112.1%	r100.006%	0.0000
σ		1.9%	0.1671	n/a	0.1977	n/a	0.0000	4.3440	n/a	n/a	2.1%	2.9%	rn/a	0.0000
%RSD		2.0	0.6892	0.4170	1.0950	0.6339	0.0000	0.8884	0.9728	0.5724	1.9	2.6	r1.0370	0.0000

SEQ-CCB@CCB07 10/19/2016 00:04:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:04:31	87.3%	0.1016	83.5%	0.0623	-0.0708	-0.0514	-17.4800	0.0667	0.1277	0.0007	-0.0888	0.0551	-0.0699	0.0000	0.1351	0.3825	0.2339	0.1320	0.3610
2	00:04:45	86.8%	0.1283	83.7%	0.0375	-0.0445	-0.0324	-25.7400	0.0520	0.1037	0.0007	-0.0286	0.0111	0.4746	0.0000	0.1216	0.4007	0.2411	0.1365	0.3291
3	00:04:58	88.0%	0.1008	84.1%	0.0535	-0.0192	-0.0385	-25.3000	0.0463	0.1176	0.0007	0.1865	0.0547	-0.2569	0.0000	0.1284	0.3849	0.2320	0.1179	0.3024
x		87.4%	0.1102	83.8%	0.0511	-0.0448	-0.0408	-22.8400	0.0550	0.1163	0.0007	0.0230	0.0403	0.0493	0.0000	0.1284	0.3894	0.2357	0.1288	0.3308
σ		0.6%	0.0156	0.3%	0.0126	0.0258	0.0097	4.6430	0.0105	0.0120	0.0000	0.1447	0.0253	0.3800	0.0000	0.0068	0.0099	0.0048	0.0097	0.0293
%RSD		0.7	14.1800	0.3	24.5700	57.5800	23.7200	20.3300	19.1600	10.3500	5.8120	628.7000	62.7700	771.5000	0.0000	5.2740	2.5470	2.0390	7.5440	8.8700

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:04:31	93.7%	-0.0083	0.0082	0.0044	0.0609	0.0000	0.2572	0.0775	0.0609	104.6%	106.2%	0.0939	0.0000
2	00:04:45	94.3%	0.0050	0.0076	0.0029	0.0662	0.0000	0.2350	0.0706	0.0628	105.0%	107.4%	0.0910	0.0000
3	00:04:58	94.3%	-0.0223	0.0063	0.0043	0.0437	0.0000	0.2169	0.0803	0.0747	106.8%	109.5%	0.0858	0.0000
x		94.1%	-0.0085	0.0074	0.0039	0.0569	0.0000	0.2364	0.0761	0.0661	105.5%	107.7%	0.0902	0.0000
σ		0.3%	0.0137	0.0010	0.0008	0.0118	0.0000	0.0202	0.0050	0.0075	1.2%	1.6%	0.0041	0.0000
%RSD		0.3	160.7000	13.7200	21.4800	20.7200	0.0000	8.5580	6.5380	11.3600	1.1	1.5	4.5410	0.0000

SEQ-CCV@CCV08 10/19/2016 00:45:04 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:17	91.5%	476.0000	88.6%	298.5000	458.4000	468.6000	2320.0000	r508.8000	502.4000	17.8600	456.7000	25.3800	4.9390	0.0000	407.7000	1286.0000	r772.1000	434.8000	r1126.0000
2	00:45:30	91.4%	466.2000	89.2%	299.1000	470.2000	481.9000	2597.0000	r508.4000	500.2000	18.3500	474.6000	26.9900	5.4650	0.0000	408.8000	r1263.0000	r767.3000	436.6000	r1123.0000
3	00:45:43	91.2%	468.2000	88.4%	303.3000	462.7000	473.0000	2605.0000	r510.8000	508.7000	18.8800	468.6000	26.6400	5.0030	0.0000	412.5000	r1271.0000	r774.1000	443.3000	r1126.0000
x		91.4%	94.028%	88.7%	300.3000	92.750%	94.902%	2508.0000	r101.860%	100.753%	18.3600	93.321%	26.3400	5.1360	0.0000	409.7000	r1272.0000	r771.2000	438.2000	r1125.0000
σ		0.2%	n/a	0.4%	2.6250	n/a	n/a	162.3000	r/n/a	n/a	0.5114	n/a	0.8467	0.2867	0.0000	2.5280	r11.3800	r3.4650	4.4560	r1.7640
%RSD		0.2	1.1070	0.4	0.8740	1.2900	1.4330	6.4730	r0.2499	0.8763	2.7850	1.9550	3.2150	5.5820	0.0000	0.6170	r0.8939	r0.4493	1.0170	r0.1569

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:17	96.1%	23.7700	65.5700	17.9400	510.2000	0.0000	486.6000	536.7000	513.4000	107.7%	110.5%	r497.5000	0.0000
2	00:45:30	93.6%	24.2600	65.6900	18.1100	513.4000	0.0000	489.1000	536.0000	514.1000	110.8%	112.7%	r496.9000	0.0000
3	00:45:43	95.0%	24.3100	65.8900	17.8000	511.5000	0.0000	496.0000	538.3000	515.6000	112.8%	113.9%	r497.0000	0.0000
x		94.9%	24.1100	101.103%	17.9500	102.341%	0.0000	490.6000	107.402%	102.873%	110.4%	112.4%	r99.429%	0.0000
σ		1.3%	0.2984	n/a	0.1541	n/a	0.0000	4.9140	n/a	n/a	2.6%	1.8%	r/n/a	0.0000
%RSD		1.4	1.2370	0.2462	0.8586	0.3081	0.0000	1.0020	0.2204	0.2162	2.3	1.6	r0.0674	0.0000

SEQ-CCB@CCB08 10/19/2016 00:49:26 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:49:39	85.2%	0.0635	77.6%	0.0363	-0.0646	-0.0451	-24.5800	0.0457	0.1811	0.0012	-0.0815	0.0335	-0.2319	0.0000	0.1390	0.3919	0.2278	0.1108	0.2982
2	00:49:52	85.2%	0.0911	78.5%	0.0377	-0.0318	-0.0424	-22.5800	0.0515	0.1051	0.0264	-0.0464	0.0340	-0.0305	0.0000	0.1051	0.3451	0.2265	0.1286	0.3390
3	00:50:05	85.5%	0.0998	79.0%	0.0243	0.0277	-0.0467	-30.9200	0.0437	0.1349	0.0011	0.0135	0.0686	0.1464	0.0000	0.1060	0.3561	0.2199	0.1302	0.2750
x		85.3%	0.0848	78.4%	0.0328	-0.0229	-0.0447	-26.0300	0.0470	0.1403	0.0096	-0.0381	0.0454	-0.0387	0.0000	0.1167	0.3643	0.2247	0.1232	0.3041
σ		0.2%	0.0190	0.7%	0.0074	0.0468	0.0022	4.3530	0.0041	0.0383	0.0146	0.0480	0.0201	0.1893	0.0000	0.0193	0.0245	0.0042	0.0108	0.0324
%RSD		0.2	22.3600	0.9	22.5600	204.2000	4.8340	16.7200	8.6440	27.2700	152.1000	126.0000	44.2900	489.6000	0.0000	16.5600	6.7130	1.8850	8.7550	10.6600

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:49:39	90.2%	0.0056	0.0082	0.0015	0.0587	0.0000	0.1794	0.0590	0.0439	101.7%	104.3%	0.0871	0.0000
2	00:49:52	89.0%	-0.0026	0.0107	0.0000	0.0469	0.0000	0.2074	0.0640	0.0391	101.4%	105.4%	0.0751	0.0000
3	00:50:05	90.6%	-0.0266	0.0016	0.0015	0.0348	0.0000	0.2130	0.0536	0.0471	103.2%	105.6%	0.0684	0.0000
x		89.9%	-0.0078	0.0068	0.0010	0.0468	0.0000	0.1999	0.0589	0.0434	102.1%	105.1%	0.0769	0.0000
σ		0.8%	0.0167	0.0047	0.0009	0.0119	0.0000	0.0180	0.0052	0.0040	1.0%	0.7%	0.0095	0.0000
%RSD		0.9	213.1000	69.0600	86.6100	25.5100	0.0000	9.0120	8.7930	9.3310	0.9	0.7	12.3100	0.0000

Q314032-BLK1@PBS01@MH1H50@46282 10/19/2016 00:53:44 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:44	85.7%	0.0364	75.5%	0.0223	-0.0966	-0.1694	-41.1600	0.0156	0.2988	0.0012	-0.0182	0.0450	-0.2340	0.0000	0.0286	0.0511	0.0459	0.0199	0.0688
2	00:53:56	85.8%	0.0352	76.8%	0.0549	-0.0581	-0.1581	-50.2500	0.0111	0.2434	0.0134	-0.0192	-0.0576	0.9037	0.0000	0.0344	0.0820	0.0543	0.0277	0.0632
3	00:54:10	85.8%	0.0148	78.2%	0.0052	-0.0558	-0.1713	-50.4900	0.0132	0.3722	-0.0112	0.0523	-0.0011	0.1668	0.0000	0.0166	0.0676	0.0418	0.0365	0.0724
x		85.8%	0.0288	76.8%	0.0275	-0.0702	-0.1663	-47.3000	0.0133	0.3048	0.0011	0.0050	-0.0046	0.2788	0.0000	0.0265	0.0669	0.0473	0.0280	0.0682
σ		0.1%	0.0121	1.3%	0.0253	0.0229	0.0071	5.3190	0.0022	0.0646	0.0123	0.0410	0.0514	0.5771	0.0000	0.0091	0.0155	0.0063	0.0083	0.0047
%RSD		0.1	42.0700	1.7	91.9500	32.6400	4.2880	11.2500	16.8200	21.2000	1094.0000	822.4000	1122.0000	207.0000	0.0000	34.1700	23.1200	13.4000	29.7400	6.8490

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:44	90.5%	-0.0034	-0.0009	0.0016	0.0133	0.0000	0.0142	0.0012	-0.0219	97.0%	99.3%	0.0247	0.0000
2	00:53:56	90.8%	-0.0047	-0.0009	0.0031	0.0010	0.0000	0.0301	0.0159	-0.0350	99.9%	101.9%	0.0222	0.0000
3	00:54:10	88.7%	-0.0150	0.0023	0.0000	0.0096	0.0000	0.0155	0.0156	-0.0185	101.3%	103.0%	0.0239	0.0000
x		90.0%	-0.0077	0.0002	0.0016	0.0079	0.0000	0.0199	0.0109	-0.0251	99.4%	101.4%	0.0236	0.0000
σ		1.2%	0.0064	0.0018	0.0016	0.0063	0.0000	0.0088	0.0084	0.0087	2.2%	1.9%	0.0013	0.0000
%RSD		1.3	82.8700	1094.0000	99.2400	79.2400	0.0000	44.3100	77.1400	34.7100	2.2	1.9	5.3830	0.0000

Q314032-BS1@LCS01 10/19/2016 00:57:46 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:46	85.9%	2.1490	77.4%	0.0321	9.8210	3.9060	-13.1400	2.0390	1.8510	0.4473	9.4980	0.6053	0.9188	0.0000	2.6920	8.0860	4.9190	2.8020	6.9110
2	00:57:59	87.0%	1.8330	78.9%	0.0157	9.8680	3.8250	-9.9230	2.0240	2.0100	0.4519	9.4610	0.7426	-0.4292	0.0000	2.6600	7.9070	4.8890	2.6850	7.1420
3	00:58:12	88.4%	2.1910	80.4%	-0.0001	9.7420	3.8270	16.2500	2.1210	2.0740	0.4341	9.9910	0.6148	0.1502	0.0000	2.6280	8.1550	4.9820	2.8270	7.2130
x		87.1%	102.868%	78.9%	0.0159	98.104%	96.311%	-2.2720	103.067%	98.919%	0.4444	96.499%	0.6542	0.2133	0.0000	2.6600	8.0490	4.9300	2.7710	7.0890
σ		1.3%	n/a	1.5%	0.0161	n/a	n/a	16.1200	n/a	n/a	0.0093	n/a	0.0766	0.6762	0.0000	0.0316	0.1282	0.0474	0.0758	0.1576
%RSD		1.4	9.5180	1.9	101.3000	0.6476	1.1970	709.3000	2.5530	5.7960	2.0820	3.0710	11.7100	317.1000	0.0000	1.1860	1.5920	0.9619	2.7360	2.2230

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:46	90.0%	0.0838	2.0470	0.0713	1.9880	0.0000	0.0097	3.9800	20.2400	96.3%	98.7%	1.9540	0.0000
2	00:57:59	91.6%	0.0741	2.0470	0.0835	2.0280	0.0000	0.0070	4.0870	20.4500	99.2%	100.7%	2.0230	0.0000
3	00:58:12	90.2%	0.0853	2.0270	0.0621	1.9960	0.0000	0.0156	4.2780	20.5900	101.6%	103.2%	2.0660	0.0000
x		90.6%	0.0810	102.016%	0.0723	100.204%	0.0000	0.0108	102.879%	102.138%	99.0%	100.9%	100.730%	0.0000
σ		0.8%	0.0061	n/a	0.0107	n/a	0.0000	0.0044	n/a	n/a	2.6%	2.2%	n/a	0.0000
%RSD		0.9	7.4990	0.5859	14.8700	1.0530	0.0000	40.5900	3.6660	0.8722	2.6	2.2	2.8130	0.0000

6100167-01@MH1H50 10/19/2016 01:01:49

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:01:49	88.4%	0.0668	82.6%	2.8450	11.0000	2.5820	-18.7900	0.7952	0.6257	0.0739	2.2780	0.1020	0.1333	0.0000	0.7194	2.0050	1.3350	0.7202	1.8630
2	01:02:02	87.4%	0.0905	85.0%	3.0820	10.9600	2.5100	-16.2500	0.7807	0.5060	0.0486	2.3610	0.1564	-0.0669	0.0000	0.7647	2.1210	1.3040	0.7416	1.8830
3	01:02:15	89.6%	0.1479	87.1%	3.0560	10.7100	2.5130	-26.6100	0.8249	0.5223	0.1659	2.4810	0.0765	-0.4410	0.0000	0.7797	2.0060	1.3640	0.7257	1.8470
x		88.5%	0.1017	84.9%	2.9940	10.8900	2.5350	-20.5500	0.8003	0.5513	0.0961	2.3730	0.1116	-0.1249	0.0000	0.7546	2.0440	1.3350	0.7292	1.8640
σ		1.1%	0.0417	2.3%	0.1297	0.1576	0.0406	5.4010	0.0225	0.0649	0.0617	0.1021	0.0408	0.2915	0.0000	0.0314	0.0670	0.0301	0.0111	0.0185
%RSD		1.2	40.9800	2.7	4.3320	1.4470	1.6020	26.2800	2.8150	11.7700	64.2300	4.3010	36.5500	233.4000	0.0000	4.1660	3.2760	2.2550	1.5270	0.9898

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:01:49	91.8%	-0.0019	0.9381	0.0091	0.1166	0.0000	0.3603	3.0320	75.3700	98.9%	100.7%	0.4310	0.0000
2	01:02:02	93.4%	-0.0006	0.9727	0.0103	0.0989	0.0000	0.3423	3.0060	77.1200	102.1%	102.4%	0.4237	0.0000
3	01:02:15	94.5%	-0.0105	0.9019	0.0087	0.1055	0.0000	0.3685	3.0970	77.9700	103.0%	105.0%	0.4212	0.0000
x		93.2%	-0.0043	0.9376	0.0093	0.1070	0.0000	0.3570	3.0450	76.8200	101.4%	102.7%	0.4253	0.0000
σ		1.3%	0.0054	0.0354	0.0008	0.0089	0.0000	0.0134	0.0470	1.3260	2.1%	2.1%	0.0051	0.0000
%RSD		1.4	124.6000	3.7790	8.9510	8.3600	0.0000	3.7590	1.5450	1.7260	2.1	2.1	1.1950	0.0000

6100167-02@MH1H51 10/19/2016 01:05:50

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:50	91.8%	0.5827	90.2%	3.5180	12.4900	2.3260	-23.2400	10.4200	4.4400	0.1479	1.8480	0.1182	0.7753	0.0000	0.4896	1.2660	0.8181	0.4114	1.1070
2	01:06:03	93.2%	0.7102	92.9%	3.4690	12.8100	2.3150	-18.6400	10.5400	4.5530	0.1601	2.4800	0.1715	0.0766	0.0000	0.5565	1.2940	0.9008	0.4639	1.0850
3	01:06:16	93.5%	0.4751	94.5%	3.7020	12.7500	2.2850	-13.3400	10.5900	4.3970	0.3506	2.1310	0.0758	1.2920	0.0000	0.5252	1.2430	0.7824	0.4548	1.1810
x		92.8%	0.5893	92.5%	3.5630	12.6800	2.3090	-18.4000	10.5100	4.4640	0.2195	2.1530	0.1218	0.7147	0.0000	0.5238	1.2680	0.8338	0.4434	1.1240
σ		0.9%	0.1177	2.2%	0.1231	0.1668	0.0215	4.9520	0.0863	0.0805	0.1137	0.3165	0.0479	0.6101	0.0000	0.0335	0.0258	0.0607	0.0281	0.0504
%RSD		1.0	19.9700	2.4	3.4540	1.3160	0.9296	26.9100	0.8213	1.8040	51.8000	14.7000	39.3400	85.3600	0.0000	6.3900	2.0320	7.2850	6.3300	4.4810

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:05:50	98.2%	0.1734	1.9280	0.0533	1.9910	0.0000	0.4542	2.8760	85.8300	105.6%	106.3%	0.3118	0.0000
2	01:06:03	97.7%	0.1455	1.9940	0.0932	1.9690	0.0000	0.4622	3.0510	87.3500	107.4%	109.5%	0.2953	0.0000
3	01:06:16	98.7%	0.1291	1.9640	0.0693	1.9970	0.0000	0.4632	3.0280	87.9500	111.5%	111.4%	0.3098	0.0000
x		98.2%	0.1493	1.9620	0.0719	1.9860	0.0000	0.4598	2.9850	87.0400	108.1%	109.0%	0.3056	0.0000
σ		0.5%	0.0224	0.0328	0.0201	0.0149	0.0000	0.0049	0.0950	1.0930	3.0%	2.6%	0.0090	0.0000
%RSD		0.5	15.0100	1.6740	27.9000	0.7516	0.0000	1.0750	3.1830	1.2560	2.8	2.4	2.9480	0.0000

SEQ-IBL1@ZZZZZZ 10/19/2016 01:09:52

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:09:52	94.6%	0.3188	96.0%	2.5860	19.5900	2.6190	-7.4930	6.0040	2.8480	0.1530	3.3870	0.2367	0.0400	0.0000	0.7235	1.9100	1.2740	0.6434	1.6370
2	01:10:05	95.6%	0.1945	98.9%	2.4080	20.1300	2.7980	0.8408	6.0730	2.8950	0.2026	3.2280	0.1594	0.7598	0.0000	0.7066	2.0030	1.2750	0.6888	1.7450
3	01:10:18	95.0%	0.1630	99.5%	2.5400	20.0300	2.7350	-17.9600	6.1830	3.0550	0.1437	3.6290	0.1979	0.2205	0.0000	0.8104	2.0180	1.3380	0.6726	1.7790
x		95.1%	0.2255	98.1%	2.5120	19.9200	2.7170	-8.2060	6.0870	2.9330	0.1664	3.4150	0.1980	0.3401	0.0000	0.7468	1.9770	1.2960	0.6683	1.7210
σ		0.5%	0.0824	1.9%	0.0934	0.2891	0.0906	9.4230	0.0905	0.1088	0.0316	0.2020	0.0387	0.3745	0.0000	0.0557	0.0583	0.0368	0.0230	0.0741
%RSD		0.5	36.5400	1.9	3.7170	1.4520	3.3320	114.8000	1.4870	3.7100	19.0200	5.9160	19.5300	110.1000	0.0000	7.4620	2.9500	2.8380	3.4420	4.3050

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:09:52	102.0%	0.3282	3.2400	0.2091	5.4940	0.0000	0.6348	3.3810	82.2200	106.1%	106.9%	0.3371	0.0000
2	01:10:05	99.2%	0.3005	3.3130	0.2089	5.5050	0.0000	0.6855	3.6800	84.0800	108.6%	109.3%	0.3348	0.0000
3	01:10:18	100.8%	0.2489	3.3600	0.2348	5.3750	0.0000	0.6911	3.6220	84.2600	110.9%	110.1%	0.3653	0.0000
x		100.7%	0.2925	3.3040	0.2176	5.4580	0.0000	0.6704	3.5610	83.5200	108.5%	108.8%	0.3457	0.0000
σ		1.4%	0.0403	0.0602	0.0149	0.0720	0.0000	0.0310	0.1584	1.1310	2.4%	1.7%	0.0170	0.0000
%RSD		1.4	13.7600	1.8200	6.8330	1.3200	0.0000	4.6240	4.4490	1.3540	2.2	1.5	4.9030	0.0000

SEQ-IBL2@ZZZZZZ 10/19/2016 01:13:51

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:51	94.6%	7.2680	98.5%	2.4790	90.5400	31.7900	188.2000	77.5200	72.9100	0.8281	14.5900	0.8610	-0.1230	0.0000	46.8600	143.2000	87.2200	49.6200	128.1000
2	01:14:05	95.5%	6.6620	100.3%	2.4480	91.8900	32.6900	152.4000	78.7100	73.1200	0.6471	15.7900	0.9958	0.0567	0.0000	47.1000	143.4000	87.9400	49.5200	127.6000
3	01:14:18	95.3%	6.8240	101.8%	2.5770	91.0700	32.4400	188.1000	79.3700	74.4600	0.5645	15.7800	0.8016	0.5637	0.0000	47.6700	146.4000	89.8500	50.7200	131.2000
x		95.1%	6.9180	100.2%	2.5020	91.1600	32.3100	176.2000	78.5300	73.5000	0.6799	15.3900	0.8862	0.1658	0.0000	47.2100	144.3000	88.3300	49.9500	129.0000
σ		0.5%	0.3138	1.7%	0.0671	0.6828	0.4661	20.6200	0.9413	0.8410	0.1348	0.6877	0.0995	0.3561	0.0000	0.4150	1.8080	1.3580	0.6636	1.9570
%RSD		0.5	4.5360	1.7	2.6820	0.7489	1.4430	11.7000	1.1990	1.1440	19.8300	4.4700	11.2300	214.8000	0.0000	0.8790	1.2530	1.5370	1.3280	1.5170

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:51	101.0%	0.6254	9.8770	0.4602	12.3200	0.0000	0.6150	14.4800	376.4000	106.0%	108.0%	7.7990	0.0000
2	01:14:05	100.0%	0.5999	9.7490	0.5276	12.4900	0.0000	0.5919	14.6000	372.3000	111.4%	111.1%	7.8960	0.0000
3	01:14:18	100.8%	0.6218	9.9890	0.5300	12.6600	0.0000	0.6263	14.7000	380.4000	112.5%	112.8%	8.0490	0.0000
x		100.6%	0.6157	9.8720	0.5059	12.4900	0.0000	0.6111	14.5900	376.4000	110.0%	110.7%	7.9150	0.0000
σ		0.5%	0.0138	0.1200	0.0396	0.1671	0.0000	0.0176	0.1146	4.0660	3.5%	2.4%	0.1261	0.0000
%RSD		0.5	2.2450	1.2160	7.8280	1.3370	0.0000	2.8730	0.7852	1.0800	3.2	2.2	1.5930	0.0000

SEQ-IBL3@ZZZZZZ 10/19/2016 01:17:53

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:53	95.2%	0.2973	100.0%	2.9230	23.7900	3.3520	-13.7800	7.0740	3.2060	0.1447	3.4810	0.2003	1.2600	0.0000	1.0010	2.1810	1.4600	0.7800	1.9290
2	01:18:06	95.7%	0.2860	103.5%	2.9750	23.1400	3.2460	13.1300	7.2120	3.1020	0.2052	3.0650	0.2748	0.0304	0.0000	0.8968	2.2870	1.4620	0.7884	1.9720
3	01:18:19	96.5%	0.2612	104.6%	3.2460	23.4800	3.2710	-21.8600	7.2820	3.0820	0.2918	3.2900	0.2035	-0.1368	0.0000	1.1390	2.2620	1.5800	0.7226	2.0800
x		95.8%	0.2815	102.7%	3.0480	23.4700	3.2900	-7.5050	7.1900	3.1300	0.2139	3.2790	0.2262	0.3846	0.0000	1.0120	2.2430	1.5010	0.7636	1.9940
σ		0.6%	0.0185	2.4%	0.1734	0.3275	0.0554	18.3200	0.1059	0.0670	0.0739	0.2080	0.0421	0.7630	0.0000	0.1214	0.0557	0.0684	0.0358	0.0777
%RSD		0.7	6.5570	2.3	5.6890	1.3960	1.6830	244.1000	1.4720	2.1410	34.5600	6.3450	18.6100	198.4000	0.0000	11.9900	2.4810	4.5550	4.6900	3.8960

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:53	100.2%	0.3082	2.9350	0.2273	5.5710	0.0000	0.6478	3.9590	84.6800	107.7%	107.1%	0.4856	0.0000
2	01:18:06	103.1%	0.2569	3.1120	0.1761	5.7480	0.0000	0.6588	3.9760	86.3000	108.6%	110.5%	0.4663	0.0000
3	01:18:19	103.1%	0.3544	2.9740	0.1896	5.5840	0.0000	0.6449	4.0160	86.5200	111.1%	112.6%	0.4595	0.0000
x		102.2%	0.3065	3.0070	0.1977	5.6340	0.0000	0.6505	3.9840	85.8400	109.2%	110.1%	0.4705	0.0000
σ		1.7%	0.0488	0.0930	0.0265	0.0988	0.0000	0.0073	0.0293	1.0030	1.8%	2.8%	0.0136	0.0000
%RSD		1.7	15.9200	3.0940	13.4300	1.7540	0.0000	1.1240	0.7358	1.1690	1.6	2.5	2.8840	0.0000

5EQ-IBL4@ZZZZZZ 10/19/2016 01:21:53

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:53	97.1%	0.0760	96.3%	0.6404	3.9590	0.3700	-53.0300	1.2780	0.7623	0.0310	0.6828	0.0311	0.6609	0.0000	0.1773	0.3944	0.2762	0.1519	0.3820
2	01:22:06	97.5%	0.0817	98.0%	0.5077	4.1460	0.3607	-62.4800	1.3470	0.6739	0.0633	0.7752	0.0803	-0.1476	0.0000	0.1508	0.4702	0.2865	0.1373	0.3878
3	01:22:19	96.6%	0.0570	99.8%	0.5647	4.0630	0.3566	-60.2500	1.3540	0.6898	0.0206	0.5749	0.0111	0.5001	0.0000	0.1816	0.4328	0.2867	0.1431	0.3878
x		97.1%	0.0716	98.0%	0.5709	4.0560	0.3624	-58.5900	1.3260	0.7087	0.0383	0.6776	0.0409	0.3378	0.0000	0.1699	0.4325	0.2831	0.1441	0.3859
σ		0.4%	0.0129	1.8%	0.0665	0.0934	0.0069	4.9410	0.0421	0.0472	0.0223	0.1003	0.0356	0.4280	0.0000	0.0167	0.0379	0.0060	0.0073	0.0033
%RSD		0.5	18.0400	1.8	11.6600	2.3020	1.8970	8.4340	3.1720	6.6540	58.3500	14.8000	87.1700	126.7000	0.0000	9.8180	8.7590	2.1070	5.0920	0.8639

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:53	105.9%	0.0649	0.6830	0.0396	1.1910	0.0000	0.1294	0.7661	17.4100	104.7%	104.7%	0.0871	0.0000
2	01:22:06	104.8%	0.0636	0.7125	0.0428	1.1520	0.0000	0.1357	0.7358	17.2500	107.3%	107.6%	0.0948	0.0000
3	01:22:19	105.7%	0.0531	0.6929	0.0380	1.2000	0.0000	0.1446	0.7444	17.9400	109.8%	109.8%	0.0953	0.0000
x		105.4%	0.0605	0.6961	0.0401	1.1810	0.0000	0.1366	0.7488	17.5300	107.3%	107.4%	0.0924	0.0000
σ		0.6%	0.0065	0.0150	0.0024	0.0254	0.0000	0.0076	0.0156	0.3628	2.5%	2.6%	0.0046	0.0000
%RSD		0.5	10.7500	2.1540	6.0830	2.1540	0.0000	5.5740	2.0820	2.0690	2.4	2.4	4.9610	0.0000

6100167-04@MH1H53 10/19/2016 01:25:54

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:54	96.8%	0.5480	104.6%	3.3850	18.2500	3.3240	7.7410	5.1580	3.6900	0.2534	2.8550	0.1407	0.8303	0.0000	0.6373	1.7260	1.1130	0.6109	1.4870
2	01:26:07	99.1%	0.5363	106.8%	3.4290	18.6400	3.4100	-11.5800	5.2480	3.7660	0.3197	2.6880	0.2014	0.3493	0.0000	0.6433	1.7520	1.1270	0.6184	1.5600
3	01:26:20	98.1%	0.5842	108.2%	3.4440	18.1000	3.3370	5.5150	5.2940	3.6320	0.1042	3.0990	0.1104	1.1400	0.0000	0.6542	1.7300	1.2140	0.5726	1.5460
x		98.0%	0.5561	106.6%	3.4190	18.3300	3.3570	0.5570	5.2330	3.6960	0.2257	2.8810	0.1509	0.7733	0.0000	0.6450	1.7360	1.1510	0.6006	1.5310
σ		1.2%	0.0250	1.8%	0.0306	0.2755	0.0461	10.5700	0.0689	0.0673	0.1104	0.2067	0.0463	0.3985	0.0000	0.0086	0.0138	0.0547	0.0246	0.0385
%RSD		1.2	4.4890	1.7	0.8942	1.5030	1.3730	1898.0000	1.3170	1.8220	48.8900	7.1750	30.7200	51.5300	0.0000	1.3300	0.7925	4.7510	4.0960	2.5150

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:54	105.4%	0.0713	0.8527	0.0358	0.8270	0.0000	0.4014	2.3610	104.2000	109.9%	108.7%	0.2499	0.0000
2	01:26:07	104.5%	0.0967	0.8703	0.0363	0.8778	0.0000	0.4410	2.2500	107.2000	112.5%	112.3%	0.2534	0.0000
3	01:26:20	106.4%	0.0675	0.9118	0.0369	0.7945	0.0000	0.4427	2.3390	107.4000	114.9%	114.2%	0.2587	0.0000
x		105.5%	0.0785	0.8783	0.0364	0.8331	0.0000	0.4284	2.3160	106.3000	112.4%	111.7%	0.2540	0.0000
σ		0.9%	0.0159	0.0303	0.0005	0.0419	0.0000	0.0234	0.0588	1.7750	2.5%	2.8%	0.0044	0.0000
%RSD		0.9	20.1800	3.4530	1.4850	5.0350	0.0000	5.4580	2.5390	1.6700	2.2	2.5	1.7510	0.0000

6100167-05@MH1H54 10/19/2016 01:29:56

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:56	98.5%	0.0828	103.6%	5.3780	19.6500	3.5260	-15.9200	1.0970	1.5060	0.2502	4.5280	0.1646	0.5414	0.0000	1.5150	4.4920	2.8430	1.5870	3.9140
2	01:30:09	98.4%	0.1320	104.5%	5.3750	19.0900	3.3000	-17.9700	1.1040	1.5760	0.1999	3.9130	0.2684	0.1730	0.0000	1.5240	4.5690	2.8220	1.5680	3.9520
3	01:30:22	97.1%	0.1088	105.8%	5.3460	19.8600	3.5450	-20.8800	1.1520	1.6490	0.1417	4.1170	0.1952	0.0385	0.0000	1.5440	4.5320	2.9030	1.5380	4.0010
x		98.0%	0.1078	104.6%	5.3660	19.5300	3.4570	-18.2600	1.1180	1.5770	0.1973	4.1860	0.2094	0.2509	0.0000	1.5280	4.5310	2.8560	1.5640	3.9560
σ		0.8%	0.0246	1.1%	0.0176	0.3990	0.1363	2.4920	0.0304	0.0716	0.0543	0.3132	0.0533	0.2603	0.0000	0.0152	0.0387	0.0420	0.0247	0.0435
%RSD		0.8	22.8200	1.0	0.3272	2.0420	3.9430	13.6500	2.7170	4.5380	27.5200	7.4810	25.4700	103.7000	0.0000	0.9924	0.8544	1.4710	1.5790	1.1010

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:29:56	102.4%	0.0378	1.0860	0.0274	0.4117	0.0000	0.5666	2.0160	192.5000	107.1%	106.4%	0.3715	0.0000
2	01:30:09	105.7%	0.0404	1.0530	0.0232	0.4277	0.0000	0.5899	2.0240	195.3000	109.0%	108.3%	0.3561	0.0000
3	01:30:22	102.1%	0.0234	1.0480	0.0279	0.4526	0.0000	0.6129	2.0740	197.7000	110.9%	111.6%	0.3524	0.0000
x		103.4%	0.0339	1.0620	0.0261	0.4307	0.0000	0.5898	2.0380	195.2000	109.0%	108.8%	0.3600	0.0000
σ		2.0%	0.0092	0.0209	0.0026	0.0206	0.0000	0.0231	0.0314	2.5670	1.9%	2.6%	0.0101	0.0000
%RSD		1.9	27.0100	1.9630	9.9550	4.7780	0.0000	3.9220	1.5410	1.3150	1.7	2.4	2.8160	0.0000

6100167-06@MH1H55 10/19/2016 01:33:58

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:33:58	96.1%	0.1542	100.2%	1.8620	18.3500	3.0350	-0.2080	2.9060	1.8580	0.1897	3.5100	0.1795	0.1748	0.0000	0.6732	1.6430	1.1360	0.5488	1.3680
2	01:34:12	97.0%	0.1059	102.6%	2.0310	18.6300	3.1310	-8.9800	2.9260	1.7880	0.1801	3.0060	0.1303	0.0156	0.0000	0.6985	1.6370	1.1100	0.5697	1.4350
3	01:34:25	97.3%	0.1836	103.9%	1.9330	18.7300	3.1280	-18.7100	2.9690	1.9270	0.1684	3.8090	0.2193	0.3377	0.0000	0.6896	1.5740	1.1520	0.5633	1.4760
x		96.8%	0.1479	102.2%	1.9420	18.5700	3.0980	-9.2980	2.9340	1.8580	0.1794	3.4420	0.1764	0.1760	0.0000	0.6871	1.6180	1.1330	0.5606	1.4260
σ		0.7%	0.0392	1.9%	0.0848	0.1951	0.0549	9.2540	0.0324	0.0699	0.0106	0.4059	0.0446	0.1610	0.0000	0.0128	0.0384	0.0209	0.0107	0.0544
%RSD		0.7	26.5300	1.8	4.3670	1.0510	1.7730	99.5200	1.1030	3.7610	5.9270	11.7900	25.2800	91.4800	0.0000	1.8680	2.3740	1.8450	1.9140	3.8180

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:33:58	105.5%	0.0597	4.4760	0.0415	1.0590	0.0000	1.9870	10.9800	73.2400	104.9%	105.0%	0.5125	0.0000
2	01:34:12	105.0%	0.0714	4.5070	0.0366	1.1020	0.0000	1.9760	10.9900	73.2200	107.6%	108.1%	0.5058	0.0000
3	01:34:25	105.6%	0.0579	4.5540	0.0426	1.1050	0.0000	2.0470	11.2400	73.7500	109.0%	109.3%	0.5113	0.0000
x		105.4%	0.0630	4.5120	0.0402	1.0880	0.0000	2.0040	11.0700	73.4100	107.2%	107.5%	0.5099	0.0000
σ		0.3%	0.0074	0.0394	0.0032	0.0259	0.0000	0.0382	0.1479	0.2982	2.1%	2.2%	0.0036	0.0000
%RSD		0.3	11.6900	0.8730	7.9430	2.3790	0.0000	1.9060	1.3360	0.4062	1.9	2.1	0.7022	0.0000

6100167-07@MH1H56 10/19/2016 01:38:00

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:00	97.5%	0.2596	105.1%	5.4450	18.9600	4.2680	-11.3100	1.5180	1.4230	0.2321	2.7440	0.1202	0.3389	0.0000	0.7784	1.8100	1.2440	0.6250	1.6650
2	01:38:13	98.0%	0.1715	106.4%	5.5580	19.0000	4.3270	-13.1400	1.5630	1.3050	0.2434	2.4770	0.2196	-0.1500	0.0000	0.7231	1.8930	1.2960	0.7285	1.7130
3	01:38:26	99.2%	0.1084	106.0%	5.8190	18.9700	4.3210	1.0500	1.6310	1.4620	0.1783	2.2930	0.1100	0.4964	0.0000	0.7640	2.0000	1.3090	0.6779	1.7160
x		98.2%	0.1798	105.8%	5.6070	18.9800	4.3050	-7.8000	1.5710	1.3970	0.2179	2.5040	0.1499	0.2284	0.0000	0.7552	1.9010	1.2830	0.6771	1.6980
σ		0.9%	0.0760	0.7%	0.1916	0.0196	0.0326	7.7190	0.0569	0.0820	0.0348	0.2267	0.0605	0.3371	0.0000	0.0287	0.0955	0.0349	0.0518	0.0285
%RSD		0.9	42.2300	0.6	3.4170	0.1030	0.7566	98.9600	3.6220	5.8720	15.9500	9.0520	40.3600	147.6000	0.0000	3.7950	5.0230	2.7170	7.6440	1.6810

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:00	105.5%	0.0279	0.3733	0.0052	0.0720	0.0000	0.4966	2.0640	128.0000	107.1%	105.7%	0.2464	0.0000
2	01:38:13	105.2%	-0.0086	0.4071	0.0038	0.0370	0.0000	0.4960	2.1850	131.4000	108.7%	108.5%	0.2524	0.0000
3	01:38:26	106.0%	0.0103	0.4269	0.0025	0.0627	0.0000	0.5327	2.0930	132.4000	111.2%	110.9%	0.2471	0.0000
x		105.6%	0.0099	0.4024	0.0038	0.0573	0.0000	0.5084	2.1140	130.6000	109.0%	108.4%	0.2486	0.0000
σ		0.4%	0.0182	0.0271	0.0013	0.0181	0.0000	0.0210	0.0629	2.2690	2.1%	2.6%	0.0033	0.0000
%RSD		0.4	185.0000	6.7280	34.4700	31.7000	0.0000	4.1380	2.9730	1.7370	1.9	2.4	1.3120	0.0000

6100167-08@MH1H57 10/19/2016 01:42:01

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:01	97.7%	0.1319	104.6%	6.2680	25.1100	4.0200	-4.0750	1.0550	1.1420	0.1925	2.7850	0.1918	0.0228	0.0000	0.8219	1.8900	1.3160	0.6603	1.8010
2	01:42:14	98.0%	0.1432	106.4%	6.5120	24.5800	4.0520	26.7200	1.0610	1.1280	0.1582	2.1690	0.0708	0.5033	0.0000	0.7810	2.0160	1.3470	0.6786	1.7650
3	01:42:27	98.9%	0.1332	108.3%	6.4250	24.7600	4.0350	24.6600	1.0270	1.2230	0.1153	2.5410	0.1095	0.0087	0.0000	0.8070	2.0390	1.3320	0.7303	1.8500
x		98.2%	0.1361	106.5%	6.4020	24.8100	4.0360	15.7700	1.0480	1.1640	0.1553	2.4980	0.1240	0.1783	0.0000	0.8033	1.9820	1.3310	0.6897	1.8050
σ		0.6%	0.0062	1.8%	0.1234	0.2689	0.0158	17.2200	0.0185	0.0511	0.0387	0.3100	0.0618	0.2816	0.0000	0.0207	0.0799	0.0155	0.0363	0.0428
%RSD		0.6	4.5390	1.7	1.9280	1.0840	0.3917	109.2000	1.7690	4.3890	24.9100	12.4100	49.8300	157.9000	0.0000	2.5790	4.0310	1.1660	5.2670	2.3680

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:01	104.1%	0.2007	9.3890	0.1175	3.5400	0.0000	1.3170	7.4720	132.3000	106.0%	105.4%	0.4824	0.0000
2	01:42:14	105.4%	0.1795	9.3460	0.1182	3.6170	0.0000	1.3310	7.5590	132.9000	109.8%	108.9%	0.4746	0.0000
3	01:42:27	105.9%	0.1662	9.4730	0.1142	3.6780	0.0000	1.3710	7.5400	134.7000	110.7%	109.9%	0.4914	0.0000
x		105.1%	0.1821	9.4020	0.1166	3.6110	0.0000	1.3400	7.5230	133.3000	108.8%	108.1%	0.4828	0.0000
σ		0.9%	0.0174	0.0645	0.0021	0.0692	0.0000	0.0281	0.0459	1.2540	2.5%	2.3%	0.0084	0.0000
%RSD		0.9	9.5370	0.6858	1.8160	1.9150	0.0000	2.0970	0.6107	0.9404	2.3	2.1	1.7410	0.0000

6100167-09@MH1H58 10/19/2016 01:46:01

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:46:01	97.9%	0.4667	103.6%	8.3410	29.1900	6.0440	-2.9170	3.8660	3.1170	0.1953	1.7840	0.0926	0.3705	0.0000	0.9643	1.9040	1.3610	0.6317	1.6590
2	01:46:15	99.3%	0.4758	104.7%	8.6250	28.2800	5.9810	12.1900	3.9010	3.0330	0.1063	2.3300	0.1410	0.0197	0.0000	0.9309	1.9610	1.3510	0.6909	1.7920
3	01:46:28	99.9%	0.3248	106.9%	8.6630	28.3500	5.8790	1.5810	3.8630	3.0650	0.1906	2.3700	0.0909	0.5076	0.0000	0.9769	1.9180	1.3800	0.6894	1.6930
x		99.0%	0.4224	105.1%	8.5430	28.6100	5.9680	3.6180	3.8770	3.0720	0.1641	2.1610	0.1082	0.2993	0.0000	0.9574	1.9280	1.3640	0.6707	1.7150
σ		1.0%	0.0847	1.7%	0.1758	0.5048	0.0831	7.7570	0.0211	0.0427	0.0501	0.3274	0.0284	0.2516	0.0000	0.0238	0.0298	0.0148	0.0338	0.0690
%RSD		1.0	20.0400	1.6	2.0580	1.7650	1.3930	214.4000	0.5437	1.3900	30.5200	15.1500	26.2600	84.0700	0.0000	2.4870	1.5460	1.0870	5.0400	4.0240

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:46:01	102.7%	0.0308	1.3790	0.0221	0.4758	0.0000	0.5738	2.1480	174.8000	107.8%	107.0%	0.4710	0.0000
2	01:46:15	104.5%	0.0541	1.4260	0.0268	0.4600	0.0000	0.6337	2.1470	177.6000	110.3%	110.8%	0.4738	0.0000
3	01:46:28	105.1%	0.0494	1.4050	0.0263	0.4705	0.0000	0.6110	2.1630	177.6000	112.1%	111.7%	0.4601	0.0000
x		104.1%	0.0448	1.4030	0.0251	0.4688	0.0000	0.6062	2.1530	176.6000	110.0%	109.8%	0.4683	0.0000
σ		1.3%	0.0123	0.0236	0.0026	0.0080	0.0000	0.0302	0.0092	1.5860	2.2%	2.5%	0.0072	0.0000
%RSD		1.2	27.4600	1.6830	10.3700	1.7130	0.0000	4.9860	0.4259	0.8980	2.0	2.3	1.5410	0.0000

6100167-10@MH1H59 10/19/2016 01:50:01

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:50:01	99.1%	1.0270	115.4%	2.9690	28.9900	4.6420	4.7360	20.1700	10.8400	0.3325	2.8600	0.1195	1.1270	0.0000	0.5134	1.0850	0.8706	0.4033	0.9364
2	01:50:15	100.4%	1.1370	120.0%	2.8960	29.0800	4.7150	8.1060	20.0500	10.9700	0.2732	2.6760	0.1989	0.3340	0.0000	0.5513	1.1680	0.8586	0.4101	1.0910
3	01:50:28	99.6%	1.2070	121.0%	3.1700	29.3200	4.6080	18.2500	20.2600	10.7400	0.2617	3.1290	0.0916	1.7910	0.0000	0.4715	1.1580	0.8378	0.4060	0.9679
x		99.7%	1.1240	118.8%	3.0120	29.1300	4.6550	10.3600	20.1600	10.8500	0.2891	2.8880	0.1367	1.0840	0.0000	0.5121	1.1370	0.8557	0.4064	0.9983
σ		0.7%	0.0909	3.0%	0.1417	0.1693	0.0548	7.0340	0.1049	0.1145	0.0380	0.2276	0.0557	0.7293	0.0000	0.0399	0.0452	0.0166	0.0034	0.0815
%RSD		0.7	8.0900	2.5	4.7040	0.5812	1.1770	67.8700	0.5202	1.0560	13.1500	7.8800	40.7400	67.2900	0.0000	7.7940	3.9730	1.9380	0.8444	8.1610

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:50:01	107.1%	0.2096	0.6545	0.1282	3.0850	0.0000	0.3808	1.7730	101.6000	112.4%	110.9%	0.3407	0.0000
2	01:50:15	105.9%	0.2349	0.7041	0.1154	3.1550	0.0000	0.4083	1.7550	102.8000	114.4%	114.5%	0.3339	0.0000
3	01:50:28	106.3%	0.1980	0.6964	0.1174	3.2630	0.0000	0.4361	1.8390	103.3000	116.2%	115.2%	0.3365	0.0000
x		106.5%	0.2142	0.6850	0.1203	3.1670	0.0000	0.4084	1.7890	102.6000	114.3%	113.5%	0.3370	0.0000
σ		0.6%	0.0188	0.0267	0.0069	0.0896	0.0000	0.0276	0.0444	0.8772	1.9%	2.3%	0.0034	0.0000
%RSD		0.6	8.8030	3.8960	5.7150	2.8280	0.0000	6.7620	2.4820	0.8552	1.6	2.0	1.0220	0.0000

SEQ-CCV@CCV09 10/19/2016 01:54:07 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:54:20	97.5%	449.0000	98.9%	296.9000	472.7000	480.4000	2761.0000	±512.9000	504.7000	18.1100	472.4000	25.8600	5.6930	0.0000	416.2000	±1298.0000	±791.4000	446.3000	±1147.0000
2	01:54:33	96.8%	454.2000	98.6%	301.2000	472.0000	482.2000	2154.0000	±511.3000	505.6000	18.9500	466.8000	26.8000	4.5940	0.0000	418.0000	±1292.0000	±783.0000	446.1000	±1145.0000
3	01:54:46	96.6%	458.0000	97.5%	302.5000	463.0000	474.5000	2292.0000	±513.1000	511.8000	18.2000	467.8000	26.6900	4.3500	0.0000	419.1000	±1287.0000	±783.9000	447.1000	±1141.0000
x		97.0%	90.750%	98.3%	300.2000	93.845%	95.805%	2402.0000	±102.495%	101.471%	18.4200	93.800%	26.4500	4.8790	0.0000	417.8000	±1293.0000	±786.1000	446.5000	±1145.0000
σ		0.5%	n/a	0.7%	2.9740	n/a	n/a	317.9000	±n/a	n/a	0.4631	n/a	0.5145	0.7154	0.0000	1.4610	±5.5200	±4.5980	0.5355	±3.0150
%RSD		0.5	0.9936	0.7	0.9905	1.1600	0.8348	13.2300	±0.1917	0.7591	2.5140	0.6393	1.9450	14.6600	0.0000	0.3497	±0.4270	±0.5850	0.1199	±0.2634

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:54:20	98.2%	24.4200	65.9900	17.9800	514.3000	0.0000	493.9000	541.0000	520.7000	112.2%	112.3%	±490.4000	0.0000
2	01:54:33	99.0%	24.4000	66.2200	18.2300	517.7000	0.0000	±478.7000	546.6000	528.8000	113.7%	116.1%	±484.1000	0.0000
3	01:54:46	100.4%	24.0000	66.1900	17.8600	518.0000	0.0000	500.2000	547.5000	525.0000	116.4%	118.4%	±480.2000	0.0000
x		99.2%	24.2700	101.744%	18.0200	103.339%	0.0000	±490.9000	109.009%	104.964%	114.1%	115.6%	±96.979%	0.0000
σ		1.1%	0.2374	n/a	0.1884	n/a	0.0000	±11.0900	n/a	n/a	2.1%	3.1%	±n/a	0.0000
%RSD		1.1	0.9779	0.1887	1.0450	0.3968	0.0000	±2.2600	0.6411	0.7721	1.8	2.6	±1.0570	0.0000

SEQ-CCB@CCB09 10/19/2016 01:58:33 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:47	95.0%	0.0482	92.2%	0.0330	-0.0404	-0.0449	-26.3100	0.0506	0.1337	0.0107	0.1231	-0.0098	0.2088	0.0000	0.1063	0.3079	0.2191	0.1174	0.3558
2	01:59:00	95.9%	0.0622	94.5%	0.0533	-0.0672	-0.0581	-21.1200	0.0483	0.0855	-0.0003	-0.0763	-0.0199	0.2044	0.0000	0.1144	0.3374	0.1869	0.1214	0.3404
3	01:59:13	95.9%	0.0386	94.2%	0.0244	-0.0702	-0.0602	-19.4700	0.0422	0.1855	0.0106	-0.1046	0.0106	0.0359	0.0000	0.1291	0.3245	0.2013	0.1178	0.3042
x		95.6%	0.0497	93.6%	0.0369	-0.0593	-0.0544	-22.3000	0.0470	0.1349	0.0070	-0.0193	-0.0064	0.1497	0.0000	0.1166	0.3233	0.2024	0.1189	0.3335
σ		0.5%	0.0119	1.2%	0.0148	0.0164	0.0083	3.5690	0.0043	0.0500	0.0063	0.1241	0.0155	0.0985	0.0000	0.0116	0.0147	0.0161	0.0022	0.0265
%RSD		0.6	23.9200	1.3	40.2100	27.6300	15.2700	16.0100	9.2400	37.0700	90.1500	643.9000	243.4000	65.8300	0.0000	9.9270	4.5640	7.9650	1.8570	7.9450

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:58:47	102.0%	-0.0102	0.0075	0.0041	0.0568	0.0000	0.2067	0.0712	0.0886	108.0%	109.2%	0.0893	0.0000
2	01:59:00	102.5%	-0.0084	0.0085	0.0040	0.0480	0.0000	0.2141	0.0599	0.0322	109.2%	111.0%	0.0752	0.0000
3	01:59:13	102.5%	-0.0139	0.0034	0.0013	0.0276	0.0000	0.2165	0.0559	0.0276	109.7%	111.3%	0.0642	0.0000
x		102.3%	-0.0108	0.0065	0.0032	0.0441	0.0000	0.2125	0.0623	0.0494	109.0%	110.5%	0.0762	0.0000
σ		0.3%	0.0028	0.0027	0.0016	0.0150	0.0000	0.0051	0.0079	0.0340	0.9%	1.1%	0.0126	0.0000
%RSD		0.2	26.1400	42.2600	49.8100	33.9100	0.0000	2.3970	12.7200	68.7200	0.8	1.0	16.5100	0.0000

6100167-11@MH1H60 10/19/2016 02:02:54

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:54	97.0%	0.7502	111.2%	5.4430	30.5600	5.3700	-17.0400	14.4500	7.4800	0.3910	2.8000	0.1513	1.3220	0.0000	0.6838	1.2810	0.8693	0.4510	1.0970
2	02:03:08	100.0%	0.8186	112.8%	±11.1700	30.0000	5.2530	-3.9050	14.5700	7.6580	0.3138	2.7710	0.1399	1.1390	0.0000	0.7330	1.1650	0.8889	0.4127	1.1300
3	02:03:21	99.4%	0.8638	114.7%	5.6450	30.5500	5.2960	10.0700	14.7500	7.6600	0.5095	2.3440	0.0632	2.3160	0.0000	0.7180	1.3360	0.9359	0.4936	1.1620
x		98.8%	0.8109	112.9%	±7.4190	30.3700	5.3060	-3.6250	14.5900	7.5990	0.4048	2.6390	0.1182	1.5920	0.0000	0.7116	1.2600	0.8980	0.4524	1.1290
σ		1.6%	0.0572	1.8%	±3.2490	0.3227	0.0592	13.5600	0.1500	0.1033	0.0986	0.2553	0.0479	0.6335	0.0000	0.0252	0.0872	0.0343	0.0405	0.0325
%RSD		1.6	7.0500	1.6	±43.8000	1.0630	1.1150	374.0000	1.0280	1.3590	24.3600	9.6750	40.5400	39.7800	0.0000	3.5410	6.9160	3.8160	8.9460	2.8740

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:54	105.4%	0.1374	0.7284	0.0232	0.6638	0.0000	0.4684	0.7494	138.6000	114.2%	113.2%	0.2248	0.0000
2	02:03:08	106.4%	0.1034	0.7739	0.0238	0.6853	0.0000	0.4660	0.7533	141.9000	118.0%	115.9%	0.2291	0.0000
3	02:03:21	105.0%	0.1038	0.7881	0.0353	0.6549	0.0000	0.4779	0.7342	143.7000	119.0%	118.3%	0.2394	0.0000
x		105.6%	0.1149	0.7635	0.0274	0.6680	0.0000	0.4708	0.7456	141.4000	117.1%	115.8%	0.2311	0.0000
σ		0.7%	0.0195	0.0312	0.0068	0.0156	0.0000	0.0063	0.0101	2.5800	2.5%	2.6%	0.0075	0.0000
%RSD		0.7	16.9700	4.0840	24.8500	2.3410	0.0000	1.3380	1.3560	1.8250	2.2	2.2	3.2520	0.0000

6100167-12@MH1H61 10/19/2016 02:06:56

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:06:56	97.9%	1.9660	118.7%	2.9850	22.4200	3.1740	-0.6966	28.3500	22.1900	0.5745	4.0670	0.0722	2.2670	0.0000	0.4147	0.6878	0.5354	0.2568	0.5786
2	02:07:09	98.9%	1.8220	121.0%	3.0330	22.4400	3.0880	-6.5250	28.3500	22.6600	0.6263	3.7920	0.1525	3.7190	0.0000	0.4363	0.7692	0.5290	0.2415	0.5806
3	02:07:22	98.9%	1.8770	123.0%	3.0530	22.1000	2.9930	-1.9920	28.3000	22.4700	0.6300	4.7420	0.3426	1.4330	0.0000	0.4664	0.7354	0.5358	0.2285	0.6202
x		98.6%	1.8880	120.9%	3.0230	22.3200	3.0850	-3.0710	28.3300	22.4400	0.6103	4.2000	0.1891	2.4730	0.0000	0.4391	0.7308	0.5334	0.2423	0.5931
σ		0.5%	0.0724	2.2%	0.0350	0.1928	0.0904	3.0610	0.0275	0.2382	0.0310	0.4891	0.1388	1.1570	0.0000	0.0259	0.0409	0.0038	0.0142	0.0235
%RSD		0.5	3.8330	1.8	1.1560	0.8638	2.9300	99.6500	0.0971	1.0620	5.0820	11.6400	73.4300	46.7800	0.0000	5.9070	5.5940	0.7164	5.8440	3.9640

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:06:56	106.7%	0.4279	0.3074	0.1555	4.0820	0.0000	0.2891	0.3868	97.8200	124.9%	122.4%	0.1859	0.0000
2	02:07:09	106.8%	0.4011	0.3124	0.1613	4.2400	0.0000	0.3006	0.3851	96.8100	127.6%	125.5%	0.1948	0.0000
3	02:07:22	107.9%	0.3507	0.2892	0.1740	4.2410	0.0000	0.2979	0.4428	99.7200	129.4%	127.8%	0.1878	0.0000
x		107.1%	0.3932	0.3030	0.1636	4.1870	0.0000	0.2958	0.4049	98.1200	127.3%	125.2%	0.1895	0.0000
σ		0.7%	0.0392	0.0122	0.0095	0.0917	0.0000	0.0060	0.0328	1.4780	2.3%	2.7%	0.0047	0.0000
%RSD		0.6	9.9670	4.0280	5.7840	2.1900	0.0000	2.0390	8.1050	1.5060	1.8	2.2	2.4750	0.0000

6100167-13@MH1H62 10/19/2016 02:10:58

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:58	98.1%	0.9912	112.1%	5.1780	24.5400	3.9720	-10.4800	16.8900	7.7660	0.2311	1.7950	0.0687	1.0670	0.0000	0.7136	1.1680	0.8296	0.3661	0.9533
2	02:11:11	99.3%	0.8413	115.0%	5.0900	25.1000	4.1300	-9.3810	16.8000	7.6150	0.2047	1.9920	0.1275	0.9426	0.0000	0.7427	1.0840	0.7982	0.3720	0.9640
3	02:11:24	97.6%	0.9742	115.5%	5.1990	24.7200	3.9890	-20.3200	17.1400	7.4780	0.3404	2.5140	0.0601	1.9900	0.0000	0.7293	1.0980	0.8384	0.4243	0.9943
x		98.3%	0.9356	114.2%	5.1550	24.7900	4.0310	-13.3900	16.9400	7.6200	0.2587	2.1000	0.0855	1.3330	0.0000	0.7285	1.1170	0.8221	0.3875	0.9705
σ		0.9%	0.0821	1.8%	0.0578	0.2883	0.0866	6.0230	0.1732	0.1441	0.0720	0.3716	0.0367	0.5722	0.0000	0.0146	0.0449	0.0211	0.0320	0.0213
%RSD		0.9	8.7740	1.6	1.1210	1.1630	2.1480	44.9600	1.0220	1.8910	27.8100	17.6900	42.9400	42.9100	0.0000	2.0010	4.0240	2.5730	8.2650	2.1920

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:10:58	110.5%	0.1074	0.5879	0.0399	1.2920	0.0000	0.4390	0.7796	192.4000	114.9%	114.8%	0.2403	0.0000
2	02:11:11	108.5%	0.1112	0.5900	0.0522	1.1890	0.0000	0.4333	0.8368	195.7000	116.9%	115.2%	0.2500	0.0000
3	02:11:24	111.1%	0.1261	0.5910	0.0551	1.2440	0.0000	0.4425	0.8147	199.0000	118.9%	117.4%	0.2471	0.0000
x		110.0%	0.1149	0.5896	0.0491	1.2410	0.0000	0.4382	0.8104	195.7000	116.9%	115.8%	0.2458	0.0000
σ		1.3%	0.0099	0.0016	0.0080	0.0516	0.0000	0.0047	0.0289	3.3320	2.0%	1.4%	0.0050	0.0000
%RSD		1.2	8.5880	0.2699	16.3700	4.1570	0.0000	1.0630	3.5630	1.7030	1.7	1.2	2.0170	0.0000

6100167-14@MH1H63 10/19/2016 02:15:00

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:15:00	97.3%	1.1020	117.7%	2.1590	27.6900	3.0720	-12.7900	16.6700	10.0800	0.3407	2.5980	0.1278	0.4744	0.0000	0.7040	1.6570	1.2630	0.5843	1.4650
2	02:15:13	98.2%	1.0170	120.1%	2.1660	26.9800	2.9530	-1.0780	16.7200	10.1600	0.1607	2.6110	0.2575	-0.0241	0.0000	0.7239	1.7280	1.3240	0.5463	1.4790
3	02:15:26	97.2%	1.0890	121.8%	2.0930	26.9800	2.9460	-11.2500	16.9300	10.1100	0.4431	2.9470	0.0209	0.7552	0.0000	0.6992	1.6080	1.2450	0.5734	1.4810
x		97.6%	1.0690	119.9%	2.1390	27.2200	2.9900	-8.3750	16.7700	10.1200	0.3149	2.7190	0.1354	0.4018	0.0000	0.7090	1.6640	1.2780	0.5680	1.4750
σ		0.5%	0.0458	2.1%	0.0405	0.4113	0.0707	6.3660	0.1372	0.0372	0.1429	0.1974	0.1185	0.3947	0.0000	0.0131	0.0602	0.0414	0.0196	0.0090
%RSD		0.5	4.2810	1.7	1.8910	1.5110	2.3660	76.0200	0.8179	0.3682	45.4000	7.2620	87.5000	98.2200	0.0000	1.8450	3.6200	3.2410	3.4430	0.6084

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:15:00	107.8%	0.0633	0.8401	0.0158	0.3031	0.0000	0.3297	1.3530	100.2000	109.6%	108.2%	0.1817	0.0000
2	02:15:13	110.3%	0.0849	0.9017	0.0214	0.3053	0.0000	0.2994	1.3710	101.1000	112.1%	112.1%	0.1781	0.0000
3	02:15:26	110.5%	0.0814	0.8487	0.0117	0.3359	0.0000	0.3140	1.3830	101.9000	114.1%	113.6%	0.1927	0.0000
x		109.5%	0.0766	0.8635	0.0163	0.3148	0.0000	0.3143	1.3690	101.1000	111.9%	111.3%	0.1842	0.0000
σ		1.5%	0.0116	0.0334	0.0049	0.0184	0.0000	0.0152	0.0151	0.8488	2.3%	2.8%	0.0076	0.0000
%RSD		1.4	15.1400	3.8630	29.8800	5.8280	0.0000	4.8190	1.1020	0.8400	2.0	2.5	4.1380	0.0000

6100167-15@MH1H64 10/19/2016 02:19:01

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:19:01	96.1%	0.7500	107.4%	2.1400	27.3500	1.6060	-21.9400	5.1390	5.3210	0.2198	2.3130	0.1601	1.3050	0.0000	0.5398	1.3620	0.9489	0.4684	1.1780
2	02:19:14	96.0%	0.6152	108.8%	2.0260	27.4100	1.6220	-11.7300	5.3440	5.2320	0.1573	2.7300	0.2677	0.0081	0.0000	0.5877	1.2520	0.9304	0.4813	1.1430
3	02:19:28	97.6%	0.5675	108.7%	2.1600	27.5400	1.5980	-25.2300	5.3880	5.2060	0.1253	2.4230	0.1297	0.6556	0.0000	0.5521	1.3390	0.9691	0.4405	1.1560
x		96.6%	0.6442	108.3%	2.1090	27.4300	1.6090	-19.6300	5.2900	5.2530	0.1675	2.4890	0.1858	0.6562	0.0000	0.5599	1.3180	0.9495	0.4634	1.1590
σ		0.9%	0.0946	0.8%	0.0721	0.0939	0.0123	7.0420	0.1330	0.0603	0.0481	0.2163	0.0725	0.6484	0.0000	0.0249	0.0578	0.0193	0.0209	0.0181
%RSD		0.9	14.6900	0.8	3.4210	0.3422	0.7633	35.8700	2.5130	1.1480	28.6900	8.6900	39.0300	98.8100	0.0000	4.4500	4.3900	2.0350	4.5030	1.5580

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:19:01	106.3%	0.0664	1.3880	0.0076	0.1574	0.0000	0.3906	0.7809	212.7000	109.1%	108.4%	0.3535	0.0000
2	02:19:14	106.0%	0.0566	1.3610	0.0100	0.1926	0.0000	0.3834	0.7458	214.3000	111.2%	110.6%	0.3598	0.0000
3	02:19:28	106.2%	0.0446	1.3570	0.0123	0.1609	0.0000	0.3746	0.7852	216.4000	115.1%	113.1%	0.3504	0.0000
x		106.2%	0.0559	1.3690	0.0100	0.1703	0.0000	0.3829	0.7706	214.5000	111.8%	110.7%	0.3546	0.0000
σ		0.2%	0.0109	0.0168	0.0023	0.0194	0.0000	0.0080	0.0216	1.8600	3.0%	2.4%	0.0048	0.0000
%RSD		0.2	19.5600	1.2280	23.3300	11.3900	0.0000	2.0910	2.8050	0.8671	2.7	2.1	1.3470	0.0000

6100167-16@MH1H65 10/19/2016 02:23:02

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:23:02	95.6%	0.0953	99.4%	1.7150	29.3700	1.0990	-12.0800	0.4073	0.4157	0.1019	2.5130	0.1279	0.4183	0.0000	0.5085	1.3490	1.0240	0.4738	1.1720
2	02:23:16	93.8%	0.0786	100.7%	1.7680	29.5900	1.1840	-11.8200	0.4034	0.3571	0.1478	2.2880	0.1706	0.0718	0.0000	0.5200	1.3860	0.9658	0.4938	1.2400
3	02:23:29	95.3%	0.0841	102.4%	1.6790	29.2900	1.1360	-14.6600	0.4167	0.4164	0.0678	2.2120	0.0227	1.2870	0.0000	0.5538	1.3300	1.0020	0.4490	1.1790
x		94.9%	0.0860	100.8%	1.7210	29.4200	1.1400	-12.8500	0.4091	0.3964	0.1058	2.3380	0.1071	0.5923	0.0000	0.5275	1.3550	0.9970	0.4722	1.1970
σ		0.9%	0.0085	1.5%	0.0447	0.1546	0.0425	1.5690	0.0068	0.0340	0.0401	0.1564	0.0761	0.6258	0.0000	0.0236	0.0288	0.0292	0.0224	0.0376
%RSD		1.0	9.8540	1.5	2.5990	0.5255	3.7240	12.2100	1.6720	8.5900	37.9400	6.6910	71.1100	105.7000	0.0000	4.4650	2.1230	2.9290	4.7490	3.1370

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:23:02	98.6%	0.0094	2.8490	0.0067	0.0347	0.0000	0.4057	0.8706	195.6000	104.5%	105.4%	0.4246	0.0000
2	02:23:16	98.3%	0.0147	2.9060	0.0079	0.0437	0.0000	0.3965	0.8649	196.2000	107.5%	107.6%	0.4139	0.0000
3	02:23:29	98.9%	0.0058	2.8480	0.0052	0.0505	0.0000	0.3958	0.8381	200.3000	108.3%	108.8%	0.4564	0.0000
x		98.6%	0.0100	2.8680	0.0066	0.0430	0.0000	0.3993	0.8579	197.4000	106.8%	107.2%	0.4316	0.0000
σ		0.3%	0.0045	0.0336	0.0014	0.0079	0.0000	0.0055	0.0174	2.5570	2.0%	1.7%	0.0221	0.0000
%RSD		0.3	44.9400	1.1710	20.4500	18.4800	0.0000	1.3830	2.0240	1.2950	1.9	1.6	5.1270	0.0000

6100167-17@MH1H66 10/19/2016 02:27:03

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:03	91.2%	0.5436	93.7%	6.7160	24.5500	4.2130	16.3800	27.2300	4.5400	0.1263	1.4200	0.0330	0.7883	0.0000	0.6167	1.3830	1.0330	0.5009	1.3140
2	02:27:16	92.0%	0.4830	94.5%	6.7330	24.1600	4.0690	0.1715	27.6600	4.7380	0.0906	1.4850	0.1590	-0.1069	0.0000	0.7829	1.5510	1.0250	0.5443	1.2840
3	02:27:29	92.5%	0.4240	96.9%	6.8570	24.3300	3.9970	33.2700	27.6700	4.5520	0.1463	1.3600	0.0738	-0.1104	0.0000	0.6559	1.6140	1.0220	0.5239	1.2970
x		91.9%	0.4835	95.1%	6.7680	24.3500	4.0930	16.6100	27.5200	4.6100	0.1210	1.4210	0.0886	0.1903	0.0000	0.6852	1.5160	1.0270	0.5231	1.2980
σ		0.6%	0.0598	1.6%	0.0770	0.1944	0.1102	16.5500	0.2516	0.1111	0.0282	0.0627	0.0643	0.5179	0.0000	0.0869	0.1196	0.0052	0.0217	0.0147
%RSD		0.7	12.3700	1.7	1.1380	0.7984	2.6920	99.6600	0.9144	2.4110	23.3300	4.4120	72.5900	272.1000	0.0000	12.6800	7.8870	0.5067	4.1520	1.1320

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:03	97.4%	0.0583	0.5993	0.0263	0.6747	0.0000	0.4932	2.3660	95.6800	104.4%	105.2%	0.5612	0.0000
2	02:27:16	98.7%	0.0600	0.6218	0.0244	0.6624	0.0000	0.5031	2.3480	97.4000	107.8%	108.5%	0.5723	0.0000
3	02:27:29	99.2%	0.0316	0.6217	0.0292	0.7690	0.0000	0.4706	2.3530	97.3700	109.8%	110.1%	0.5772	0.0000
x		98.4%	0.0500	0.6143	0.0267	0.7020	0.0000	0.4890	2.3560	96.8200	107.3%	107.9%	0.5702	0.0000
σ		0.9%	0.0159	0.0130	0.0024	0.0583	0.0000	0.0166	0.0094	0.9827	2.7%	2.5%	0.0082	0.0000
%RSD		0.9	31.8100	2.1090	9.0800	8.3080	0.0000	3.4040	0.3977	1.0150	2.5	2.3	1.4400	0.0000

6100167-18@MH1H67 10/19/2016 02:31:04

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:31:04	96.4%	0.3474	98.6%	8.6100	30.5200	5.5840	-11.8800	3.4010	2.7930	0.2051	2.9510	0.2035	0.0300	0.0000	1.1730	2.5670	1.6060	0.8652	2.2390
2	02:31:17	96.2%	0.3608	101.0%	8.5850	30.0400	5.5870	-3.8990	3.4690	2.7650	0.1833	2.5010	0.1630	0.1966	0.0000	1.1050	2.4470	1.6400	0.8775	2.2680
3	02:31:30	96.6%	0.3664	103.3%	8.5830	30.4400	5.7310	17.7300	3.3840	2.8790	0.1417	2.3320	0.0832	0.7138	0.0000	1.1610	2.5180	1.6200	0.9231	2.2430
x		96.4%	0.3582	101.0%	8.5930	30.3400	5.6340	0.6516	3.4180	2.8120	0.1767	2.5950	0.1499	0.3134	0.0000	1.1470	2.5110	1.6220	0.8886	2.2500
σ		0.2%	0.0098	2.4%	0.0154	0.2577	0.0838	15.3200	0.0454	0.0595	0.0322	0.3201	0.0612	0.3566	0.0000	0.0361	0.0604	0.0171	0.0305	0.0157
%RSD		0.2	2.7240	2.3	0.1796	0.8493	1.4880	2351.0000	1.3270	2.1170	18.2200	12.3400	40.8400	113.8000	0.0000	3.1520	2.4050	1.0510	3.4320	0.6982

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:31:04	103.2%	0.0454	0.8868	0.0080	0.2021	0.0000	0.7307	3.7240	221.8000	107.5%	107.8%	0.4544	0.0000
2	02:31:17	103.3%	0.0160	0.8609	0.0104	0.1840	0.0000	0.7381	3.7720	225.4000	111.1%	110.8%	0.4710	0.0000
3	02:31:30	102.2%	0.0171	0.8813	0.0140	0.1828	0.0000	0.7578	3.9320	228.6000	112.7%	112.5%	0.4683	0.0000
x		102.9%	0.0262	0.8764	0.0108	0.1896	0.0000	0.7422	3.8090	225.3000	110.4%	110.4%	0.4646	0.0000
σ		0.6%	0.0167	0.0137	0.0030	0.0108	0.0000	0.0140	0.1089	3.4000	2.7%	2.4%	0.0089	0.0000
%RSD		0.6	63.6700	1.5580	27.9800	5.7070	0.0000	1.8860	2.8590	1.5090	2.4	2.2	1.9080	0.0000

Q3140 32-PS1@MH1HS2A 10/19/2016 02:35:05

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:05	96.3%	0.1715	106.4%	2.2150	18.2200	2.4810	-4.9380	5.4930	2.6060	0.1680	3.1980	0.2193	0.6610	0.0000	0.7095	1.9730	1.1870	0.6261	1.6360
2	02:35:18	97.4%	0.1685	108.0%	2.2920	18.6600	2.5440	-1.0680	5.5200	2.5910	0.1369	3.0720	0.2092	0.0115	0.0000	0.6997	1.8380	1.1990	0.6546	1.7110
3	02:35:32	99.9%	0.2122	110.1%	2.3380	18.4600	2.5140	-15.2700	5.6070	2.7000	0.1565	3.4510	0.1884	0.4908	0.0000	0.7268	1.9180	1.2240	0.6586	1.6430
x		97.9%	0.1841	108.1%	2.2820	18.4500	2.5130	-7.0920	5.5400	2.6320	0.1538	3.2400	0.2056	0.3878	0.0000	0.7120	1.9100	1.2030	0.6464	1.6640
σ		1.8%	0.0244	1.9%	0.0622	0.2217	0.0318	7.3420	0.0595	0.0591	0.0158	0.1929	0.0158	0.3368	0.0000	0.0137	0.0680	0.0188	0.0177	0.0415
%RSD		1.9	13.2700	1.7	2.7240	1.2020	1.2660	103.5000	1.0740	2.2460	10.2500	5.9540	7.6650	86.8500	0.0000	1.9230	3.5610	1.5640	2.7450	2.4960

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:05	105.9%	0.2736	3.0280	0.2147	5.0390	0.0000	0.5959	3.3130	75.6300	108.7%	107.8%	0.3077	0.0000
2	02:35:18	105.5%	0.2158	3.0670	0.2138	5.0490	0.0000	0.6309	3.3550	78.5500	109.4%	110.0%	0.3282	0.0000
3	02:35:32	106.4%	0.2776	3.1830	0.1945	5.1250	0.0000	0.6291	3.3920	77.6800	113.2%	113.3%	0.3224	0.0000
x		105.9%	0.2557	3.0930	0.2077	5.0710	0.0000	0.6186	3.3530	77.2900	110.4%	110.4%	0.3194	0.0000
σ		0.5%	0.0346	0.0806	0.0114	0.0468	0.0000	0.0197	0.0397	1.4970	2.4%	2.8%	0.0106	0.0000
%RSD		0.4	13.5200	2.6070	5.5080	0.9224	0.0000	3.1790	1.1830	1.9370	2.2	2.5	3.3080	0.0000

SEQ-CCV@CCV10 10/19/2016 02:39:12 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:25	94.0%	463.1000	93.8%	300.9000	472.6000	481.2000	2578.0000	±514.5000	506.3000	19.0400	474.2000	27.1000	3.9000	0.0000	412.4000	±1285.0000	±787.5000	445.2000	±1149.0000
2	02:39:38	94.0%	452.0000	96.4%	296.4000	467.5000	477.3000	2255.0000	±507.8000	501.9000	18.4400	465.3000	27.0500	4.9820	0.0000	412.1000	±1278.0000	±777.9000	440.2000	±1134.0000
3	02:39:51	92.7%	446.7000	96.6%	301.5000	463.2000	472.1000	2409.0000	±508.0000	502.5000	19.8400	460.8000	26.0800	4.4020	0.0000	415.3000	±1284.0000	±779.6000	442.6000	±1132.0000
x		93.6%	90.780%	95.6%	299.6000	93.560%	95.373%	2414.0000	±102.018%	100.716%	19.1100	93.356%	26.7400	4.4280	0.0000	413.3000	±1282.0000	±781.7000	442.7000	±1138.0000
σ		0.7%	n/a	1.6%	2.7890	n/a	n/a	161.8000	±n/a	n/a	0.7016	n/a	0.5748	0.5414	0.0000	1.7860	±3.7070	±5.1010	2.5150	±9.4960
%RSD		0.8	1.8420	1.6	0.9307	1.0070	0.9528	6.7050	±0.7496	0.4719	3.6720	1.4680	2.1490	12.2300	0.0000	0.4322	±0.2890	±0.6526	0.5680	±0.8343

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:39:25	99.0%	24.7300	65.9100	18.1700	510.6000	0.0000	493.0000	542.0000	518.5000	111.3%	111.1%	±499.2000	0.0000
2	02:39:38	101.4%	24.1100	65.6700	18.0500	510.3000	0.0000	±476.7000	543.6000	520.2000	114.4%	115.3%	±492.3000	0.0000
3	02:39:51	102.7%	24.2200	65.2600	18.0900	515.2000	0.0000	±478.4000	549.8000	524.4000	115.9%	117.6%	±487.1000	0.0000
x		101.0%	24.3500	100.943%	18.1100	102.405%	0.0000	±482.7000	109.025%	104.201%	113.9%	114.7%	±98.572%	0.0000
σ		1.9%	0.3310	n/a	0.0597	n/a	0.0000	±8.9420	n/a	n/a	2.4%	3.3%	±n/a	0.0000
%RSD		1.9	1.3590	0.4995	0.3300	0.5359	0.0000	±1.8530	0.7544	0.5850	2.1	2.9	±1.2310	0.0000

SEQ-CCB@CCB10 10/19/2016 02:43:40 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:54	92.3%	0.0718	92.9%	0.0565	-0.0791	-0.0622	-17.9000	0.0379	0.1724	-0.0112	-0.0091	0.0006	0.5984	0.0000	0.1105	0.3456	0.2144	0.1186	0.3337
2	02:44:07	92.6%	0.0712	93.5%	0.0413	-0.0762	-0.0685	-16.8000	0.0426	0.1779	0.0000	0.0455	0.0110	0.4063	0.0000	0.1306	0.3231	0.1935	0.1335	0.3200
3	02:44:20	92.8%	0.0068	93.8%	0.0301	-0.0214	-0.0622	-26.2600	0.0414	0.0710	0.0115	0.1372	-0.0311	0.7701	0.0000	0.1099	0.3347	0.2215	0.1153	0.2984
x		92.6%	0.0500	93.4%	0.0427	-0.0589	-0.0643	-20.3200	0.0406	0.1404	0.0001	0.0579	-0.0065	0.5916	0.0000	0.1170	0.3345	0.2098	0.1225	0.3174
σ		0.2%	0.0374	0.4%	0.0133	0.0325	0.0036	5.1740	0.0024	0.0602	0.0113	0.0739	0.0219	0.1820	0.0000	0.0118	0.0112	0.0146	0.0097	0.0178
%RSD		0.3	74.7400	0.5	31.0800	55.1600	5.6580	25.4700	5.9490	42.8800	10730.0000	127.7000	337.3000	30.7700	0.0000	10.0600	3.3570	6.9410	7.8970	5.6060

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:43:54	98.3%	-0.0020	0.0133	0.0000	0.0384	0.0000	0.2124	0.0647	0.0355	108.0%	108.2%	0.0738	0.0000
2	02:44:07	99.6%	-0.0329	0.0034	0.0027	0.0409	0.0000	0.2196	0.0551	0.0594	108.1%	109.6%	0.0749	0.0000
3	02:44:20	98.5%	0.0082	0.0028	0.0000	0.0505	0.0000	0.2011	0.0544	0.0513	110.0%	110.2%	0.0784	0.0000
x		98.8%	-0.0089	0.0065	0.0009	0.0433	0.0000	0.2110	0.0580	0.0487	108.7%	109.3%	0.0757	0.0000
σ		0.7%	0.0214	0.0059	0.0016	0.0064	0.0000	0.0093	0.0057	0.0122	1.1%	1.0%	0.0024	0.0000
%RSD		0.7	240.4000	90.4000	173.2000	14.7600	0.0000	4.4200	9.9020	25.0100	1.0	0.9	3.1860	0.0000

Mass Uncorrected ICPS

SEQ-CAL1@S01 10/18/2016 17:47:39

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:47:52	117328.9500	16.6667	146812.6400	60.0002	412.0093	327.3392	192.0020	50.0001	953.3833	6.6667	13.3333	13.3333	13.3333	115823.1500	13.3333	10.0000	20.0000	0.0000	13.3333
2	17:48:05	119628.6300	23.3334	149262.0400	63.3336	421.3431	310.6720	174.6683	33.3334	896.7109	0.0000	7.7778	10.0000	10.0000	116224.9000	30.0001	3.3333	33.3334	10.0000	10.0000
3	17:48:18	121830.9200	6.6667	150437.8500	63.3336	433.3437	324.6725	193.3354	20.0000	1053.3944	3.3333	13.3333	13.3333	23.3334	120594.6000	20.0000	16.6667	13.3333	6.6667	6.6667
x		119596.1600	15.5556	148837.5100	62.2224	422.2320	320.8946	186.6686	34.4445	967.8295	3.3333	11.4815	12.2222	15.5556	117547.5500	21.1111	10.0000	22.2223	5.5556	10.0000
σ		2251.1616	8.3887	1849.5181	1.9245	10.6949	8.9529	10.4139	15.0309	79.3344	3.3333	3.2075	1.9245	6.9389	2646.4544	8.3887	6.6667	10.1835	5.0918	3.3333
%RSD		1.8823	53.9274	1.2426	3.0930	2.5329	2.7900	5.5788	43.6380	8.1971	100.0000	27.9363	15.7459	44.6072	2.2514	39.7360	66.6667	45.8258	91.6515	33.3334

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:47:52	44321.1100	120.0008	16.6667	0.0000	3.3333	205183.0000	166.6682	33.3334	80.0004	168218.7600	162380.7100	6.6667	102484.4300
2	17:48:05	44555.5860	143.3345	16.6667	0.0000	10.0000	210669.7000	146.6678	46.6668	76.6670	168935.2000	167811.3400	36.6667	105026.5300
3	17:48:18	44200.5260	170.0016	16.6667	0.0000	16.6667	212341.2600	163.3348	30.0001	90.0004	173326.7200	168619.4200	46.6668	105704.3200
x		44359.0740	144.4456	16.6667	0.0000	10.0000	209397.9900	158.8903	36.6667	82.2226	170160.2300	166270.4900	30.0001	104405.0900
σ		180.5488	25.0189	0.0000	0.0000	6.6667	3744.7450	10.7154	8.8192	6.9390	2765.5574	3392.7922	20.8167	1697.5153
%RSD		0.4070	17.3206	0.0000	0.0000	66.6667	1.7883	6.7439	24.0523	8.4392	1.6253	2.0405	69.3889	1.6259

SEQ-CAL2@S02 10/18/2016 17:51:52

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	9
1	17:52:06	122161.9800	116.6674	150193.8700	63.3336	1510.1254	891.3770	266.0039	1560.1339	983.3865	10.0000	56.6668	30.0001	23.3334	119095.0200	2507.0123	4000.8802	4644.5195	2557.0262	6385.
2	17:52:19	120608.1100	153.3346	152135.7600	86.6671	1525.4613	890.7103	270.6707	1660.1516	1143.4052	16.6667	45.5557	30.0001	36.6667	119186.2100	2510.3466	4114.2641	4701.2153	2630.3805	6702.
3	17:52:32	121817.4100	130.0009	153844.1500	63.3336	1456.1166	867.3747	256.6703	1520.1271	993.3876	23.3334	57.7780	26.6667	26.6667	123449.2000	2510.3466	4637.8494	4617.8392	2693.7324	6665.
x		121529.1700	133.3343	152057.9300	71.1114	1497.2344	883.1540	264.4483	1580.1375	1040.0598	16.6667	53.3335	28.8889	28.8889	120576.8100	2509.2351	4250.9979	4654.5246	2627.0464	6584.
σ		816.0538	18.5595	1826.3859	13.4716	36.4253	13.6693	7.1287	72.1237	89.6394	6.6667	6.7587	1.9245	6.9389	2487.9795	1.9250	339.7860	42.5790	68.4140	173.
%RSD		0.6715	13.9195	1.2011	18.9444	2.4328	1.5478	2.6957	4.5644	8.6187	40.0000	12.6725	6.6617	24.0193	2.0634	0.0767	7.9931	0.9148	2.6042	2.

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:52:06	44974.3070	143.3345	1133.4040	26.6667	243.3366	212228.6700	7222.8682	1750.1685	3070.5185	170317.3000	166025.6600	2080.2380	104139.7500
2	17:52:19	45728.0530	160.0014	1246.7522	26.6667	303.3384	214883.2800	7376.3247	1826.8502	3250.5810	173238.3900	169787.5300	2016.8904	106786.8600
3	17:52:32	45587.3490	156.6680	1276.7563	20.0000	293.3381	218989.5500	7329.6203	1866.8583	3410.6397	176167.2100	173092.3100	2196.9321	107754.8500
x		45429.9030	153.3346	1218.9708	24.4445	280.0043	215367.1700	7309.6044	1814.6257	3243.9131	173240.9600	169635.1700	2098.0201	106227.1500
σ		400.7808	8.8193	75.6064	3.8490	32.1465	3406.3115	78.6619	59.2977	170.1586	2924.9539	3535.7872	91.3286	1871.4137
%RSD		0.8822	5.7517	6.2025	15.7459	11.4807	1.5816	1.0761	3.2678	5.2455	1.6884	2.0843	4.3531	1.7617

SEQ-CAL3@S03 10/18/2016 17:56:04

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	
1	17:56:18	121597.8300	270.0040	150390.4100	30.0001	3041.1753	1643.4819	366.6741	3387.2976	1880.1944	26.6667	127.7787	80.0004	10.0000	120567.5800	4897.9858	8243.7361	9251.3716	5151.4592	13
2	17:56:31	121243.1400	243.3366	152528.9300	100.0006	2974.4865	1655.4841	338.0063	3997.5454	1843.5202	36.6667	95.5561	66.6669	3.3333	122415.3600	5238.1753	8747.5399	9361.4842	5271.5280	13
3	17:56:44	124216.2100	286.6712	154434.0300	70.0003	3045.1766	1650.1498	352.6735	3814.1333	1853.5223	36.6667	127.7787	86.6671	16.6667	124452.7400	5184.8114	8784.2419	9224.6778	5241.5106	14
x		122352.3900	266.6706	152451.1200	66.6670	3020.2795	1649.7052	352.4513	3732.9921	1859.0790	33.3334	117.0378	77.7781	10.0000	122478.5600	5106.9909	8591.8393	9279.1779	5221.4992	13
σ		1623.8246	21.8588	2022.9307	35.1191	39.7083	6.0134	14.3352	313.1110	18.9580	5.7735	18.6037	10.1836	6.6667	1943.3538	182.9598	302.0242	72.5182	62.4858	
%RSD		1.3272	8.1969	1.3269	52.6784	1.3147	0.3645	4.0673	8.3877	1.0198	17.3205	15.8955	13.0931	66.6667	1.5867	3.5825	3.5152	0.7815	1.1967	

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:56:18	45235.5980	260.0037	3003.8295	36.6667	646.6897	214269.0400	14241.1460	4294.3474	7226.2042	171370.1400	165699.8000	4867.9697	104234.1600
2	17:56:31	45366.2470	183.3352	2997.1606	63.3336	586.6856	219843.1100	14301.2400	4197.6356	7569.8170	174193.0400	172073.2400	5214.8286	105957.2400
3	17:56:44	46150.1780	210.0024	2913.8002	13.3333	660.0240	220635.3000	14999.0300	4474.4342	7873.4080	176629.3800	173234.9900	5238.1753	108959.0700
x		45584.0080	217.7804	2971.5968	37.7779	631.1331	218249.1500	14513.8050	4322.1390	7556.4764	174064.1900	170336.0100	5106.9912	106383.4900
σ		494.6502	38.9216	50.1642	25.0186	39.0658	3469.5602	421.2897	140.4765	323.8081	2631.9840	4056.8777	207.3276	2391.1259
%RSD		1.0851	17.8719	1.6881	66.2256	6.1898	1.5897	2.9027	3.2502	4.2852	1.5121	2.3817	4.0597	2.2476

SEQ-CAL4@S04 10/18/2016 18:00:14

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97M
1	18:00:28	120733.0800	403.3423	152088.3100	76.6670	5628.4085	2952.4794	527.3486	7186.1725	2323.6303	53.3335	198.8911	80.0004	33.3334	121189.0900	12154.7870	20222.4670	22380.8490	12979.25
2	18:00:41	123499.8800	523.3484	153661.1000	216.6693	5592.3863	2969.8183	498.6803	7456.3900	2333.6328	73.3336	200.0022	120.0008	10.0000	123151.8700	12301.6510	20940.7570	23052.5240	13289.70
3	18:00:54	123675.5800	436.6771	155997.0400	73.3336	5639.0817	2946.4774	522.6817	7596.5059	2443.6617	70.0003	211.1136	133.3343	30.0001	124993.4200	12795.6650	22016.6280	23801.1160	13523.38
x		122636.1800	454.4559	153915.4800	122.2233	5619.9588	2956.2584	516.2369	7413.0228	2366.9749	65.5558	203.3356	111.1118	24.4445	123111.4600	12417.3680	21059.9510	23078.1630	13264.11
σ		1650.4689	61.9470	1966.7445	81.8096	24.4676	12.1207	15.3824	208.5759	66.6008	10.7152	6.7588	27.7559	12.6198	1902.4847	335.7441	902.9998	710.4807	272.96
%RSD		1.3458	13.6310	1.2778	66.9345	0.4354	0.4100	2.9797	2.8136	2.8137	16.3452	3.3240	24.9801	51.6265	1.5453	2.7038	4.2878	3.0786	2.05

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:00:28	46109.9750	206.6690	5865.2248	123.3342	1416.7771	216750.1600	34846.6580	8627.4252	14665.1520	172504.6300	168188.2100	9765.2420	106442.8600
2	18:00:41	46230.5850	256.6703	5805.1863	133.3343	1293.4253	219498.2600	35730.0770	8487.2934	15052.4510	176717.7400	172640.5100	9872.0239	108206.8400
3	18:00:54	45865.4090	243.3366	5948.6123	123.3342	1413.4432	221987.6300	36817.7380	8567.3684	15409.7160	177241.1100	173445.6200	10002.1660	108638.6100
x		46068.6560	235.5586	5873.0078	126.6676	1374.5485	219412.0200	35798.1580	8560.6957	15042.4400	175487.8300	171424.7800	9879.8106	107762.7700
σ		186.0613	25.8922	72.0291	5.7736	70.2745	2619.7976	987.3018	70.3038	372.3827	2596.7419	2831.7122	118.6538	1163.2809
%RSD		0.4039	10.9918	1.2264	4.5581	5.1126	1.1940	2.7580	0.8212	2.4755	1.4797	1.6519	1.2010	1.0795

SEQ-CAL5@S05 10/18/2016 18:04:25

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	
1	18:04:38	121439.0600	4767.9167	148713.1600	11430.5150	10443.9960	13305.0630	1845.5206	72340.0120	16084.2160	140.0011	385.5637	176.6684	13.3333	118622.2300	28624.9960	50630.5990	55455.2930	31
2	18:04:51	123665.4400	4577.8190	150675.0700	12308.3270	10606.1830	13546.7520	1822.8494	74850.2100	16778.8030	130.0009	393.3418	230.0029	3.3333	121303.9400	30029.5160	52152.4990	56548.6640	32
3	18:05:05	121668.7700	4567.8139	151627.3700	12385.0970	10724.9890	13562.1090	1808.8466	76735.8340	17062.5640	106.6673	412.2316	206.6690	16.6667	122732.9300	30347.2350	54191.0370	58604.9600	33
x		122257.7600	4637.8499	150338.5300	12041.3130	10591.7230	13471.3080	1825.7389	74642.0190	16641.8940	125.5564	397.0457	204.4468	11.1111	120886.3700	29667.2490	52324.7110	56869.6390	32
σ		1224.4881	112.7522	1485.9696	530.3575	141.0538	144.1773	18.5070	2205.2936	503.3867	17.1056	13.7143	26.7366	6.9389	2086.9188	916.4905	1786.4554	1599.1773	
%RSD		1.0016	2.4311	0.9884	4.4045	1.3317	1.0703	1.0137	2.9545	3.0248	13.6238	3.4541	13.0775	62.4500	1.7263	3.0892	3.4142	2.8120	

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:04:38	45034.6040	1270.0887	7276.2441	896.7109	12548.6550	213757.2000	42529.2480	41380.6320	14581.6850	170836.9100	168164.4400	97368.6590	105734.6700
2	18:04:51	46562.2710	1186.7441	7753.3048	833.3715	13146.1650	216163.0900	43771.7920	42445.5250	15115.8900	174080.9200	170898.0500	100772.1100	107646.9100
3	18:05:05	45738.1030	1423.4448	7689.9177	943.3823	12979.2590	221755.3900	45697.9020	43353.1260	15533.2590	176911.4500	173486.3800	101709.1300	108527.2900
x		45778.3260	1293.4259	7573.1555	891.1549	12891.3600	217225.2300	43999.6470	42393.0950	15076.9450	173943.1000	170849.6200	99949.9670	107302.9600
σ		764.6274	120.0636	259.0788	55.2154	308.3007	4103.5198	1596.5681	987.2916	476.9810	3039.6129	2661.3029	2284.0459	1427.7299
%RSD		1.6703	9.2826	3.4210	6.1959	2.3915	1.8891	3.6286	2.3289	3.1636	1.7475	1.5577	2.2852	1.3306

SEQ-CAL6@S06 10/18/2016 18:08:35

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96
1	18:08:48	120925.6200	21899.6790	149397.5800	58816.3180	50480.4340	64865.9280	8143.6459	364840.2800	78715.9890	593.3527	1981.3270	980.0528	23.3334	118787.7100	143811.9100	255867.4500	278360.73
2	18:09:01	122486.3000	22160.3100	152420.4700	59138.3970	50574.2860	64796.0990	8158.9930	374470.2300	79909.6690	546.6831	1983.5497	953.3833	33.3334	122506.5700	150549.6800	263813.1100	286741.94
3	18:09:14	122070.7700	22474.4130	152088.3100	60806.0110	50815.6270	65186.2070	8212.3744	379172.5800	80373.7330	526.6819	1964.6567	906.7119	23.3334	123280.2600	153156.0100	267048.8900	291437.78
x		121827.5600	22178.1340	151302.1200	59586.9090	50623.4490	64949.4110	8171.6711	372827.7000	79666.4640	555.5726	1976.5111	946.7160	26.6667	121524.8500	149172.5300	262243.1500	285513.48
σ		808.2680	287.7810	1657.7234	1067.9847	172.9199	208.0217	36.0756	7305.9651	855.2136	34.2128	10.3262	37.1223	5.7735	2401.7911	4821.8737	5753.6724	6624.51
%RSD		0.6635	1.2976	1.0956	1.7923	0.3416	0.3203	0.4415	1.9596	1.0735	6.1581	0.5224	3.9212	21.6507	1.9764	3.2324	2.1940	2.32

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:08:48	45349.4970	5598.3899	37677.9180	4277.6728	63527.8620	216142.6200	212972.4300	205015.9600	73731.1210	173887.2700	168503.9700	497243.4700	106085.3900
2	18:09:01	45640.9500	6295.5124	38718.9450	4624.5093	64850.4850	220481.6300	221629.0300	214204.2000	75713.9860	178359.3300	173700.4100	512616.3500	109272.8100
3	18:09:14	45101.6020	5991.9741	39512.3480	4497.7790	66116.2200	222291.5900	225874.9700	216958.3700	77619.9590	179436.9000	173741.1800	520950.6600	110608.8200
x		45364.0160	5961.9588	38636.4040	4466.6537	64831.5220	219638.6100	220158.8100	212059.5100	75688.3550	177227.8300	171981.8600	510270.1600	108655.6700
σ		269.9672	349.5291	919.9963	175.5006	1294.2831	3159.9797	6575.7166	6253.4066	1944.5455	2942.7552	3012.0037	12026.4800	2324.0061
%RSD		0.5951	5.8627	2.3812	3.9291	1.9964	1.4387	2.9868	2.9489	2.5691	1.6604	1.7513	2.3569	2.1389

SEQ-CAL7@S07 10/18/2016 18:11:47

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95
1	18:12:00	119892.0600	215224.5500	145850.6700	566748.8700	471232.0700	608248.1000	74883.1470	r3516920.2000	765475.4000	5418.2809	18614.5940	8503.9756	86.6671	117359.3400	1495644.2000	2684456.7
2	18:12:13	119520.5500	218801.7700	148401.4600	579254.6900	471015.9600	611360.1300	75316.7060	r3577415.8000	782243.1900	5681.7750	18266.1100	8774.2323	143.3345	117669.9800	1525494.8000	r2675442.2
3	18:12:26	120169.0200	220252.8500	146951.5200	584388.1100	471723.2500	609451.4900	74851.5550	r3599893.9000	784524.4300	5491.6582	18357.4050	8547.3496	150.0012	119449.6300	1553001.0000	r2696110.1
x		119860.5400	218093.0600	147067.8800	576797.2200	471323.7600	609686.5700	75017.1360	r3564743.3000	777414.3400	5530.5714	18412.7030	8608.5191	126.6676	118159.6500	1524713.4000	r2685336.4
σ		325.3794	2587.9853	1279.3679	9072.7634	362.4527	1569.2787	259.9160	r42913.8900	10402.1520	135.9888	180.7031	145.1411	34.8015	1127.9029	28686.3700	r10361.9
%RSD		0.2715	1.1866	0.8699	1.5730	0.0769	0.2574	0.3465	r1.2038	1.3380	2.4589	0.9814	1.6860	27.4746	0.9546	1.8814	r0.3

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:12:00	42874.1960	58215.8040	381500.3300	42867.4980	657568.3800	240475.7200	2284873.5000	2218015.0000	762221.6500	180735.5800	178542.8800	r5298607.0000	114169.1000
2	18:12:13	43450.2550	59363.1890	393259.1500	44237.3710	675834.3800	245993.7800	r2238415.5000	2272421.0000	788663.9600	183058.0300	184217.7700	r5386834.0000	116015.5900
3	18:12:26	42683.3010	60097.9930	391328.4600	44850.3630	676723.6900	245363.7600	2400019.6000	2338452.4000	801220.6000	185694.0200	183721.2000	r5451402.7000	118129.2100
x		43002.5840	59225.6620	388695.9800	43985.0770	670042.1500	243944.4200	r2307769.5000	2276296.1000	784035.4000	183162.5400	182160.6200	r5378947.9000	116104.6300
σ		399.2707	948.6008	6305.9466	1015.2229	10811.7500	3020.4553	r83199.4360	60312.1270	19907.2130	2480.8717	3142.8731	r76702.4770	1981.5587
%RSD		0.9285	1.6017	1.6223	2.3081	1.6136	1.2382	r3.6052	2.6496	2.5391	1.3545	1.7253	r1.4260	1.7067

SEQ-CAL8@S08 10/18/2016 18:15:55

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94M
1	18:16:08	110848.3800	u392608.5900	127839.2500	994736.1300	860631.2500	u1126737.3000	136404.3900	r6143279.5000	1333234.2000	10259.1190	32918.3800	15716.9080	233.3363	104591.5600	r2646683.600
2	18:16:22	110649.3100	u400676.0500	127764.8800	1017798.2000	862597.8400	u1138556.9000	137901.3800	r6298055.5000	u1383573.2000	10409.2890	33478.1970	15810.4030	246.6700	105056.8800	r2716387.400
3	18:16:35	109681.0100	u401522.1800	128674.2400	1021999.3000	u865948.3600	u1134705.7000	138067.2100	r6314290.7000	u1381994.6000	10172.3550	33560.7220	15553.2930	200.0022	105353.6200	r2737965.300
x		110392.9000	u398268.9400	128092.7900	1011511.2000	u863059.1500	u1133333.3000	137457.6600	r6251875.2000	u1366267.3000	10280.2540	33319.1000	15693.5350	226.6695	105000.6800	r2700345.400
σ		624.4950	u4920.2317	504.9210	14678.7300	u2688.4042	u6028.1393	915.9215	r94396.3350	u28618.3880	119.8730	349.4778	130.1386	24.0376	384.1238	r47708.434
%RSD		0.5657	u1.2354	0.3942	1.4512	u0.3115	u0.5319	0.6663	r1.5099	u2.0946	1.1661	1.0489	0.8292	10.6047	0.3658	r1.765

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:16:08	39462.1300	104652.2500	687807.6100	77885.5490	1205512.6000	243549.2700	r4000985.0000	r3954293.2000	r1401166.0000	174009.5800	172657.4900	tu10623219.0000	115688.1200
2	18:16:22	39646.2620	105545.8300	705581.9600	80948.8020	u1239968.1000	246339.6300	r4107913.0000	r4012134.4000	r1426372.0000	175915.7400	175259.9200	tu10777939.0000	119290.9000
3	18:16:35	39000.1430	108776.9100	708665.1500	81312.0210	u1249816.5000	247760.8100	r4180524.0000	tu4107360.0000	r1447977.2000	178257.3600	177468.8200	tu10924899.0000	119675.9100
x		39369.5120	106325.0000	700684.9100	80048.7910	u1231765.7000	245883.2400	r4096474.0000	tu4024595.8000	r1425171.7000	176060.8900	175128.7500	tu10775352.0000	118218.3100
σ		332.8680	2169.9166	11258.1120	1882.2043	u23263.0020	2142.5417	r90314.4570	tu77290.5230	r23428.6500	2127.6096	2408.3459	tu150856.6100	2199.6495
%RSD		0.8455	2.0408	1.6067	2.3513	u1.8886	0.8714	r2.2047	tu1.9205	r1.6439	1.2085	1.3752	tu1.4000	1.8607

SEQ-ICV@ICV01 10/18/2016 18:20:00 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96M
1	18:20:00	108095.5200	36610.2360	116690.8100	363.3406	88614.4610	113421.8300	14062.8690	573542.3600	122395.0900	1986.8838	7096.1018	3270.5882	76.6670	97742.6400	10229.0850	18054.5770	19687.962
2	18:20:14	108584.6300	38069.5440	119544.1900	313.3387	89231.7880	114162.3400	14153.6760	604131.4000	127781.7800	2313.6277	7245.1081	3400.6359	46.6668	99498.1970	10853.1410	19303.8070	21071.058
3	18:20:27	109522.4500	38464.5350	121185.7100	310.0053	88763.9080	114505.9600	14355.3250	623506.2000	133746.6600	2233.6077	7213.9723	3373.9593	70.0003	101705.7600	11033.3580	19380.6370	21218.066
x		108734.2000	37714.7720	119140.2400	328.8949	88870.0520	114030.0400	14190.6230	600393.3200	127974.5100	2178.0397	7185.0607	3348.3945	64.4447	99648.8650	10705.1950	18913.0070	20659.025
σ		725.1262	976.7315	2274.5155	29.8774	322.0611	554.0419	149.6881	25190.7960	5678.2421	170.3122	78.5979	68.6897	15.7528	1985.8508	422.0544	744.4137	844.174
%RSD		0.6669	2.5898	1.9091	9.0842	0.3624	0.4859	1.0548	4.1957	4.4370	7.8195	1.0939	2.0514	24.4439	1.9928	3.9425	3.9360	4.088

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:20:00	40402.9160	9348.1372	490937.5600	6919.2989	106176.4400	179766.6500	1213.4143	701291.6300	128728.3300	161166.0500	160779.2900	r2079115.9000	106631.7200
2	18:20:14	40212.0730	9788.6004	511347.8200	7212.8603	112640.2000	186588.7300	1206.7468	744589.8100	136896.3600	167648.3700	167369.9800	r2163473.8000	110058.8700
3	18:20:27	40443.0940	10449.3350	522425.1000	7603.1781	116846.1200	190406.6800	1003.3887	779839.2500	141773.6000	170487.1000	168795.9800	r2200324.9000	113699.9400
x		40352.6940	9862.0243	508236.8300	7245.1124	111887.5900	185587.3500	1141.1833	741906.9000	135799.4300	166433.8400	165648.4200	r2147638.2000	110130.1800
σ		123.4277	554.2586	15972.6340	343.0785	5374.5090	5390.2334	119.3801	39342.4760	6591.4499	4777.7455	4276.6447	r62136.7850	3534.6471
%RSD		0.3059	5.6201	3.1428	4.7353	4.8035	2.9044	10.4611	5.3029	4.8538	2.8707	2.5818	r2.8933	3.2095

SEQ-ICB@ICB01 10/18/2016 18:23:33 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	18:23:46	109934.0400	30.0001	121766.7300	63.3336	349.3401	312.6720	140.0011	333.3394	873.3753	13.3333	8.8889	20.0000	10.0000	101813.6200	63.3336	126.6676	150.0012	76.6670	160.0014
2	18:23:59	109937.4100	40.0001	125243.4900	53.3335	373.3410	292.0047	146.6678	390.0084	833.3715	6.6667	15.5556	13.3333	10.0000	103323.8500	100.0006	106.6673	140.0011	110.0007	240.0032
3	18:24:12	111364.6300	73.3336	125375.2900	93.3338	349.3401	314.6721	145.3345	333.3394	920.0466	0.0000	6.6667	13.3333	40.0001	105326.6400	76.6670	106.6673	180.0018	60.0002	296.6715
x		110412.0300	47.7779	124128.5000	70.0003	357.3404	306.4496	144.0011	352.2291	875.5978	6.6667	10.3704	15.5556	20.0000	103488.0400	80.0004	113.3340	156.6680	82.2226	232.2254
σ		824.9782	22.6897	2046.4146	20.8168	13.8570	12.5496	3.5277	32.7178	43.3802	6.6667	4.6259	3.8490	17.3206	1762.2541	18.5594	11.5472	20.8170	25.4590	68.6662
%RSD		0.7472	47.4898	1.6486	29.7382	3.8778	4.0952	2.4498	9.2888	4.9544	100.0000	44.6072	24.7436	86.6026	1.7029	23.1991	10.1886	13.2873	30.9635	29.5688

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:23:46	39666.3500	76.6670	336.6729	3.3333	100.0006	188487.2900	210.0024	500.0138	153.3346	165034.5300	165231.3900	1290.0915	108321.5200
2	18:23:59	39987.7530	136.6677	293.3381	3.3333	56.6668	193943.6100	193.3354	466.6786	123.3342	166256.4900	165866.1200	1233.4170	108975.9400
3	18:24:12	40165.1990	130.0009	203.3356	3.3333	53.3335	194359.0100	230.0029	483.3462	96.6672	170069.3900	167454.8500	1076.7304	108426.0900
x		39939.7670	114.4452	277.7822	3.3333	70.0003	192263.3000	211.1136	483.3462	124.4453	167120.1400	166184.1200	1200.0797	108574.5200
σ		252.8631	32.8863	68.0162	0.0000	26.0344	3276.7089	18.3590	16.6676	28.3501	2626.1893	1145.3351	110.5182	351.5519
%RSD		0.6331	28.7354	24.4854	0.0000	37.1918	1.7043	8.6963	3.4484	22.7811	1.5714	0.6892	9.2092	0.3238

SEQ-IFA@ICSA01 10/18/2016 18:27:13 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo
1	18:27:26	105920.1400	130.0009	134115.3700	875889.0500	358.0070	24307.1190	3105.1969	8981.1008	9004.4572	6.6667	7.7778	13.3333	33.3334	108510.4200	2269485.2000	±3990281.0000	±4331625.1000
2	18:27:40	105475.0100	150.0012	138500.3900	926470.1400	385.3415	24801.7860	3053.8462	9411.5359	8974.4275	3.3333	6.6667	23.3334	16.6667	113372.5500	2374793.7000	±4119061.1000	±4486734.4000
3	18:27:54	106979.1000	180.0018	140998.3500	947585.8700	387.3416	24884.6790	3081.1887	9418.2095	9211.3310	0.0000	12.2222	13.3333	26.6667	114560.6400	±2402275.8000	±4263878.0000	±4629537.0000
x		106124.7500	153.3347	137871.3700	916648.3500	376.8967	24664.5280	3080.0773	9270.2820	9063.4052	3.3333	8.8889	16.6667	25.5556	112147.8700	±2348851.6000	±4124406.7000	±4482632.2000
σ		772.6381	25.1665	3484.3355	36843.7130	16.3895	312.2876	25.6934	250.4605	128.9844	3.3333	2.9397	5.7735	8.3887	3205.6462	±70093.3580	±136876.7900	±148998.3300
%RSD		0.7280	16.4128	2.5272	4.0194	4.3485	1.2661	0.8342	2.7018	1.4231	100.0000	33.0719	34.6411	32.8254	2.8584	±2.9842	±3.3187	±3.3239

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:27:26	39716.5680	123.3342	153.3346	1850.1883	2156.9225	202493.7000	776.6998	4487.7741	3040.5084	170021.8500	166735.1400	723.3621	104682.6000
2	18:27:40	39468.8260	156.6680	173.3350	1803.5122	2323.6303	206638.7500	850.0397	4751.2413	2907.1314	175028.8700	172372.1500	633.3554	108058.4200
3	18:27:54	40141.7630	136.6677	166.6682	1803.5122	2290.2885	212904.2000	740.0301	5308.2160	3280.5918	177798.5100	175154.5900	540.0160	108790.4100
x		39775.7190	138.8900	164.4459	1819.0709	2256.9471	207345.5500	788.9232	4849.0771	3076.0772	174283.0700	171420.6300	632.2445	107177.1400
σ		340.3456	16.7777	10.1837	26.9484	88.2134	5241.1156	56.0142	418.8796	189.2539	3941.6072	4289.6183	91.6781	2191.1211
%RSD		0.8557	12.0798	6.1927	1.4814	3.9085	2.5277	7.1001	8.6383	6.1524	2.2616	2.5024	14.5004	2.0444

SEQ-IFB@ICSAB01 10/18/2016 18:31:24 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	
1	18:31:37	105158.0400	8597.3967	148957.1000	972853.9900	21251.4770	52403.2680	6504.3260	151420.6400	37939.0000	220.0027	730.0293	336.6729	36.6667	120854.6800	2451984.2000	±4261997.2000	±4664
2	18:31:50	104928.7400	8460.6018	154857.8100	999884.2800	20836.5180	52414.6670	6536.3490	154664.5600	39492.2610	206.6690	724.4733	383.3414	40.0001	123709.3700	±2502568.5000	±4406409.7000	±4805
3	18:32:03	106254.0000	8740.8668	154647.6100	1021493.6000	20932.7390	52611.1300	6581.7150	156244.5700	40399.5680	236.6697	732.2517	353.3402	40.0001	122263.3300	±2543299.7000	±4478969.8000	±4886
x		105446.9300	8599.6218	152820.8400	998077.2900	21006.9110	52476.3550	6540.7967	154109.9200	39276.9430	221.1138	728.9181	357.7848	38.8890	122275.7900	±2499284.1000	±4382458.9000	±4785
σ		708.2881	140.1457	3347.7478	24370.1050	217.1955	116.8577	38.8857	2459.3317	1244.3349	15.0312	4.0065	23.6496	1.9245	1427.3813	±45746.2690	±110451.3600	±112
%RSD		0.6717	1.6297	2.1906	2.4417	1.0339	0.2227	0.5945	1.5958	3.1681	6.7979	0.5496	6.6100	4.9487	1.1673	±1.8304	±2.5203	

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:31:37	41682.0050	2366.9748	105889.7900	3510.6777	26675.7470	216036.8100	796.7016	88939.6130	33354.4100	175287.1000	172246.4700	207136.5600	107154.4800
2	18:31:50	42184.3140	2326.9644	108851.1300	3647.3982	27641.9600	221622.2000	823.3706	92585.7450	35184.6230	177383.8600	175157.9800	211420.1600	108345.1400
3	18:32:03	42716.7910	2403.6511	111128.4300	3554.0279	27795.7620	223633.9100	796.7016	93915.9520	36436.2050	183088.6300	179338.3100	217071.0100	109272.8100
x		42194.3700	2365.8634	108623.1200	3570.7013	27371.1560	220430.9800	805.5913	91813.7700	34991.7460	178586.5300	175580.9200	211875.9100	108257.4700
σ		517.4667	38.3554	2626.7523	69.8686	607.1321	3936.1464	15.3974	2576.4212	1549.9248	4037.4229	3564.7865	4982.8849	1061.8800
%RSD		1.2264	1.6212	2.4182	1.9567	2.2181	1.7857	1.9113	2.8061	4.4294	2.2608	2.0303	2.3518	0.9809

SEQ-CCV@CCV01 10/18/2016 18:35:33 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95
1	18:35:46	114219.7300	241310.7500	162889.6900	619581.0000	526728.4000	685449.0800	83968.0020	±3900168.5000	845124.8000	6575.7107	20957.4620	9815.2958	130.0009	132390.3600	1622973.6000	±2834819.7
2	18:35:59	112822.4400	244894.7000	166052.8200	634313.4400	527362.9900	688756.2100	83986.8410	±3985596.8000	864396.5900	6378.9039	20860.5730	9771.9158	186.6686	133672.2500	1659124.8000	±2903719.5
3	18:36:12	113936.2000	244257.9100	166453.3800	640795.1700	529157.5600	684928.6300	83865.0580	±4035636.1000	876196.6800	6605.7324	20831.6180	9775.2527	116.6674	133469.3000	1682094.7000	±2914154.5
x		113659.4500	243487.7900	165131.9600	631563.2000	527749.6500	686377.9700	83939.9670	±3973800.5000	861906.0200	6520.1157	20883.2180	9787.4881	144.4456	133177.3000	1654731.0000	±2884231.2
σ		738.6091	1912.0649	1952.1642	10871.2060	1259.8928	2075.9911	65.5534	±68499.8800	15684.9480	123.2108	65.9074	24.1399	37.1689	689.0251	29804.4130	±43108.5
%RSD		0.6498	0.7853	1.1822	1.7213	0.2387	0.3025	0.0781	±1.7238	1.8198	1.8897	0.3156	0.2466	25.7321	0.5174	1.8012	±1.4

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:35:46	47413.3200	64367.0680	414411.7100	48948.0880	729597.7000	267773.0600	±2356516.0000	2446730.9000	843777.8900	191567.3500	190096.9600	±5612591.8000	120668.9100
2	18:35:59	47487.0360	65619.3060	431429.9600	50104.3620	747216.0500	269860.1000	2549222.1000	2530470.3000	868351.5000	197590.9000	191420.9800	±5755662.0000	123297.1600
3	18:36:12	47681.3830	66579.5830	434239.0800	49615.0220	758285.3500	273365.8800	2599256.7000	2588354.3000	888055.4100	198258.5400	195431.6400	±5770567.3000	124885.2800
x		47527.2460	65521.9860	426693.5900	49555.8240	745033.0400	270333.0100	±2501664.9000	2521851.9000	866728.2700	195805.5900	192316.5300	±5712940.4000	122950.4500
σ		138.4814	1109.4638	10728.7500	580.4054	14467.8820	2826.2388	±128167.9400	71203.9870	22183.3440	3685.5779	2777.8041	±87223.3780	2129.4609
%RSD		0.2914	1.6933	2.5144	1.1712	1.9419	1.0455	±5.1233	2.8235	2.5594	1.8823	1.4444	±1.5268	1.7320

SEQ-CCB@CCB01 10/18/2016 18:39:45 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98
1	18:39:58	106294.4700	130.0009	148215.1200	293.3381	556.0170	518.0148	197.3355	1216.7481	1180.0766	13.3333	16.6667	16.6667	30.0001	117497.7700	570.0179	913.3792	1120.0690	593.3527	1803.51
2	18:40:11	109778.8500	93.3338	148093.1600	336.6729	516.0146	476.0125	193.3354	1503.4576	1303.4268	10.0000	14.4445	16.6667	20.0000	120334.5200	690.0262	1093.3991	1283.4239	620.0211	1956.87
3	18:40:24	109026.5400	120.0008	149810.9600	336.6729	567.3510	451.3445	200.0022	1406.7755	1230.0832	6.6667	11.1111	13.3333	23.3334	121293.8100	733.3629	1126.7365	1200.0792	710.0277	1883.52
x		108366.6200	114.4452	148706.4100	322.2280	546.4609	481.7906	196.8910	1375.6604	1237.8622	10.0000	14.0741	15.5556	24.4445	119708.7000	664.4690	1044.5049	1201.1907	641.1339	1881.30
σ		1833.5322	18.9544	958.5084	25.0194	26.9693	33.7086	3.3556	145.8654	62.0419	3.3333	2.7962	1.9245	5.0918	1973.8814	84.6184	114.7750	81.6831	61.1357	76.70
%RSD		1.6920	16.5620	0.6446	7.7645	4.9353	6.9965	1.7043	10.6033	5.0120	33.3334	19.8680	12.3718	20.8299	1.6489	12.7347	10.9885	6.8002	9.5356	4.07

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:39:58	46012.8180	193.3354	233.3363	23.3334	223.3361	214374.8200	963.3844	940.0486	346.6733	176612.3900	173360.6900	2473.6698	110841.6300
2	18:40:11	46059.7210	163.3348	256.6703	16.6667	260.0037	217306.5400	1003.3887	980.0528	353.3402	176177.4000	174522.6000	2436.9933	112987.8100
3	18:40:24	46026.2190	193.3354	200.0022	23.3334	313.3387	220136.7600	1020.0572	913.3792	393.3418	179277.1200	176965.8300	2640.3834	113136.3000
x		46032.9190	183.3352	230.0029	21.1111	265.5595	217272.7100	995.6101	944.4936	364.4518	177355.6400	174949.7100	2517.0155	112321.9100
σ		24.1589	17.3208	28.4807	3.8490	45.2578	2881.1174	29.1262	33.5583	25.2406	1678.2091	1840.1275	108.4021	1284.1125
%RSD		0.0525	9.4476	12.3828	18.2321	17.0424	1.3260	2.9255	3.5530	6.9256	0.9462	1.0518	4.3068	1.1432

SEQ-CCV@CCV02 10/18/2016 19:10:27 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95
1	19:10:40	116343.0600	225348.8200	152054.4200	578076.4600	481384.4700	626337.2200	77471.3660	±3673513.0000	798172.5100	5511.6703	18662.4700	8437.2468	93.3338	124402.0600	1521419.0000	±2656088.80
2	19:10:53	116761.7100	229989.5600	150458.1900	582857.7300	482255.5300	626474.9000	77166.7920	±3690888.5000	811112.7400	5805.1863	19053.2790	8961.0810	103.3339	123341.0800	1543886.5000	±2706767.70
3	19:11:07	116559.1400	230307.4600	151220.6800	585407.3200	481555.8600	624674.4500	76837.3520	±3715396.0000	811509.2200	5955.2833	18781.6030	9017.8038	106.6673	122401.8400	1573529.6000	±2747658.60
x		116554.6400	228548.6100	151244.4300	582113.8400	481731.9500	625828.8600	77158.5030	±3693265.8000	806931.4900	5757.3800	18832.4510	8805.3772	101.1117	123381.6600	1546278.4000	±2703505.00
σ		209.3611	2775.6568	798.3802	3721.6117	461.4568	1002.1105	317.0880	±21042.4860	7588.0917	225.6373	200.3050	320.0693	6.9390	1000.7226	26137.5230	±45871.97
%RSD		0.1796	1.2145	0.5279	0.6393	0.0958	0.1601	0.4110	±0.5698	0.9404	3.9191	1.0636	3.6349	6.8627	0.8111	1.6904	±1.69

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	19:10:40	45346.1470	59792.6560	391749.3500	44937.4580	684167.7500	250463.3700	2339271.9000	2321940.7000	799255.0300	187310.0000	183945.6700	±5460515.0000	117220.9000
2	19:10:53	43500.4940	61309.3750	407663.3000	46294.2410	710975.5000	257317.5200	2424558.3000	2428421.0000	829637.7600	190267.1300	187868.0100	±5565803.8000	119672.5300
3	19:11:07	44649.3780	62030.9110	408649.4600	46917.4240	713927.2400	258442.0900	2459413.8000	2459585.6000	838844.5100	192466.0300	190382.8500	±5586082.6000	122094.4200
x		44498.6730	61044.3140	402687.3700	46049.7080	703023.5000	255407.6600	2407748.0000	2403315.8000	822579.1000	190014.3900	187398.8400	±5570800.5000	119662.6200
σ		932.0098	1142.4270	9485.4275	1012.3798	16396.1170	4318.6425	61809.8500	72175.0720	20717.1480	2587.2921	3244.1325	±112866.7600	2436.7747
%RSD		2.0945	1.8715	2.3555	2.1984	2.3322	1.6909	2.5671	3.0031	2.5186	1.3616	1.7311	±2.0260	2.0364

SEQ-CCB@CCB02 10/18/2016 19:14:39 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	19:14:53	109185.1000	103.3339	134866.3600	376.6745	466.0119	441.3440	196.0021	1150.0727	1063.3955	0.0000	16.6667	16.6667	0.0000	111405.1200	566.6843	873.3753	990.0539	540.0160	1450.1156
2	19:15:05	112221.7400	103.3339	135833.9400	210.0024	452.0112	439.3440	177.3351	1116.7353	1076.7304	13.3333	15.5556	26.6667	10.0000	111884.2800	553.3502	993.3876	986.7202	666.6911	1626.8122
3	19:15:18	111489.4800	96.6672	138581.6100	240.0032	492.0133	433.3437	160.0014	1206.7468	910.0456	3.3333	11.1111	23.3334	3.3333	114023.9600	490.0132	783.3671	880.0426	613.3540	1323.4297
x		110965.4400	101.1117	136427.3000	275.5600	470.0122	438.0106	177.7795	1157.8516	1016.7238	5.5556	14.4445	22.2222	4.4444	112437.7900	536.6826	883.3767	952.2722	606.6871	1466.7858
σ		1584.6970	3.8490	1927.3907	88.8432	20.2988	4.1635	18.0045	45.5071	92.6264	6.9389	2.9397	5.0918	5.0918	1394.3999	40.9631	105.3669	62.5749	63.6002	152.3767
%RSD		1.4281	3.8067	1.4128	32.2410	4.3188	0.9506	10.1274	3.9303	9.1103	124.9000	20.3519	22.9129	114.5644	1.2402	7.6326	11.9277	6.5711	10.4832	10.3885

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	19:14:53	43791.8880	143.3345	193.3354	30.0001	186.6686	205690.9500	813.3697	880.0426	336.6729	175416.2200	171791.3100	2500.3438	112906.8100
2	19:15:05	43279.4430	163.3348	173.3350	20.0000	220.0027	210308.1400	810.0361	786.7007	380.0079	178570.0800	175708.4500	2190.2638	113838.3200
3	19:15:18	42974.6690	136.6677	143.3345	20.0000	233.3363	212344.6700	793.3679	893.3772	316.6722	179957.0300	178206.3800	2133.5837	114354.7400
x		43348.6670	147.7790	170.0016	23.3334	213.3359	209447.9200	805.5912	853.3735	344.4510	177981.1100	175235.3800	2274.7304	113699.9600
σ		412.9840	13.8780	25.1666	5.7735	24.0376	3409.2479	10.7161	58.1240	32.3764	2326.9897	3233.5899	197.4315	733.8143
%RSD		0.9527	9.3911	14.8037	24.7436	11.2675	1.6277	1.3302	6.8111	9.3994	1.3074	1.8453	8.6793	0.6454

SEQ-CCV@CCV03 10/18/2016 19:45:06 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95M
1	19:45:19	115134.4900	215931.0100	148357.4100	554617.2200	473253.1000	617240.2000	75992.2940	÷3559267.1000	769425.5500	5891.9087	18565.6050	8787.5785	143.3345	122661.9800	1479104.0000	÷2600556.50
2	19:45:32	115164.8700	217804.9300	148296.4300	563524.0400	477467.1000	620574.8000	75806.0820	÷3610910.7000	782827.0500	5831.8700	18764.9020	8730.8572	146.6678	122618.0600	1530865.3000	÷2668809.10
3	19:45:45	114574.1400	218170.2000	148262.5500	575227.3200	473504.3600	620877.8100	75816.1660	÷3651827.3000	800275.9100	5828.5345	18674.7170	8834.2904	146.6678	122928.8800	1555275.1000	÷2694411.40
x		114957.8300	217302.0400	148305.4700	564456.1900	474741.5200	619564.2700	75871.5140	÷3607335.0000	784176.1700	5850.7711	18668.4080	8784.2420	145.5567	122736.3100	1521748.1000	÷2654597.30
σ		332.6334	1201.3144	48.0721	10336.6170	2363.7625	2018.3969	104.7199	÷46383.5770	15469.3670	35.6652	99.7984	51.7972	1.9245	168.2143	38895.3950	÷48515.71
%RSD		0.2894	0.5528	0.0324	1.8313	0.4979	0.3258	0.1380	÷1.2858	1.9727	0.6096	0.5346	0.5897	1.3222	0.1371	2.5560	÷1.82

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	19:45:19	43316.2850	59400.0950	392949.5200	45228.8980	678362.6700	251833.7900	2317105.0000	2308680.9000	800061.5500	187919.0400	186187.2900	÷5592337.4000	120959.4000
2	19:45:32	44776.6680	60302.6750	401368.9700	46491.9130	697880.1800	255524.6700	2403817.6000	2424387.0000	826518.6000	193701.8700	191802.2200	÷5758896.7000	123756.6700
3	19:45:45	44639.3280	61363.0690	407360.1600	46153.5280	707895.1600	255462.9700	2430892.7000	2443461.8000	840818.2900	196225.1300	195397.5800	÷5763548.1000	126696.7500
x		44244.0940	60355.2800	400559.5500	45958.1130	694712.6700	254273.8100	2383938.5000	2392176.6000	822466.1500	192615.3500	191129.0300	÷5704927.4000	123804.2700
σ		806.4353	982.5434	7239.3352	653.7901	15018.8810	2113.3431	59441.5470	72935.6190	20678.3600	4258.3031	4641.9051	÷97533.5080	2868.9751
%RSD		1.8227	1.6279	1.8073	1.4226	2.1619	0.8311	2.4934	3.0489	2.5142	2.2108	2.4287	÷1.7096	2.3173

SEQ-CCB@CCB03 10/18/2016 19:49:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	19:49:31	110841.6300	60.0002	133476.0600	163.3348	386.0082	341.3397	144.0011	716.6949	850.0397	0.0000	8.8889	16.6667	16.6667	111678.4400	410.0093	743.3637	736.6965	460.0116	1176.7428
2	19:49:44	112690.8200	56.6658	135766.2700	200.0022	412.6760	344.6732	152.0013	800.0352	996.7213	6.6667	7.7778	10.0000	10.0000	113969.9500	443.3441	736.6965	836.7052	583.3520	1370.1032
3	19:49:57	112275.7300	90.0004	136991.1100	176.6684	380.0079	314.0054	162.0014	720.0285	886.7099	3.3333	15.5556	16.6667	20.0000	114169.1000	436.6771	676.6919	796.7016	476.6792	1146.7390
x		111936.0600	68.8892	135411.1500	180.0018	392.8974	333.3395	152.6579	745.5862	911.1570	3.3333	10.7407	14.4445	15.5556	113272.5000	430.0102	718.9174	790.0344	506.6810	1231.1950
σ		970.2637	18.3587	1784.2278	18.5596	17.3896	16.8265	9.0187	47.1837	76.3355	3.3333	4.2066	3.8490	5.0918	1384.0775	17.6392	36.7200	50.3366	66.9201	121.2299
%RSD		0.8668	26.6496	1.3176	10.3108	4.4260	5.0479	5.9074	6.3284	8.3779	100.0000	39.1649	26.6470	32.7327	1.2219	4.1020	5.1077	6.3714	13.2075	9.8465

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	19:49:31	43389.9680	150.0012	96.6672	10.0000	136.6677	207047.9100	716.6949	626.6883	226.6695	179059.5600	177173.1400	1400.1078	114854.3100
2	19:49:44	42723.4890	140.0011	93.3338	3.3333	110.0007	210069.3800	616.6876	576.6850	266.6706	179501.4900	177910.6700	1490.1221	116208.0200
3	19:49:57	43316.2850	146.6678	103.3339	3.3333	113.3340	210939.1800	546.6831	576.6850	226.6695	182061.6500	180419.3900	1523.4610	118254.1500
x		43143.2470	145.5567	97.7783	5.5556	120.0008	209352.1500	626.6885	593.3527	240.0032	180207.5700	178501.0700	1471.2303	116438.8300
σ		365.3832	5.0918	5.0918	3.8490	14.5299	2042.3784	85.4460	28.8694	23.0946	1620.8139	1701.7523	63.8097	1711.6316
%RSD		0.8469	3.4982	5.2075	69.2821	12.1081	0.9756	13.6345	4.8655	9.6226	0.8994	0.9534	4.3372	1.4700

SEQ-CCV@CCV04 10/18/2016 20:06:35 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95
1	20:06:48	115475.4400	218497.9300	146209.7000	573159.3000	460087.0700	603258.8900	73761.3650	÷3665975.2000	793041.2900	5728.4709	17826.3500	8470.6111	163.3348	121445.8200	1538089.4000	÷2733502.5
2	20:07:02	114415.5000	215651.1500	144661.9000	572864.9200	467644.4100	609886.6000	75131.8530	÷3627107.2000	788555.1000	5474.9815	18237.1630	8597.3967	143.3345	120777.0000	1549055.1000	÷2709639.3
3	20:07:15	114958.9600	218538.8900	143300.6000	566770.1400	466088.1300	610023.3300	74786.3550	÷3614138.4000	781731.9000	5788.5090	18573.3980	8283.7724	103.3339	120945.8900	1556280.7000	÷2703168.0
x		114949.9600	217562.6600	144724.0700	570931.4500	464606.5400	607722.9400	74559.8570	÷3635740.3000	787776.0900	5663.9871	18212.3040	8450.5934	136.6677	121056.2300	1547808.4000	÷2715436.6
σ		530.0285	1655.5408	1455.5499	3606.8099	3990.5770	3866.5811	712.7658	÷26975.1800	5694.7966	166.4136	374.1444	157.7675	30.5509	347.7975	9159.5132	÷15976.5
%RSD		0.4611	0.7609	1.0057	0.6317	0.8589	0.6362	0.9560	÷0.7419	0.7229	2.9381	2.0543	1.8669	22.3542	0.2873	0.5918	÷0.5

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	20:06:48	42914.3850	61245.6140	398159.0000	45939.1130	701841.7500	251892.0400	÷2303236.5000	2408938.0000	827480.4700	190883.1800	188960.3000	÷5781075.1000	123290.4000
2	20:07:02	43510.5420	61426.8300	402768.8900	46572.3230	707988.7000	253495.7100	2439447.6000	2439306.1000	838275.4400	194164.9300	191420.9800	÷5878668.1000	126314.8300
3	20:07:15	43125.3800	62534.3430	404005.3100	47259.1870	716707.0400	254023.4700	2446572.1000	2463246.6000	844416.6500	196725.7700	193358.0000	÷5887653.6000	127217.2800
x		43183.4360	61735.5960	401644.4000	46590.2070	708845.8300	253137.0700	÷2396418.8000	2437163.6000	836724.1900	193924.6300	191246.4200	÷5849132.2000	125607.5000
σ		302.2890	697.6443	3081.1018	660.2187	7469.6197	1110.0485	÷80776.7840	27217.6640	8573.9885	2928.6988	2204.0408	÷59110.2250	2056.7780
%RSD		0.7000	1.1301	0.7671	1.4171	1.0538	0.4385	÷3.3707	1.1168	1.0247	1.5102	1.1525	÷1.0106	1.6375

SEQ-CCB@CCB04 10/18/2016 20:10:57 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	20:11:10	111924.7800	53.3335	132058.9300	156.6680	379.3413	342.0064	172.6683	580.0185	880.0426	3.3333	8.8889	26.6667	16.6667	111577.2100	333.3394	596.6862	620.0211	376.6745	1013.3898
2	20:11:24	112312.8500	73.3336	134355.5400	186.6686	376.0078	306.6718	168.0016	623.3547	850.0397	6.6667	13.3333	26.6667	30.0001	111789.8000	363.3406	606.6869	666.6911	446.6776	946.7160
3	20:11:37	111489.4800	70.0003	134250.6800	140.0011	363.3406	304.6718	137.3344	563.3508	853.3734	3.3333	7.7778	16.6667	16.6667	113470.4300	310.0053	583.3520	670.0247	396.6753	1023.3909
x		111909.0400	65.5558	133555.0500	161.1126	372.8965	317.7833	159.3347	588.9080	861.1519	4.4444	10.0000	23.3334	21.1111	112279.1500	335.5618	595.5751	652.2456	406.6758	994.4989
σ		411.9134	10.7152	1296.7420	23.6491	8.4419	21.0016	19.1952	30.9739	16.4445	1.9245	2.9397	5.7735	7.6980	1037.1422	26.7370	11.7070	27.9570	36.0572	41.6823
%RSD		0.3681	16.3452	0.9709	14.6786	2.2639	6.6088	12.0471	5.2596	1.9096	43.3013	29.3973	24.7436	36.4643	0.9237	7.9678	1.9657	4.2863	8.8663	4.1913

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	20:11:10	43396.6670	103.3339	73.3336	0.0000	113.3340	208162.9400	506.6808	520.0149	240.0032	178444.3100	176792.5000	1380.1047	114931.9500
2	20:11:24	43346.4280	96.6672	86.6671	3.3333	123.3342	211174.5500	606.6869	553.3502	226.6695	181140.1800	179654.4600	1386.7724	116863.0000
3	20:11:37	43353.1260	116.6674	123.3342	3.3333	146.6678	210748.1600	610.0205	486.6797	200.0022	184792.5900	182966.2000	1276.7563	117207.3900
x		43365.4070	105.5562	94.4450	2.2222	127.7787	210028.5500	574.4627	520.0149	222.2250	181459.0300	179804.3900	1347.8778	116334.1200
σ		27.2781	10.1836	25.8918	1.9245	17.1056	1629.6697	58.7245	33.3352	20.3675	3186.1302	3089.5802	61.6832	1226.4587
%RSD		0.0629	9.6476	27.4147	86.6025	13.3869	0.7759	10.2225	6.4104	9.1653	1.7558	1.7183	4.5763	1.0543

SEQ-CCV@CCV05 10/18/2016 21:08:00 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95M
1	21:08:14	105845.9500	188167.4400	123503.2600	478131.3500	411009.7100	544312.1800	66672.2590	±3079032.6000	661663.4200	5094.7605	15918.3690	7386.3328	140.0011	106510.3100	1311508.1000	2379626.70
2	21:08:27	107427.6800	189491.1800	125804.4900	482615.9200	416350.7000	546634.8500	67263.9270	±3078278.8000	667863.0600	4764.5816	16301.2690	7443.0457	133.3343	107417.5600	1336787.0000	2424331.40
3	21:08:40	106739.6400	188330.7700	126517.6200	485598.6200	414272.2300	544887.1400	66753.5190	±3103404.8000	670901.6900	5131.4478	16143.2090	7643.2117	120.0008	108662.2200	1356606.2000	2458198.10
x		106671.0900	188663.1300	125275.1200	482115.3000	413877.5500	545278.0600	66896.5680	±3086905.4000	666809.3900	4996.9300	16120.9490	7490.8634	131.1121	107530.0300	1334967.1000	2420718.70
σ		793.0877	721.7472	1575.3620	3758.7243	2692.2815	1209.6737	320.7259	±14293.8560	4708.4042	202.0540	192.4181	134.9503	10.1836	1080.3544	22604.0850	39410.04
%RSD		0.7435	0.3826	1.2575	0.7796	0.6505	0.2218	0.4794	±0.4630	0.7061	4.0436	1.1936	1.8015	7.7671	1.0047	1.6932	1.62

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	21:08:14	40433.0500	53081.1840	350235.7400	39937.5330	616487.6200	226602.7500	±2022284.0000	2119687.3000	735510.1400	181384.9900	180813.7800	±5565486.7000	121371.5000
2	21:08:27	40623.8980	54583.3730	354575.8900	40741.0870	634081.3900	228871.8800	2180858.3000	2185207.4000	754206.0700	188143.6200	184915.0500	±5691621.8000	125074.5200
3	21:08:40	41079.2700	54730.9230	359919.8600	41963.2940	632642.8400	232642.4600	2187499.8000	2192856.3000	759569.5400	188528.1300	186374.4000	±5696526.9000	127203.7600
x		40712.0720	54131.8270	354910.5000	40880.6380	627737.2800	229372.3700	±2130214.0000	2165917.0000	749761.9100	186018.9100	184034.4100	±5651211.8000	124549.9300
σ		332.0112	912.8693	4850.7209	1020.0651	9769.0095	3050.8022	±93529.0960	40218.3270	12630.3800	4017.6981	2883.0138	±74280.6250	2951.3068
%RSD		0.8155	1.6864	1.3667	2.4952	1.5562	1.3301	±4.3906	1.8569	1.6846	2.1598	1.5666	±1.3144	2.3696

SEQ-CCB@CCB05 10/18/2016 21:12:22 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	21:12:36	104207.1800	50.0001	115512.5700	130.0009	310.0053	262.6705	119.3341	500.0138	846.7061	6.6667	4.4444	16.6667	16.6667	98611.9520	470.0122	826.7043	656.6904	486.6797	1186.7441
2	21:12:49	104186.9500	63.3336	117204.0200	106.6673	284.0044	269.3373	136.6677	466.6786	770.0326	6.6667	8.8889	6.6667	16.6667	100620.4500	396.6753	740.0301	710.0277	430.0102	1176.7428
3	21:13:02	104166.7200	43.3334	117359.3400	113.3340	318.0056	279.3376	135.3343	506.6808	780.0335	3.3333	3.3333	16.6667	10.0000	101294.5400	450.0111	696.6934	726.6957	510.0143	1150.0727
x		104186.9500	52.2224	116691.9800	116.6674	304.0051	270.4485	130.4454	491.1244	798.9241	5.5556	5.5556	13.3333	14.4445	100175.6500	438.8995	754.4759	697.8046	475.5681	1171.1866
σ		20.2299	10.1836	1024.3398	12.0187	17.7770	8.3890	9.6457	21.4315	41.6815	1.9245	2.9397	5.7735	3.8490	1395.5121	37.9101	66.1983	36.5683	41.1432	18.9566
%RSD		0.0194	19.5004	0.8778	10.3016	5.8476	3.1019	7.3944	4.3638	5.2172	34.6410	52.9150	43.3013	26.6470	1.3931	8.6375	8.7741	5.2405	8.6514	1.6186

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	21:12:36	40178.5920	90.0004	60.0002	6.6667	96.6672	189596.6800	500.0138	433.3437	170.0016	171346.3700	170062.6000	1066.7292	114293.9800
2	21:12:49	39642.9140	110.0007	76.6670	13.3333	83.3337	193123.0800	546.6831	413.3427	153.3346	173764.9600	173058.3400	973.3854	116852.8700
3	21:13:02	40155.1550	126.6676	66.6669	3.3333	80.0004	194478.1800	603.3533	340.0064	146.6678	175276.9100	174233.8100	1163.4078	118075.1800
x		39992.2200	108.8896	67.7780	7.7778	86.6671	192399.3100	550.0167	395.5643	156.6680	173462.7500	172451.5800	1067.8408	116407.3500
σ		302.7348	18.3588	8.3888	5.0918	8.8193	2519.9519	51.7504	49.1428	12.0187	1982.6221	2150.7838	95.0160	1929.5692
%RSD		0.7570	16.8600	12.3768	65.4654	10.1760	1.3098	9.4089	12.4235	7.6715	1.1430	1.2472	8.8980	1.6576

SEQ-CCV@CCV06 10/18/2016 22:50:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95M
1	22:50:31	112356.7200	198033.7100	138635.7600	534006.4600	437736.9900	575343.6800	70909.4740	±3455438.9000	736535.0000	5254.8516	17287.5330	7749.9687	153.3346	118311.5600	1484304.9000	±2603165.20
2	22:50:44	113359.0500	200486.6100	138926.8200	536034.0500	441511.7900	578380.2300	70959.8650	±3443668.4000	740278.1400	5321.5571	17250.7960	8440.5832	130.0009	118463.5200	1493910.9000	±2625167.90
3	22:50:57	111614.3300	200490.0100	137698.3400	535613.6600	439317.9100	577263.8500	71210.4800	±3425906.2000	741476.8300	5171.4705	17207.3810	7759.9772	96.6672	118007.6500	1504296.0000	±2626340.80
x		112443.3700	199670.1100	138420.3100	535218.0600	439522.2300	576995.9200	71026.6060	±3441671.2000	739429.9900	5249.2931	17248.5700	7983.5097	126.6676	118260.9100	1494170.6000	±2618224.60
σ		875.5827	1417.1630	641.9545	1070.1221	1895.6749	1535.9053	161.2201	±14867.2900	2577.7766	75.1975	40.1223	395.8689	28.4804	232.1182	9998.1026	±13054.99
%RSD		0.7787	0.7098	0.4638	0.1999	0.4313	0.2662	0.2270	±0.4320	0.3486	1.4325	0.2326	4.9586	22.4844	0.1963	0.6691	±0.49

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	22:50:31	42572.7850	58779.4140	385733.4600	44357.9560	674185.0800	249072.6000	2325226.5000	2349280.9000	803975.2600	194845.9300	193245.6500	±5881353.1000	128089.4000
2	22:50:44	42700.0460	58923.6760	387923.7700	44662.7760	681422.6300	254815.1700	2380752.2000	2371636.8000	816956.1600	198316.4400	196187.6600	±5945372.1000	131642.9600
3	22:50:57	42452.2230	60363.0740	390789.3300	45627.5500	693550.2500	255367.0000	2414882.1000	2440150.9000	826944.8700	200994.3000	197866.8100	±6049329.0000	131500.9200
x		42575.0180	59355.3880	388148.8500	44882.7610	683052.6500	253084.9200	2373620.3000	2387022.9000	815958.7600	198052.2300	195766.7000	±5958684.8000	130411.0900
σ		123.9267	875.6574	2535.4403	662.7683	9784.9433	3485.7100	45251.3180	47348.5330	11517.2440	3082.6889	2339.1625	±84775.5270	2011.9000
%RSD		0.2911	1.4753	0.6532	1.4767	1.4325	1.3773	1.9064	1.9836	1.4115	1.5565	1.1949	±1.4227	1.5427

SEQ-CCB@CCB06 10/18/2016 22:54:41 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	22:54:54	108082.0300	50.0001	122803.8800	146.6678	319.3389	274.0041	116.6674	473.3457	810.0361	3.3333	8.8889	6.6667	20.0000	109154.7300	480.0127	840.0388	803.3688	540.0160	1306.7606
2	22:55:07	109448.2300	66.6669	125743.6600	133.3343	298.6716	276.6709	115.3341	603.3533	786.7007	0.0000	11.1111	10.0000	16.6667	110872.0000	576.6850	880.0426	1003.3887	536.6825	1330.0973
3	22:55:20	107616.5600	53.3335	127464.0400	166.6682	328.6726	282.6711	121.3341	566.6843	863.3743	3.3333	7.7778	10.0000	13.3333	109815.9600	506.6808	796.7016	860.0407	473.3457	1260.0873
x		108382.2700	56.6668	125337.1900	148.8901	315.5610	277.7820	117.7785	547.7944	820.0370	2.2222	9.2593	8.8889	16.6667	109947.5600	521.1261	838.9277	888.9327	516.6814	1298.9817
σ		952.0325	8.8192	2356.5177	16.7777	15.3532	4.4390	3.1506	67.0307	39.3030	1.9245	1.6973	1.9245	3.3333	866.1616	49.9288	41.6816	103.0924	37.5669	35.6473
%RSD		0.8784	15.5633	1.8801	11.2685	4.8654	1.5980	2.6750	12.2365	4.7928	86.6025	18.3303	21.6506	20.0000	0.7878	9.5809	4.9684	11.5973	7.2708	2.7443

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	22:54:54	41946.5500	153.3346	96.6672	3.3333	83.3337	203267.3400	1170.0753	510.0143	166.6682	181357.7900	180466.9900	1103.4003	120165.6400
2	22:55:07	41551.4090	110.0007	60.0002	6.6667	103.3339	209124.6400	1100.0666	456.6781	170.0016	182830.1700	181925.6300	1216.7481	121753.2200
3	22:55:20	42381.8960	126.6676	93.3338	3.3333	110.0007	210604.8900	1313.4282	456.6781	193.3354	186105.6400	184217.7700	1193.4117	124233.1000
x		41959.9520	130.0009	83.3337	4.4444	98.8894	207665.6200	1194.5234	474.4569	176.6684	183431.2000	182203.4600	1171.1867	122050.6500
σ		415.4058	21.8584	20.2760	1.9245	13.8779	3880.2632	108.7616	30.7937	14.5300	2430.3199	1890.7627	59.8531	2049.9782
%RSD		0.9900	16.8141	24.3311	43.3013	14.0338	1.8685	9.1050	6.4903	8.2244	1.3249	1.0377	5.1105	1.6796

SEQ-CCV@CCV07 10/18/2016 23:59:56 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95M
1	00:00:09	106031.4300	179368.9100	129411.2600	505208.4400	443462.0200	582712.8700	71295.1400	±3261679.0000	697075.1300	5151.4592	17110.5320	8343.8273	113.3340	110828.1300	1381458.1000	2502171.10
2	00:00:22	106699.1700	184955.8600	132271.9900	513356.4100	445186.6600	586623.4100	72609.4810	±3313593.2000	708254.9600	5558.3654	17681.6230	8016.8666	100.0006	112768.4400	1423101.5000	2590120.50
3	00:00:36	106402.3900	181191.1800	133401.6500	518090.6400	449568.5900	588391.7100	72264.0780	±3331780.5000	719426.4200	5308.2160	17539.1250	8307.1271	133.3343	114989.3400	1443213.0000	±2550909.00
x		106377.6600	181838.6500	131694.9700	512218.4900	446072.4200	585909.3300	72056.2330	±3302350.9000	708252.1700	5339.3468	17443.7600	8222.6070	115.5563	112861.9700	1415924.2000	±2547733.60
σ		334.5584	2849.1990	2056.8249	6516.0494	3148.1719	2905.9816	681.3758	±36377.8030	11175.6430	205.2316	297.2494	179.1188	16.7776	2082.1783	31496.8420	±44060.60
%RSD		0.3145	1.5669	1.5618	1.2721	0.7058	0.4960	0.9456	±1.1016	1.5779	3.8438	1.7040	2.1784	14.5190	1.8449	2.2245	±1.72

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	00:00:09	41963.2940	56317.2340	365315.4700	42234.5460	636066.4500	238586.9200	2192626.0000	2221985.4000	759439.3000	183755.2100	181901.8300	±5619230.5000	120277.1000
2	00:00:22	42388.5940	56927.6860	371255.6700	43523.9400	653865.0500	245808.8800	2273838.5000	2320482.5000	782565.9400	188820.7800	186003.5800	±5758812.2000	123378.2400
3	00:00:36	43611.0220	57944.0770	376261.9800	44619.2300	666089.7800	246473.1800	2309684.3000	2308084.0000	796015.1000	190750.4400	191472.0400	±5816340.5000	126443.2600
x		42654.3030	57062.9990	370944.3700	43459.2390	652007.0900	243622.9900	2258716.3000	2283517.3000	779340.1100	187775.4800	186459.1500	±5731461.0000	123366.2000
σ		855.3964	821.8189	5479.8901	1193.6580	15097.6490	4373.9959	59976.4350	53647.5550	18500.0450	3612.8627	4801.3419	±101361.4800	3083.0985
%RSD		2.0054	1.4402	1.4773	2.7466	2.3156	1.7954	2.6553	2.3493	2.3738	1.9240	2.5750	±1.7685	2.4991

SEQ-CCB@CCB07 10/19/2016 00:04:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	00:04:31	104547.7300	50.0001	124337.8500	153.3346	299.3383	238.0031	132.6676	440.0107	850.0397	3.3333	6.6667	26.6667	13.3333	107485.0200	463.3451	733.3629	810.0361	456.6781	1260.0873
2	00:04:45	104004.8900	60.0002	124591.2900	113.3340	274.6708	262.0038	119.3341	350.0067	820.0370	3.3333	8.8889	23.3334	23.3334	108439.5900	420.0097	770.0326	836.7052	473.3457	1153.4065
3	00:04:58	105390.7100	50.0001	125142.1100	140.0011	300.0050	254.6702	119.3341	316.6722	843.3724	3.3333	16.6667	23.3334	10.0000	110305.1600	446.6776	746.6973	813.3697	413.3427	1070.0630
x		104647.7700	53.3335	124690.4200	135.5566	291.3380	251.5590	123.7786	368.8965	837.8164	3.3333	10.7407	24.4445	15.5556	108743.2500	443.3442	750.0309	820.0370	447.7888	1161.1856
σ		698.3078	5.7735	411.1897	20.3673	14.4381	12.2991	7.6981	63.8021	15.7542	0.0000	5.2509	1.9245	6.9389	1434.3876	21.8592	18.5608	14.5310	30.9734	95.2507
%RSD		0.6673	10.8254	0.3298	15.0249	4.9558	4.8891	6.2193	17.2954	1.8804	0.0000	48.8878	7.8730	44.6072	1.3191	4.9305	2.4747	1.7720	6.9170	8.2029

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	00:04:31	41584.8950	116.6674	60.0002	10.0000	83.3337	204538.7200	1276.7563	346.6733	170.0016	177999.0400	176602.1900	996.7213	117291.8100
2	00:04:45	41836.0430	146.6678	56.6668	6.6667	90.0004	207688.9500	1183.4104	320.0056	173.3350	178716.2400	178624.4600	976.7191	118642.5000
3	00:04:58	41812.6020	86.6671	50.0001	10.0000	63.3336	207777.6100	1116.7353	363.3406	193.3354	181759.0100	181990.2400	936.7149	119659.0200
x		41744.5130	116.6675	55.5557	8.8889	78.8892	206668.4300	1192.3006	343.3398	178.8906	179491.4300	179072.3000	970.0518	118531.1100
σ		138.7298	30.0004	5.0918	1.9245	13.8779	1844.9106	80.3801	21.8589	12.6200	1996.2573	2721.7976	30.5537	1187.5335
%RSD		0.3323	25.7144	9.1652	21.6506	17.5916	0.8927	6.7416	6.3666	7.0546	1.1122	1.5199	3.1497	1.0019

SEQ-CCV@CCV08 10/19/2016 00:45:04 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95M
1	00:45:17	109559.5600	187275.9800	131866.1600	514159.9600	435612.5000	569649.3300	69882.9040	+3315467.9000	706135.9200	5131.4478	16861.1780	7860.0631	106.6673	113730.3100	1405321.1000	2552004.60
2	00:45:30	109461.7300	184612.3200	132728.5700	518661.8700	436270.2800	570315.9000	70384.0820	+3341946.8000	709194.1000	5131.4478	17057.0980	8140.3096	113.3340	113899.0700	1429758.1000	+2545084.80
3	00:45:43	109205.3400	183809.6300	131605.7600	521740.7600	436412.8900	568688.5600	70300.7740	+3338042.7000	717229.2400	5364.9159	17109.4180	8153.6549	106.6673	116012.2100	1445178.3000	+2564842.60
x		109408.8700	185232.6400	132066.8300	518187.5300	436098.5600	569551.2600	70189.2530	+3331819.1000	710853.0900	5209.2705	17009.2310	8051.3425	108.8895	114547.2000	1426752.5000	+2553977.30
σ		182.9306	1814.5215	587.6903	3812.5944	426.9308	818.0944	268.5561	+14294.4790	5729.7139	134.7928	130.8599	165.7872	3.8490	1271.5394	20097.8610	+10025.57
%RSD		0.1672	0.9796	0.4450	0.7358	0.0979	0.1436	0.3826	+0.4290	0.8060	2.5876	0.7693	2.0591	3.5348	1.1101	1.4086	+0.39

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	00:45:17	42633.0660	55324.5000	369086.6400	42696.6970	644886.4900	241081.4500	2216571.7000	2246669.2000	767825.0100	183265.4800	183704.2000	+5619441.9000	120945.8900
2	00:45:30	41501.1800	57417.4180	376123.0700	43845.4790	660485.5500	245541.8100	2271062.7000	2288840.4000	786755.4200	188460.0700	187405.2700	+5725561.0000	124290.5500
3	00:45:43	42160.8720	57796.4750	379012.7900	43309.5860	661756.5100	247051.9000	2320376.6000	2317198.2000	798775.5100	191975.8300	189457.1400	+5789024.6000	125287.4200
x		42098.3730	56846.1310	374740.8300	43283.9210	655709.5200	244558.3900	2269337.0000	2284235.9000	784451.9800	187900.4600	186855.5400	+5711375.8000	123507.9500
σ		568.5255	1331.3307	5105.3944	574.8208	9394.5337	3104.3380	51923.9620	35489.2410	15603.2900	4382.0594	2915.6046	+85689.0820	2274.1105
%RSD		1.3505	2.3420	1.3624	1.3280	1.4327	1.2694	2.2881	1.5537	1.9891	2.3321	1.5604	+1.5003	1.8413

SEQ-CCB@CCB08 10/19/2016 00:49:26 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	00:49:39	102012.5000	33.3334	115566.5900	103.3339	252.0035	236.0031	114.6674	290.0046	860.0407	3.3333	6.6667	16.6667	10.0000	102049.5800	450.0111	710.0277	746.6973	363.3406	986.7202
2	00:49:52	102009.1300	43.3334	116873.1300	106.6673	288.0046	236.0031	117.3341	326.6725	773.3662	10.0000	7.7778	20.0000	13.3333	104015.0000	346.6733	630.0218	746.6973	423.3432	1126.7365
3	00:50:05	102410.2700	46.6668	117612.5800	86.6671	296.0048	235.3364	102.6673	283.3378	816.7034	3.3333	10.0000	33.3334	16.6667	103778.9900	353.3402	656.6904	733.3629	433.3437	926.7139
x		102143.9700	41.1112	116684.1000	98.8894	278.6710	235.7808	111.5562	300.0050	816.7034	5.5556	8.1482	23.3334	13.3333	103281.1900	383.3415	665.5800	742.2525	406.6758	1013.3902
σ		230.6308	6.9389	1036.0107	10.7153	23.4386	0.3849	7.8127	23.3341	43.3372	3.8490	1.6973	8.8192	3.3333	1073.1144	57.8337	40.7370	7.6986	37.8610	102.6437
%RSD		0.2258	16.8784	0.8879	10.8356	8.4108	0.1632	7.0034	7.7779	5.3064	69.2821	20.8299	37.7965	25.0000	1.0390	15.0867	6.1205	1.0372	9.3099	10.1287

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	00:49:39	39991.1010	140.0011	56.6668	3.3333	76.6670	195605.3100	893.3772	260.0037	140.0011	173037.9600	173408.2500	906.7119	114793.5500
2	00:49:52	39472.1740	123.3342	70.0003	0.0000	63.3336	199641.6500	1013.3898	280.0043	133.3343	172514.8200	175219.1500	786.7007	117328.9500
3	00:50:05	40178.5920	73.3336	23.3334	3.3333	50.0001	203396.8600	1050.0606	243.3366	146.6678	175582.7300	175626.9000	716.6949	117106.1000
x		39880.6220	112.2230	50.0002	2.2222	63.3336	199547.9400	985.6092	261.1149	140.0011	173711.8400	174751.4300	803.3692	116409.5300
σ		365.9382	34.6948	24.0371	1.9245	13.3334	3896.6180	81.9527	18.3591	6.6668	1641.2162	1180.9622	96.0989	1403.9094
%RSD		0.9176	30.9160	48.0741	86.6025	21.0527	1.9527	8.3149	7.0310	4.7619	0.9448	0.6758	11.9620	1.2060

QJ14032-BLK1@PBS01@MH1H50@46282 10/19/2016 00:53:44 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	00:53:44	102642.8700	23.3334	112420.8400	80.0004	128.6676	94.6672	66.6669	113.3340	976.7191	3.3333	8.8889	20.0000	10.0000	97941.4290	103.3339	96.6672	160.0014	66.6669	226.6695
2	00:53:56	102733.8900	23.3334	114341.2400	130.0009	109.3340	108.0006	50.6668	90.0004	926.7139	6.6667	8.8889	10.0000	30.0001	100333.9700	123.3342	153.3346	190.0020	93.3338	213.3358
3	00:54:10	102808.0500	16.6667	116356.5700	56.6668	107.3340	90.6671	47.3335	103.3339	1103.4003	0.0000	11.1111	13.3333	16.6667	101584.4100	70.0003	130.0009	153.3346	123.3342	246.6700
x		102728.2700	21.1111	114372.8800	88.8894	115.1118	97.7783	54.8891	102.2228	1002.2778	3.3333	9.6296	14.4445	18.8889	99953.2720	98.8895	126.6676	167.7793	94.4450	228.8918
σ		82.7353	3.8490	1968.0535	37.4664	11.7821	9.0759	10.3352	11.7064	91.0739	3.3333	1.2830	5.0918	10.1835	1851.0901	26.9433	28.4804	19.5319	28.3500	16.7778
%RSD		0.0805	18.2321	1.7207	42.1495	10.2354	9.2821	18.8292	11.4519	9.0867	100.0000	13.3235	35.2506	53.9127	1.8520	27.2459	22.4844	11.6414	30.0174	7.3300

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	00:53:44	40138.4150	116.6674	10.0000	3.3333	23.3334	188585.9800	196.6688	36.6667	46.6668	165054.8900	165058.2900	230.0029	110848.3800
2	00:53:56	40289.0790	116.6674	10.0000	6.6667	10.0000	193814.2300	266.6706	93.3338	30.0001	169957.3200	169356.2600	210.0024	111172.3000
3	00:54:10	39334.9140	96.6672	26.6667	0.0000	20.0000	196569.1000	210.0024	93.3338	53.3335	172378.9500	171281.8400	230.0029	115245.8900
x		39920.8030	110.0007	15.5556	3.3333	17.7778	192989.7700	224.4473	74.4448	43.3334	169130.3900	168565.4600	223.3361	112422.1900
σ		512.9561	11.5471	9.6225	3.3333	6.9389	4054.9204	37.1692	32.7167	12.0186	3731.3963	3186.2463	11.5473	2450.7543
%RSD		1.2849	10.4973	61.8590	100.0000	39.0313	2.1011	16.5603	43.9477	27.7351	2.2062	1.8902	5.1704	2.1800

QJ14032-BS1@LCS01 10/19/2016 00:57:46 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	00:57:46	102845.1400	750.0309	115222.2600	96.6672	8818.9421	4732.5649	649.3565	11664.1450	2907.1314	123.3342	337.7840	200.0022	30.0001	99205.0190	8197.0272	14161.0210	15369.6480	8864.3196
2	00:57:59	104119.5200	653.3568	117389.7200	73.3336	9028.4810	4719.2246	656.0237	11807.6630	3163.8838	126.6676	342.2287	220.0027	6.6667	101334.9900	8287.1088	14164.3590	15626.7530	8690.8189
3	00:58:12	105812.2300	793.3679	119591.4800	50.0001	8939.0594	4652.5236	697.3601	12615.4140	3307.2681	120.0008	355.5625	190.0020	16.6667	103033.9200	8357.1729	14912.2210	16254.5190	9341.4637
x		104258.9600	732.2519	117401.1500	73.3336	8928.8275	4701.4377	667.5801	12029.0740	3126.0945	123.3342	345.1917	203.3356	17.7778	101191.3100	8280.4363	14412.5340	15750.3060	8965.5340
σ		1488.4535	71.6788	2184.6318	23.3335	105.1435	42.8828	26.0048	512.8306	202.7273	3.3334	9.2522	15.2756	11.7063	1918.4909	80.2811	432.7448	455.1902	336.9242
%RSD		1.4277	9.7888	1.8608	31.8183	1.1776	0.9121	3.8954	4.2633	6.4850	2.7027	2.6803	7.5125	65.8479	1.8959	0.9695	3.0026	2.8900	3.7580

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	00:57:46	39937.5330	296.6715	10199.0510	150.0012	2233.6077	188511.1100	180.0018	14805.3790	27006.7220	163948.4700	164189.4300	19704.6650	109444.8600
2	00:57:59	40617.2010	283.3378	10445.9980	180.0018	2333.6328	192816.6800	173.3350	15586.6840	28019.7810	168775.6100	167420.9000	20807.1180	113078.9300
3	00:58:12	40017.8850	313.3387	10559.4620	136.6677	2346.9696	196221.7200	213.3358	16671.9400	28862.4110	172823.9500	171577.3300	21776.0500	113919.3200
x		40190.8730	297.7827	10401.5040	155.5569	2304.7367	192516.5000	188.8909	15688.0010	27962.9710	168516.0100	167729.2200	20762.6110	112147.7000
σ		371.3903	15.0313	184.2793	22.1948	61.9594	3864.0571	21.4308	937.3959	929.1480	4443.4276	3703.5876	1036.4091	2378.1502
%RSD		0.9241	5.0478	1.7717	14.2680	2.6884	2.0071	11.3456	5.9752	3.3228	2.6368	2.2081	4.9917	2.1206

6100167-01@MH1H50 10/19/2016 01:01:49

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	01:01:49	105937.0000	36.6667	122901.8600	4617.8392	9996.1594	3290.5954	476.0125	4851.2941	1486.7882	23.3334	90.0004	43.3334	16.6667	111506.3500	2316.9619	3697.4184	4397.7301	2396.9826
2	01:02:02	104702.8300	46.6668	126521.0000	5144.7887	10138.9840	3260.5846	479.3460	4904.6560	1370.1032	16.6667	94.4449	56.6668	13.3333	115252.6400	2537.0206	4030.8934	4427.7447	2543.6892
3	01:02:15	107286.0200	70.0003	129597.2100	5224.8343	9977.4722	3304.6005	464.6785	5298.2101	1423.4448	50.0001	100.0006	26.6667	6.6667	115856.9100	2633.7148	3880.8282	4714.5555	2533.6864
x		105975.2800	51.1113	126340.0200	4995.8208	10037.5390	3285.2602	473.3457	5018.0534	1426.7787	30.0001	94.8153	42.2223	12.2222	114205.3000	2495.8991	3869.7133	4513.3434	2491.4527
σ		1292.0206	17.1054	3351.3443	329.7793	88.3499	22.4877	7.6888	244.0855	58.4139	17.6384	5.0103	15.0309	5.0918	2356.8072	162.3309	167.0151	174.8998	81.9662
%RSD		1.2192	33.4671	2.6526	6.6011	0.8802	0.6845	1.6243	4.8641	4.0941	58.7946	5.2843	35.5994	41.6598	2.0637	6.5039	4.3160	3.8752	3.2899

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:01:49	40741.0870	126.6676	4901.3209	20.0000	146.6678	196432.8700	1663.4855	11757.5980	103954.3100	168357.9700	167515.9600	4417.7398	206464.8700
2	01:02:02	41417.4660	133.3343	5238.1753	23.3334	130.0009	201985.9200	1636.8140	12021.2760	109721.5000	173785.3500	170273.1500	4414.4049	213306.8000
3	01:02:15	41933.1560	113.3340	4938.0074	20.0000	140.0011	204068.3300	1776.8403	12565.3450	112292.6100	175307.4900	174536.1900	4497.7790	217432.8400
x		41363.9030	124.4453	5025.8346	21.1111	138.8900	200829.0400	1692.3799	12114.7400	108656.1400	172483.6000	170775.1000	4443.3079	212401.5000
σ		597.8367	10.1836	184.8051	1.9245	8.3888	3947.0001	74.3506	411.9042	4270.0150	3653.0607	3536.9302	47.2029	5539.7464
%RSD		1.4453	8.1832	3.6771	9.1161	6.0399	1.9654	4.3933	3.4000	3.9298	2.1179	2.0711	1.0623	2.6081

6100167-02@MH1H51 10/19/2016 01:05:50

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	01:05:50	110173.5800	246.6700	134254.0600	6222.1286	12059.9940	3200.5633	463.3451	68879.9600	7049.3988	46.6668	80.0004	63.3336	30.0001	207044.5000	1713.4948	2530.3521	2923.8034	1483.4544
2	01:06:03	111826.9200	306.6718	138290.5600	6318.8619	12325.6830	3172.5535	469.3455	71661.3350	7416.3572	50.0001	103.3339	66.6669	16.6667	212194.5600	1993.5519	2650.3863	3297.2645	1713.4948
3	01:06:16	112201.4900	213.3358	140690.3000	6859.2534	12421.1470	3164.5507	480.6794	73405.1650	7329.6203	106.6673	91.1116	60.0002	40.0001	220471.3900	1930.2049	2610.3747	2940.4755	1723.4967
x		111400.6600	255.5592	137744.9700	6466.7480	12268.9410	3179.2225	471.1233	71315.4870	7265.1254	67.7781	91.4819	63.3336	28.8889	213236.8100	1879.0839	2597.0377	3053.8478	1640.1486
σ		1079.0620	47.2987	3252.6191	343.3434	187.1430	18.9099	8.8028	2282.3410	191.7924	33.7203	11.6712	3.3334	11.7063	6773.8543	146.8605	61.1184	210.9698	135.7933
%RSD		0.9686	18.5079	2.3613	5.3094	1.5253	0.5948	1.8685	3.2003	2.6399	49.7510	12.7579	5.2632	40.5218	3.1767	7.8155	2.3534	6.9083	8.2793

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:05:50	43560.7820	543.3496	10859.8160	126.6676	2517.0151	217081.2500	2216.9369	12007.9250	126946.8700	179630.6700	176670.1600	3363.9556	162445.1800
2	01:06:03	43356.4750	490.0132	11493.9280	226.6695	2547.0234	225000.3500	2303.6252	13015.9780	131791.7600	182748.5600	181986.8400	3280.5918	168432.6700
3	01:06:16	43771.7920	463.3451	11634.1060	173.3350	2657.0549	230351.9000	2376.9774	13309.7360	137129.8400	189678.3500	185207.5800	3504.0085	173812.5300
x		43563.0160	498.9026	11329.2830	175.5573	2573.6978	224144.5000	2299.1798	12777.8800	131956.1600	184019.1900	181288.1900	3382.8520	168230.1300
σ		207.6672	40.7363	412.5679	50.0380	73.7322	6676.5896	80.1128	682.7854	5093.4752	5142.9454	4311.3757	112.9007	5686.3802
%RSD		0.4767	8.1652	3.6416	28.5024	2.8648	2.9787	3.4844	5.3435	3.8600	2.7948	2.3782	3.3374	3.3801

SEQ-I8L1@ZZZZZZ 10/19/2016 01:09:52

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	01:09:52	113470.4300	150.0012	142836.7100	4881.3101	19536.9710	3701.4200	558.6838	41986.7350	5054.7382	50.0001	143.3345	90.0004	16.6667	164647.6100	2623.7119	3964.1975	4717.8906	2406.9853
2	01:10:05	114709.1600	100.0006	147219.1300	4684.5400	19570.3760	3824.1375	586.6856	43738.2980	5278.1985	63.3336	133.3343	76.6670	30.0001	170290.1300	2633.7148	4271.0030	4854.6292	2647.0520
3	01:10:18	114007.0800	86.6671	148052.5000	4968.0238	19682.6180	3808.1308	546.6831	44860.4130	5568.3715	46.6668	151.1124	80.0004	20.0000	173578.1100	3053.8462	4354.3759	5154.7944	2617.0433
x		114062.2200	112.2230	146036.1200	4844.6246	19596.6550	3777.8961	564.0175	43528.4820	5300.4361	53.3335	142.5937	82.2226	22.2223	169505.2800	2770.4243	4196.5255	4909.1047	2557.0269
σ		621.2055	33.3893	2801.9208	145.2589	76.2968	66.7120	20.5277	1448.2826	257.5377	8.8192	8.9121	6.9390	6.9389	4516.6883	245.5015	205.4750	223.4881	130.8032
%RSD		0.5446	29.7526	1.9186	2.9984	0.3893	1.7659	3.6395	3.3272	4.8588	16.5360	6.2500	8.4392	31.2250	2.6646	8.8615	4.8963	4.5525	5.1154

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:09:52	45228.8980	933.3813	18849.5220	513.3478	7146.1409	239825.5500	3120.5355	14478.1860	123760.0500	180602.9800	177696.5400	3660.7369	207682.1300
2	01:10:05	43992.8550	890.0436	19788.1800	526.6819	7349.6364	248158.0900	3443.9856	16161.0190	129685.1200	184785.7900	181711.4100	3717.4266	216210.8800
3	01:10:18	44733.1210	773.3662	20342.7350	600.0198	7279.5801	254153.7000	3524.0162	16157.6790	132319.3400	188735.7000	183051.2200	4087.5854	220519.2000
x		44651.6250	865.5970	19660.1450	546.6832	7258.4525	247379.1100	3362.8458	15598.9620	128588.1700	184708.1600	180819.7200	3821.9163	214804.0700
σ		622.0385	82.7613	754.7955	46.6695	103.3798	7195.7698	213.6280	970.6211	4383.8153	4066.9165	2786.4822	231.8156	6533.1397
%RSD		1.3931	9.5612	3.8392	8.5369	1.4243	2.9088	6.3526	6.2223	3.4092	2.2018	1.5410	6.0654	3.0414

SEQ-I8L2@ZZZZZZ 10/19/2016 01:13:51

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo
1	01:13:51	113453.5500	3193.8943	146633.1100	4801.2675	89092.4320	40925.9140	5226.1684	554401.3000	113011.4300	253.3369	576.6850	286.6712	13.3333	165316.2400	171186.7400	300840.0700	326347.7000
2	01:14:05	114577.5200	2980.4885	149218.0000	4827.9483	89243.9070	41649.8580	5226.1684	574982.5400	115796.1500	196.6688	616.6876	330.0060	16.6667	172616.7300	177407.6500	310751.9200	339472.1000
3	01:14:18	114374.9900	3100.5286	151579.9200	5158.1296	89376.5330	41648.5180	5306.8818	588554.4200	119672.5300	173.3350	621.1323	280.0043	26.6667	175494.3800	181932.4300	321482.2000	351392.4500
x		114135.3600	3091.6371	149143.6800	4929.1152	89237.6240	41408.0970	5253.0729	572646.0800	116160.0400	207.7802	604.8350	298.8938	18.8889	171142.4500	176842.2700	311024.7300	339070.7500
σ		599.0775	106.9804	2474.2450	198.7805	142.1550	417.5828	46.5999	17196.0210	3345.4267	41.1421	24.4797	27.1493	6.9389	5246.7832	5395.1120	10323.7680	12527.1980
%RSD		0.5249	3.4603	1.6590	4.0328	0.1593	1.0085	0.8871	3.0029	2.8800	19.8008	4.0473	9.0833	36.7353	3.0657	3.0508	3.3193	3.6946

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:13:51	44816.8650	1666.8195	58121.8730	1143.4052	16314.6260	242738.0000	3057.1806	62406.8040	569010.4600	180446.5900	179617.0700	86105.8600	190049.3100
2	01:14:05	44357.9560	1660.1516	59366.5440	1356.7679	17132.7960	244411.9700	3060.5151	65380.9310	587531.3200	189637.5100	184717.7600	89653.2380	195826.6700
3	01:14:18	44702.9730	1736.8326	61591.2710	1380.1047	17573.6360	254208.5300	3267.2537	66643.3820	606882.5500	191448.2100	187609.4100	92821.4630	200854.6000
x		44625.9320	1687.9345	59693.2290	1293.4260	17007.0190	247119.5000	3128.3165	64810.3720	587808.1100	187177.4400	183981.4100	89526.8540	195576.8600
σ		238.9581	42.4780	1757.6184	130.4447	638.8594	6196.0749	120.3347	2175.1552	18937.5630	5898.9753	4046.7334	3359.5851	5406.9715
%RSD		0.5355	2.5166	2.9444	10.0852	3.7564	2.5073	3.8466	3.3562	3.2217	3.1515	2.1995	3.7526	2.7646

SEQ-I8L3@ZZZZZZ 10/19/2016 01:17:53

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	01:17:53	114216.3500	146.6678	148763.9800	5731.8064	23182.1870	4565.8129	641.3560	51371.4040	5808.5217	46.6668	144.4456	100.0006	40.0001	170819.9300	3734.1001	4661.1947	5568.3715	3003.829
2	01:18:06	114854.3100	146.6678	154013.6500	6035.3361	23395.3990	4561.8109	704.0273	54056.9080	5825.1990	66.6669	132.2232	103.3339	16.6667	176442.4700	3427.3126	5004.7105	5708.4584	3107.197
3	01:18:19	115775.8900	136.6677	155610.5000	6649.0974	23490.3100	4592.4930	630.0218	55227.2450	5861.8893	93.3338	141.1122	76.6670	13.3333	180704.9800	4414.4049	5028.0568	6262.1561	2893.793
x		114948.8500	143.3345	152796.0400	6138.7466	23355.9650	4573.3723	658.4683	53551.8520	5831.8700	68.8892	139.2603	93.3338	23.3334	175989.1300	3858.6058	4897.9873	5846.3286	3001.607
σ		784.0574	5.7736	3581.9901	467.3072	157.8010	16.6795	39.8601	1976.9138	27.3020	23.4127	6.3181	14.5298	14.5297	4958.0917	505.1871	205.4004	366.8657	106.719
%RSD		0.6821	4.0281	2.3443	7.6124	0.6756	0.3647	6.0535	3.6916	0.4682	33.9861	4.5369	15.5676	62.2701	2.8173	13.0925	4.1936	6.2751	3.555

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:17:53	44448.3960	910.0456	17543.5780	573.3514	7439.7096	253643.0600	3260.5846	17359.8930	130080.7100	183319.8900	178097.6100	5294.8748	209291.7500
2	01:18:06	45751.5040	800.0352	18993.1530	453.3446	7830.0372	262842.2500	3373.9593	17740.6270	134389.3700	184853.8200	183653.1800	5241.5106	216374.7100
3	01:18:19	45741.4530	1063.3955	18465.4010	496.6802	7739.9601	268679.2200	3367.2902	18254.9770	137498.6900	189127.0400	187211.3300	5264.8574	222271.0900
x		45313.7840	924.4921	18334.0440	507.7921	7669.9023	261721.5100	3333.9447	17785.1650	133989.5900	185766.9200	182987.3700	5267.0810	215979.1800
σ		749.4650	132.2732	733.6607	60.7702	204.3771	7580.4699	63.6191	449.2011	3725.1122	3009.3307	4593.1973	26.7515	6498.7051
%RSD		1.6539	14.3077	4.0016	11.9675	2.6647	2.8964	1.9082	2.5257	2.7802	1.6199	2.5101	0.5079	3.0089

SEQ-1BL4@ZZZZZZ 10/19/2016 01:21:53

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	9
1	01:21:53	116275.5400	46.6668	143324.3000	1256.7535	4170.2896	832.7048	133.3343	8974.4275	1920.2028	13.3333	38.8890	36.6667	30.0001	129492.4000	656.6904	823.3706	1036.7258	570.0179	1446.
2	01:22:06	116825.8600	50.0001	145854.0600	1026.7246	4251.6606	812.0363	109.3340	9635.1032	1820.1822	23.3334	42.2223	36.6667	13.3333	131893.2100	573.3514	1000.0550	1096.7328	526.6819	1500.
3	01:22:19	115762.3900	40.0001	148608.1300	1156.7403	4218.3118	813.3697	114.6674	9868.6869	1880.1944	10.0000	34.4445	26.6667	26.6667	134937.4000	700.0270	940.0486	1120.0690	560.0172	1530.
x		116287.9300	45.5557	145928.8300	1146.7395	4213.4207	819.3703	119.1119	9492.7392	1873.5265	15.5556	38.5186	33.3334	23.3334	132107.6700	643.3563	921.1581	1084.5092	552.2390	1492.
σ		531.8457	5.0918	2642.7073	115.3401	40.9054	11.5673	12.6023	463.8163	50.3426	6.9389	3.9021	5.7735	8.8192	2728.8283	64.3818	89.8442	42.9952	22.6909	42.
%RSD		0.4574	11.1770	1.8110	10.0581	0.9708	1.4117	10.5803	4.8860	2.6870	44.6072	10.1305	17.3205	37.7965	2.0656	10.0072	9.7534	3.9645	4.1089	2.

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:21:53	46957.6300	300.0050	3964.1975	96.6672	1546.7982	225239.5000	760.0318	3283.9264	26007.1470	178107.8100	174023.1700	910.0456	131835.7200
2	01:22:06	46491.9130	303.3384	4224.3146	106.6673	1530.1288	231551.8100	806.7025	3227.2394	26378.2140	182639.7400	178950.7900	1020.0572	134873.1200
3	01:22:19	46877.2170	283.3378	4194.3007	96.6672	1626.8122	236698.5100	866.7080	3333.9446	28033.1560	186755.4300	182568.3200	1046.7269	136544.4600
x		46775.5870	295.5604	4127.6042	100.0006	1567.9131	231163.2700	811.1474	3281.7034	26806.1720	182500.9900	178514.0900	992.2766	134417.7700
σ		248.9374	10.7155	142.3079	5.7736	51.6846	5739.3779	53.4768	53.3873	1078.6745	4325.4817	4289.2843	72.4519	2387.1692
%RSD		0.5322	3.6255	3.4477	5.7735	3.2964	2.4828	6.5927	1.6268	4.0240	2.3701	2.4028	7.3016	1.7759

6100167-04@MH1H53 10/19/2016 01:25:54

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	01:25:54	116086.4800	270.0040	155735.9600	6935.9783	18959.0820	4767.2496	719.3618	39107.2690	6849.2459	83.3337	126.6676	76.6670	33.3334	228735.1700	2470.3356	3824.1375	4401.0651	2436.9933
2	01:26:07	118875.5100	270.0040	158947.4900	7169.4926	19049.9390	4839.2877	682.6923	40617.2010	7119.4533	103.3339	118.8897	86.6671	23.3334	237358.7200	2547.0234	3964.1975	4551.1389	2520.3493
3	01:26:20	117730.7600	296.6715	161094.8000	7299.5961	18961.7550	4827.2813	722.6954	41564.8030	6996.0242	36.6667	137.7788	73.3336	40.0001	243080.3000	2633.7148	3980.8714	4984.6996	2373.6432
x		117564.2500	278.8932	158592.7500	7135.0223	18990.2580	4811.2729	708.2498	40429.7580	6988.2411	74.4448	127.7787	78.8892	32.2223	236391.4000	2550.3579	3923.0688	4645.6345	2443.6619
σ		1401.9504	15.3965	2696.9758	184.2434	51.7018	38.5950	22.1961	1239.4435	135.2718	34.2109	9.4935	6.9389	8.3887	7221.3212	81.7406	86.0817	303.0749	73.5801
%RSD		1.1925	5.5206	1.7006	2.5822	0.2723	0.8022	3.1339	3.0657	1.9357	45.9548	7.4296	8.7958	26.0340	3.0548	3.2051	2.1942	6.5239	3.0111

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:25:54	46773.3510	336.6729	5278.1985	93.3338	1150.0727	230331.3900	2146.9201	10672.9280	164243.7300	187082.0400	180728.7800	2753.7503	161193.1900
2	01:26:07	46371.2990	410.0093	5504.9996	96.6672	1246.7522	236438.5400	2393.6484	10399.2780	172711.8400	191397.1500	186649.9600	2883.7907	167278.3100
3	01:26:20	47192.1730	340.0064	5868.5603	100.0006	1150.0727	241013.0000	2446.9960	11013.3340	176517.2300	195516.7700	189937.0000	2997.1606	169570.1900
x		46778.9410	362.2295	5550.5861	96.6672	1182.2992	235927.6400	2329.1882	10695.1800	171157.6000	191331.9900	185771.9200	2878.2339	166013.9000
σ		410.4659	41.4120	297.8093	3.3334	55.8179	5359.1036	160.0866	307.6321	6282.6311	4217.7418	4666.4850	121.8003	4329.2749
%RSD		0.8775	11.4325	5.3654	3.4483	4.7211	2.2715	6.8731	2.8764	3.6707	2.2044	2.5119	4.2318	2.6078

6100167-05@MH1H54 10/19/2016 01:29:56

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97M
1	01:29:56	117953.6200	53.3335	154169.6000	10866.4910	19634.5140	4893.3166	676.6919	8243.7361	3250.5810	80.0004	188.8909	76.6670	26.6667	139759.4400	5741.8127	9765.2420	11013.3340	6212.12
2	01:30:09	117940.1100	76.6670	155600.3300	10963.2730	19685.2900	4748.5732	659.3572	8380.5277	3397.3013	66.6669	170.0016	106.6673	20.0000	142792.7000	5851.8828	10062.2320	11073.4070	6218.79
3	01:30:22	116322.8100	66.6669	157424.6700	11033.3580	19751.4330	4903.9890	666.6911	8857.6464	3560.6972	46.6668	172.2239	76.6670	16.6667	144810.9100	6011.9873	10118.9620	11550.6670	6185.43
x		117405.5100	65.5558	155731.5300	10954.3740	19690.4120	4848.6263	667.5801	8493.9701	3402.8599	64.4447	177.0388	86.6671	21.1111	142454.3500	5868.5609	9982.1454	11212.4690	6205.45
σ		937.6750	11.7064	1631.4992	83.7889	58.6278	86.8127	8.7014	322.2939	155.1328	16.7775	10.3242	17.3207	5.0918	2542.6788	135.8573	189.9733	294.4239	17.65
%RSD		0.7987	17.8571	1.0476	0.7649	0.2977	1.7905	1.3034	3.7944	4.5589	26.0340	5.8316	19.9853	24.1188	1.7849	2.3150	1.9031	2.6259	0.28

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:29:56	45443.2970	246.6700	6592.3894	70.0003	570.0179	229172.6500	2900.4626	8934.3881	296349.4700	182221.4700	176860.4700	4017.5542	188654.0300
2	01:30:09	46904.0210	256.6703	6478.9746	60.0002	600.0198	234964.3800	3057.1806	9101.2202	305443.1400	185486.5100	180127.0100	3920.8453	193739.3200
3	01:30:22	45312.6470	216.6693	6542.3533	73.3336	643.3561	236147.7900	3217.2358	9468.2614	314100.7800	188643.8200	185578.3600	3997.5454	199076.1100
x		45886.6550	240.0032	6537.9058	67.7780	604.4646	233428.2700	3058.2930	9167.9566	305297.8000	185450.6000	180855.2800	3978.6483	193823.1600
σ		883.4833	20.8172	56.8381	6.9389	36.8706	3732.6765	158.3895	273.1217	8876.5492	3211.3289	4404.3349	51.0488	5211.5459
%RSD		1.9254	8.6737	0.8694	10.2377	6.0997	1.5991	5.1790	2.9791	2.9075	1.7316	2.4353	1.2831	2.6888

6100167-06@MH1H55 10/19/2016 01:33:58

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	01:33:58	115222.2600	83.3337	149116.3500	3680.7450	19024.5520	4385.7243	658.0238	21101.1270	3697.4184	63.3336	153.3346	76.6670	20.0000	145884.5400	2493.6753	3480.6662	4294.3474	2093.574
2	01:34:12	116332.9400	63.3336	152650.9600	4104.2596	19142.8000	4490.4421	649.3565	21752.6600	3674.0756	60.0002	132.2232	56.6668	16.6667	149031.6400	2650.3863	3554.0279	4301.0172	2226.939
3	01:34:25	116765.0900	100.0006	154620.4900	3960.8627	19287.7730	4513.1200	630.6885	22360.8000	3947.5235	56.6668	165.5571	93.3338	23.3334	153301.7700	2650.3863	3460.6586	4517.7890	2230.273
x		116106.7600	82.2226	152129.2700	3915.2891	19151.7080	4463.0955	646.0230	21738.1960	3773.0059	60.0002	150.3716	75.5559	20.0000	149405.9900	2598.1493	3498.4509	4371.0512	2183.595
σ		795.8950	18.3587	2788.9102	215.4040	131.8361	67.9580	13.9692	629.9608	151.5867	3.3334	16.8633	18.3587	3.3333	3722.7571	90.4771	49.1597	127.1224	77.978
%RSD		0.6855	22.3281	1.8333	5.5016	0.6884	1.5227	2.1623	2.8979	4.0177	5.5556	11.2144	24.2982	16.6667	2.4917	3.4824	1.4052	2.9083	3.571

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:33:58	46820.2580	293.3381	26408.3010	103.3339	1403.4417	225714.3900	9508.3032	47302.7460	110224.1900	178532.6900	174563.3800	5478.3168	226466.0800
2	01:34:12	46572.3230	330.0060	27254.1250	93.3338	1496.7899	229316.2000	9695.1670	48542.5890	113004.6800	183166.8500	179800.6400	5568.3715	232136.4400
3	01:34:25	46843.7120	300.0050	27892.7250	110.0007	1520.1271	234595.0200	10165.6810	50285.3570	115276.2700	185513.7300	181694.4100	5688.4458	237105.5800
x		46745.4310	307.7830	27185.0500	102.2228	1473.4529	229875.2100	9789.7169	48710.2310	112835.0500	182404.4200	178686.1400	5578.3781	231902.7000
σ		150.3740	19.5322	744.6185	8.3888	61.7441	4466.6288	338.7344	1498.3558	2530.3085	3552.4224	3693.8452	105.4213	5323.6006
%RSD		0.3217	6.3461	2.7391	8.2064	4.1904	1.9431	3.4601	3.0761	2.2425	1.9476	2.0672	1.8898	2.2956

6100167-07@MH1H56 10/19/2016 01:38:00

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	01:38:00	116960.9200	136.6677	156461.5900	11163.5170	19551.6690	6027.9979	820.0370	11543.9920	3157.2148	76.6670	122.2230	60.0002	23.3334	153071.2700	2987.1574	3974.2018	4871.3048	2470.335
2	01:38:13	117494.4000	96.6672	158333.5900	11530.6410	19524.9450	6090.7063	822.7039	12034.6270	3000.4951	80.0004	111.1118	83.3337	13.3333	157102.5000	2813.7687	4210.9751	5144.7887	2917.134
3	01:38:26	118953.1800	66.6669	157828.2500	12034.6270	19741.4120	6126.7305	860.0407	12551.9930	3260.5846	60.0002	104.4450	60.0002	26.6667	159174.7500	2993.8262	4484.4391	5238.1753	2737.078
x		117802.8300	100.0006	157541.1400	11576.2620	19606.0080	6081.8116	834.2605	12043.5370	3139.4315	72.2225	112.5933	67.7780	21.1111	156449.5100	2931.5841	4223.2053	5084.7563	2708.183
σ		1031.3253	35.1192	968.4592	437.3434	118.0214	49.9637	22.3661	504.0597	130.9535	10.7152	8.9811	13.4716	6.9389	3103.6961	102.0856	255.3384	190.6605	224.796
%RSD		0.8755	35.1190	0.6147	3.7779	0.6020	0.8215	2.6809	4.1853	4.1712	14.8364	7.9766	19.8761	32.8684	1.9838	3.4823	6.0461	3.7496	8.300

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:38:00	46793.4540	223.3361	2293.6226	13.3333	110.0007	225318.0700	2577.0319	9194.6474	197733.9600	182265.6700	175735.6400	2640.3834	146030.1900
2	01:38:13	46666.1350	133.3343	2533.6864	10.0000	63.3336	230085.2700	2610.3747	9865.3500	205786.4100	185034.1000	180439.7900	2777.0908	150132.8700
3	01:38:26	47011.2400	183.3352	2683.7294	6.6667	100.0006	233904.2300	2827.1062	9581.7135	211014.2200	189198.5100	184336.8100	2777.0908	152501.8200
x		46823.6090	180.0019	2503.6795	10.0000	91.1116	229769.1900	2671.5043	9547.2370	204844.8600	185499.4300	180170.7500	2731.5216	149554.9600
σ		174.5174	45.0934	196.7769	3.3333	24.5706	4301.7957	135.7826	336.6778	6690.0085	3489.7626	4306.8937	78.9280	3274.2927
%RSD		0.3727	25.0516	7.8595	33.3334	26.9676	1.8722	5.0826	3.5264	3.2659	1.8813	2.3905	2.8895	2.1894

6100167-08@MH1H57 10/19/2016 01:42:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	01:42:01	117109.4800	76.6670	155725.7900	12778.9750	25448.9040	5621.0706	788.0341	7993.5127	2683.7294	63.3336	122.2230	76.6670	16.6667	149726.2500	3130.5389	4120.9338	5114.7718	2590.369
2	01:42:14	117437.0000	83.3337	158421.7700	13506.6930	25453.5840	5735.8089	872.7085	8197.0272	2713.7383	53.3335	98.8894	46.6668	26.6667	152013.7500	3050.5117	4504.4490	5368.2512	2730.410
3	01:42:27	118520.9300	80.0004	161203.3600	13560.1060	25735.7100	5739.1443	869.3749	8060.2383	2917.1346	40.0001	114.4452	50.0001	16.6667	155400.2900	3193.8943	4617.8392	5381.5924	2977.154
x		117689.1300	80.0004	158450.3100	13281.9250	25546.0660	5698.6746	843.3725	8083.5927	2771.5341	52.2224	111.8525	57.7780	20.0000	152380.0900	3124.9816	4414.4073	5288.2051	2765.977
σ		738.7335	3.3334	2738.9013	436.3849	164.2531	67.2277	47.9534	103.7478	126.9833	11.7063	11.8809	16.4431	5.7735	2854.7031	71.8526	260.4023	150.3457	195.830
%RSD		0.6277	4.1667	1.7286	3.2856	0.6430	1.1797	5.6859	1.2834	4.5817	22.4163	10.6219	28.4590	28.8675	1.8734	2.2993	5.8989	2.8430	7.080

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:42:01	46166.9290	653.3568	56810.2880	300.0050	4781.2570	305098.5200	6502.3246	32892.7320	202350.5600	180354.7900	175324.4800	5178.1410	244833.0700
2	01:42:14	46763.2990	616.6876	58091.6810	310.0053	5021.3864	312569.3300	6759.1785	34261.1060	209898.8400	186833.6800	181004.1800	5258.1869	250213.2900
3	01:42:27	46967.6820	590.0191	59614.8270	303.3384	5168.1353	318848.5100	7039.3910	34562.2420	214818.4500	188351.1800	182660.1400	5494.9936	256738.1500
x		46632.6370	620.0212	58172.2650	304.4495	4990.2596	312172.1200	6766.9647	33905.3600	209022.6200	185179.8900	179662.9300	5310.4405	250594.8400
σ		416.0598	31.8002	1404.0052	5.0919	195.3084	6883.5930	268.6179	889.7933	6279.9569	4246.9805	3847.3603	164.7626	5961.7034
%RSD		0.8922	5.1289	2.4135	1.6725	3.9138	2.2051	3.9695	2.6243	3.0044	2.2934	2.1414	3.1026	2.3790

6100167-09@MH1H58 10/19/2016 01:46:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	01:46:01	117504.5300	230.0029	154240.7900	16828.8960	29111.8710	8171.6710	1079.3974	29002.8570	5851.8828	63.3336	81.1115	50.0001	23.3334	169560.0100	3674.0756	4157.6172	5301.5454	2483.672
2	01:46:15	119199.7100	236.6697	155878.3700	17586.9950	28822.9530	8231.7252	1122.7360	29618.1700	5785.1735	36.6667	104.4450	60.0002	16.6667	173000.5900	3604.0476	4351.0410	5344.9041	2760.419
3	01:46:28	119858.2900	170.0016	159181.5400	18037.8770	28988.8120	8145.6477	1090.0653	29935.8740	5958.6188	63.3336	106.6673	53.3335	26.6667	177750.9200	3854.1502	4337.7013	5565.0361	2807.100
x		118854.1800	212.2248	156433.5600	17484.5890	28974.5460	8183.0146	1097.3996	29518.9670	5865.2251	54.4446	97.4079	54.4446	22.2222	173437.1700	3710.7578	4282.1198	5403.8286	2683.730
σ		1214.3302	36.7180	2516.7300	610.9619	144.9866	44.1457	22.5810	474.3534	87.4890	15.3961	14.1568	5.0918	5.0918	4112.8739	129.0233	108.0286	141.2831	174.820
%RSD		1.0217	17.3014	1.6088	3.4943	0.5004	0.5395	2.0577	1.6069	1.4917	28.2784	14.5335	9.3522	22.9129	2.3714	3.4770	2.5228	2.6145	6.514

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:46:01	45537.0980	230.0029	8393.8734	56.6668	656.6904	228297.7100	2947.1443	9555.0188	270450.6000	183353.9000	177866.4800	5128.1126	187854.3900
2	01:46:15	46341.1460	293.3381	8830.9538	70.0003	646.6897	233264.7800	3297.2645	9735.2098	280422.6700	187640.0400	184173.5500	5341.5688	193460.1400
3	01:46:28	46612.5280	286.6712	8867.6562	70.0003	673.3583	238569.8100	3243.9120	9985.4810	285311.3000	190747.0300	185758.6500	5231.5048	196650.8400
x		46163.5900	270.0041	8697.4944	65.5558	658.9128	233377.4300	3162.7736	9758.5699	278728.1900	187246.9900	182599.5600	5233.7288	192655.1300
σ		559.2689	34.8020	263.5832	7.6981	13.4725	5136.9779	188.6362	216.1798	7573.8748	3712.2064	4174.8850	106.7455	4453.1349
%RSD		1.2115	12.8894	3.0306	11.7428	2.0447	2.2011	5.9643	2.2153	2.7173	1.9825	2.2864	2.0396	2.3115

6100167-10@MH1H59 10/19/2016 01:50:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	01:50:01	119395.5900	543.3496	171821.8800	6712.4772	30224.8280	6627.7484	927.3806	167078.0200	20212.4450	110.0007	128.8898	76.6670	40.0001	324106.2800	2130.2496	2570.3633	3677.4103	1716.828
2	01:50:15	121084.3800	623.3547	178638.0600	6805.8800	30012.1250	6653.1003	936.0482	172188.7300	21191.3370	90.0004	120.0008	86.6671	23.3334	335809.7800	2353.6380	2847.1124	3734.1001	1796.844
3	01:50:28	120128.4900	666.6911	180164.4100	7506.4311	30423.4890	6532.3461	946.0492	175626.9000	20967.4850	86.6671	138.8900	80.0004	53.3335	342876.3500	2040.2289	2857.1156	3687.4144	1800.178
x		120202.8200	611.1318	176874.7800	7008.2628	30220.1470	6604.3983	936.4927	171631.2100	20790.4220	95.5561	129.2602	81.1115	38.8890	334264.1400	2174.7055	2758.1971	3699.6416	1771.283
σ		846.8420	62.5726	4441.9903	433.9468	205.7219	63.6735	9.3422	4301.6251	512.9044	12.6199	9.4500	5.0918	15.0309	9480.0102	161.3647	162.7457	30.2582	47.188
%RSD		0.7045	10.2388	2.5114	6.1919	0.6807	0.9641	0.9976	2.5063	2.4670	13.2068	7.3109	6.2775	38.6508	2.8361	7.4201	5.9004	0.8179	2.664

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:50:01	47517.1930	730.0293	4294.3474	353.3402	4494.4441	239781.0600	2150.2543	8417.2283	166137.6800	191288.2300	184462.6600	3840.8112	148784.3100
2	01:50:15	46994.4870	820.0370	4744.5711	326.6725	4717.8906	243723.8600	2350.3038	8540.6767	171665.6400	194617.7900	190382.8500	3884.1629	153698.3800
3	01:50:28	47158.6670	726.6957	4751.2413	336.6729	4941.3426	251792.6800	2530.3521	9067.8535	175073.0400	197686.2700	191499.2700	3937.5192	155278.2300
x		47223.4490	758.9207	4596.7199	338.8952	4717.8924	245099.2000	2343.6367	8675.2528	170958.7900	194530.7600	188781.5900	3887.4978	152586.9700
σ		267.3071	52.9545	261.8835	13.4720	223.4493	6122.7777	190.1366	345.5595	4509.4204	3199.9102	3781.7310	48.4402	3386.6173
%RSD		0.5660	6.9776	5.6972	3.9753	4.7362	2.4981	8.1129	3.9833	2.6377	1.6449	2.0032	1.2461	2.2195

SEQ-CCV@CCV09 10/19/2016 01:54:07 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95
1	01:54:20	116727.9500	197127.6700	147151.3800	570042.1800	461452.3900	596906.8100	74028.8590	±3703103.6000	785413.1300	5318.2218	17827.4630	8197.0272	123.3342	123925.6100	1558520.1000	±2797932.9
2	01:54:33	115941.3100	198898.9700	146785.5400	577089.9800	460757.7900	604068.7700	73605.4420	±3688897.8000	786214.8500	5611.7315	17761.7790	8540.6767	103.3339	125229.9700	1571302.5000	±2796557.8
3	01:54:46	115681.3700	198340.2900	145152.9700	573485.6100	459213.1700	602572.9000	73796.3130	±3673841.5000	790068.4100	5461.6401	18041.2170	8617.4157	100.0006	126362.1500	1578839.7000	±2792088.5
x		116116.8800	198122.3100	146363.3000	573539.2600	460474.4500	601162.8300	73810.2050	±3688614.3000	787232.1300	5463.8645	17876.8200	8451.7065	108.8896	125172.5800	1569554.1000	±2795526.4
σ		544.9326	905.5423	1064.0150	3524.2090	1146.1845	3777.9153	212.0502	±14633.1030	2488.7818	146.7675	146.1113	223.8714	12.6200	1219.2791	10271.9950	±3055.6
%RSD		0.4693	0.4571	0.7270	0.6145	0.2489	0.6284	0.2873	±0.3967	0.3161	2.6861	0.8173	2.6488	11.5897	0.9741	0.6545	±0.1

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:54:20	43574.1790	61302.6630	400390.5400	46103.2740	699008.8100	260108.6200	2409044.8000	2420303.2000	823451.4500	190896.8000	186755.4300	±5630330.2000	120226.4400
2	01:54:33	43935.9140	61591.2710	404095.8700	47001.1880	708053.4700	263696.4600	±2351780.5000	2464136.3000	844858.3200	193535.0400	193014.1400	±5745344.5000	124442.6000
3	01:54:46	44532.1380	60926.8160	406342.7700	46331.0950	713570.8200	265285.0200	2480624.0000	2493801.2000	851832.9800	197992.8400	196831.3500	±5811076.0000	125544.2600
x		44014.0770	61273.5830	403609.7300	46478.5190	706877.7000	263030.0400	±2413816.4000	2459413.6000	840047.5800	194141.5600	192200.3100	±5728916.9000	123404.4300
σ		483.7389	333.1806	3005.7481	466.7576	7351.8631	2651.7677	±64554.1400	36975.8860	14789.6960	3586.6912	5087.0226	±91485.8520	2806.8077
%RSD		1.0991	0.5438	0.7447	1.0042	1.0400	1.0082	±2.6744	1.5034	1.7606	1.8475	2.6467	±1.5969	2.2745

SEQ-CCB@CCB09 10/19/2016 01:58:33 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:58:47	113689.8100	33.3334	137231.3600	116.6674	297.3382	267.3373	126.0009	373.3410	940.0486	6.6667	15.5556	13.3333	20.0000	118446.6300	396.6753	636.6890	816.7034	436.6771	1333.4311
2	01:59:00	114780.0500	40.0001	140615.8300	156.6680	306.6718	251.3368	136.0010	366.6741	890.0436	3.3333	7.7778	10.0000	20.0000	120344.6500	433.3437	710.0277	713.3613	460.0116	1300.0930
3	01:59:13	114800.3000	30.0001	140196.0800	103.3339	314.6721	248.6701	139.3344	323.3391	1036.7258	6.6667	6.6667	16.6667	16.6667	121351.2300	486.6797	683.3590	766.6990	446.6776	1163.4078
x		114423.3900	34.4445	139347.7600	125.5565	306.2274	255.7814	133.7788	354.4514	955.6060	5.5556	10.0000	13.3333	18.8889	120047.5100	438.8996	676.6919	765.5879	447.7888	1265.6439
σ		635.3768	5.0918	1844.8302	27.7559	8.6755	10.0961	6.9390	27.1495	74.5684	1.9245	4.8432	3.3333	1.9245	1474.9224	45.2587	37.1212	51.6800	11.7069	90.0946
%RSD		0.5553	14.7825	1.3239	22.1063	2.8330	3.9472	5.1869	7.6596	7.8033	34.6410	48.4322	25.0000	10.1885	1.2286	10.3119	5.4857	6.7504	2.6144	7.1185

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:58:47	45252.3480	120.0008	60.0002	10.0000	83.3337	219720.2000	1120.0690	340.0064	220.0027	183734.8100	181524.4000	973.3854	116717.8200
2	01:59:00	45446.6470	126.6676	66.6669	10.0000	73.3336	225157.5000	1173.4091	296.6715	136.6677	185806.2800	184554.5000	830.0379	118409.4900
3	01:59:13	45449.9970	113.3340	36.6667	3.3333	46.6668	228516.4400	1186.7441	280.0043	130.0009	186718.0100	185057.9100	706.6941	120986.4200
x		45382.9970	120.0008	54.4446	7.7778	67.7780	224464.7100	1160.0741	305.5607	162.2238	185419.7000	183712.2700	836.7058	118704.5800
σ		113.1580	6.6668	15.7528	3.8490	18.9543	4438.8554	35.2812	30.9730	50.1489	1528.7094	1911.3976	133.4706	2149.5438
%RSD		0.2493	5.5556	28.9336	49.4872	27.9652	1.9775	3.0413	10.1364	30.9134	0.8245	1.0404	15.9519	1.8108

6100167-11@MH1H60 10/19/2016 02:02:54

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97
1	02:02:54	116994.6800	386.6749	165455.4100	11800.9880	31184.0600	7493.0868	974.0522	115988.5800	13800.4670	126.6676	124.4453	90.0004	43.3334	314438.8400	2787.0938	2987.1574	3620.7209	1893.5
2	02:03:08	120543.9300	426.6767	167919.9800	±24512.1800	30997.4230	7407.0163	995.3878	118983.5800	14351.3190	103.3339	124.4453	83.3337	40.0001	330479.6900	3053.8462	2780.4251	3787.4555	1773.5
3	02:03:21	119902.2000	456.6781	170673.8900	12625.4280	31228.8800	7364.9822	1020.0572	122266.7100	14575.0080	163.3348	105.5562	80.0004	63.3336	336442.5400	3030.5050	3227.2394	4037.5631	2146.9
x		119146.9400	423.3432	168016.4300	±16312.8650	31136.7870	7421.6951	996.4991	119079.6200	14242.2650	131.1121	118.1489	84.4448	48.8890	327120.3500	2957.1483	2998.2740	3815.2465	1937.9
σ		1891.3253	35.1205	2610.5798	±7112.7703	122.7561	65.3016	23.0226	3140.1687	398.6201	30.2464	10.9056	5.0918	12.6199	11380.0080	147.7332	223.6145	209.8061	190.6
%RSD		1.5874	8.2960	1.5538	±43.6022	0.3942	0.8799	2.3104	2.6370	2.7989	23.0691	9.2304	6.0297	25.8133	3.4788	4.9958	7.4581	5.4991	9.8

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:02:54	46766.6500	530.0154	4734.5659	63.3336	970.0517	242238.2700	2593.7033	3574.0358	227785.0900	194253.4500	188153.8300	2577.0319	140717.3800
2	02:03:08	47212.2770	450.0111	5154.7944	66.6669	1026.7246	250912.1600	2650.3863	3690.7490	240160.8900	200820.5200	192769.0200	2690.3980	144858.3300
3	02:03:21	46575.6730	456.6781	5311.5512	100.0006	993.3876	255668.6300	2743.7473	3637.3942	245610.2900	202449.3900	196681.5000	2870.4531	147327.5300
x		46851.5330	478.9016	5066.9705	76.6670	996.7213	249606.3500	2662.6123	3634.0597	237852.0900	199174.4600	192534.7800	2712.6277	144301.0800
σ		326.6807	44.3913	298.3501	20.2761	28.4831	6809.7396	75.7655	58.4281	9134.1310	4338.8374	4268.6580	147.9683	3340.1250
%RSD		0.6973	9.2694	5.8881	26.4469	2.8577	2.7282	2.8455	1.6078	3.8403	2.1784	2.2171	5.4548	2.3147

6100167-12@MH1H61 10/19/2016 02:06:56

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97M
1	02:06:56	118237.2700	1053.3944	176653.1700	6945.9859	23374.6790	4620.5072	685.3592	243699.8900	41983.3870	186.6686	177.7795	83.3337	63.3336	633895.7600	1833.5182	1736.8326	2416.9879	1166.74
2	02:07:09	119395.5900	996.7213	180062.4200	7192.8444	23367.3270	4508.4510	659.3572	248414.9700	43698.1050	203.3356	166.6682	140.0011	93.3338	653532.3600	1966.8794	1980.2156	2436.9933	1120.06
3	02:07:22	119429.3700	1043.3932	183129.4400	7362.9805	23293.1370	4426.4107	662.0241	252166.1500	44063.1950	206.6690	207.7801	160.0014	46.6668	668364.6500	2133.5837	1923.5368	2507.0123	1076.73
x		119020.7400	1031.1696	179948.3400	7167.2703	23345.0470	4518.4563	668.9135	248093.6700	43248.2290	198.8911	184.0760	127.7787	67.7781	651930.9200	1977.9938	1880.1950	2453.6645	1121.18
σ		678.7188	30.2493	3239.6444	209.6704	45.1061	97.4343	14.3046	4242.2643	1110.4918	10.7154	21.2669	39.7684	23.6488	17290.1580	150.3412	127.3488	47.2710	45.01
%RSD		0.5703	2.9335	1.8003	2.9254	0.1932	2.1564	2.1385	1.7099	2.5677	5.3876	11.5533	31.1228	34.8916	2.6521	7.6007	6.7732	1.9265	4.01

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:06:56	47319.4990	1413.4432	2173.5932	460.0116	6388.9109	235662.1000	1810.1802	2023.5585	175066.2400	212576.6600	203516.1500	2300.2910	126352.0100
2	02:07:09	47359.7080	1363.4356	2253.6126	486.6797	6772.5217	239219.9000	1913.5347	2056.8993	176925.0400	217166.5900	208735.8500	2473.6698	131159.3800
3	02:07:22	47855.6280	1233.4170	2120.2472	533.3490	6879.2685	241892.5800	1926.8709	2393.6484	184915.0500	220225.5400	212505.0200	2426.9906	132299.0500
x		47511.6120	1336.7653	2182.4843	493.3468	6680.2337	238924.8600	1883.5286	2158.0354	178968.7800	216656.2600	208252.3400	2400.3171	129936.8100
σ		298.6044	92.9292	67.1258	37.1205	257.8768	3125.7003	63.8706	204.7267	5232.8166	3849.8890	4513.8967	89.7143	3156.3943
%RSD		0.6285	6.9518	3.0757	7.5242	3.8603	1.3082	3.3910	9.4867	2.9239	1.7770	2.1675	3.7376	2.4292

6100167-13@MH1H62 10/19/2016 02:10:58

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97M
1	02:10:58	118183.2400	510.0143	166894.6900	11327.0520	26380.2200	5902.5823	814.0364	136727.1800	14414.7520	80.0004	87.7782	60.0002	40.0001	306749.3700	2930.4722	2747.0817	3484.0008	1550.13
2	02:11:11	119662.4000	446.6776	171227.4900	11423.8400	26500.5690	6013.3215	826.7043	139414.2000	14504.8950	70.0003	94.4449	76.6670	36.6667	313345.3700	3117.2010	2607.0404	3427.3126	1610.14
3	02:11:24	117703.7500	516.6813	171933.9700	11717.5470	26632.9550	5955.9504	797.3683	142989.0800	14341.3030	116.6674	118.8897	76.6670	60.0002	322970.2400	3090.5252	2667.0578	3634.0595	1853.52
x		118516.4500	491.1244	170018.7200	11489.4800	26504.5810	5957.2847	812.7030	139710.1500	14420.3170	88.8893	100.3709	71.1114	45.5557	314354.9900	3046.0662	2673.7266	3515.1243	1671.26
σ		1020.9608	38.6361	2728.4491	203.3542	126.4154	55.3817	14.7134	3141.4242	81.9381	24.5706	16.3804	9.6226	12.6199	8157.4297	100.9919	70.2584	106.8297	160.66
%RSD		0.8615	7.8669	1.6048	1.7699	0.4770	0.9296	1.8104	2.2485	0.5682	27.6418	16.3199	13.5317	27.7021	2.5950	3.3155	2.6277	3.0391	9.61

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:10:58	49025.1690	453.3446	3854.1502	110.0007	1890.1965	237273.2000	2480.3329	3744.1042	318341.1800	195574.6600	190951.2500	2797.0969	148791.0800
2	02:11:11	48147.1610	473.3457	3950.8583	146.6678	1776.8403	240181.4300	2480.3383	4097.5899	330030.4700	198980.7300	191611.6000	2920.4690	153318.7200
3	02:11:24	49269.8190	520.0149	4000.8802	156.6680	1880.1944	245206.2600	2560.3605	4040.8979	340520.2300	202374.4200	195166.0200	2940.4755	154478.1000
x		48814.0500	482.2351	3935.2962	137.7788	1849.0771	240886.9600	2500.3439	3960.8640	329630.6300	198976.6000	192576.2900	2886.0138	152195.9700
σ		590.3545	34.2125	74.5926	24.5707	62.7585	4013.3172	52.9297	189.8476	11094.9260	3399.8783	2266.9452	77.6513	3005.1577
%RSD		1.2094	7.0946	1.8955	17.8335	3.3940	1.6661	2.1169	4.7931	3.3659	1.7087	1.1772	2.6906	1.9745

6100167-14@MH1H63 10/19/2016 02:15:00

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	02:15:00	116825.8600	593.3527	175161.3800	4991.3699	28959.3860	4529.7949	648.6898	139938.8300	19120.0860	113.3340	118.8897	66.6669	26.6667	283949.6500	2910.4658	3914.1758	5318.2218	2480.338
2	02:15:13	117879.3300	560.0172	178746.8300	5111.4366	28971.4240	4469.7652	672.6916	143334.4600	19654.5570	56.6668	122.2230	103.3339	16.6667	293867.4800	3057.1806	4170.9566	5695.1167	2370.309
3	02:15:26	116724.5700	606.6869	181303.3800	5011.3809	28947.3470	4468.4312	648.6898	147229.3000	19854.9920	150.0012	136.6677	36.6667	33.3334	297733.6100	3000.4951	3944.1888	5441.6281	2527.017
x		117143.2600	586.6856	178403.8700	5038.0624	28959.3860	4489.3305	656.6904	143500.8600	19543.2110	106.6674	125.9268	68.8892	25.5556	291850.2500	2989.3805	4009.7737	5484.9889	2459.221
σ		639.4684	24.0385	3085.3313	64.3268	12.0383	35.0496	13.8574	3648.0795	379.8949	47.0230	9.4500	33.3891	8.3887	7109.9429	73.9862	140.3928	192.1524	80.460
%RSD		0.5459	4.0973	1.7294	1.2768	0.0416	0.7807	2.1102	2.5422	1.9439	44.0838	7.5044	48.4678	32.8254	2.4362	2.4750	3.5013	3.5032	3.271

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:15:00	47818.7680	333.3394	5474.9815	43.3334	450.0111	237560.5600	1866.8583	6362.2255	160986.2300	186442.4400	179926.4300	1986.8838	115698.2500
2	02:15:13	48938.0340	400.0088	6005.3162	60.0002	463.3451	244316.1100	1750.1685	6592.3894	166215.7600	190825.3200	186340.3800	2016.8904	117268.1700
3	02:15:26	49025.1690	396.6753	5745.1481	33.3334	516.6813	246103.3600	1856.8563	6759.1785	170327.4900	194205.7800	188837.7900	2213.6028	118574.9600
x		48593.9900	376.6745	5741.8153	45.5557	476.6792	242660.0100	1824.6277	6571.2645	165843.1600	190491.1800	185034.8700	2072.4590	117180.4600
σ		672.7741	37.5663	265.1831	13.4716	35.2786	4505.7562	64.6772	199.3179	4681.7597	3892.4446	4596.8856	123.1515	1440.3601
%RSD		1.3845	9.9731	4.6185	29.5717	7.4009	1.8568	3.5447	3.0332	2.8230	2.0434	2.4843	5.9423	1.2292

6100167-15@MH1H64 10/19/2016 02:19:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	02:19:01	115124.3600	373.3410	159795.5000	4521.1240	28139.4830	2495.6758	394.0085	39817.0060	9715.1884	73.3336	105.5562	93.3338	43.3334	244004.5700	2120.2472	3053.8462	3797.4596	1890.1965
2	02:19:14	115023.0900	313.3387	162007.4700	4344.3711	28184.9570	2511.0134	418.6763	42006.8280	9705.1777	53.3335	122.2230	103.3339	16.6667	252399.1500	2343.6354	2853.7812	3784.1207	1973.5475
3	02:19:28	116890.0100	290.0046	161834.4300	4624.5093	28298.6430	2485.6731	385.3415	42479.0140	9695.1670	43.3334	110.0007	70.0003	30.0001	253595.0900	2233.6077	3093.8597	3997.5454	1833.5182
x		115679.1600	325.5614	161212.4700	4496.6681	28207.6950	2497.4541	399.3421	41434.2830	9705.1777	56.6669	112.5933	88.8893	30.0001	249999.6000	2232.4968	3000.4957	3859.7086	1899.0874
σ		1049.8547	42.9917	1230.1749	141.6613	81.9797	12.7634	17.2956	1420.3619	10.0107	15.2754	8.6306	17.1055	13.3334	5226.1717	111.6982	128.6240	119.5563	70.4368
%RSD		0.9076	13.2054	0.7631	3.1504	0.2906	0.5111	4.3310	3.4280	0.1031	26.9564	7.6653	19.2436	44.4445	2.0905	5.0033	4.2868	3.0975	3.7090

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:19:01	47135.2120	326.6725	8647.4442	20.0000	230.0029	237926.6200	2103.5767	3570.7011	334668.8400	185670.2100	180218.8000	3894.1672	126659.5700
2	02:19:14	47001.1880	306.6718	8620.7522	26.6667	283.3378	244559.1800	2103.5767	3470.6624	343281.2100	189191.7000	183891.2600	4044.2327	129008.9300
3	02:19:28	47128.5110	280.0043	8750.8764	33.3334	243.3366	247623.8200	2103.5767	3734.1001	356235.5800	195823.2600	188065.3600	4027.5586	130604.8100
x		47088.3040	304.4496	8673.0243	26.6667	252.2258	243369.8700	2103.5767	3591.8212	344728.5400	190228.3900	184058.4700	3988.6528	128757.7700
σ		75.5190	23.4133	68.7302	6.6667	27.7563	4956.7911	0.0000	132.9827	10855.9760	5155.3076	3925.9488	82.2506	1984.5739
%RSD		0.1604	7.6904	0.7925	25.0000	11.0046	2.0367	0.0000	3.7024	3.1491	2.7101	2.1330	2.0621	1.5413

6100167-16@MH1H65 10/19/2016 02:23:02

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	02:23:02	114442.5000	56.6668	147900.0500	3367.2902	28087.3220	1685.4896	314.6721	2963.8164	1436.7802	33.3334	105.5562	60.0002	23.3334	126936.7300	1876.8604	2840.4437	3847.4807	1796.8442
2	02:23:16	112333.1000	50.0001	149895.6700	3517.3470	28186.2950	1784.1751	326.0059	2980.4885	1356.7694	46.6668	96.6672	66.6669	16.6667	129296.3100	1956.8773	2977.1541	3704.0878	1910.2007
3	02:23:29	114101.5900	53.3335	152471.3100	3400.6359	28078.6290	1736.1658	315.3388	3127.2044	1483.4544	23.3334	94.4449	43.3334	40.0001	131473.8700	2110.2449	2893.7938	3890.8324	1760.1704
x		113625.7300	53.3335	150089.0100	3428.4244	28117.4150	1735.2768	318.6723	3023.8364	1429.0013	34.4445	98.8894	56.6668	26.6667	129235.6400	1981.3275	2903.7972	3814.1336	1822.4051
σ		1132.3524	3.3334	2291.7548	78.7935	59.8094	49.3488	6.3598	89.9066	58.7301	11.7063	5.8795	12.0186	12.0185	2269.1767	118.5978	68.9020	97.7364	78.2131
%RSD		0.9966	6.2500	1.5269	2.2982	0.2127	2.8439	1.9957	2.9733	4.1099	33.9860	5.9455	21.2092	45.0695	1.7558	5.9858	2.3728	2.5625	4.2918

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:23:02	43758.3940	170.0016	16715.3530	16.6667	56.6668	228772.7600	2060.2334	3764.1124	292814.3000	177835.8900	175171.5700	4551.1389	126750.8300
2	02:23:16	43590.9260	186.6686	17420.0070	20.0000	70.0003	235662.1000	2063.5675	3827.4722	301198.3100	182945.8000	178967.7800	4531.1289	129438.3000
3	02:23:29	43889.0220	166.6682	17276.4000	13.3333	80.0004	236712.1900	2083.5721	3750.7736	310482.9600	184364.0200	180823.9800	5051.4030	131210.1000
x		43746.1140	174.4461	17137.2540	16.6667	68.8892	233715.6800	2069.1243	3780.7861	301498.5300	181715.2400	178321.1100	4711.2236	129133.0800
σ		149.4268	10.7154	372.3652	3.3333	11.7064	4312.7729	12.6227	40.9778	8838.1544	3433.6319	2881.1541	294.7738	2245.2478
%RSD		0.3416	6.1425	2.1728	20.0000	16.9931	1.8453	0.6100	1.0838	2.9314	1.8896	1.6157	6.2568	1.7387

6100167-17@MH1H66 10/19/2016 02:27:03

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97M
1	02:27:03	109320.0400	240.0032	139492.0400	12278.2860	23428.1490	5498.3289	807.3692	185972.9700	7429.7015	40.0001	63.3336	36.6667	30.0001	145776.1600	2193.5980	2813.7687	3750.7736	1836.85.
2	02:27:16	110349.0200	216.6693	140713.9900	12421.8140	23275.7590	5392.2654	763.3654	191073.7900	7810.0200	30.0001	66.6669	60.0002	13.3333	151593.4800	2830.4406	3213.9013	3794.1249	2033.56
3	02:27:29	110848.3800	196.6688	144211.5000	12962.5680	23761.0120	5328.8947	827.3710	195734.7200	7713.2708	46.6668	62.2224	33.3334	13.3333	154681.5200	2426.9906	3417.3088	3867.4892	2000.22
x		110172.4800	217.7804	141472.5100	12554.2230	23488.3070	5406.4963	799.3685	190927.1600	7650.9974	38.8890	64.0743	43.3334	18.8889	150683.7200	2483.6764	3148.3263	3804.1292	1956.87
σ		779.3151	21.6885	2449.4541	360.8457	248.1567	85.6089	32.7443	4882.5289	197.6589	8.3887	2.3130	14.5297	9.6225	4521.8471	322.1833	307.0672	58.9974	105.27.
%RSD		0.7074	9.9589	1.7314	2.8743	1.0565	1.5834	4.0963	2.5573	2.5834	21.5710	3.6098	33.5301	50.9427	3.0009	12.9720	9.7533	1.5509	5.37

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:27:03	43205.7610	280.0043	3430.6472	63.3336	870.0416	214033.5900	2413.6537	9952.1111	141438.4400	177642.1600	174991.4900	6015.3228	142403.3300
2	02:27:16	43788.5390	290.0046	3634.0595	60.0002	873.3753	221178.2500	2517.0151	10115.6250	147981.3600	183517.1400	180334.3900	6322.1976	145566.1700
3	02:27:29	44006.2530	226.6695	3710.7572	73.3336	1033.3921	225396.6500	2413.6537	10342.5470	150800.4500	186786.0500	183037.6200	6472.3032	146473.9100
x		43666.8910	265.5595	3591.8213	65.5558	925.6030	220202.8300	2448.1075	10136.7610	146740.0800	182648.4500	179454.5000	6269.9412	144814.4700
σ		413.8878	34.0489	144.7531	6.9389	93.3630	5743.9870	59.6757	196.0740	4802.8537	4633.4275	4094.5959	232.9288	2136.8648
%RSD		0.9478	12.8216	4.0301	10.5848	10.0867	2.6085	2.4376	1.9343	3.2730	2.5368	2.2817	3.7150	1.4756

6100167-18@MH1H67 10/19/2016 02:31:04

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	02:31:04	115607.1000	166.6682	146805.8600	16545.0420	30521.1490	7613.8537	996.7213	24419.4200	5101.4310	66.6669	127.7787	80.0004	16.6667	173809.1300	4334.3664	5438.2928	6072.0271	3303.933
2	02:31:17	115343.7800	176.6684	150315.8600	16892.3460	30116.4690	7621.8604	1015.3900	25532.4710	5184.8114	60.0002	110.0007	70.0003	20.0000	177832.4900	4197.6356	5328.2277	6372.2325	3443.985
3	02:31:30	115806.2800	183.3352	153813.6400	17279.7400	30332.5190	7727.9499	1073.3967	25458.9320	5484.9875	46.6668	102.2228	53.3335	30.0001	181109.5800	4494.4441	5591.7192	6418.9320	3694.083
x		115585.7200	175.5573	150311.7900	16905.7100	30323.3790	7654.5547	1028.5027	25136.9410	5257.0766	57.7780	113.3341	67.7780	22.2223	177583.7300	4342.1487	5452.7465	6287.7306	3480.667
σ		231.9854	8.3889	3503.8913	367.5314	202.4946	63.6881	39.9842	622.4787	201.7315	10.1836	13.1000	13.4716	6.9389	3656.5762	148.5572	132.3391	188.2583	197.644
%RSD		0.2007	4.7784	2.3311	2.1740	0.6678	0.8320	3.8876	2.4764	3.8373	17.6253	11.5587	19.8761	31.2250	2.0591	3.4213	2.4270	2.9941	5.678

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:31:04	45774.9550	260.0037	5274.8632	20.0000	280.0043	224740.7100	3634.0595	16234.4830	339091.6200	182952.6000	179222.7300	4984.6996	169824.8800
2	02:31:17	45801.7560	193.3354	5268.1927	26.6667	263.3372	230680.0600	3777.4513	16935.7600	355275.7600	189014.7400	184244.9800	5311.5512	175185.1700
3	02:31:30	45322.6970	200.0022	5494.9936	36.6667	266.6706	236147.7900	3944.1888	17967.7390	366411.6200	191849.8800	187058.2300	5361.5806	180361.5900
x		45633.1360	217.7804	5346.0165	27.7778	270.0040	230522.8600	3785.2332	17045.9940	353593.0000	187939.0800	183508.6500	5219.2771	175123.8800
σ		269.1816	36.7181	129.0610	8.3887	8.8194	5705.1662	155.2110	871.8701	13737.5180	4545.1282	3969.3057	204.6844	5268.6230
%RSD		0.5899	16.8601	2.4142	30.1994	3.2664	2.4749	4.1004	5.1148	3.8851	2.4184	2.1630	3.9217	3.0085

QJ14032-PS1@MH1H52A 10/19/2016 02:35:05

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	02:35:05	115515.9500	96.6672	158313.2400	4634.5144	18915.6590	3657.4022	564.6842	42194.3600	5148.1239	56.6668	141.1122	100.0006	30.0001	177098.3700	2760.4190	4387.7253	4711.2204	2507.0123
2	02:35:18	116868.3800	96.6672	160680.9000	4864.6345	19329.1940	3730.7654	581.3519	42991.4150	5194.8171	46.6668	135.5566	83.3337	16.6667	179256.7300	2753.7503	4134.2732	4814.6079	2650.3863
3	02:35:32	119763.7200	120.0008	163907.7500	5061.4086	19189.5650	3722.7621	549.3499	44619.2300	5494.9936	53.3335	152.2235	86.6671	26.6667	184136.1400	2933.8067	4427.7447	5041.3975	2737.0786
x		117382.0200	104.4450	160967.3000	4853.5192	19144.8060	3703.6432	565.1287	43268.3350	5279.3115	52.2224	142.9641	90.0004	24.4445	180163.7500	2815.9920	4316.5810	4855.7419	2631.4924
σ		2170.3235	13.4717	2808.2296	213.6641	210.3696	40.2453	16.0056	1235.9257	188.2395	5.0918	8.4864	8.8193	6.9389	3605.4905	102.0849	159.1462	168.8882	116.1911
%RSD		1.8489	12.8983	1.7446	4.4023	1.0988	1.0866	2.8322	2.8564	3.5656	9.7502	5.9360	9.7991	28.3864	2.0012	3.6252	3.6869	3.4781	4.4154

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:35:05	46954.2800	853.3734	18725.9330	560.0172	6949.3218	256511.9000	3100.5286	14932.2530	118470.2700	184932.0500	179195.5400	3367.2902	198670.7200
2	02:35:18	46806.8560	713.3613	19163.5100	563.3508	7032.7192	262382.5900	3303.9336	15266.1410	124054.0100	186166.8800	182904.9900	3667.4063	203911.5300
3	02:35:32	47215.6280	896.7109	20439.6190	526.6819	7339.6283	267141.5500	3390.6322	15887.2030	126544.6500	192537.5200	188385.2100	3710.7572	209192.8500
x		46992.2550	821.1485	19443.0210	550.0167	7107.2231	262012.0100	3265.0315	15361.8660	123022.9800	187878.8200	183495.2500	3581.8179	203925.0300
σ		207.0152	95.8285	890.3786	20.2771	205.5430	5324.5081	148.9129	484.6182	4134.7547	4081.5260	4623.1836	187.0466	5261.0750
%RSD		0.4405	11.6701	4.5794	3.6866	2.8920	2.0322	4.5608	3.1547	3.3610	2.1724	2.5195	5.2221	2.5799

SEQ-CCV@CCV10 10/19/2016 02:39:12 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95
1	02:39:25	112525.4600	192854.1300	139603.7400	548594.4300	463842.1900	602580.0100	74334.6730	r3540654.6000	751248.9600	5635.0793	18036.7640	8617.4157	90.0004	120337.9000	1490687.0000	r2675300.7
2	02:39:38	112511.9600	193477.1600	143480.0600	555374.7700	467863.9500	611939.2100	74832.0620	r3591756.9000	765468.1600	5588.3838	18120.2630	8827.6172	113.3340	122611.3100	1531531.4000	r2735201.2
3	02:39:51	111017.0800	191649.0400	143822.0700	566341.2800	470892.4700	613428.0300	75408.7980	r3605460.3000	769157.5700	6092.0405	18182.6100	8617.4157	103.3339	124101.3200	1553185.6000	r2763998.7
x		112018.1700	192660.1100	142301.9600	556770.1600	467532.8700	609315.7500	74858.5110	r3579290.6000	761958.2300	5771.8345	18113.2120	8687.4829	102.2228	122350.1700	1525134.7000	r2724833.5
σ		866.9905	929.3734	2342.9733	8955.3315	3536.7813	5880.6273	537.5509	r34154.0760	9456.1770	278.2877	73.1780	121.3599	11.7064	1895.2524	31736.5090	r45248.7
%RSD		0.7740	0.4824	1.6465	1.6084	0.7565	0.9651	0.7181	r0.9542	1.2410	4.8215	0.4040	1.3970	11.4519	1.5490	2.0809	r1.6

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:39:25	43915.8170	60198.6560	387982.8800	45215.4990	674346.4100	250569.5700	2343060.3000	2365509.0000	805414.6800	189324.4200	184795.9900	r5671536.6000	121158.6900
2	02:39:38	44964.2570	60349.6520	397522.0100	46190.3810	692939.5400	259923.4400	r2329907.0000	2439945.0000	830986.3100	194740.3700	191679.6800	r5801984.8000	123999.9500
3	02:39:51	45563.8980	61057.6890	397929.2600	46635.9810	705020.8300	262001.8400	r2357602.5000	2488914.3000	846311.2600	197168.5400	195615.5300	r5858138.9000	126737.3100
x		44814.6580	60535.3320	394478.0500	46013.9540	690768.9300	257498.2800	r2343523.3000	2431456.1000	827570.7500	193744.4500	190697.0700	r5777220.1000	123965.3200
σ		834.1629	458.6313	5628.6707	726.4899	15451.9790	6089.7641	r13853.5540	62139.0840	20661.1230	4015.7768	5476.2881	r95734.3560	2789.4727
%RSD		1.8614	0.7576	1.4269	1.5788	2.2369	2.3650	r0.5911	2.5556	2.4966	2.0727	2.8717	r1.6571	2.2502

SEQ-CCB@CCB10 10/19/2016 02:43:40 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	02:43:54	110534.5900	43.3334	138324.4000	160.0014	303.3384	236.0031	136.6677	290.0046	1003.3887	0.0000	10.0000	23.3334	26.6667	118095.4400	413.3427	716.6949	803.3688	443.3441	1256.7535
2	02:44:07	110851.7500	43.3334	139109.5800	133.3343	317.3389	231.3363	140.0011	323.3391	1016.7235	3.3333	12.2222	23.3334	23.3334	120273.7200	486.6797	673.3583	730.0293	500.0138	1210.0805
3	02:44:20	111131.8100	16.6667	139563.1200	113.3340	305.3385	236.6697	119.3341	316.6722	863.3743	6.6667	15.5556	16.6667	30.0001	120033.9200	416.6762	703.3605	840.0388	436.6771	1140.0715
x		110839.3800	34.4445	138999.0400	135.5566	308.6719	234.6697	132.0010	310.0053	961.1622	3.3333	12.5926	21.1111	26.6667	119467.6900	438.8995	697.8046	791.1457	460.0117	1202.3018
σ		298.7996	15.3961	626.7142	23.4129	7.5721	2.9060	11.0957	17.6389	84.9488	3.3333	2.7962	3.8490	3.3333	1194.4379	41.4124	22.1961	56.0141	34.8028	58.7287
%RSD		0.2696	44.6981	0.4509	17.2717	2.4531	1.2383	8.4058	5.6899	8.8381	100.0000	22.2054	18.2321	12.5000	0.9998	9.4355	3.1809	7.0801	7.5656	4.8847

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:43:54	43597.6250	140.0011	93.3338	0.0000	60.0002	223671.4900	1150.0727	313.3387	140.0011	183755.2100	179858.4400	793.3679	116295.8000
2	02:44:07	44193.8260	66.6669	36.6667	6.6667	63.3336	223538.2700	1186.7441	273.3374	176.6684	183962.6800	182306.4800	816.7034	118135.9600
3	02:44:20	43704.8040	166.6682	33.3334	0.0000	76.6670	227870.5200	1113.4015	273.3374	166.6682	187153.4900	183166.8500	860.0407	119250.3700
x		43832.0850	124.4454	54.4446	2.2222	66.6669	225026.7600	1150.0728	286.6712	161.1126	184957.1300	181777.2600	823.3707	117894.0400
σ		317.8277	51.7837	33.7202	3.8490	8.8192	2463.6729	36.6713	23.0948	18.9545	1904.9330	1716.5256	33.8327	1492.0695
%RSD		0.7251	41.6116	61.9349	173.2051	13.2288	1.0948	3.1886	8.0562	11.7647	1.0299	0.9443	4.1091	1.2656

Analyte ICPS

SEQ-CAL1@S01 10/18/2016 17:47:39

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:47:52	98.1%	2.1635	98.6%	-1.3883	-101.2623	8.8047	4.7048	16.8862	173.1027	3.3332	2.8225	3.3007	-2.2278	-221.0311	-7.5859	0.0760	-2.0078	-5.5300	3.8541
2	17:48:05	100.0%	8.5339	100.3%	0.9503	-45.6000	-9.5131	-11.4752	-0.5102	102.1935	-3.3392	-2.7788	3.2330	-5.6167	-1195.0637	8.9544	-6.7135	11.1253	4.4875	-0.2085
3	17:48:18	101.9%	-8.1373	101.1%	0.4380	-84.9234	7.0222	6.7704	-14.0212	247.9889	0.0061	2.8589	-6.5337	7.8445	1416.0948	-1.3685	6.3816	-9.1175	1.0425	-3.6456
x		100.0%	0.8534	100.0%	0.0000	-77.2619	2.1046	-0.0000	0.7849	174.4284	0.0000	0.9675	0.0000	-0.0000	0.0000	0.0000	-0.0853	-0.0000	0.0000	-0.0000
σ		1.9%	8.4125	1.2%	1.2293	28.6111	10.1006	9.9913	15.4943	72.9067	3.3362	3.2445	5.6585	7.0016	1319.5371	8.3546	6.5490	10.2697	5.0895	3.7542
%RSD		1.9	985.7899	1.2	0.0000	37.0314	479.9370	0.0000	1973.9292	41.7975	0.0000	335.3320	0.0000	0.0000	0.0000	0.0000	7679.1260	0.0000	0.0000	0.0000

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:47:52	99.9%	-22.7256	0.2077	0.0000	-6.5631	-1668.8008	9.8187	-2.6776	-1.4408	98.9%	97.7%	27.9989	528.2783
2	17:48:05	100.4%	-0.5371	0.0422	0.0000	0.0946	1980.0543	-11.7103	10.4271	-5.3260	99.3%	100.9%	57.5026	-348.9618
3	17:48:18	99.6%	23.2627	-0.2482	0.0000	6.4753	-311.2534	1.8916	-6.8923	6.0898	101.9%	101.4%	67.1893	-179.3165
x		100.0%	0.0000	0.0006	0.0000	0.0023	-0.0000	-0.0000	0.2858	-0.2257	100.0%	100.0%	50.8969	0.0000
σ		0.4%	22.9989	0.2308	0.0000	6.5197	1844.2329	10.8884	9.0320	5.8041	1.6%	2.0%	20.4132	465.2992
%RSD		0.4	0.0000	40269.5190	0.0000	289014.9300	0.0000	0.0000	3160.6894	2572.1548	1.6	2.0	40.1068	0.0000

SEQ-CAL2@S02 10/18/2016 17:51:52

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:52:06	102.1%	100.8808	100.9%	0.5564	953.9151	560.3684	12.0140	1513.7966	182.3979	6.5240	45.3694	10.0696	7.4416	850.1348	2472.0025	3968.8994	4597.1298	2537.8454	6342.2908
2	17:52:19	100.8%	135.2773	102.2%	22.5800	938.4550	545.2299	13.9426	1591.1616	326.0513	12.8285	33.6696	-2.7219	19.9965	-759.4392	2439.0450	4022.0611	4585.2421	2572.5094	6559.6806
3	17:52:32	101.8%	111.0372	103.4%	-0.9430	907.1294	525.1898	3.4148	1436.5789	167.7080	19.3655	45.6990	3.5528	10.3756	1816.5665	2405.8864	4473.7087	4442.0889	2598.6318	6434.3893
x		101.6%	115.7318	102.2%	7.3978	933.1665	543.5960	9.7905	1513.8457	225.3857	12.9060	41.5793	3.6335	12.6046	635.7540	2438.9780	4154.8897	4541.4869	2569.6622	6445.4535
σ		0.7%	17.6723	1.2%	13.1695	23.8370	17.6461	5.6051	77.2914	87.4878	6.4211	6.8520	6.3961	6.5675	1301.3149	33.0581	277.3819	86.2862	30.4931	109.1165
%RSD		0.7	15.2701	1.2	178.0192	2.5544	3.2462	57.2504	5.1056	38.8169	49.7528	16.4794	176.0315	52.1042	204.6884	1.3554	6.6760	1.9000	1.1867	1.6929

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:52:06	101.4%	-1.5760	1111.4918	26.5452	230.7527	1881.9192	7036.1990	1707.3952	2980.4730	100.1%	99.9%	2104.4781	-117.8190
2	17:52:19	103.1%	12.6299	1205.7032	26.1461	285.9005	1252.9204	7075.9571	1755.5835	3107.9657	101.8%	102.1%	1996.2844	163.7045
3	17:52:32	102.8%	7.2022	1217.4595	19.3320	271.8010	2167.2166	6924.8905	1767.7502	3212.9692	103.5%	104.1%	2131.5203	-903.0646
x		102.4%	6.0853	1178.2182	24.0078	262.8180	1767.3521	7012.3489	1743.5763	3100.4693	101.8%	102.0%	2077.4276	-285.7264
σ		0.9%	7.1685	58.0849	4.0543	28.6503	467.7912	78.3065	31.9188	116.4292	1.7%	2.1%	71.5611	552.8505
%RSD		0.9	117.7996	4.9299	16.8873	10.9012	26.4685	1.1167	1.8307	3.7552	1.7	2.1	3.4447	193.4895

SEQ-CAL3@S03 10/18/2016 17:56:04

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:56:18	101.6%	252.4829	101.0%	-32.5219	2405.6253	1292.8214	25.7037	3319.8793	1068.4324	22.8108	114.7805	71.8739	-5.7663	1932.9890	4833.1815	8160.3461	9147.0710	5100.3962	12921.4340
2	17:56:31	101.3%	222.7144	102.5%	35.3684	2421.4559	1299.9159	-4.1720	3867.5207	1006.0077	32.5135	82.9124	65.0265	-12.3132	1960.9804	5092.6732	8529.8058	9117.0488	5140.9398	13166.9670
3	17:56:44	103.8%	261.5495	103.8%	5.2493	2403.3870	1267.2920	8.0317	3641.9438	993.1095	31.9045	112.2973	70.6379	0.4473	2382.9334	4974.9693	8454.3717	8866.5294	5045.1112	13555.2270
x		102.3%	245.5823	102.4%	2.6986	2410.1561	1286.6764	9.8545	3609.7813	1022.5166	29.0762	103.3300	69.1795	-5.8774	2092.3010	4966.9413	8381.5079	9043.5497	5095.4824	13214.5430
σ		1.4%	20.3164	1.4%	34.0169	9.8497	17.1581	15.0211	275.2337	40.2839	5.4346	17.7258	3.6492	6.3810	252.0839	129.9320	195.2101	154.0373	48.1029	319.5639
%RSD		1.3	8.2727	1.3	1260.5379	0.4087	1.3335	152.4287	7.6247	3.9397	18.6909	17.1545	5.2750	108.5674	12.0482	2.6159	2.3291	1.7033	0.9440	2.4183

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:56:18	102.0%	113.5355	2961.4720	36.3542	628.0296	2910.0843	13964.9370	4222.9250	7088.2230	100.7%	99.7%	4905.9081	182.0153
2	17:56:31	102.3%	34.7639	2909.6659	61.8375	559.4927	5090.0047	13805.8280	4062.5619	7310.6288	102.4%	103.5%	5060.1438	-2027.0470
3	17:56:44	104.0%	58.1116	2790.9269	12.8473	622.6382	3006.5816	14292.8630	4274.7125	7503.2295	103.8%	104.2%	5048.7594	167.4974
x		102.8%	68.8037	2887.3550	37.0130	603.3869	3668.8902	14021.2090	4186.7331	7300.6937	102.3%	102.4%	5004.9371	-559.1781
σ		1.1%	40.4596	87.4342	24.5017	38.1089	1231.6667	248.3461	110.6090	207.6816	1.5%	2.4%	85.9503	1271.2325
%RSD		1.1	58.8045	3.0282	66.1976	6.3158	33.5706	1.7712	2.6419	2.8447	1.5	2.4	1.7173	227.3395

SEQ-CAL4@S04 10/18/2016 18:00:14

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	18:00:28	100.9%	379.9880	102.2%	12.8244	4815.0983	2521.5521	33.3588	7005.5995	1483.1772	47.9691	180.8165	48.5701	16.4951	1420.7677	11914.4840	19849.0840	21958.0030	12742.3090	33162.5430
2	18:00:41	103.2%	492.1869	103.2%	147.6334	4856.0581	2530.7790	3.4755	7183.3418	1465.4855	67.0257	181.3834	108.7735	-5.9774	1473.6690	11864.2330	20220.9500	22247.7740	12832.4080	32810.3530
3	18:00:54	103.4%	401.9027	104.8%	7.7614	4862.9140	2530.8928	30.4853	7219.5757	1540.2573	64.3621	193.6578	103.5547	13.4422	2001.6996	12219.9460	21053.4140	22749.6770	12933.8010	33461.3760
x		102.5%	424.6925	103.4%	56.0731	4844.6901	2527.7413	22.4399	7136.1723	1496.3067	59.7856	185.2859	86.9661	7.9866	1632.0455	11999.5540	20374.4830	22318.4850	12836.1730	33144.7570
σ		1.4%	59.4700	1.3%	79.3339	25.8555	5.3603	16.4864	114.5215	39.0767	10.3197	7.2558	33.3541	12.1891	321.2208	192.5118	616.6702	400.5454	95.8017	325.8759
%RSD		1.3	14.0031	1.3	141.4831	0.5337	0.2121	73.4691	1.6048	2.6115	17.2612	3.9160	38.3530	152.6195	19.6821	1.6043	3.0267	1.7947	0.7463	0.9832

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:00:28	103.9%	58.8741	5747.9885	121.2279	1374.9852	3319.8268	34116.4480	8451.3306	14361.3740	101.4%	101.2%	9675.0691	818.0412
2	18:00:41	104.2%	103.5919	5588.2629	128.7281	1230.5282	1999.7564	34318.9060	8152.1319	14428.1360	103.9%	103.8%	9528.9424	-196.8714
3	18:00:54	103.4%	88.7045	5678.1381	118.0784	1335.0651	2763.4051	35109.0870	8171.6704	14693.9750	104.2%	104.3%	9609.5672	-266.7097
x		103.9%	83.7235	5671.4631	122.6781	1313.5261	2694.3294	34514.8130	8258.3776	14494.4950	103.1%	103.1%	9604.5263	118.1534
σ		0.4%	22.7712	80.0717	5.4710	74.5982	662.7406	524.5167	167.3875	175.9506	1.5%	1.7%	73.1936	607.1257
%RSD		0.4	27.1981	1.4118	4.4596	5.6792	24.5976	1.5197	2.0269	1.2139	1.5	1.7	0.7621	513.8454

SEQ-CAL5@S05 10/18/2016 18:04:25

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	18:04:38	101.5%	4757.1706	99.9%	11376.9460	9267.4922	12786.6880	173.4436	72324.4210	15294.4370	134.5618	369.2579	164.1815	-2.4392	961.0413	28568.9320	50556.5530	55360.6050	31556.7030	82862.0300
2	18:04:51	103.4%	4507.2572	101.2%	12093.8910	9259.8895	12586.9430	114.9762	73809.3850	15758.3930	120.5104	364.2077	219.0416	-12.3970	1800.9394	29509.1670	51270.6470	55575.9910	32374.1440	83405.7290
3	18:05:05	101.7%	4469.0356	101.9%	12090.9300	9588.6925	12834.3890	104.4741	75105.3350	15911.5230	100.1120	389.2803	187.6308	0.5916	1999.4413	29510.4940	52715.0660	56987.2170	32409.0010	84818.3960
x		102.2%	4577.8211	101.0%	11853.9220	9372.0247	12736.0000	130.9646	73746.3800	15654.7840	118.3947	374.2487	190.2846	-4.7482	1587.1407	29196.1980	51514.0890	55974.6040	32113.2830	83695.3850
σ		1.0%	156.4925	1.0%	413.0757	187.6783	131.2738	37.1608	1391.5271	321.3252	17.3221	13.2604	27.5262	6.7952	551.2269	543.2280	1099.6552	883.5362	482.3274	1009.8352
%RSD		1.0	3.4185	1.0	3.4847	2.0025	1.0307	28.3747	1.8869	2.0526	14.6308	3.5432	14.4658	143.1102	34.7308	1.8606	2.1347	1.5785	1.5020	1.2066

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:04:38	101.5%	1123.6576	7246.7007	895.0865	12494.1900	3366.7755	42275.3840	41246.5870	14455.0540	100.4%	101.1%	96293.2170	132.6968
2	18:04:51	105.0%	1021.4850	7598.5922	818.4582	12876.9190	2209.3412	42789.8940	41599.4940	14723.2320	102.3%	102.8%	98064.5910	320.9282
3	18:05:05	103.1%	1237.9845	7449.2155	915.7347	12561.1560	5019.0717	44120.4440	41948.3540	14917.4460	104.0%	104.3%	97499.8690	-397.8699
x		103.2%	1127.7090	7431.5028	876.4265	12644.0880	3531.7295	43061.9070	41598.1450	14698.5780	102.2%	102.8%	97285.8920	18.5850
σ		1.7%	108.3066	176.6131	51.2526	204.3988	1412.1097	952.1319	350.8856	232.1798	1.8%	1.6%	904.8651	372.7382
%RSD		1.7	9.6041	2.3765	5.8479	1.6166	39.9835	2.2111	0.8435	1.5796	1.7	1.6	0.9301	2005.5828

SEQ-CAL6@S06 10/18/2016 18:08:35

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	18:08:48	101.1%	21802.8490	100.4%	58516.2950	47134.8480	63130.4550	581.1981	362652.4500	77445.8990	577.0548	1927.5330	939.3152	7.2512	-7.8281	142160.6400	252917.2400	275096.6700	157850.5000
2	18:09:01	102.3%	21624.6530	102.4%	57663.8960	46856.7950	62657.4150	599.1825	364608.6200	77003.5980	527.9897	1917.3173	897.8911	16.8246	1025.8631	145538.8700	255007.3300	277102.9900	158369.4600
3	18:09:14	102.0%	21979.3020	102.2%	59413.4040	47628.8230	63794.2020	616.8976	369632.9200	77544.2570	514.6717	1921.7894	872.3279	7.3766	1664.3524	147868.9000	257785.6300	281239.7200	162016.4300
x		101.8%	21802.2680	101.7%	58531.1980	47206.8220	63194.0240	599.0927	365631.3300	77331.2510	539.9054	1922.2132	903.1781	10.4841	894.1291	145189.4700	255236.7300	277813.1200	159412.1300
σ		0.7%	177.3255	1.1%	874.8495	391.0145	571.0535	17.8499	3600.8567	287.9865	32.8542	5.1210	33.8052	5.4914	843.8378	2870.1274	2442.2876	3132.4894	2270.2681
%RSD		0.7	0.8133	1.1	1.4947	0.8283	0.9037	2.9795	0.9848	0.3724	6.0852	0.2664	3.7429	52.3778	94.3754	1.9768	0.9569	1.1276	1.4242

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:08:48	102.2%	5380.2574	37158.0800	4219.8829	62529.1720	901.1784	209605.6600	201795.9200	72320.5400	102.2%	101.3%	490673.7800	268.1102
2	18:09:01	102.9%	5927.7166	37319.7090	4458.4669	62372.0500	128.2310	213075.4800	205927.5100	72479.9240	104.8%	104.5%	490710.6800	187.5962
3	18:09:14	101.7%	5622.5620	38000.3200	4326.3623	63431.0180	1226.1323	216506.2800	207902.2700	73979.8640	105.5%	104.5%	498571.4900	1441.6169
x		102.3%	5643.5120	37492.7030	4334.9040	62777.4130	751.8472	213062.4700	205208.5700	72926.7760	104.2%	103.4%	493318.6500	632.4411
σ		0.6%	274.3302	446.9760	119.5211	571.4636	563.9784	3450.3281	3116.0102	915.4763	1.7%	1.8%	4549.1287	701.9221
%RSD		0.6	4.8610	1.1922	2.7572	0.9103	75.0124	1.6194	1.5185	1.2553	1.7	1.8	0.9221	110.9862

SEQ-CAL7@S07 10/18/2016 18:11:47

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo
1	18:12:00	100.2%	219617.3500	98.0%	577547.6000	470336.5000	628994.9600	5572.1385	ŧ3555052.2000	772459.4800	5602.5949	19248.7570	8713.6554	74.0961	-1348.4762	1475569.4000	2646589.6000
2	18:12:13	99.9%	219429.9500	99.7%	580186.6800	463638.4300	623828.7100	5576.6459	ŧ3555894.6000	776248.5800	5797.2775	18637.6470	8817.3848	130.7599	-2851.3344	1481924.0000	ŧ2597328.1000
3	18:12:26	100.4%	223064.8700	98.7%	590887.2000	473476.9900	633060.1100	5422.3011	ŧ3603730.9000	783911.6700	5703.9249	19067.6060	8733.1851	140.3178	-996.8658	1508629.3000	ŧ2616818.3000
x		100.2%	220704.0600	98.8%	582873.8200	469150.6400	628627.9300	5523.6952	ŧ3571559.2000	777539.9100	5701.2658	18984.6700	8754.7418	115.0579	-1732.2255	1488707.6000	ŧ2620245.3000
σ		0.3%	2046.6691	0.9%	7064.1212	5025.3374	4626.6310	87.8388	ŧ27864.6610	5834.2809	97.3685	313.8830	55.1223	35.7945	984.9929	17542.8340	ŧ24808.9430
%RSD		0.3	0.9273	0.9	1.2119	1.0712	0.7360	1.5902	ŧ0.7802	0.7504	1.7078	1.6534	0.6296	31.1099	56.8629	1.1784	ŧ0.9468

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:12:00	96.7%	56806.3360	372928.0500	41876.4320	639940.7300	-4095.3199	2216043.8000	2146697.9000	729182.4600	106.2%	107.4%	ŧ4934421.0000	1910.3876
2	18:12:13	98.0%	57065.0450	378720.5200	42575.3200	648097.8000	-1218.9720	ŧ2139732.4000	2167966.2000	744207.7800	107.6%	110.8%	ŧ4862046.8000	301.7172
3	18:12:26	96.2%	57626.3210	375825.5500	43037.5080	646608.1600	-4725.7760	2282520.5000	2218137.1000	749063.2900	109.1%	110.5%	ŧ4933623.6000	2497.6000
x		96.9%	57165.9010	375824.7100	42496.4200	644882.2300	-3346.6893	ŧ2212765.6000	2177600.4000	740817.8500	107.6%	109.6%	ŧ4910030.5000	1569.9016
σ		0.9%	419.1931	2896.2353	584.5453	4343.7930	1869.4262	ŧ71450.4760	36681.0980	10364.8760	1.5%	1.9%	ŧ41556.9940	1136.8480
%RSD		0.9	0.7333	0.7706	1.3755	0.6736	55.8590	ŧ3.2290	1.6845	1.3991	1.4	1.7	ŧ0.8464	72.4152

SEQ-CAL8@S08 10/18/2016 18:15:55

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo
1	18:16:08	92.6%	¥457081.8600	85.9%	1154977.8000	940624.7400	¥1266237.8000	8768.2138	ŧ7012774.4000	1518972.1000	11528.8560	36992.7730	17413.2420	246.7190	-3276.6995	ŧ2869780.4000
2	18:16:22	92.5%	¥466745.9800	85.8%	1182255.1000	937955.0400	¥1273580.1000	8893.8707	ŧ7185072.6000	¥1575253.9000	11643.3180	37447.2790	17422.3710	260.4195	-3153.2410	ŧ2934063.9000
3	18:16:35	91.6%	¥464426.0400	86.5%	1178645.3000	¥955241.7800	¥1290304.5000	9731.7595	ŧ7148168.0000	¥1561270.5000	11566.7780	38161.7110	17470.5390	211.9115	-3878.9950	ŧ2929575.5000
x		92.2%	¥462751.2900	86.1%	1171959.4000	¥944607.1800	¥1276707.5000	9131.2813	ŧ7115338.4000	¥1551832.2000	11579.6510	37533.9210	17435.3840	239.6833	-3436.3118	ŧ2911139.9000
σ		0.5%	¥5045.0328	0.3%	14816.8360	¥9306.0590	¥12334.3860	523.8110	ŧ90719.3850	¥29303.9750	58.3066	589.2659	30.7856	25.0076	388.3127	ŧ35888.6070
%RSD		0.6	¥1.0902	0.4	1.2643	¥0.9852	¥0.9661	5.7364	ŧ1.2750	¥1.8883	0.5035	1.5700	0.1766	10.4336	11.3003	ŧ1.2328

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:16:08	89.0%	111274.5800	731138.7000	82666.7720	1271618.1000	-7498.0306	ŧ4180968.3000	ŧ4112865.7000	ŧ1420586.7000	102.3%	103.8%	≈10230262.0000	6997.4086
2	18:16:22	89.4%	111661.5900	746190.8500	85469.2420	¥1300723.6000	-7216.8625	ŧ4265867.9000	ŧ4145617.5000	ŧ1434139.3000	103.4%	105.4%	≈10225138.0000	8761.0956
3	18:16:35	87.9%	113928.7300	741895.3200	84982.5520	¥1297557.0000	-8837.0263	ŧ4294892.1000	≈4197957.8000	ŧ1438717.4000	104.8%	106.7%	≈10235556.0000	7713.1895
x		88.8%	112288.3000	739741.6200	84372.8550	¥1289966.2000	-7850.6398	ŧ4247242.7000	≈4152147.0000	ŧ1431147.8000	103.5%	105.3%	≈10230319.0000	7823.8979
σ		0.8%	1433.7754	7753.7516	1497.4164	¥15968.6470	865.7266	ŧ59201.6190	≈42920.1650	ŧ9428.2933	1.3%	1.4%	≈5209.2248	887.0401
%RSD		0.8	1.2769	1.0482	1.7748	¥1.2379	11.0275	ŧ1.3939	≈1.0337	ŧ0.6588	1.2	1.4	≈0.0509	11.3376

SEQ-ICV@ICV01 10/18/2016 18:20:00 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	18:20:00	90.3%	46681.1150	78.4%	399.8932	93518.5620	124209.0100	1091.1023	716156.4700	151807.7300	2178.0955	7780.4130	3511.3798	68.6015	-1140.5228	12061.9680	21281.9750	23158.1010	13297.1510
2	18:20:14	90.7%	47383.4390	80.3%	326.7058	94622.5260	125616.8900	1104.0240	735196.8100	154460.3000	2548.8889	7981.7613	3703.9216	35.9069	-2476.7129	12420.3880	22079.8010	24047.3790	13218.8040
3	18:20:27	91.5%	47226.5260	81.4%	317.3400	93033.9470	125274.4000	1275.0618	748258.0800	159451.3500	2446.5418	7901.9566	3628.4406	61.2056	-1640.4093	12440.7370	21840.5690	23857.1350	13645.4600
x		90.8%	107.145%	80.0%	347.9797	98.131%	100.918%	1156.7294	102.914%	102.334%	2391.1754	102.213%	3614.5806	55.2380	-1752.5484	12307.6980	21734.1150	23687.5380	13387.1380
σ		0.6%	n/a	1.5%	45.2017	n/a	n/a	102.6824	n/a	n/a	191.4968	n/a	97.0163	17.1448	675.1166	213.0509	409.4272	468.2693	227.1167
%RSD		0.7	0.7827	1.9	12.9897	0.8687	0.5872	8.8770	2.2018	2.5000	8.0085	1.2854	2.6840	31.0380	38.5220	1.7310	1.8838	1.9769	1.6965

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:20:00	91.1%	10681.7660	567588.3700	7986.5176	121920.1400	-4394.3612	1218.2572	791833.2200	141298.3100	94.7%	96.7%	ŧ2150146.5000	5862.4504
2	18:20:14	90.7%	10839.5600	572735.4600	8054.4446	125237.7900	-3484.1707	1165.9382	812907.1800	144955.2700	98.5%	100.7%	ŧ2149282.7000	4924.7344
3	18:20:27	91.2%	11404.5480	576322.3300	8372.4709	127941.9100	-2482.7068	925.7336	838222.3400	147727.5300	100.2%	101.5%	ŧ2167425.2000	7587.6437
x		91.0%	10975.2910	100.680%	8141.1444	98.810%	-3453.7462	1103.3097	98.704%	100.021%	97.8%	99.6%	ŧ102.860%	6124.9428
σ		0.3%	380.0272	n/a	204.0886	n/a	956.1903	155.9944	n/a	n/a	2.8%	2.6%	ŧn/a	1350.7214
%RSD		0.3	3.4626	0.7672	2.5069	2.4122	27.6856	14.1388	2.8523	2.2292	2.9	2.6	ŧ0.4748	22.0528

SEQ-ICB@ICB01 10/18/2016 18:23:33 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	18:23:46	91.9%	21.9365	81.8%	14.9982	-8.6080	30.8478	-33.4112	365.8868	252.5710	11.5715	-0.5818	14.4406	-4.3895	-591.4958	51.1270	134.1700	148.2743	81.5045	171.0666
2	18:23:59	91.8%	32.8025	84.1%	1.0205	-12.3385	5.1107	-24.3395	421.8524	179.2646	4.0562	6.7338	6.9534	-4.4794	-1314.1083	90.6746	109.0092	133.8021	116.9333	257.1980
3	18:24:12	93.1%	72.3239	84.2%	48.2962	-26.0274	28.7139	-29.2221	354.3489	276.6438	-3.3392	-3.1595	-25.5338	28.6041	-72.8169	63.7866	107.8628	176.4239	60.6002	316.8466
x		92.3%	42.3543	83.4%	21.4383	-15.6579	21.5575	-28.9909	380.6960	236.1598	4.0962	0.9975	-1.3799	6.5784	-659.4737	68.5294	117.0140	152.8334	86.3460	248.3704
σ		0.7%	26.5170	1.4%	24.2869	9.1719	14.2832	4.5403	36.1063	50.7215	7.4555	5.1322	21.2502	19.0749	623.4315	20.1959	14.8686	21.6736	28.4769	73.2898
%RSD		0.8	62.6076	1.6	113.2874	58.5764	66.2564	15.6610	9.4843	21.4776	182.0102	514.5064	1539.9513	289.9623	94.5347	29.4704	12.7067	14.1812	32.9800	29.5083

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:23:46	89.4%	-58.3617	359.8776	3.7225	101.1819	-1163.3714	72.0866	511.0545	81.3687	97.0%	99.4%	1319.3772	4591.5963
2	18:23:59	90.1%	6.1331	305.6560	3.6579	51.9576	1425.3017	50.4528	466.9121	47.7638	97.7%	99.8%	1257.5965	4830.4786
3	18:24:12	90.5%	-2.8718	204.1096	3.6138	47.5789	-958.1293	86.6799	477.2996	17.8077	99.9%	100.7%	1090.2876	3248.0869
x		90.0%	-18.3668	289.8811	3.6647	66.9061	-232.0663	69.7398	485.0888	48.9801	98.2%	99.9%	1222.4204	4223.3873
σ		0.6%	34.9280	79.0731	0.0547	29.7643	1438.9867	18.2272	23.0790	31.7980	1.5%	0.7%	118.5265	853.0383
%RSD		0.6	190.1692	27.2778	1.4919	44.4866	620.0756	26.1360	4.7577	64.9202	1.6	0.7	9.6961	20.1980

SEQ-IFA@ICSA01 10/18/2016 18:27:13 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	18:27:26	88.5%	129.5384	90.1%	970386.1700	-767.4525	26829.5860	222.5990	9813.9283	9071.5834	4.1067	-1.8353	-18.5594	21.6572	-1672.3550	2412509.5000	±4237956.9000	±4596336.7000	2655180.4000	±676
2	18:27:40	88.2%	146.4637	93.1%	993975.6700	-377.9297	27555.9500	103.8351	9962.6749	8730.9853	0.4071	-3.0296	10.9012	3.1591	-179.9368	2447642.6000	±4241734.7000	±4616314.5000	2709155.4000	±682
3	18:27:54	89.4%	175.2764	94.7%	998652.1900	-429.5208	27180.2590	119.3488	9794.9244	8811.7157	-3.3392	2.9840	-11.1110	13.8957	-959.3064	±2434245.7000	±4316956.4000	±4683153.6000	±2687119.5000	±692
x		88.7%	1.#IO%	92.6%	987671.3400	-109.929%	102.409%	148.5943	136.973%	95.518%	0.3915	-5.443%	-6.2564	12.9040	-937.1994	±2431465.9000	±4265549.3000	±4631935.0000	±2683818.5000	±684
σ		0.7%	n/a	2.3%	15150.9190	n/a	n/a	64.5577	n/a	n/a	3.7230	n/a	15.3185	9.2888	746.4547	±17730.7270	±44559.9160	±45467.4780	±27138.5050	±8
%RSD		0.8	15.3730	2.5	1.5340	40.3028	1.3361	43.4456	0.9319	2.0062	950.8668	507.8015	244.8452	71.9839	79.6474	±0.7292	±1.0446	±0.9816	±1.0112	

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:27:26	89.5%	-14.5456	144.4234	1942.0215	577.1018	1755.8508	648.9126	4618.2788	3024.6469	99.9%	100.3%	742.5188	-20.2626
2	18:27:40	89.0%	15.5465	159.9578	1836.1365	676.4756	-356.5279	698.8620	4745.1956	2801.4622	102.9%	103.7%	632.1083	-177.7903
3	18:27:54	90.5%	-7.1691	150.3439	1805.6769	573.9868	2439.8135	575.6065	5218.4403	3119.7810	104.5%	105.3%	533.7982	-1138.7378
x		89.7%	-2.0561	1.#IO%	1861.2783	68.087%	1279.7121	641.1271	77.769%	171.816%	102.4%	103.1%	1.#IO%	-445.5969
σ		0.8%	15.6841	n/a	71.5650	n/a	1457.7079	61.9955	n/a	n/a	2.3%	2.6%	n/a	605.4230
%RSD		0.9	762.8139	5.1724	3.8449	9.5691	113.9090	9.6698	6.5073	5.4795	2.3	2.5	16.4144	135.8679

SEQ-IFB@ICSAB01 10/18/2016 18:31:24 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo
1	18:31:37	88.0%	8575.7613	100.1%	971549.9700	20877.2830	55450.1070	413.1940	150740.3500	36974.4150	230.7933	766.3939	323.0886	23.4491	1892.5524	2420073.1000	±4205491.0000	±4601236.4000	±262696
2	18:31:50	87.8%	8116.9517	104.0%	960919.5100	20094.8280	54798.0260	438.7937	148583.1800	37154.2700	213.9844	751.3004	364.9170	26.4897	1270.7709	±2403274.0000	±4231532.0000	±4615136.7000	±263683
3	18:32:03	88.9%	8397.7399	103.9%	982491.9700	19872.1020	54314.9940	455.3011	149711.5000	37914.2270	242.4295	749.8815	329.2513	25.9654	-1427.0784	±2411675.3000	±4245894.3000	±4630598.8000	±264586
x		88.3%	99.140%	102.7%	971653.8200	111.762%	108.473%	435.7629	103.995%	100.530%	229.0691	103.614%	339.0856	25.3014	578.7483	±2411674.1000	±4227639.1000	±4615657.3000	±263655
σ		0.6%	n/a	2.2%	10786.6050	n/a	n/a	21.2165	n/a	n/a	14.3007	n/a	22.5818	1.6254	1764.6979	±8399.5384	±20481.0530	±14688.1210	±945
%RSD		0.7	2.7658	2.2	1.1101	2.6030	1.0385	4.8688	0.7209	1.3357	6.2430	1.2107	6.6596	6.4241	304.9163	±0.3483	±0.4845	±0.3182	±1

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:31:37	94.0%	2184.8569	104152.0600	3452.7413	24530.2070	2680.7950	622.6557	87146.6050	32479.9180	103.0%	103.6%	199971.2600	-974.3121
2	18:31:50	95.1%	2089.9669	104493.5400	3501.8829	24835.7280	3348.9613	631.4800	88836.0350	33681.9600	104.2%	105.3%	200713.9000	-1563.4186
3	18:32:03	96.3%	2126.6658	104942.1900	3355.6869	24520.3770	1285.1495	591.0202	88284.0510	34013.7580	107.6%	107.9%	201274.9000	-3100.6970
x		95.1%	2133.8299	101.154%	3436.7704	96.344%	2438.3019	615.0520	96.095%	104.945%	105.0%	105.6%	93.467%	-1879.4759
σ		1.2%	47.8489	n/a	74.3950	n/a	1053.0584	21.2747	n/a	n/a	2.4%	2.1%	n/a	1097.8603
%RSD		1.2	2.2424	0.3791	2.1647	0.7280	43.1882	3.4590	0.9779	2.4168	2.3	2.0	0.3259	58.4131

SEQ-CCV@CCV01 10/18/2016 18:35:33 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo
1	18:35:46	95.7%	220478.6000	109.4%	565805.8800	476432.8100	640975.3700	5288.5264	±3551564.1000	768611.4700	6148.7808	19596.9140	9066.8592	106.0540	2129.0678	1465202.0000	±2558634.8000
2	18:35:59	94.5%	219490.8300	111.6%	568118.3700	477289.8500	643069.1500	4945.4407	±3555287.3000	770019.0100	5955.3874	19475.9690	8960.3901	158.8002	463.2333	1462076.6000	±2557985.2000
3	18:36:12	95.4%	218393.2000	111.8%	572534.2300	476135.6300	636885.8500	5217.3865	±3590854.4000	778566.6000	6142.1237	19369.6050	8990.8060	92.9658	-42.0062	1478154.4000	±2559944.2000
x		95.2%	98.853%	110.9%	568819.5000	99.805%	101.295%	5150.4512	±99.102%	99.796%	6082.0973	101.477%	9006.0184	119.2733	850.0983	1468477.7000	±2558854.7000
σ		0.6%	n/a	1.3%	3418.5315	n/a	n/a	181.0724	±n/a	n/a	109.7845	n/a	54.8405	34.8512	1136.0630	8524.7314	±997.8492
%RSD		0.7	0.4754	1.2	0.6010	0.1257	0.4911	3.5157	±0.6082	0.6975	1.8050	0.5838	0.6089	29.2196	133.6390	0.5805	±0.0390

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:35:46	106.9%	57793.6000	372909.4100	44037.0840	654877.4400	3995.0206	±2114654.3000	2194094.9000	753562.9800	112.6%	114.3%	±4909139.0000	1133.3091
2	18:35:59	107.1%	57439.4290	378448.0400	43937.7590	653532.9100	-1885.3014	2227449.7000	2208841.0000	753622.3200	116.1%	115.1%	±4999456.1000	2686.2073
3	18:36:12	107.5%	58112.0660	379800.4000	43381.2800	661267.5500	-6.4498	2264329.8000	2252504.5000	768277.0000	116.5%	117.5%	±4909538.7000	1839.5042
x		107.1%	57781.6980	101.043%	43785.3740	102.734%	701.0898	±2202144.6000	106.485%	104.887%	115.1%	115.7%	±96.635%	1886.3402
σ		0.3%	336.4765	n/a	353.4624	n/a	3003.3325	±79980.4650	n/a	n/a	2.2%	1.7%	±n/a	777.5078
%RSD		0.3	0.5823	0.9684	0.8073	0.6294	428.3806	±3.5411	1.3692	1.1178	1.9	1.4	±1.0534	41.2178

SEQ-CCB@CCB01 10/18/2016 18:39:45 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	18:39:58	89.0%	115.8138	99.6%	232.1572	86.9371	180.5819	-16.8047	1182.0277	385.6034	9.5149	5.5454	-9.2419	13.3492	-1393.0882	541.3609	890.8755	1082.1359	579.3092	1767.3414
2	18:40:11	91.9%	79.0699	99.5%	275.9317	45.9935	139.6219	-16.1806	1470.0457	510.1574	6.2916	3.3889	0.2088	3.6890	1582.5027	660.8062	1070.0883	1245.1563	606.5459	1921.4790
3	18:40:24	91.3%	104.4880	100.7%	272.0228	68.1314	116.1812	-6.9470	1356.2401	421.8134	3.0860	0.1864	-6.1542	6.9156	892.5954	693.5527	1087.4839	1146.2475	685.5434	1822.8649
x		90.7%	99.7905	99.9%	260.0372	67.0207	145.4617	-13.3108	1336.1045	439.1914	6.2975	3.0402	-5.0624	7.9846	360.6700	631.9066	1016.1492	1157.8465	623.7995	1837.2284
σ		1.5%	18.8170	0.6%	24.2238	20.4944	32.5951	5.5200	145.0609	64.0697	3.2145	2.6965	4.8190	4.9180	1557.4800	80.1060	108.8384	82.1268	55.1787	78.0662
%RSD		1.7	18.8565	0.6	9.3155	30.5792	22.4080	41.4702	10.8570	14.5881	51.0438	88.6931	95.1918	61.5940	431.8297	12.6769	10.7109	7.0931	8.8456	4.2491

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	18:39:58	103.7%	45.7018	212.4854	22.9068	208.7210	500.6716	783.4182	882.0705	254.3397	103.8%	104.3%	2393.6729	1897.2323
2	18:40:11	103.8%	16.4988	235.8297	16.3900	245.0560	3757.7530	824.3740	922.9809	261.5500	103.5%	105.0%	2342.9352	3234.1637
3	18:40:24	103.8%	43.2593	177.2156	22.6105	292.8954	3296.9359	825.5759	844.0375	294.3136	105.4%	106.4%	2501.9783	1887.5146
x		103.8%	35.1533	208.5102	20.6358	248.8908	2518.4535	811.1227	883.0296	270.0677	104.2%	105.2%	2412.8621	2339.6369
σ		0.1%	16.2014	29.5085	3.6799	42.2180	1762.5751	24.0003	39.4804	21.3047	1.0%	1.1%	81.2394	774.6982
%RSD		0.1	46.0878	14.1521	17.8326	16.9624	69.9864	2.9589	4.4710	7.8887	0.9	1.1	3.3669	33.1119

SEQ-CCV@CCV02 10/18/2016 19:10:27 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo
1	19:10:40	97.4%	220566.5500	102.2%	565106.7100	453083.0400	612384.5900	5774.4571	±3564243.0000	773152.4700	5388.3557	18245.7120	8167.1466	75.7296	856.2500	1443260.5000	±2518023.4000
2	19:10:53	97.7%	227497.4700	101.1%	575596.2200	474176.7100	638520.9700	5699.2322	±3608408.6000	791526.7500	5916.4254	19418.8160	9037.7159	89.8009	-36.5197	1464377.8000	±2565140.8000
3	19:11:07	97.5%	226663.1800	101.6%	575143.3600	461649.2200	620294.1000	5425.3764	±3611468.4000	787311.8900	5913.2237	18648.9660	8858.3509	90.4012	-1788.3445	1481115.8000	±2583896.6000
x		97.5%	101.310%	101.6%	571948.7600	96.947%	98.673%	5633.0219	±99.903%	101.295%	5739.3349	97.780%	8687.7378	85.3105	-322.8714	1462918.0000	±2555686.9000
σ		0.2%	n/a	0.5%	5929.7174	n/a	n/a	183.7177	±n/a	n/a	303.9611	n/a	459.6785	8.3028	1345.3505	18969.8180	±33938.9480
%RSD		0.2	1.6824	0.5	1.0368	2.2914	2.1489	3.2614	±0.7352	1.2277	5.2961	3.1752	5.2911	9.7324	416.6831	1.2967	±1.3280

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	19:10:40	102.2%	56133.9080	368464.4500	42240.6080	640832.8600	-3081.9986	2184266.0000	2163894.6000	736875.3100	110.1%	110.6%	±4935839.8000	1546.1059
2	19:10:53	98.1%	57395.3400	382240.8800	43370.6150	663275.9000	1251.3555	2251078.4000	2248711.0000	757107.3800	111.8%	113.0%	±4925973.9000	1503.7088
3	19:11:07	100.7%	57589.7500	379966.5000	43584.9980	660307.3200	21.3547	2262946.8000	2256733.9000	757787.5400	113.1%	114.5%	±4965950.2000	2219.7847
x		100.3%	57039.6660	100.999%	43065.4070	102.459%	-603.0961	2232763.7000	106.708%	103.795%	111.7%	112.7%	±96.697%	1756.5331
σ		2.1%	790.4090	n/a	722.2951	n/a	2233.1466	42417.4100	n/a	n/a	1.5%	2.0%	±n/a	401.7473
%RSD		2.1	1.3857	1.9595	1.6772	1.8618	370.2804	1.8998	2.3139	1.5830	1.4	1.7	±0.4213	22.8716

SEQ-CCB@CCB02 10/18/2016 19:14:39 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	19:14:53	91.3%	99.3055	90.6%	352.6438	-19.8436	128.2454	-2.5397	1216.7028	361.8533	-3.3392	6.3603	19.9164	-15.5726	-325.0485	571.8305	902.7338	1011.3061	557.5870	1500.8003
2	19:15:05	93.9%	98.4932	91.3%	167.3931	22.8508	131.4887	-19.6914	1170.4138	366.5686	10.3267	5.4213	20.3213	-5.3231	-1099.8917	551.3282	1016.3204	995.9839	681.6255	1665.0597
3	19:15:18	93.3%	89.0881	93.1%	195.0379	116.2100	128.4887	-35.9523	1243.3736	168.9754	0.1015	0.9468	23.7470	-12.1319	-718.7972	478.1861	787.2394	872.4302	617.3425	1332.8265
x		92.8%	95.6289	91.7%	238.3583	39.7391	129.4076	-19.3945	1210.1634	299.1324	2.3630	4.2428	21.3282	-11.0092	-714.5792	533.7816	902.0978	959.9067	618.8517	1499.5622
σ		1.3%	5.6791	1.3%	99.9347	69.5813	1.8064	16.7083	36.9169	112.7440	7.1081	2.8928	2.1045	5.2161	387.4389	49.2263	114.5419	76.1433	62.0330	166.1200
%RSD		1.4	5.9386	1.4	41.9263	175.0955	1.3959	86.1500	3.0506	37.6903	300.8093	68.1809	9.8670	47.3799	54.2192	9.2222	12.6973	7.9324	10.0239	11.0779

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	19:14:53	98.7%	3.7158	182.6701	30.8964	181.2966	709.1257	669.2266	856.4985	252.8810	103.1%	103.3%	2441.1633	4867.2095
2	19:15:05	97.6%	22.2674	159.8132	20.3380	212.5564	2574.1973	654.6602	750.7481	290.2075	104.9%	105.7%	2093.7890	3312.4972
3	19:15:18	96.9%	-6.8361	127.2737	20.0623	223.0257	1890.8355	627.9823	846.6371	224.8990	105.8%	107.2%	2011.8533	2284.3651
x		97.7%	6.3824	156.5857	23.7656	205.6263	1724.7195	650.6230	817.9612	255.9958	104.6%	105.4%	2182.2685	3488.0239
σ		0.9%	14.7338	27.8389	6.1770	21.7106	943.5671	20.9165	58.4167	32.7655	1.4%	1.9%	227.9216	1300.3378
%RSD		1.0	230.8520	17.7787	25.9915	10.5583	54.7084	3.2148	7.1417	12.7992	1.3	1.8	10.4442	37.2801

SEQ-CCV@CCV03 10/18/2016 19:45:06 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	9
1	19:45:19	96.3%	218615.0500	99.7%	555447.2800	467347.7400	631780.7300	5599.6237	±3528355.5000	761298.5400	6030.4103	19002.0280	8858.3137	131.2125	900.9126	1421851.8000	±2497689.1000	±2720884.
2	19:45:32	96.3%	218584.8800	99.6%	564343.4000	457961.7900	614468.4100	4850.9572	±3568963.0000	772088.6500	5774.1418	18579.3760	8510.0717	129.7274	-386.8580	1454217.6000	±2532277.1000	±2737218.
3	19:45:45	95.8%	219001.5200	99.6%	576086.5300	455506.0000	616661.0000	4842.0317	±3605112.8000	788294.4800	5788.6026	18546.9510	8639.0287	130.1745	-607.2945	1470072.4000	±2543592.6000	±2763589.
x		96.1%	98.228%	99.6%	565292.4000	96.382%	98.236%	5097.5375	±99.146%	99.989%	5864.3849	97.459%	8669.1380	130.3715	-31.0800	1448713.9000	±2524519.6000	±2740564.
σ		0.3%	n/a	0.0%	10352.3010	n/a	n/a	434.8423	±n/a	n/a	143.9639	n/a	176.0626	0.7619	814.6200	24576.9090	±23914.8070	±21548.
%RSD		0.3	0.5845	0.0	1.8313	1.3578	1.5180	8.5304	±1.0764	1.7558	2.4549	1.3571	2.0309	0.5844	2621.0419	1.6965	±0.9473	±0.

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	19:45:19	97.6%	56345.5910	373343.7400	42935.3850	641222.0300	152.2399	2179564.5000	2165813.1000	739492.7000	110.4%	112.0%	±4994135.9000	3609.0106
2	19:45:32	100.9%	56344.3940	375525.7300	43449.2700	648901.9800	-1111.8902	2219922.0000	2231039.9000	745992.8600	113.8%	115.4%	±4992322.9000	2871.6768
3	19:45:45	100.6%	56973.8510	378674.6900	42850.0190	653670.1500	-3027.9348	2227561.7000	2230395.5000	751276.7400	115.3%	117.5%	±4904421.4000	3399.4669
x		99.7%	56554.6120	100.720%	43078.2250	101.384%	-1329.1950	2209016.0000	106.034%	103.103%	113.2%	115.0%	±97.109%	3293.3848
σ		1.8%	363.0723	n/a	324.1570	n/a	1601.1852	25790.2710	n/a	n/a	2.5%	2.8%	±n/a	379.9413
%RSD		1.8	0.6420	0.7131	0.7525	0.9693	120.4628	1.1675	1.6964	0.7917	2.2	2.4	±1.0331	11.5365

SEQ-CCB@CCB03 10/18/2016 19:49:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	19:49:31	92.7%	52.1724	89.7%	119.4707	23.1533	30.1486	-42.6780	750.9946	136.4210	-3.3392	-1.4348	3.3746	1.4664	-96.9074	407.1212	765.2365	745.0066	472.9059	1211.9236
2	19:49:44	94.2%	47.3895	91.2%	156.5503	28.2353	39.0534	-33.0904	828.8098	280.2223	3.5827	-2.4467	3.2415	-5.1897	891.9921	436.7292	749.7376	839.5811	594.5885	1398.0494
3	19:49:57	93.9%	83.0502	92.0%	129.2855	-47.7443	2.7498	-20.8699	735.1792	152.6507	0.0744	5.4078	0.0299	4.9089	-175.2607	424.9033	680.1739	789.3112	479.4115	1155.4381
x		93.6%	60.8707	91.0%	135.1021	1.2148	23.9840	-32.2128	771.6612	189.7646	0.1059	0.5087	2.2153	0.3952	206.6080	422.9179	731.7160	791.2996	515.6353	1255.1370
σ		0.8%	19.3563	1.2%	19.2119	42.4759	18.9206	10.9305	50.1199	78.7578	3.4611	4.2728	1.8938	5.1338	594.8515	14.9035	45.3045	47.3186	68.4528	126.9473
%RSD		0.9	31.7991	1.3	14.2203	3496.5609	78.8887	33.9322	6.4951	41.5029	3267.2059	839.8727	85.4869	1299.1153	287.9131	3.5240	6.1915	5.9799	13.2754	10.1142

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	19:49:31	97.8%	9.8181	82.4716	10.2414	129.1357	502.3091	564.7155	593.6034	140.2277	105.2%	106.6%	1335.1224	3375.4210
2	19:49:44	96.3%	-1.8535	78.1323	3.3814	100.9248	1741.9043	458.6392	538.8132	178.0422	105.5%	107.0%	1413.8003	4193.7302
3	19:49:57	97.6%	3.2126	87.0787	3.3422	102.9786	92.1209	381.9446	531.8053	136.1086	107.0%	108.5%	1425.1602	4569.2563
x		97.3%	3.7257	82.5609	5.6550	111.0130	778.7781	468.4331	554.7407	151.4595	105.9%	107.4%	1391.3610	4046.1358
σ		0.8%	5.8527	4.4739	3.9720	15.7282	858.9369	91.7782	33.8381	23.1132	1.0%	1.0%	49.0342	610.4496
%RSD		0.8	157.0891	5.4189	70.2382	14.1679	110.2929	19.5926	6.0998	15.2603	0.9	1.0	3.5242	15.0872

SEQ-CCV@CCV04 10/18/2016 20:06:35 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	9
1	20:06:48	96.5%	222410.2300	98.2%	582190.9000	460090.3700	623248.4500	4995.2537	±3675296.4000	793392.7300	5917.9775	18415.9410	8593.3466	153.2608	169.5029	1482219.7000	±2631198.1000	±2857609.
2	20:07:02	95.7%	221861.1000	97.2%	587883.7500	459610.1600	621461.6300	5551.5418	±3664360.1000	794814.8100	5578.4140	18582.2980	8624.8877	130.5572	-370.6146	1492408.8000	±2606947.8000	±2812745.
3	20:07:15	96.1%	226968.1700	96.3%	586968.1700	463228.9300	627155.5300	5231.0466	±3677252.4000	793408.0600	5950.7624	19094.2080	8419.6171	90.7174	-11.2049	1500439.4000	±2602075.5000	±2806839.
x		96.1%	100.786%	97.2%	585680.9400	96.530%	98.708%	5259.2807	±102.059%	102.571%	5815.7180	97.397%	8545.9505	124.8451	-70.7722	1491689.3000	±2613407.1000	±2825731.
σ		0.4%	n/a	1.0%	3056.9377	n/a	n/a	279.2167	±n/a	n/a	206.1640	n/a	110.5387	31.6605	274.9416	9131.1206	±15598.8710	±27765.
%RSD		0.5	1.2530	1.0	0.5219	0.4264	0.4667	5.3090	±0.1892	0.1029	3.5449	1.8906	1.2935	25.3598	388.4881	0.6121	±0.6969	±0.

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	20:06:48	96.7%	58060.7290	377933.1800	43556.4020	662056.7900	-284.1968	±2158028.4000	2249159.0000	757811.5000	112.2%	113.6%	±5086921.4000	4074.9069
2	20:07:02	98.1%	58049.8800	381017.0300	43996.7610	664961.2900	-1540.8548	2271720.5000	2261903.7000	759276.3900	114.1%	115.1%	±5106300.6000	5307.3927
3	20:07:15	97.2%	59002.4610	381487.2900	44555.0390	671393.6000	-1855.1334	2269115.3000	2273424.6000	758665.1200	115.6%	116.3%	±5062873.7000	4984.2857
x		97.3%	58371.0240	101.872%	44036.0670	104.233%	-1226.7283	±2232954.7000	108.550%	104.900%	114.0%	115.0%	±99.491%	4788.8618
σ		0.7%	546.8679	n/a	500.4776	n/a	831.2443	±64901.2150	n/a	n/a	1.7%	1.3%	±n/a	639.0604
%RSD		0.7	0.9369	0.5079	1.1365	0.7173	67.7611	±2.9065	0.5367	0.0970	1.5	1.2	±0.4278	13.3447

SEQ-CCB@CCB04 10/18/2016 20:10:57 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	20:11:10	93.6%	45.3767	88.7%	113.9070	-71.3483	30.7762	-13.4694	607.6596	178.7627	0.0680	-1.4362	13.5964	1.4637	758.4131	329.7939	617.1299	628.5024	389.2479	1050.9024
2	20:11:24	93.9%	66.5051	90.3%	144.0521	-72.8269	-4.9787	-13.9638	643.9619	129.8148	3.4832	3.1226	0.2366	15.1283	-951.4547	355.1650	617.3011	666.1530	455.0420	965.1161
3	20:11:37	93.2%	62.8730	90.2%	92.5611	7.6519	-7.0737	-45.1303	577.8751	132.0066	0.0715	-2.5640	3.3749	1.4808	50.4105	297.6179	588.7136	664.3608	400.3176	1035.7184
x		93.6%	58.2516	89.7%	116.8401	-45.5077	6.2413	-24.1878	609.8322	146.8613	1.2076	-0.2926	5.7360	6.0243	-47.5437	327.5256	607.7149	653.0054	414.8691	1017.2456
σ		0.4%	11.2969	0.9%	25.8705	46.0436	21.2737	18.1384	33.0969	27.6491	1.9708	3.0109	6.9858	7.8843	859.1323	28.8405	16.4558	21.2391	35.2282	45.7794
%RSD		0.4	19.3934	1.0	22.1418	101.1774	340.8540	74.9898	5.4272	18.8267	163.2014	1029.1333	121.7893	130.8755	1807.0358	8.8056	2.7078	3.2525	8.4914	4.5003

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	20:11:10	97.8%	-37.3538	59.0725	0.0000	106.1850	3014.6239	355.9174	489.5749	154.5133	104.9%	106.3%	1319.1388	3680.5049
2	20:11:24	97.7%	-45.8498	71.4129	3.3828	114.4381	2676.7084	447.8121	514.5031	137.9120	106.5%	108.0%	1304.6326	3745.7578
3	20:11:37	97.7%	-26.6042	107.4832	3.3499	136.5052	-86.0369	444.0904	442.2466	109.0309	108.6%	110.0%	1181.4245	2101.0520
x		97.8%	-36.6026	79.3229	2.2442	119.0428	1868.4318	415.9400	482.1082	133.8187	106.6%	108.1%	1268.3986	3175.7716
σ		0.1%	9.6448	25.1560	1.9436	15.6758	1701.0313	52.0144	36.7023	23.0158	1.9%	1.9%	75.6702	931.3061
%RSD		0.1	26.3499	31.7135	86.6056	13.1682	91.0406	12.5053	7.6129	17.1992	1.8	1.7	5.9658	29.3253

SEQ-CCV@CCV05 10/18/2016 21:08:00 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	9
1	21:08:14	88.4%	226751.5400	83.0%	574022.7500	435697.1300	596845.7500	4907.2846	±3610406.6000	773518.4400	5586.1195	17453.5110	7956.0518	138.0225	-134.2985	1430287.6000	2589586.7000	2829974.
2	21:08:27	89.8%	224169.5900	84.5%	568674.6600	438411.4300	596576.5400	5240.4137	±3537291.5000	765034.0700	5199.3232	17789.5720	7987.7507	130.0212	-1984.3154	1421703.7000	2572422.9000	±2709383.
3	21:08:40	89.2%	221540.8300	85.0%	568990.3800	432314.5200	588072.5700	4844.6835	±3547293.5000	764467.2400	5537.8077	17421.5750	8129.4959	114.0092	-1168.1058	1436543.0000	2597157.2000	±2213320.
x		89.1%	100.970%	84.2%	570562.5900	91.189%	93.943%	4997.4606	±99.077%	99.186%	5441.0835	91.445%	8024.4328	127.3510	-1095.5732	1429511.4000	2586388.9000	±2750892.
σ		0.7%	n/a	1.1%	3000.7348	n/a	n/a	212.7190	±n/a	n/a	210.7594	n/a	92.3574	12.2273	927.1388	7450.0505	12673.4280	±68514.
%RSD		0.7	1.1623	1.3	0.5259	0.7014	0.8402	4.2565	±1.1120	0.6604	3.8735	1.1613	1.1510	9.6013	84.6259	0.5212	0.4900	±2.

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	21:08:14	91.1%	56251.3900	371268.0100	42244.1870	646746.9200	-443.5602	±2091516.7000	2177462.3000	727888.9700	106.6%	108.7%	±5117862.3000	7198.1637
2	21:08:27	91.6%	56304.1500	365807.8700	41933.9530	646990.5500	-6063.8385	2191195.4000	2179632.8000	722676.6200	110.6%	111.2%	±5117769.9000	8052.4112
3	21:08:40	92.6%	56232.8540	369864.2800	43023.8390	643056.4000	-3092.6618	2190032.1000	2179685.2000	725706.8000	110.8%	112.1%	±5082072.8000	9071.3594
x		91.8%	56262.7980	98.880%	42400.6600	101.019%	-3200.0201	±2157581.4000	104.587%	100.314%	109.3%	110.7%	±99.892%	8107.3114
σ		0.7%	36.9916	n/a	561.5382	n/a	2811.6768	±57216.7040	n/a	n/a	2.4%	1.7%	±n/a	937.8038
%RSD		0.8	0.0657	0.7685	1.3244	0.3415	87.8643	±2.6519	0.0582	0.3608	2.2	1.6	±0.4042	11.5674

SEQ-CCB@CCB05 10/18/2016 21:12:22 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	21:12:36	87.1%	49.6919	77.6%	104.6525	-2.9840	-28.8142	-51.4219	592.4741	265.1530	4.0211	-5.6154	3.4019	2.8282	-1698.4836	524.9528	948.2365	737.2488	556.0877	1356.7507
2	21:12:49	87.0%	65.6943	78.7%	72.7270	-87.0890	-17.4356	-31.5433	542.3157	155.4796	4.1206	-0.5759	-7.7828	3.0769	-1025.1513	433.1887	835.5520	787.2477	483.6307	1325.3058
3	21:13:02	87.0%	40.2233	78.9%	80.9576	-40.8471	-10.2329	-35.7883	590.4281	165.7996	0.3431	-6.8400	10.6194	-4.5257	-678.7520	492.2071	782.7981	802.8340	572.2114	1290.1450
x		87.1%	51.8698	78.4%	86.1124	-43.6400	-18.8276	-39.5845	575.0726	195.4774	2.8282	-4.3437	2.0795	0.4598	-1134.1290	483.4495	855.5289	775.7768	537.3100	1324.0671
σ		0.0%	12.8744	0.7%	16.5753	42.1220	9.3686	10.4689	28.3868	60.5610	2.1528	3.3200	9.2721	4.3193	518.5270	46.5047	84.5090	34.2643	47.1814	33.3201
%RSD		0.0	24.8206	0.9	19.2484	96.5214	49.7597	26.4470	4.9362	30.9811	76.1174	76.4318	445.8873	939.3537	45.7203	9.6193	9.8780	4.4168	8.7810	2.5165

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	21:12:36	90.6%	-42.4802	51.0140	7.5030	97.7376	468.3258	390.8609	436.6689	96.1371	100.7%	102.3%	1064.1156	7334.2852
2	21:12:49	89.4%	-21.6323	68.5878	14.7931	81.5592	1346.6113	433.6777	408.4614	76.3725	102.1%	104.1%	956.3790	7858.4278
3	21:13:02	90.5%	-3.7265	57.1103	3.6802	77.4595	1689.0433	491.4806	327.4253	68.4223	103.0%	104.8%	1131.4070	8267.4442
x		90.2%	-22.6130	58.9040	8.6588	85.5854	1167.9935	438.6731	390.8519	80.3106	101.9%	103.7%	1050.6339	7820.0524
σ		0.7%	19.3954	8.9232	5.6459	10.7219	629.6555	50.4955	56.7108	14.2710	1.2%	1.3%	88.2894	467.7616
%RSD		0.8	85.7711	15.1487	65.2042	12.5277	53.9092	11.5110	14.5095	17.7697	1.1	1.2	8.4034	5.9816

SEQ-CCV@CCV06 10/18/2016 22:50:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	9
1	22:50:31	93.9%	212591.6300	93.1%	571459.3600	439459.9700	599165.4100	5381.4301	±3625338.6000	770671.2300	5471.9980	18002.3690	7921.6064	144.1957	351.5927	1465979.3000	±2566470.8000	±2786401.4
2	22:50:44	94.7%	214774.0900	93.3%	572307.4200	442993.5300	600533.2600	5057.6130	±3599773.7000	771666.4400	5524.9767	17910.5200	8639.2088	119.4793	-358.0141	1463753.8000	±2567280.0000	±2773433.1
3	22:50:57	93.3%	216694.0100	92.5%	576790.7300	442102.8200	602874.3300	5482.8931	±3605187.4000	777971.2200	5400.4212	17969.7720	8012.5814	85.4367	-634.8810	1474762.3000	±2569296.6000	±2793403.7
x		94.0%	96.705%	93.0%	573519.1700	92.455%	95.054%	5307.3120	±100.330%	99.930%	5465.7986	93.560%	8191.1322	116.3706	-213.7675	1468165.1000	±2567715.8000	±2784412.8
σ		0.7%	n/a	0.4%	2864.8091	n/a	n/a	222.1169	±n/a	n/a	62.5087	n/a	390.7027	29.5026	508.8103	5820.6670	±1510.8187	±10132.7
%RSD		0.8	0.9561	0.5	0.4995	0.4162	0.3122	4.1851	±0.3732	0.5118	1.1436	0.2593	4.7698	25.3523	238.0204	0.3965	±0.0588	±0.3

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	22:50:31	96.0%	56669.5480	372140.0500	42718.7310	644706.3200	-942.6369	2198253.2000	2208712.9000	733171.8100	114.5%	116.2%	±5060396.3000	5798.2666
2	22:50:44	96.3%	56266.0520	370634.5200	42590.5430	644971.4900	1538.4720	2225545.2000	2203807.6000	734584.5500	116.5%	118.0%	±5038767.8000	7157.2408
3	22:50:57	95.7%	57543.9360	372652.4000	43418.0750	654681.3200	896.4457	2248107.7000	2256681.5000	737470.3600	118.1%	119.0%	±5083364.4000	6091.0935
x		96.0%	56826.5120	99.638%	42909.1170	101.413%	497.4269	2223968.7000	106.705%	101.649%	116.4%	117.7%	±99.011%	6348.8670
σ		0.3%	653.2419	n/a	445.4069	n/a	1287.7839	24964.6210	n/a	n/a	1.8%	1.4%	±n/a	715.2189
%RSD		0.3	1.1495	0.2821	1.0380	0.8770	258.8891	1.1225	1.3141	0.2981	1.6	1.2	±0.4407	11.2653

SEQ-CCB@CCB06 10/18/2016 22:54:41 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	22:54:54	90.3%	45.8668	82.5%	114.8783	17.4989	-29.0516	-59.7679	524.1111	159.6434	0.1858	-1.1221	-10.6434	5.5777	3247.2486	504.3136	907.4021	853.2122	581.6556	1408.1154
2	22:55:07	91.5%	64.1778	84.5%	95.0469	1.3134	-23.4491	-60.6569	661.7742	112.0394	-3.3392	1.3396	-3.7274	2.2203	2893.1227	598.9276	934.1617	1052.0641	567.9017	1408.5734
3	22:55:20	89.9%	47.5435	85.6%	131.6987	15.0326	-22.9568	-56.8457	610.4199	186.4225	0.1496	-2.3816	-0.1759	-1.6172	-25.4989	515.4806	831.8745	884.6862	492.5786	1312.9519
x		90.6%	52.5294	84.2%	113.8746	11.2817	-25.1525	-59.0902	598.7684	152.7018	-1.0013	-0.7214	-4.8489	2.0603	2038.2908	539.5739	891.1461	929.9875	547.3787	1376.5469
σ		0.8%	10.1226	1.6%	18.3465	8.7204	3.3857	1.9939	69.5672	37.6742	2.0248	1.8927	5.3231	3.6001	1796.0435	51.7041	53.0458	106.8863	47.9539	55.0754
%RSD		0.9	19.2704	1.9	16.1111	77.2970	13.4606	3.3744	11.6184	24.6718	202.2266	262.3773	109.7792	174.7412	88.1152	9.5824	5.9525	11.4933	8.7606	4.0010

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	22:54:54	94.6%	19.1734	86.1188	3.5364	77.5205	2750.5017	1054.3149	488.7201	82.8008	106.6%	108.5%	1037.7735	6301.6330
2	22:55:07	93.7%	-28.9036	46.1075	6.9603	96.8972	5610.3068	965.1770	427.1827	84.1371	107.4%	109.4%	1133.2165	6864.9258
3	22:55:20	95.5%	-13.4797	79.4716	3.4261	102.0698	3712.8134	1161.8742	419.7639	103.8435	109.4%	110.8%	1098.3170	7718.6483
x		94.6%	-7.7366	70.5660	4.6409	92.1625	4024.5406	1060.4554	445.2222	90.2605	107.8%	109.6%	1089.7690	6961.7357
σ		0.9%	24.5476	21.4408	2.0094	12.9414	1455.1638	98.4922	37.8524	11.7822	1.4%	1.1%	48.2923	713.4509
%RSD		1.0	317.2906	30.3841	43.2968	14.0420	36.1573	9.2877	8.5019	13.0536	1.3	1.0	4.4314	10.2482

SEQ-CCV@CCV07 10/18/2016 23:59:56 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	9
1	00:00:09	88.5%	206279.7000	86.9%	579099.3800	453337.0200	615662.4600	4981.2497	±3662185.5000	780515.5500	5442.2284	18076.8890	8705.8208	104.2320	359.4024	1456003.5000	2632291.9000	±2819182.4
2	00:00:22	89.1%	208104.6900	88.9%	575670.9800	447866.3400	613574.4200	5838.5984	±3638064.4000	775431.9600	5813.4129	18493.0500	8290.0171	89.0766	-380.1195	1464515.4000	2660423.9000	±2814627.6
3	00:00:36	88.8%	202142.0200	89.6%	576047.3100	441437.4700	598165.4700	5114.3262	±3626452.9000	780859.1000	5395.9276	17829.4480	8319.7426	120.0488	849.8471	1471715.9000	±2596301.6000	±2816997.9
x		88.8%	92.571%	88.5%	576939.2200	93.717%	96.363%	5311.3914	±101.223%	100.641%	5550.5230	94.457%	8438.5268	104.4525	276.3767	1464078.3000	±2629672.5000	±2816936.0
σ		0.3%	n/a	1.4%	1880.1886	n/a	n/a	461.3976	±n/a	n/a	228.8433	n/a	231.9600	15.4873	619.1723	7865.2864	±32141.3430	±2278.0
%RSD		0.3	1.4866	1.6	0.3259	1.3309	1.5688	8.6869	±0.5005	0.3902	4.1229	1.8494	2.7488	14.8271	224.0321	0.5372	±1.2223	±0.0

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	00:00:09	94.6%	57882.6610	375671.0000	43350.6450	648088.5700	3732.8465	2207269.8000	2223821.5000	736080.5200	108.0%	109.4%	±5136375.2000	5530.2122
2	00:00:22	95.6%	57096.5750	372551.5400	43592.2480	649989.8600	4605.7359	2232516.7000	2264730.4000	739052.6100	111.0%	111.9%	±5147881.7000	5877.9276
3	00:00:36	98.3%	57579.1930	374074.5300	44274.2490	655998.5600	2796.7446	2246314.5000	2231270.4000	744435.1100	112.1%	115.2%	±5050814.9000	5389.6641
x		96.2%	57519.4770	100.251%	43739.0470	101.920%	3711.7757	2228700.3000	107.515%	102.310%	110.4%	112.1%	±100.006%	5599.2680
σ		1.9%	396.4307	n/a	478.9819	n/a	904.6797	19800.1350	n/a	n/a	2.1%	2.9%	±n/a	251.3500
%RSD		2.0	0.6892	0.4170	1.0951	0.6339	24.3732	0.8884	0.9728	0.5724	1.9	2.6	±1.0375	4.4890

SEQ-CCB@CCB07 10/19/2016 00:04:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	00:04:31	87.3%	45.1192	83.5%	120.7186	-67.5949	-64.9343	-37.5360	479.9933	197.6131	0.2165	-3.4109	17.5411	-1.3497	1144.1127	485.6331	790.4142	860.1786	491.0007	1357.7349
2	00:04:45	86.8%	56.9435	83.7%	72.7182	-42.5218	-41.0103	-55.2510	373.9873	160.4966	0.1951	-1.0973	3.5287	9.1680	1875.5877	436.9654	828.0918	886.6706	507.6681	1237.7876
3	00:04:58	88.0%	44.7345	84.1%	103.7061	-18.3023	-48.6347	-54.3107	333.0733	182.0228	0.1971	7.1595	17.3914	-4.9635	2896.3099	461.6536	795.2747	853.1643	438.4296	1137.2972
x		87.4%	48.9324	83.8%	99.0476	-42.8063	-51.5265	-49.0325	395.6846	180.0441	0.2029	0.8838	12.8204	0.9516	1972.0035	461.4173	804.5936	866.6712	479.0328	1244.2732
σ		0.6%	6.9405	0.3%	24.3369	24.6475	12.2213	9.9674	75.8251	18.6372	0.0118	5.5566	8.0472	7.3415	880.0686	24.3347	20.4947	17.6715	36.1375	110.3619
%RSD		0.7	14.1839	0.3	24.5709	57.5791	23.7186	20.3282	19.1630	10.3515	5.8121	628.7480	62.7690	771.5204	44.6281	5.2739	2.5472	2.0390	7.5438	8.8696

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	00:04:31	93.7%	-19.6118	47.2975	10.6398	77.8920	5122.8550	1172.5127	322.8919	88.0410	104.6%	106.2%	959.5830	6018.7848
2	00:04:45	94.3%	11.9681	43.5627	7.0718	84.6363	7743.7662	1071.2276	294.1741	90.7650	105.0%	107.4%	930.3401	6025.8431
3	00:04:58	94.3%	-52.8848	35.9237	10.4962	55.8082	5381.0449	988.4173	334.4475	108.0634	106.8%	109.5%	876.9770	4912.1144
x		94.1%	-20.1762	42.2613	9.4026	72.7788	6082.5554	1077.3858	317.1712	95.6231	105.5%	107.7%	922.3000	5652.2474
σ		0.3%	32.4301	5.7975	2.0198	15.0789	1444.4312	92.2021	20.7372	10.8593	1.2%	1.6%	41.8858	640.9837
%RSD		0.3	160.7347	13.7183	21.4813	20.7188	23.7471	8.5579	6.5382	11.3564	1.1	1.5	4.5415	11.3403

SEQ-CCV@CCV08 10/19/2016 00:45:04 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	9[illegible]
1	00:45:17	91.5%	211363.9200	88.6%	578556.9400	437805.7500	592392.8800	4981.0329	±3661242.8000	777755.3200	5335.8562	17533.2830	8072.5471	95.4132	2057.7952	1465465.0000	2656761.2000	±2839433.[illegible]
2	00:45:30	91.4%	207003.5300	89.2%	579661.7900	449087.3400	609270.7300	5575.4311	±3658537.8000	774234.4800	5481.4753	18221.1780	8585.1934	105.5660	599.1043	1469263.6000	±2610548.7000	±2821844.[illegible]
3	00:45:43	91.2%	207861.9500	88.4%	587867.9800	441887.0100	598020.2800	5593.4170	±3675580.5000	787431.7300	5641.2950	17990.9550	8471.8234	96.6562	2734.7033	1482753.6000	±2626044.2000	±2846611.[illegible]
x		91.4%	94.028%	88.7%	582028.9000	92.750%	94.902%	5383.2937	±101.860%	100.753%	5486.2088	93.321%	8376.5213	99.2118	1797.2009	1472494.1000	±2631118.0000	±2835963.[illegible]
σ		0.2%	n/a	0.4%	5086.8725	n/a	n/a	348.4841	±n/a	n/a	152.7744	n/a	269.2832	5.5379	1091.3880	9085.7322	±23520.3930	±12743.[illegible]
%RSD		0.2	1.1066	0.4	0.8740	1.2897	1.4325	6.4734	±0.2499	0.8763	2.7847	1.9545	3.2147	5.5819	60.7271	0.6170	±0.8939	±0.[illegible]

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	00:45:17	96.1%	56381.4040	376435.0900	43473.7070	652176.8100	4516.1777	2217787.9000	2236167.2000	742562.7400	107.7%	110.5%	±5086172.5000	5056.8659
2	00:45:30	93.6%	57538.4410	377123.4100	43879.9880	656180.8700	4283.6096	2229129.9000	2233519.3000	743515.2700	110.8%	112.7%	±5079966.2000	5862.4451
3	00:45:43	95.0%	57666.0030	378273.4500	43134.0700	653785.5600	3743.7649	2260989.3000	2243072.7000	745699.8900	112.8%	113.9%	±5080557.7000	5543.0240
x		94.9%	57195.2830	101.103%	43495.9210	102.341%	4181.1840	2235969.0000	107.402%	102.873%	110.4%	112.4%	±99.429%	5487.4450
σ		1.3%	707.7195	n/a	373.4547	n/a	396.2621	22398.0090	n/a	n/a	2.6%	1.8%	±n/a	405.6553
%RSD		1.4	1.2374	0.2462	0.8586	0.3081	9.4773	1.0017	0.2204	0.2162	2.3	1.6	±0.0674	7.3924

SEQ-CCB@CCB08 10/19/2016 00:49:26 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	00:49:39	85.2%	28.1968	77.6%	70.3454	-61.6932	-57.0347	-52.7629	328.9426	280.2790	0.3582	-3.1274	10.6505	-4.4803	1920.5087	499.6874	809.7309	837.8627	412.0317	1121.6817
2	00:49:52	85.2%	40.4519	78.5%	73.1167	-30.3899	-53.5932	-48.4863	370.7948	162.7206	7.8988	-1.7815	10.8256	-0.5885	3419.8542	377.6926	713.0805	832.9071	478.2436	1275.0846
3	00:50:05	85.5%	44.3233	79.0%	47.0349	26.4391	-58.9924	-66.3820	314.5373	208.7612	0.3409	0.5182	21.8027	2.8282	1945.7029	381.1339	735.7796	808.7419	484.3812	1034.3241
x		85.3%	37.6573	78.4%	63.4990	-21.8813	-56.5401	-55.8771	338.0916	217.2536	2.8660	-1.4636	14.4263	-0.7469	2428.6886	419.5046	752.8637	826.5039	458.2188	1143.6968
σ		0.2%	8.4186	0.7%	14.3255	44.6780	2.7334	9.3454	29.2233	59.2375	4.3586	1.8435	6.3888	3.6569	858.4670	69.4617	50.5393	15.5806	40.1168	121.8807
%RSD		0.2	22.3558	0.9	22.5602	204.1833	4.8344	16.7250	8.6436	27.2665	152.0797	125.9579	44.2857	489.6307	35.3469	16.5580	6.7129	1.8851	8.7549	10.6567

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	00:49:39	90.2%	13.2864	46.9394	3.7327	74.9881	5901.5048	817.6249	245.6967	63.5178	101.7%	104.3%	890.5627	5657.3311
2	00:49:52	89.0%	-6.0968	61.5590	0.0000	59.9254	9600.8787	945.4851	266.6085	56.5189	101.4%	105.4%	767.6955	6925.6783
3	00:50:05	90.6%	-63.0487	9.1035	3.6730	44.4839	10938.0640	970.8429	223.4816	68.1448	103.2%	105.6%	699.6860	6456.2119
x		89.9%	-18.6197	39.2006	2.4686	59.7992	8813.4824	911.3176	245.2622	62.7272	102.1%	105.1%	785.9814	6346.4071
σ		0.8%	39.6784	27.0705	2.1381	15.2525	2608.9704	82.1249	21.5667	5.8532	1.0%	0.7%	96.7433	641.2635
%RSD		0.9	213.0991	69.0562	86.6110	25.5062	29.6020	9.0117	8.7933	9.3311	0.9	0.7	12.3086	10.1044

QJ14032-BLK1@P8S01@MH1H50@46282 10/19/2016 00:53:44 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	00:53:44	85.7%	16.1587	75.5%	43.3110	-92.2377	-214.1933	-88.3584	112.2098	462.5760	0.3446	-0.6987	14.3064	-4.5210	1075.6326	102.7282	105.5292	168.6327	73.8379	258.9362
2	00:53:56	85.8%	15.6399	76.8%	106.3575	-55.4925	-199.9041	-107.8796	80.0674	376.7720	4.0009	-0.7354	-18.3260	17.4581	1452.3982	123.5539	169.3712	199.5648	103.1911	237.6250
3	00:54:10	85.8%	6.5861	78.2%	9.9961	-53.3100	-216.5671	-108.3856	94.7123	576.1736	-3.3392	2.0081	-0.3493	3.2229	976.8485	59.6813	139.6191	153.8791	135.8330	272.4466
x		85.8%	12.7949	76.8%	53.2215	-67.0134	-210.2215	-101.5412	95.6631	471.8405	0.3354	0.1913	-1.4563	5.3866	1168.2931	95.3211	138.1731	174.0256	104.2873	256.3359
σ		0.1%	5.3832	1.3%	48.9392	21.8721	9.0136	11.4194	16.0923	100.0231	3.6701	1.5734	16.3443	11.1482	250.9509	32.5742	31.9456	23.3154	31.0121	17.5558
%RSD		0.1	42.0731	1.7	91.9537	32.6385	4.2877	11.2461	16.8216	21.1985	1094.1219	822.4301	1122.3172	206.9595	21.4801	34.1731	23.1199	13.3977	29.7372	6.8488

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	00:53:44	90.5%	-8.0448	-5.0206	3.8741	16.9596	6316.6546	64.6039	4.9674	-31.6449	97.0%	99.3%	252.8646	7251.3216
2	00:53:56	90.8%	-11.1067	-5.2837	7.5723	1.2760	7092.9220	136.9509	66.3895	-50.6201	99.9%	101.9%	227.3486	4735.5355
3	00:54:10	88.7%	-35.6705	13.2125	0.0000	12.2139	6763.7572	70.4848	64.8125	-26.7405	101.3%	103.0%	244.4461	7462.8999
x		90.0%	-18.2740	0.9694	3.8154	10.1498	6724.4446	90.6799	45.3898	-36.3352	99.4%	101.4%	241.5531	6483.2523
σ		1.2%	15.1434	10.6037	3.7865	8.0429	389.6240	40.1796	35.0157	12.6118	2.2%	1.9%	13.0017	1517.2597
%RSD		1.3	82.8685	1093.8375	99.2408	79.2420	5.7941	44.3093	77.1444	34.7096	2.2	1.9	5.3825	23.4028

QJ14032-BS1@LCS01 10/19/2016 00:57:46 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	00:57:46	85.9%	954.1139	77.4%	62.2468	9380.4091	4937.6989	-28.2065	14672.4270	2865.7122	133.6495	364.6583	192.5236	17.7488	908.1611	9674.6900	16708.5910	18089.0730	10420.2480	25997.0020
2	00:57:59	87.0%	813.6529	78.9%	30.4483	9424.6340	4835.1698	-21.3038	14563.3620	3110.9845	134.9976	363.2343	236.1691	-8.2917	806.7559	9562.8496	16338.5290	17978.6230	9985.8168	26864.2910
3	00:58:12	88.4%	972.6526	80.4%	-0.2025	9304.6409	4838.4200	34.8761	15267.0400	3210.5974	129.6794	383.6121	195.5423	2.9021	374.9616	9447.8163	16851.8340	18320.3500	10514.6060	27130.2990
x		87.1%	102.868%	78.9%	30.8308	98.104%	96.311%	-4.8781	103.067%	98.919%	132.7755	96.499%	208.0783	4.1197	696.6262	9561.7853	16632.9850	18129.3490	10306.8900	26663.8640
σ		1.3%	n/a	1.5%	31.2264	n/a	n/a	34.6007	n/a	n/a	2.7647	n/a	24.3741	13.0629	283.1463	113.4406	264.8731	174.3875	282.0318	592.6371
%RSD		1.4	9.5178	1.9	101.2831	0.6476	1.1966	709.3073	2.5531	5.7959	2.0823	3.0705	11.7139	317.0811	40.6454	1.1864	1.5925	0.9619	2.7363	2.2226

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	00:57:46	90.0%	198.7406	11751.6040	172.7463	2540.9367	4698.6879	44.3758	16584.8620	29273.3030	96.3%	98.7%	19975.5890	6420.9081
2	00:57:59	91.6%	175.6845	11754.3020	202.4231	2592.0813	4298.6573	32.0656	17029.6730	29574.3310	99.2%	100.7%	20685.3160	7890.7842
3	00:58:12	90.2%	202.1991	11634.1000	150.4804	2551.6373	3458.5277	71.1198	17825.7250	29786.0810	101.6%	103.2%	21123.6950	5984.6948
x		90.6%	192.2080	102.016%	175.2166	100.204%	4151.9576	49.1871	102.879%	102.138%	99.0%	100.9%	100.730%	6765.4623
σ		0.8%	14.4139	n/a	26.0593	n/a	632.9613	19.9667	n/a	n/a	2.6%	2.2%	n/a	998.6653
%RSD		0.9	7.4991	0.5859	14.8726	1.0531	15.2449	40.5934	3.6664	0.8722	2.6	2.2	2.8132	14.7612

6100167-01@MH1H50 10/19/2016 01:01:49

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:01:49	88.4%	29.6714	82.6%	5514.7142	10505.3560	3263.9998	-40.3346	5722.8238	968.4850	22.0662	87.4706	32.4317	2.5742	8894.1568	2585.7014	4143.3686	4910.1106	2678.6378	7006.6907
2	01:02:02	87.4%	40.1651	85.0%	5973.1472	10464.2550	3173.3474	-34.8922	5618.0783	783.3179	14.5112	90.6305	49.7306	-1.2923	9286.0515	2748.7499	4383.7644	4796.4739	2758.3679	7084.1353
3	01:02:15	89.6%	65.6596	87.1%	5922.8426	10226.5810	3176.9635	-57.1341	5936.1852	808.5575	49.5535	95.2635	24.3320	-8.5202	7582.3941	2802.7187	4144.8185	5017.8536	2699.1569	6945.6494
x		88.5%	45.1654	84.9%	5803.5680	10398.7310	3204.7702	-44.1203	5759.0291	853.4535	28.7103	91.1215	35.4981	-2.4128	8587.5341	2712.3900	4223.9839	4908.1460	2712.0542	7012.1585
σ		1.1%	18.5078	2.3%	251.4160	150.4955	51.3262	11.5941	162.1145	100.4163	18.4418	3.9196	12.9740	5.6314	892.2585	112.9852	138.3759	110.7029	41.4002	69.4047
%RSD		1.2	40.9780	2.7	4.3321	1.4472	1.6016	26.2785	2.8150	11.7659	64.2340	4.3015	36.5485	233.4019	10.3902	4.1655	3.2760	2.2555	1.5265	0.9898

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:01:49	91.8%	-4.3991	5385.6677	22.0093	149.0747	4282.6105	1642.4387	12633.4910	109011.6600	98.9%	100.7%	4406.0666	100518.6700
2	01:02:02	93.4%	-1.4388	5584.2514	24.9088	126.4561	3709.7470	1560.0770	12525.8300	111535.3800	102.1%	102.4%	4331.8067	103881.4000
3	01:02:15	94.5%	-24.8471	5177.5022	21.0063	134.8322	2643.0533	1679.5941	12906.0700	112774.5200	103.0%	105.0%	4305.9452	102724.5000
x		93.2%	-10.2283	5382.4738	22.6415	136.7877	3545.1369	1627.3699	12688.4640	111107.1800	101.4%	102.7%	4347.9395	102374.8600
σ		1.3%	12.7465	203.3934	2.0266	11.4354	832.0813	61.1669	195.9899	1917.6279	2.1%	2.1%	51.9738	1708.4121
%RSD		1.4	124.6194	3.7788	8.9508	8.3599	23.4711	3.7586	1.5446	1.7259	2.1	2.1	1.1954	1.6688

6100167-02@MH1H51 10/19/2016 01:05:50

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:05:50	91.8%	258.7317	90.2%	6819.0835	11931.1530	2940.4017	-49.8860	74973.8910	6873.4155	44.1828	70.9442	37.5892	14.9773	99129.2650	1759.9314	2616.4302	3008.4795	1530.0776	4163.5475
2	01:06:03	93.2%	315.3276	92.9%	6723.2957	12231.2200	2927.1024	-40.0072	75825.2620	7048.2058	47.8171	95.2012	54.5313	1.4795	98975.8920	2000.3680	2674.0542	3312.7527	1725.3962	4080.6569
3	01:06:16	93.5%	210.9568	94.5%	7175.8862	12174.2130	2888.1943	-28.6411	76183.5950	6806.9490	104.7592	81.8117	24.1130	24.9642	102044.4100	1887.7328	2567.7170	2877.3352	1691.5704	4442.4089
x		92.8%	261.6720	92.5%	6906.0885	12112.1950	2918.5661	-39.5115	75660.9160	6909.5234	65.5864	82.6524	38.7445	13.8070	100049.8600	1882.6774	2619.4005	3066.1892	1649.0147	4228.8744
σ		0.9%	52.2475	2.2%	238.5099	159.3575	27.1303	10.6311	621.3720	124.6156	33.9733	12.1503	15.2420	11.7860	1729.0385	120.2980	53.2308	223.3717	104.3819	189.5126
%RSD		1.0	19.9668	2.4	3.4536	1.3157	0.9296	26.9065	0.8213	1.8035	51.7993	14.7005	39.3398	85.3625	1.7282	6.3897	2.0322	7.2850	6.3300	4.4814

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:05:50	98.2%	411.2853	11071.0780	129.1468	2544.6190	9711.1534	2070.0155	11985.3490	124132.4400	105.6%	106.3%	3187.1093	48471.7250
2	01:06:03	97.7%	345.1391	11447.6870	225.7976	2516.5004	12663.7500	2106.4994	12713.8090	126330.2900	107.4%	109.5%	3018.4531	49475.7210
3	01:06:16	98.7%	306.1222	11274.9700	167.9880	2552.8928	11500.1960	2111.1856	12618.3970	127200.9100	111.5%	111.4%	3166.9035	51629.4220
x		98.2%	354.1822	11264.5790	174.3108	2538.0041	11291.7000	2095.9002	12439.1850	125887.8800	108.1%	109.0%	3124.1553	49858.9560
σ		0.5%	53.1616	188.5195	48.6347	19.0767	1487.2995	22.5389	395.9180	1581.3509	3.0%	2.6%	92.0966	1613.3552
%RSD		0.5	15.0097	1.6736	27.9011	0.7516	13.1716	1.0754	3.1828	1.2562	2.8	2.4	2.9479	3.2358

SEQ-IBL1@ZZZZZZ 10/19/2016 01:09:52

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:09:52	94.6%	141.5700	96.0%	5016.0544	18709.9930	3311.4209	-16.0866	43206.0350	4408.0259	45.6993	130.0557	75.2842	0.7736	47693.6310	2600.4803	3947.4319	4683.5056	2393.1580	6159.0094
2	01:10:05	95.6%	86.3668	98.9%	4666.7927	19228.3640	3537.1566	1.8050	43704.8320	4480.9198	60.5216	123.9220	50.6943	14.6772	48709.6580	2539.7307	4139.3581	4690.3187	2561.9707	6563.6802
3	01:10:18	95.0%	72.3936	99.5%	4923.5722	19134.2270	3457.4732	-38.5670	44497.4150	4729.2986	42.9373	139.3265	62.9291	4.2602	50024.0550	2913.0631	4169.6886	4921.1042	2501.7868	6693.0655
x		95.1%	100.1101	98.1%	4868.8064	19024.1950	3435.3502	-17.6162	43802.7610	4539.4147	49.7194	131.1014	62.9692	6.5703	48809.1150	2684.4247	4085.4929	4764.9762	2485.6385	6471.9184
σ		0.5%	36.5787	1.9%	180.9569	276.1477	114.4824	20.2295	651.2358	168.4348	9.4563	7.7553	12.2950	7.2340	1168.3913	200.3229	120.5222	135.2538	85.5571	278.6022
%RSD		0.5	36.5385	1.9	3.7167	1.4516	3.3325	114.8345	1.4867	3.7105	19.0194	5.9155	19.5255	110.1004	2.3938	7.4624	2.9500	2.8385	3.4421	4.3048

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:09:52	102.0%	778.5613	18602.6310	506.6283	7022.3101	25751.2420	2893.4289	14087.2410	118910.8700	106.1%	106.9%	3446.5207	89916.8390
2	01:10:05	99.2%	712.7166	19020.1880	506.2682	7035.7439	27700.2250	3124.3349	15331.9000	121598.8700	108.6%	109.3%	3422.7109	93427.2300
3	01:10:18	100.8%	590.3632	19287.8600	568.8513	6869.9633	29861.5390	3149.9585	15090.6080	121867.9800	110.9%	110.1%	3734.0394	95892.5490
x		100.7%	693.8804	18970.2260	527.2492	6976.0058	27771.0020	3055.9074	14836.5830	120792.5700	108.5%	108.8%	3534.4237	93078.8720
σ		1.4%	95.5025	345.3361	36.0289	92.0808	2056.0621	141.2926	660.0688	1635.1508	2.4%	1.7%	173.2817	3003.0468
%RSD		1.4	13.7635	1.8204	6.8334	1.3200	7.4036	4.6236	4.4489	1.3537	2.2	1.5	4.9027	3.2263

SEQ-IBL2@ZZZZZZ 10/19/2016 01:13:51

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	01:13:51	94.6%	3227.1765	98.5%	4805.4748	86470.9550	40189.0530	403.9710	557834.8000	112853.7500	247.4099	560.2720	273.8436	-2.3754	45674.1860	168448.8200	295865.0600	320733.2900	184537.6100
2	01:14:05	95.5%	2958.1556	100.3%	4745.3730	87765.1740	41332.0920	327.1572	566464.2200	113192.6900	193.3345	606.1809	316.7144	1.0945	47977.5310	169311.5000	296323.8400	323401.0200	184193.3200
3	01:14:18	95.3%	3029.7002	101.8%	4994.5984	86978.2970	41009.3020	403.7177	571194.4200	115258.7800	168.6623	605.8317	254.9518	10.8890	48486.0990	171353.3600	302552.7100	330403.5500	188629.7400
x		95.1%	3071.6775	100.2%	4848.4821	87071.4750	40843.4820	378.2819	565164.4800	113768.4000	203.1356	590.7615	281.8366	3.2027	47379.2720	169704.5600	298247.2100	324845.9500	185786.8900
σ		0.5%	139.3364	1.7%	130.0597	652.1213	589.2850	44.2755	6773.9843	1301.7832	40.2783	26.4053	31.6476	6.8789	1498.3821	1491.6328	3735.7286	4994.4292	2467.9907
%RSD		0.5	4.5362	1.7	2.6825	0.7489	1.4428	11.7044	1.1986	1.1442	19.8283	4.4697	11.2291	214.7852	3.1625	0.8790	1.2526	1.5375	1.3284

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:13:51	101.0%	1483.4735	56704.7660	1115.1323	15753.1850	26206.4610	2803.3417	60314.0140	544418.1900	106.0%	108.0%	79728.8730	71516.4240
2	01:14:05	100.0%	1422.8243	55968.8550	1278.3055	15970.0710	19311.2850	2697.7030	60815.9180	538484.1300	111.4%	111.1%	80720.9790	71858.8440
3	01:14:18	100.8%	1474.7600	57345.6520	1284.2173	16180.2650	25629.1950	2854.6350	61268.3470	550244.2900	112.5%	112.8%	82285.0090	73598.0140
x		100.6%	1460.3526	56673.0910	1225.8850	15967.8410	23715.6470	2785.2266	60799.4260	544382.2000	110.0%	110.7%	80911.6200	72324.4270
σ		0.5%	32.7912	688.9452	95.9602	213.5487	3825.1945	80.0189	477.3798	5880.1589	3.5%	2.4%	1288.6877	1116.1677
%RSD		0.5	2.2454	1.2156	7.8278	1.3374	16.1294	2.8730	0.7852	1.0802	3.2	2.2	1.5927	1.5433

SEQ-IBL3@ZZZZZZ 10/19/2016 01:17:53

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:17:53	95.2%	132.0073	100.0%	5665.5281	22724.8520	4237.8227	-29.5873	50910.4910	4963.3996	43.2338	133.6331	63.7121	24.3471	48608.4990	3599.0708	4505.9541	5369.1319	2900.9214	7255.1284
2	01:18:06	95.7%	127.0055	103.5%	5765.6746	22099.2990	4104.1590	28.1864	51904.1070	4801.3624	61.2987	117.6768	87.3866	0.5869	49853.9590	3223.5801	4725.9384	5377.3907	2932.3274	7418.3357
3	01:18:19	96.5%	115.9861	104.6%	6291.1961	22421.6930	4134.8857	-46.9359	52407.6420	4770.1351	87.1739	126.3253	64.7121	-2.6422	51348.6430	4093.6856	4674.2157	5808.6052	2687.5180	7822.5763
x		95.8%	124.9997	102.7%	5907.4663	22415.2810	4158.9558	-16.1123	51740.7460	4844.9657	63.9021	125.8784	71.9369	7.4306	49937.0340	3638.7788	4635.3694	5518.3759	2840.2556	7498.6801
σ		0.6%	8.1968	2.4%	336.0711	312.8258	70.0073	39.3322	761.8270	103.7484	22.0854	7.9875	13.3891	14.7388	1371.9594	436.4097	115.0219	251.3798	133.2035	292.1313
%RSD		0.7	6.5574	2.3	5.6889	1.3956	1.6833	244.1137	1.4724	2.1414	34.5614	6.3454	18.6123	198.3532	2.7474	11.9933	2.4814	4.5553	4.6898	3.8958

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:17:53	100.2%	731.1074	16846.8330	550.7618	7120.7027	33065.4030	2952.5206	16496.2600	122478.5800	107.7%	107.1%	4964.4249	90981.9520
2	01:18:06	103.1%	609.2954	17864.8520	426.6288	7347.3284	37160.9670	3002.6310	16565.8200	124816.9700	108.6%	110.5%	4766.5764	91483.7990
3	01:18:19	103.1%	840.6185	17075.7300	459.5020	7137.2313	38176.6510	2939.5479	16733.8160	125136.2800	111.1%	112.6%	4697.1204	92997.4460
x		102.2%	727.0071	17262.4720	478.9642	7201.7541	36134.3400	2964.8998	16598.6320	124143.9500	109.2%	110.1%	4809.3739	91821.0650
σ		1.7%	115.7160	534.0833	64.3144	126.3416	2705.8612	33.3137	122.1302	1451.0562	1.8%	2.8%	138.6962	1049.2214
%RSD		1.7	15.9168	3.0939	13.4278	1.7543	7.4883	1.1236	0.7358	1.1688	1.6	2.5	2.8839	1.1427

SEQ-IB14@ZZZZZZ 10/19/2016 01:21:53

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:21:53	97.1%	33.7288	96.3%	1241.1443	3781.5275	467.8094	-113.8416	9194.9786	1180.0752	9.2563	26.2147	9.8984	12.7673	12788.9660	637.4534	815.0409	1015.8753	564.8483	1436.9924
2	01:22:06	97.5%	36.2898	98.0%	983.9949	3959.4909	455.9688	-134.1291	9694.1474	1043.1543	18.9237	29.7631	25.5512	-2.8509	12540.4640	542.1515	971.5892	1053.4212	510.6328	1458.7800
3	01:22:19	96.6%	25.3288	99.8%	1094.5709	3880.2753	450.8623	-129.3574	9741.4010	1067.7427	6.1236	22.0720	3.5385	9.8617	12906.7640	652.8682	894.2430	1054.3168	532.2984	1458.6391
x̄		97.1%	31.7825	98.0%	1106.5700	3873.7645	458.2135	-125.7761	9543.5090	1096.9908	11.4345	26.0166	12.9961	6.5260	12745.3980	610.8244	893.6244	1041.2045	535.9265	1451.4705
σ		0.4%	5.7339	1.8%	128.9940	89.1602	8.6937	10.6073	302.7595	72.9960	6.6723	3.8494	11.3286	8.2678	186.9962	59.9698	78.2759	21.9403	27.2892	12.5386
%RSD		0.5	18.0410	1.8	11.6571	2.3016	1.8973	8.4335	3.1724	6.6542	58.3520	14.7959	87.1693	126.6896	1.4672	9.8178	8.7594	2.1072	5.0920	0.8639

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:21:53	105.9%	153.9872	3921.1123	95.9525	1521.7168	12996.3740	589.9603	3192.0779	25182.1160	104.7%	104.7%	890.6759	21551.3460
2	01:22:06	104.8%	150.9142	4090.3430	103.6222	1472.5466	14247.7640	618.4766	3065.9784	24946.3060	107.3%	107.6%	968.9494	20904.9960
3	01:22:19	105.7%	125.8496	3978.1502	91.9930	1533.9845	14506.3120	659.0121	3101.9071	25949.7870	109.8%	109.8%	974.4584	19944.0340
x̄		105.4%	143.5837	3996.5352	97.1892	1509.4160	13916.8170	622.4830	3119.9878	25359.4030	107.3%	107.4%	944.6946	20800.1260
σ		0.6%	15.4348	86.1003	5.9124	32.5137	807.5413	34.6998	64.9650	524.7062	2.5%	2.6%	46.8626	808.7717
%RSD		0.5	10.7497	2.1544	6.0834	2.1541	5.8026	5.5744	2.0822	2.0691	2.4	2.4	4.9606	3.8883

6100167-04@MH1H53 10/19/2016 01:25:54

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:25:54	96.8%	243.3109	104.6%	6561.1999	17431.1130	4202.3660	16.6193	37121.2140	5711.4072	75.6931	109.6072	44.7630	16.0403	96996.3750	2290.9063	3567.4216	4093.1430	2272.2969	5593.7015
2	01:26:07	99.1%	238.0971	106.8%	6645.6053	17798.3920	4310.4779	-24.8708	37765.5300	5829.4273	95.5106	103.2083	64.0657	6.7483	100391.9400	2312.1888	3619.8231	4143.1627	2300.1682	5866.0331
3	01:26:20	98.1%	259.3655	108.2%	6675.4604	17288.3910	4218.6690	11.8392	38096.9310	5621.5781	31.1263	118.9852	35.1182	22.0262	102026.1000	2351.6695	3574.5094	4463.8476	2129.5735	5815.1719
x̄		98.0%	246.9245	106.6%	6627.4219	17505.9650	4243.8376	1.1959	37661.2250	5720.8042	67.4433	110.6002	47.9823	14.9382	99804.8040	2318.2548	3587.2513	4233.3844	2234.0129	5758.3022
σ		1.2%	11.0851	1.8%	59.2608	263.1112	58.2850	22.7006	496.1507	104.2427	32.9754	7.9352	14.7398	7.6983	2565.7494	30.8325	28.4297	201.1478	91.5144	144.7990
%RSD		1.2	4.4893	1.7	0.8942	1.5030	1.3734	1898.2265	1.3174	1.8222	48.8936	7.1747	30.7192	51.5345	2.5708	1.3300	0.7925	4.7515	4.0964	2.5146

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:25:54	105.4%	169.2185	4895.4048	86.8219	1057.0780	4173.7216	1829.5201	9835.6133	150771.2000	109.9%	108.7%	2554.6231	43886.6080
2	01:26:07	104.5%	229.3182	4996.5958	87.9922	1121.9370	5095.3633	2009.9813	9373.4026	155047.2500	112.5%	112.3%	2590.0950	44602.8080
3	01:26:20	106.4%	160.1597	5234.5071	89.4333	1015.5618	5311.4935	2017.9919	9745.7130	155372.0000	114.9%	114.2%	2644.8812	44030.2870
x̄		105.5%	186.2321	5042.1692	88.0824	1064.8589	4860.1928	1952.4978	9651.5763	153730.1500	112.4%	111.7%	2596.5331	44173.2340
σ		0.9%	37.5875	174.0842	1.3080	53.6127	604.2434	106.5771	245.0632	2567.6660	2.5%	2.8%	45.4722	378.8944
%RSD		0.9	20.1832	3.4526	1.4850	5.0347	12.4325	5.4585	2.5391	1.6702	2.2	2.5	1.7513	0.8577

6100167-05@MH1H54 10/19/2016 01:29:56

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:29:56	98.5%	36.7558	103.6%	10422.7320	18769.0990	4457.7530	-34.1840	7893.0781	2331.5875	74.7524	173.8619	52.3618	10.4579	15683.5570	5444.2897	9282.3417	10454.7340	5902.3425	14722.5170
2	01:30:09	98.4%	58.6018	104.5%	10417.4170	18233.4230	4172.1073	-38.5801	7942.4967	2439.1147	59.7104	150.2553	85.3770	3.3423	16891.6950	5478.1338	9442.3249	10376.1980	5832.0739	14863.8000
3	01:30:22	97.1%	48.2973	105.8%	10361.3210	18970.7620	4481.9730	-44.8313	8293.8060	2553.1170	42.3455	158.0773	62.0978	0.7434	16948.4680	5550.9368	9364.5365	10674.3100	5720.1733	15049.0920
x̄		98.0%	47.8850	104.6%	10400.4900	18657.7620	4370.6111	-39.1985	8043.1269	2441.2731	58.9361	160.7315	66.6122	4.8478	16507.9070	5491.1201	9363.0677	10501.7470	5818.1966	14878.4700
σ		0.8%	10.9288	1.1%	34.0254	381.0697	172.3354	5.3505	218.4961	110.7806	16.2173	12.0250	16.9642	5.0292	714.4717	54.4966	80.0017	154.5164	91.8740	163.7813
%RSD		0.8	22.8230	1.0	0.3272	2.0424	3.9430	13.6498	2.7166	4.5378	27.5168	7.4814	25.4672	103.7414	4.3281	0.9924	0.8544	1.4713	1.5791	1.1008

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:29:56	102.4%	89.7356	6234.5521	66.3582	526.2520	7364.3169	2582.5975	8400.8828	278462.8200	107.1%	106.4%	3798.1652	72946.7440
2	01:30:09	105.7%	95.9056	6042.8869	56.0954	546.6591	9664.3153	2688.8017	8431.8077	282436.0100	109.0%	108.3%	3640.4014	74424.5190
3	01:30:22	102.1%	55.5843	6014.4709	67.5755	578.4443	7529.1905	2793.4410	8641.4421	285880.4600	110.9%	111.6%	3602.8069	73952.7810
x̄		103.4%	80.4085	6097.3033	63.3430	550.4518	8185.9409	2688.2800	8491.3775	282259.7700	109.0%	108.8%	3680.4578	73774.6810
σ		2.0%	21.7186	119.7071	6.3060	26.3020	1282.9610	105.4227	130.8764	3711.9596	1.9%	2.6%	103.6562	754.8142
%RSD		1.9	27.0104	1.9633	9.9554	4.7783	15.6727	3.9216	1.5413	1.3151	1.7	2.4	2.8164	1.0231

6100167-06@MH1H55 10/19/2016 01:33:58

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:33:58	96.1%	68.4448	100.2%	3608.8892	17526.3250	3836.3666	-0.4466	20912.0910	2875.6075	56.6651	134.7521	57.1010	3.3761	25541.0010	2419.7546	3395.4962	4177.7094	2041.2061	5145.1182
2	01:34:12	97.0%	47.0183	102.6%	3936.3701	17791.4030	3958.2287	-19.2778	21053.4360	2767.0511	53.8096	115.4173	41.4506	0.3021	25125.7790	2510.7515	3383.5762	4082.9045	2119.1031	5399.2656
3	01:34:25	97.3%	81.5274	103.9%	3747.5168	17885.7060	3954.9246	-40.1621	21367.0770	2983.3410	50.3220	146.2535	69.7633	6.5232	27348.9850	2478.5934	3252.4516	4235.0424	2095.2625	5550.4147
x̄		96.8%	65.6635	102.2%	3764.2587	17734.4780	3916.5066	-19.9622	21110.8680	2875.3332	53.5989	132.1410	56.1050	3.4004	26005.2550	2469.6998	3343.8414	4165.2188	2085.1906	5364.9328
σ		0.7%	17.4218	1.9%	164.3811	186.3304	69.4230	19.8666	232.8667	108.1452	3.1768	15.5830	14.1826	3.1106	1182.0787	46.1458	79.3699	76.8342	39.9133	204.8179
%RSD		0.7	26.5320	1.8	4.3669	1.0507	1.7726	99.5212	1.1031	3.7611	5.9270	11.7927	25.2787	91.4770	4.5455	1.8685	2.3736	1.8447	1.9141	3.8177

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:33:58	105.5%	141.4943	25696.4030	100.5727	1352.9877	9532.3961	9057.7332	45759.1870	105932.4400	104.9%	105.0%	5239.2340	111296.3400
2	01:34:12	105.0%	169.4076	25875.2380	88.6311	1408.2753	7587.3236	9008.5788	45805.2270	105903.6800	107.6%	108.1%	5170.5193	110256.8300
3	01:34:25	105.6%	137.2750	26145.6110	103.1325	1412.1676	9763.4257	9331.5691	46848.8500	106664.5400	109.0%	109.3%	5226.7299	112566.7000
x̄		105.4%	149.3923	25905.7510	97.4454	1391.1435	8961.0484	9132.6271	46137.7540	106166.8800	107.2%	107.5%	5212.1610	111373.2900
σ		0.3%	17.4617	226.1531	7.7400	33.1012	1195.2755	174.0330	616.2569	431.2199	2.1%	2.2%	36.6008	1156.8558
%RSD		0.3	11.6885	0.8730	7.9429	2.3794	13.3386	1.9056	1.3357	0.4062	1.9	2.1	0.7022	1.0387

6100167-07@MH1H56 10/19/2016 01:38:00

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:38:00	97.5%	115.2751	105.1%	10554.0380	18107.8640	5395.5828	-24.2867	10922.7990	2202.9249	69.3392	105.3423	38.2355	6.5469	27028.4830	2797.8414	3739.7196	4573.1942	2324.5338	6264.0096
2	01:38:13	98.0%	76.1365	106.4%	10772.9580	18144.7830	5470.7816	-28.2049	11249.1260	2019.3909	72.7061	95.0964	69.8271	-2.8984	28904.2770	2599.2865	3910.7449	4767.0769	2709.5392	6444.1055
3	01:38:26	99.2%	48.1362	106.0%	11278.1090	18121.4140	5462.2726	2.2549	11736.3870	2263.0984	53.2760	88.0305	34.9901	9.5897	29889.8180	2746.1170	4133.2148	4815.3898	2521.2149	6455.3122
x̄		98.2%	79.8492	105.8%	10868.3680	18124.6870	5442.8790	-16.7456	11302.7700	2161.8047	65.1071	96.1564	47.5842	4.4127	28607.5260	2714.4150	3927.8931	4718.5536	2518.4293	6387.8091
σ		0.9%	33.7231	0.7%	371.3449	18.6760	41.1801	16.5711	409.4378	126.9507	10.3834	8.7044	19.2448	6.5119	1453.5664	103.0038	197.3073	128.1817	192.5178	107.3598
%RSD		0.9	42.2335	0.6	3.4167	0.1030	0.7566	98.9579	3.6225	5.8724	15.9482	9.0524	40.3589	147.5695	5.0811	3.7947	5.0232	2.7165	7.6444	1.6807

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:38:00	105.5%	66.1051	2143.1540	12.5535	92.0854	2462.5501	2263.3886	8601.8561	185195.1100	107.1%	105.7%	2519.3445	33753.8410
2	01:38:13	105.2%	-20.3538	2336.9725	9.2876	47.2901	3973.1190	2260.8266	9103.1384	189974.1500	108.7%	108.5%	2580.1882	33932.3340
3	01:38:26	106.0%	24.3767	2450.5377	6.1262	80.1989	4874.4772	2428.1870	8720.8106	191479.8900	111.2%	110.9%	2526.0886	33144.4160
x̄		105.6%	23.3760	2310.2214	9.3224	73.1915	3770.0487	2317.4674	8808.6017	188883.0500	109.0%	108.4%	2541.8738	33610.1970
σ		0.4%	43.2381	155.4281	3.2137	23.2052	1218.7191	95.8945	261.9187	3281.3811	2.1%	2.6%	33.3522	413.1332
%RSD		0.4	184.9580	6.7278	34.4733	31.7048	32.3263	4.1379	2.9734	1.7373	1.9	2.4	1.3121	1.2292

6100167-08@MH1H57 10/19/2016 01:42:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:42:01	97.7%	58.5427	104.6%	12148.8890	23979.0820	5082.1396	-8.7479	7594.1688	1767.5603	57.5142	106.9146	61.0049	0.4415	24853.3920	2954.4669	3906.4239	4838.1902	2455.7600	6773.2874
2	01:42:14	98.0%	63.5591	106.4%	12620.8820	23473.3560	5122.1009	57.3605	7638.6163	1746.2224	47.2522	83.2830	22.5116	9.7231	23593.2790	2807.2549	4165.2033	4952.3121	2523.9578	6639.7237
3	01:42:27	98.9%	59.1305	108.3%	12453.2150	23647.9750	5101.5745	52.9500	7388.6317	1892.6408	34.4392	97.5666	34.8308	0.1684	24749.2340	2900.5760	4213.3843	4898.7570	2716.3106	6959.9378
x		98.2%	60.4108	106.5%	12407.6620	23700.1380	5101.9383	33.8542	7540.4723	1802.1412	46.4019	95.9214	39.4491	3.4443	24398.6350	2887.4326	4095.0038	4896.4198	2565.3428	6790.9830
σ		0.6%	2.7423	1.8%	239.2710	256.8663	19.9831	36.9604	133.3625	79.0978	11.5610	11.9014	19.6578	5.4393	699.4005	74.4809	165.0822	57.0968	135.1155	160.8388
%RSD		0.6	4.5395	1.7	1.9284	1.0838	0.3917	109.1752	1.7686	4.3891	24.9149	12.4075	49.8309	157.9202	2.8666	2.5795	4.0313	1.1661	5.2670	2.3684

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:42:01	104.1%	475.9279	53901.4250	284.6994	4524.2829	79823.5260	6004.6665	31132.0480	191311.2500	106.0%	105.4%	4931.9074	127778.4300
2	01:42:14	105.4%	425.6693	53653.6050	286.3323	4622.5386	78662.1620	6067.0611	31495.9750	192251.2900	109.8%	108.9%	4851.3446	125434.8700
3	01:42:27	105.9%	394.2567	54381.7180	276.7427	4700.6862	81018.1200	6251.0112	31417.1140	194814.3100	110.7%	109.9%	5023.1136	129290.5200
x		105.1%	431.9513	53978.9160	282.5915	4615.8359	79834.6020	6107.5796	31348.3790	192792.2900	108.8%	108.1%	4935.4552	127501.2700
σ		0.9%	41.1964	370.1902	5.1306	88.3925	1178.0181	128.0732	191.4528	1813.1049	2.5%	2.3%	85.9395	1942.7128
%RSD		0.9	9.5373	0.6858	1.8156	1.9150	1.4756	2.0970	0.6107	0.9404	2.3	2.1	1.7413	1.5237

6100167-09@MH1H58 10/19/2016 01:46:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:46:01	97.9%	207.2125	103.6%	16166.7950	27878.0390	7641.4587	-6.2631	27822.5370	4825.5058	58.3559	68.4909	29.4654	7.1572	43667.7150	3466.0762	3934.7078	5006.1417	2349.3751	6241.9792
2	01:46:15	99.3%	211.2466	104.7%	16716.3450	27012.1320	7560.8286	26.1716	28073.3460	4694.4490	31.7592	89.4555	44.8330	0.3813	44448.1550	3345.9730	4053.0510	4956.6821	2569.8865	6741.1196
3	01:46:28	99.9%	144.2214	106.9%	16790.6190	27077.6730	7433.0365	3.3942	27800.1000	4744.8356	56.9325	90.9883	28.9190	9.8049	45719.3950	3511.6024	3964.2238	5074.4210	2564.2653	6367.8920
x		99.0%	187.5602	105.1%	16557.9200	27322.6150	7545.1079	7.7676	27898.6610	4754.9302	49.0159	82.9782	34.4058	5.7811	44611.7550	3441.2172	3983.9942	5015.7483	2494.5090	6450.3303
σ		1.0%	37.5866	1.7%	340.7535	482.1266	105.0967	16.6537	151.6972	66.1090	14.9616	12.5698	9.0344	4.8602	1035.5782	85.5673	61.5989	54.5081	125.7210	259.5811
%RSD		1.0	20.0398	1.6	2.0579	1.7646	1.3929	214.4006	0.5437	1.3903	30.5241	15.1483	26.2583	84.0704	2.3213	2.4865	1.5462	1.0867	5.0399	4.0243

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:46:01	102.7%	73.1698	7914.8023	53.5268	608.1597	5687.7785	2615.3740	8948.8546	252838.4500	107.8%	107.0%	4814.9582	71196.1040
2	01:46:15	104.5%	128.3288	8185.2251	64.9844	587.9863	6414.1363	2888.2003	8947.8838	256819.3900	110.3%	110.8%	4843.5004	70243.2100
3	01:46:28	105.1%	117.2265	8067.8995	63.7923	601.3663	7336.8156	2785.0860	9014.5407	256805.3900	112.1%	111.7%	4703.8340	71608.8330
x		104.1%	106.2417	8055.9756	60.7678	599.1707	6479.5768	2762.8867	8970.4264	255487.7400	110.0%	109.8%	4787.4309	71016.0490
σ		1.3%	29.1741	135.6052	6.2992	10.2643	826.4639	137.7612	38.2072	2294.3662	2.2%	2.5%	73.7902	700.3897
%RSD		1.2	27.4601	1.6833	10.3660	1.7131	12.7549	4.9861	0.4259	0.8980	2.0	2.3	1.5413	0.9862

6100167-10@MH1H59 10/19/2016 01:50:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:50:01	99.1%	455.9334	115.4%	5754.9507	27685.9920	5868.4357	10.1676	145169.2200	16777.0720	99.3505	109.8012	38.0106	21.7690	166120.0400	1845.5077	2242.7155	3201.5157	1499.8694	3522.2298
2	01:50:15	100.4%	504.6331	120.0%	5612.9667	27777.3490	5961.1849	17.4032	144293.8200	16976.9480	81.6141	102.7490	63.2564	6.4523	167570.0000	1981.4619	2413.3940	3157.5293	1525.2325	4102.2643
3	01:50:28	99.6%	536.0341	121.0%	6143.3320	28000.3410	5825.7359	39.1784	145796.5800	16623.3950	78.1828	120.1224	29.1210	34.5948	170289.5300	1694.7017	2393.5952	3081.0216	1510.0274	3640.7412
x		99.7%	498.8669	118.8%	5837.0831	27821.2280	5885.1188	22.2497	145086.5400	16792.4710	86.3825	110.8909	43.4626	20.9387	167993.1900	1840.5571	2349.9016	3146.6889	1511.7098	3755.0784
σ		0.7%	40.3605	3.0%	274.5562	161.7026	69.2485	15.1004	754.7887	177.2786	11.3609	8.7378	17.7087	14.0896	2116.7124	143.4442	93.3522	60.9741	12.7649	306.4552
%RSD		0.7	8.0904	2.5	4.7037	0.5812	1.1767	67.8679	0.5202	1.0557	13.1519	7.8797	40.7448	67.2898	1.2600	7.7935	3.9726	1.9377	0.8444	8.1611

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:50:01	107.1%	497.2337	3757.6183	310.6218	3942.9931	1722.1602	1735.7846	7385.5802	146956.0700	112.4%	110.9%	3483.1933	29699.6890
2	01:50:15	105.9%	557.0338	4042.4581	279.5963	4032.2090	-191.8608	1861.1891	7313.5980	148644.0200	114.4%	114.5%	3413.3986	29821.0460
3	01:50:28	106.3%	469.5525	3997.8200	284.5689	4170.2218	3948.2074	1987.5382	7663.9370	149440.6000	116.2%	115.2%	3439.9493	30410.1970
x		106.5%	507.9400	3932.6321	291.5957	4048.4746	1826.1689	1861.5040	7454.3717	148346.9000	114.3%	113.5%	3445.5137	29976.9770
σ		0.6%	44.7125	153.2009	16.6636	114.4843	2071.9929	125.8771	185.0232	1268.6373	1.9%	2.3%	35.2285	380.0543
%RSD		0.6	8.8027	3.8956	5.7146	2.8278	113.4612	6.7621	2.4821	0.8552	1.6	2.0	1.0224	1.2678

SEQ-CCV@CCV09 10/19/2016 01:54:07 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	[illegible]
1	01:54:20	97.5%	199371.7200	98.9%	575372.0600	451484.0500	607339.9800	5926.9665	±3691307.3000	781298.9200	5410.6788	18138.0640	8224.6681	109.9832	2073.5816	1496068.8000	±2682892.1000	±291016[illegible]
2	01:54:33	96.8%	201664.7200	98.6%	583800.3600	450821.0800	609567.9200	4624.9654	±3679850.0000	782572.3600	5662.4405	17922.3260	8523.7257	88.7566	2940.7098	1502410.2000	±2670660.8000	±287927[illegible]
3	01:54:46	96.6%	203360.2000	97.5%	586396.0700	442165.8500	599912.3200	4921.0603	±3692759.5000	792202.1700	5437.0755	17960.5820	8489.3402	84.0393	3952.8273	1506490.7000	±2660098.3000	±288280[illegible]
x		97.0%	90.750%	98.3%	581856.1600	93.845%	95.805%	5157.6641	±102.495%	101.471%	5503.3983	93.800%	8412.5780	94.2597	2989.0396	1501656.5000	±2671217.0000	±289075[illegible]
σ		0.5%	n/a	0.7%	5763.4320	n/a	n/a	682.4865	±n/a	n/a	138.3655	n/a	163.6404	13.8197	940.5546	5251.6612	±11407.1040	±1691[illegible]
%RSD		0.5	0.9936	0.7	0.9905	1.1601	0.8348	13.2325	±0.1917	0.7591	2.5142	0.6393	1.9452	14.6613	31.4668	0.3497	±0.4270	±[illegible]

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:54:20	98.2%	57926.9220	378846.0500	43575.8600	657412.9400	5583.1133	2251421.4000	2254403.5000	753041.7500	112.2%	112.3%	±5012768.3000	2627.8311
2	01:54:33	99.0%	57872.6730	380150.5200	44162.4230	661717.8000	8117.0478	±2181754.7000	2277362.7000	764751.4500	113.7%	116.1%	±4949302.3000	2788.9529
3	01:54:46	100.4%	56925.7840	380012.3600	43263.3450	662154.8200	6245.8414	2280069.7000	2281393.2000	759342.2800	116.4%	118.4%	±4908845.0000	1640.5967
x		99.2%	57575.1260	101.744%	43667.2090	103.339%	6648.6675	±2237748.6000	109.009%	104.964%	114.1%	115.6%	±96.979%	2352.4602
σ		1.1%	563.0005	n/a	456.4470	n/a	1314.1186	±50563.5410	n/a	n/a	2.1%	3.1%	±n/a	621.7333
%RSD		1.1	0.9779	0.1887	1.0453	0.3968	19.7651	±2.2596	0.6411	0.7721	1.8	2.6	±1.0568	26.4291

SEQ-CCB@CCB09 10/19/2016 01:58:33 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	01:58:47	95.0%	21.4195	92.2%	64.0128	-38.6225	-56.7548	-56.4730	363.9164	206.9442	3.1958	4.7262	-3.1091	4.0326	3695.3054	382.1689	636.3177	805.7226	436.5714	1338.4909
2	01:59:00	95.9%	27.6058	94.5%	103.2423	-64.1820	-73.4928	-45.3318	347.9477	132.3456	-0.0857	-2.9306	-6.3364	3.9488	3227.7768	411.0671	697.1416	687.3576	451.4926	1280.3682
3	01:59:13	95.9%	17.1161	94.2%	47.2308	-67.0231	-76.1136	-41.7893	303.5560	287.1210	3.1674	-4.0156	3.3592	0.6941	4265.4105	464.2041	670.4591	740.2293	438.1067	1144.3034
x		95.6%	22.0471	93.6%	71.4953	-56.6092	-68.7871	-47.8647	338.4734	208.8036	2.0925	-0.7400	-2.0288	2.8918	3729.4976	419.1467	667.9728	744.4365	442.0569	1254.3875
σ		0.5%	5.2729	1.2%	28.7456	15.6416	10.5023	7.6625	31.2756	77.4044	1.8864	4.7649	4.9373	1.9038	519.6612	41.6102	30.4881	59.2945	8.2076	99.6666
%RSD		0.6	23.9166	1.3	40.2063	27.6308	15.2678	16.0087	9.2402	37.0705	90.1502	643.9062	243.3593	65.8333	13.9338	9.9274	4.5643	7.9650	1.8567	7.9454

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	01:58:47	102.0%	-24.2487	43.2422	9.9712	72.5587	7495.4138	942.3494	296.4548	128.0905	108.0%	109.2%	912.7622	2498.6229
2	01:59:00	102.5%	-19.8211	48.7300	9.7972	61.3597	9168.5906	976.0076	249.4026	46.5308	109.2%	111.0%	768.9777	2267.4008
3	01:59:13	102.5%	-33.0212	19.2647	3.2622	35.2863	12080.3150	986.8652	232.8071	39.8523	109.7%	111.3%	656.1218	4292.5194
x		102.3%	-25.6970	37.0789	7.6769	56.4016	9581.4398	968.4074	259.5549	71.4912	109.0%	110.5%	779.2872	3019.5144
σ		0.3%	6.7182	15.6697	3.8242	19.1245	2320.1645	23.2107	33.0160	49.1300	0.9%	1.1%	128.6304	1108.5000
%RSD		0.2	26.1438	42.2605	49.8142	33.9077	24.2152	2.3968	12.7203	68.7218	0.8	1.0	16.5062	36.7112

6100167-11@MH1H60 10/19/2016 02:02:54

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	02:02:54	97.0%	333.1053	111.2%	10548.8790	29188.9080	6788.5232	-36.5779	103971.7100	11578.7040	116.8074	107.5165	48.1205	25.5300	162459.4400	2457.8671	2646.2308	3196.6564	1677.4776	4125.9086
2	02:03:08	100.0%	363.4560	112.8%	±21648.4650	28649.7770	6640.5694	-8.3825	104862.4400	11854.1020	93.7499	106.4024	44.5003	22.0102	170414.9000	2634.5773	2406.8909	3268.7648	1534.9115	4248.7828
3	02:03:21	99.4%	383.5167	114.7%	10941.2580	29178.3010	6695.6578	21.6146	106119.7400	11857.0300	152.2223	90.0103	20.1138	44.7469	171768.4300	2580.6679	2759.7122	3441.8401	1835.8651	4370.1114
x		98.8%	360.0260	112.9%	±14379.5340	29005.6620	6708.2501	-7.7819	104984.6300	11763.2790	120.9265	101.3097	37.5782	30.7623	168214.2600	2557.7041	2604.2779	3302.4204	1682.7514	4248.2676
σ		1.6%	25.3802	1.8%	±6298.1355	308.2512	74.7764	29.1009	1079.2116	159.8532	29.4530	9.8014	15.2325	12.2381	5029.5540	90.5656	180.1132	126.0091	150.5461	122.1022
%RSD		1.6	7.0495	1.6	±43.7993	1.0627	1.1147	373.9552	1.0280	1.3589	24.3561	9.6747	40.5355	39.7829	2.9900	3.5409	6.9161	3.8157	8.9464	2.8742

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:02:54	105.4%	325.8628	4181.6993	56.1478	848.3953	4971.0089	2135.1441	3122.4829	200489.7400	114.2%	113.2%	2298.4813	19940.0290
2	02:03:08	106.4%	245.2474	4443.0411	57.6546	875.9764	6953.9665	2124.1026	3138.9477	205224.7300	118.0%	115.9%	2341.7415	20534.5900
3	02:03:21	105.0%	246.3129	4524.2882	85.4649	837.1310	8574.6169	2178.4191	3059.1556	207853.3700	119.0%	118.3%	2447.7945	20136.5300
x		105.6%	272.4744	4383.0095	66.4224	853.8343	6833.1974	2145.8886	3106.8621	204522.6100	117.1%	115.8%	2362.6724	20203.7160
σ		0.7%	46.2388	179.0101	16.5085	19.9857	1804.8370	28.7081	42.1272	3731.6828	2.5%	2.6%	76.8257	302.9210
%RSD		0.7	16.9699	4.0842	24.8538	2.3407	26.4128	1.3378	1.3559	1.8246	2.2	2.2	3.2516	1.4993

6100167-12@MH1H61 10/19/2016 02:06:56

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	02:06:56	97.9%	872.7947	118.7%	5785.1973	21417.2770	4012.6219	-1.4956	204043.6900	34348.8130	171.6509	156.1349	22.9702	43.7987	406270.8900	1490.6285	1421.3080	1968.7347	955.1438	2176.1912
2	02:07:09	98.9%	809.1453	121.0%	5878.1538	21429.3280	3903.9880	-14.0091	204000.1000	35081.5050	187.1134	145.5861	48.4928	71.8478	411828.8600	1568.3921	1589.4586	1945.2872	898.3540	2183.7331
3	02:07:22	98.9%	833.2794	123.0%	5917.0972	21104.5520	3784.1817	-4.2767	203681.1900	34788.2760	188.2296	182.0765	108.9529	27.6845	415352.5200	1676.2827	1519.5405	1970.4261	849.9257	2332.9923
x		98.6%	838.4065	120.9%	5860.1494	21317.0520	3900.2639	-6.5938	203908.3300	34739.5310	182.3313	161.2658	60.1386	47.7770	411150.7500	1578.4344	1510.1024	1961.4827	901.1412	2230.9722
σ		0.5%	32.1330	2.2%	67.7681	184.1295	114.2656	6.5707	197.9108	368.7702	9.2663	18.7785	44.1585	22.3488	4578.6339	93.2336	84.4717	14.0512	52.6644	88.4324
%RSD		0.5	3.8326	1.8	1.1564	0.8638	2.9297	99.6496	0.0971	1.0615	5.0821	11.6444	73.4279	46.7773	1.1136	5.9067	5.5938	0.7164	5.8442	3.9639

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:06:56	106.7%	1014.8656	1764.9978	376.8958	5216.9646	-16953.7500	1317.5178	1611.7970	141476.4500	124.9%	122.4%	1900.4853	-1182.9171
2	02:07:09	106.8%	951.4027	1793.4559	390.7222	5418.9514	-18006.9680	1370.1084	1604.8178	140019.2600	127.6%	125.5%	1991.5973	65.0881
3	02:07:22	107.9%	831.7975	1660.3926	421.6778	5421.0994	-18776.9080	1357.7387	1845.0990	144227.9300	129.4%	127.8%	1920.1250	-896.2755
x		107.1%	932.6886	1739.6154	396.4319	5352.3385	-17912.5420	1348.4550	1687.2379	141907.8800	127.3%	125.2%	1937.4025	-671.3682
σ		0.7%	92.9577	70.0690	22.9305	117.2421	915.2393	27.4970	136.7562	2137.2477	2.3%	2.7%	47.9503	653.6947
%RSD		0.6	9.9666	4.0278	5.7842	2.1905	5.1095	2.0391	8.1053	1.5061	1.8	2.2	2.4750	97.3675

6100167-13@MH1H62 10/19/2016 02:10:58

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	02:10:58	98.1%	440.1002	112.1%	10035.2050	23437.4200	5021.9741	-22.5048	121537.7200	12021.0380	69.0469	68.9014	21.8543	20.6204	153449.8300	2564.9732	2413.6490	3050.9433	1361.5316	3585.5911
2	02:11:11	99.3%	373.5363	115.0%	9865.1487	23976.4860	5221.3948	-20.1398	120911.1700	11788.3860	61.1536	76.4920	40.5626	18.2093	153131.7100	2669.6732	2240.0190	2935.3405	1383.7453	3626.0527
3	02:11:24	97.6%	432.5408	115.5%	10076.4280	23609.7980	5043.5032	-43.6238	123314.0900	11575.0880	101.6999	96.5176	19.1199	38.4474	158952.9400	2621.3309	2269.7190	3083.2976	1578.0310	3739.9205
x		98.3%	415.3924	114.2%	9992.2607	23674.5680	5095.6241	-28.7562	121921.0000	11794.8370	77.3001	80.6370	27.1789	25.7590	155178.1600	2618.6591	2307.7956	3023.1938	1441.1026	3650.5214
σ		0.9%	36.4450	1.8%	111.9953	275.3078	109.4513	12.9299	1246.4664	223.0447	21.4962	14.2671	11.6710	11.0544	3272.9229	52.4011	92.8667	77.7840	119.1025	80.0214
%RSD		0.9	8.7736	1.6	1.1208	1.1629	2.1479	44.9641	1.0224	1.8910	27.8088	17.6930	42.9414	42.9145	2.1091	2.0011	4.0240	2.5729	8.2647	2.1921

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:10:58	110.5%	254.7880	3374.9448	96.7785	1651.0097	-994.0392	2000.9915	3248.3408	278230.2100	114.9%	114.8%	2456.7401	25148.4530
2	02:11:11	108.5%	263.6517	3387.3564	126.3496	1519.1995	-2726.3784	1974.7572	3486.9346	283044.7600	116.9%	115.2%	2555.4023	28630.8030
3	02:11:24	111.1%	299.0174	3392.7631	133.4737	1589.7630	-901.2991	2016.8113	3394.7690	287869.6100	118.9%	117.4%	2526.2925	27195.5300
x		110.0%	272.4857	3385.0214	118.8673	1586.6574	-1540.5722	1997.5200	3376.6815	283048.2000	116.9%	115.8%	2512.8116	26991.5950
σ		1.3%	23.4006	9.1358	19.4583	65.9600	1027.9846	21.2409	120.3209	4819.7023	2.0%	1.4%	50.6938	1750.1088
%RSD		1.2	8.5878	0.2699	16.3697	4.1572	66.7275	1.0634	3.5633	1.7028	1.7	1.2	2.0174	6.4839

6100167-14@MH1H63 10/19/2016 02:15:00

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	02:15:00	97.3%	489.4485	117.7%	4184.2670	26447.0660	3883.2487	-27.4688	119948.1600	15610.7370	101.7951	99.7657	40.6348	9.1648	130619.0600	2530.5810	3423.7600	4646.2211	2173.1538	5509.0330
2	02:15:13	98.2%	451.5777	120.1%	4198.9612	25768.1000	3732.7301	-2.3135	120348.0500	15724.2240	48.0255	100.2648	81.8941	-0.4653	133834.6900	2601.9633	3570.7826	4870.0367	2031.8771	5562.7323
3	02:15:26	97.2%	483.3148	121.8%	4056.3928	25765.1680	3724.3221	-24.1559	121822.6800	15649.7350	132.3853	113.1377	6.6531	14.5882	133212.5600	2513.2313	3323.2610	4579.2030	2132.5561	5571.3068
x		97.6%	474.7804	119.9%	4146.5403	25993.4440	3780.1003	-17.9794	120706.3000	15661.5650	94.0686	104.3894	43.0607	7.7626	132555.4400	2548.5919	3439.2679	4698.4869	2112.5290	5547.6907
σ		0.5%	20.3268	2.1%	78.4150	392.8507	89.4281	13.6678	987.2765	57.6609	42.7073	7.5804	37.6791	7.6241	1705.5611	47.0280	124.4874	152.2986	72.7364	33.7519
%RSD		0.5	4.2813	1.7	1.8911	1.5113	2.3658	76.0191	0.8179	0.3682	45.4002	7.2616	87.5023	98.2165	1.2867	1.8453	3.6196	3.2414	3.4431	0.6084

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:15:00	107.8%	150.2208	4822.7206	38.3268	387.4427	1633.3953	1502.5753	5636.4503	144884.9800	109.6%	108.2%	1857.2571	2505.9194
2	02:15:13	110.3%	201.4583	5176.3526	51.9155	390.2523	2884.3404	1364.5055	5712.1088	146235.8200	112.1%	112.1%	1820.8327	226.6050
3	02:15:26	110.5%	193.1186	4872.1230	28.3810	429.3893	975.1553	1431.0781	5761.1662	147336.0900	114.1%	113.6%	1970.2359	-6.6298
x		109.5%	181.5992	4957.0654	39.5411	402.3614	1830.9637	1432.7196	5703.2418	146152.3000	111.9%	111.3%	1882.7752	908.6315
σ		1.5%	27.4926	191.5079	11.8142	23.4489	969.8050	69.0495	62.8290	1227.6889	2.3%	2.8%	77.9019	1388.1988
%RSD		1.4	15.1392	3.8633	29.8782	5.8278	52.9669	4.8195	1.1016	0.8400	2.0	2.5	4.1376	152.7791

6100167-15@MH1H64 10/19/2016 02:19:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	02:19:01	96.1%	333.0061	107.4%	4147.7476	26123.9370	2029.8723	-47.1014	36980.1680	8236.8332	65.6753	88.8169	50.9050	25.2086	108324.9900	1940.1536	2814.3761	3489.4163	1742.1701	4432.1176
2	02:19:14	96.0%	273.1336	108.8%	3927.5974	26176.5950	2051.0450	-25.1770	38459.3960	8098.6019	46.9962	104.8302	85.1438	0.1572	112463.7800	2112.6200	2587.6249	3421.6218	1790.2382	4297.6198
3	02:19:28	97.6%	251.9813	108.7%	4186.9944	26298.7180	2020.7913	-54.1710	38771.0480	8059.1347	37.4478	93.0144	41.2483	12.6646	110732.3100	1984.5153	2766.6131	3563.6586	1638.3745	4348.1913
x		96.6%	286.0403	108.3%	4087.4465	26199.7500	2033.9029	-42.1498	38070.2040	8131.5233	50.0397	95.5538	59.0990	12.6768	110507.0300	2012.4297	2722.8714	3491.5655	1723.5942	4359.3096
σ		0.9%	42.0261	0.8%	139.8173	89.6616	15.5243	15.1179	956.7735	93.3116	14.3577	8.3032	23.0665	12.5257	2078.5715	89.5576	119.5367	71.0428	77.6173	67.9347
%RSD		0.9	14.6924	0.8	3.4207	0.3422	0.7633	35.8671	2.5132	1.1475	28.6927	8.6895	39.0302	98.8082	1.8809	4.4502	4.3901	2.0347	4.5032	1.5584

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:19:01	106.3%	157.4222	7967.5103	18.4634	201.1795	10002.6630	1780.2835	3253.8380	307598.0100	109.1%	108.4%	3613.9446	12445.4250
2	02:19:14	106.0%	134.3415	7812.9058	24.2148	246.1721	12357.2070	1747.6897	3107.4829	309948.1800	111.2%	110.6%	3677.8801	12235.9450
3	02:19:28	106.2%	105.6874	7790.2424	29.7228	205.6181	10595.2180	1707.4456	3271.5848	312963.2600	115.1%	113.1%	3581.9780	11057.9020
x		106.2%	132.4837	7856.8862	24.1337	217.6566	10985.0290	1745.1396	3210.9686	310169.8200	111.8%	110.7%	3624.6009	11913.0910
σ		0.2%	25.9174	96.4711	5.6302	24.7947	1224.7179	36.4858	90.0594	2689.4859	3.0%	2.4%	48.8310	747.9846
%RSD		0.2	19.5627	1.2279	23.3291	11.3917	11.1490	2.0907	2.8047	0.8671	2.7	2.1	1.3472	6.2787

6100167-16@MH1H65 10/19/2016 02:23:02

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	02:23:02	95.6%	42.2930	99.4%	3323.6447	28051.1700	1389.8117	-25.9325	2930.9332	643.4471	30.4517	96.4829	40.6771	8.0811	7780.4101	1827.8111	2786.8428	3764.5581	1762.2031	4410.0269
2	02:23:16	93.8%	34.9141	100.7%	3426.6238	28259.5930	1496.8004	-25.3724	2902.8373	552.7540	44.1499	87.8484	54.2544	1.3878	7714.0689	1869.2296	2864.1990	3551.7540	1836.5379	4665.9347
3	02:23:29	95.3%	37.3294	102.4%	3254.3632	27974.2460	1435.9452	-31.4682	2998.6061	644.6389	20.2440	84.9342	7.2115	24.8559	8105.2938	1990.6924	2747.3666	3683.3904	1670.0440	4434.3158
x		94.9%	38.1788	100.8%	3334.8772	28095.0030	1440.8524	-27.5910	2944.1255	613.6133	31.6152	89.7551	34.0476	11.4416	7866.5910	1895.9110	2799.4694	3666.5675	1756.2617	4503.4258
σ		0.9%	3.7621	1.5%	86.6779	147.6373	53.6629	3.3694	49.2285	52.7091	11.9953	6.0058	24.2120	12.0896	209.3671	84.6552	59.4309	107.3948	83.4058	141.2599
%RSD		1.0	9.8538	1.5	2.5991	0.5255	3.7244	12.2120	1.6721	8.5900	37.9416	6.6914	71.1121	105.6633	2.6615	4.4651	2.1229	2.9290	4.7491	3.1367

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:23:02	98.6%	22.3451	16355.2190	16.3170	44.3591	13841.6020	1849.1433	3627.4412	282896.4400	104.5%	105.4%	4341.0520	15899.0410
2	02:23:16	98.3%	34.8464	16685.8990	19.1653	55.8897	15477.8320	1807.1511	3603.8548	283725.3700	107.5%	107.6%	4230.8298	15843.8610
3	02:23:29	98.9%	13.7198	16348.6810	12.6240	64.6038	13908.8540	1804.0826	3492.0248	289674.9800	108.3%	108.8%	4666.0170	16238.6150
x		98.6%	23.6371	16463.2660	16.0354	54.9509	14409.4300	1820.1257	3574.4403	285432.2600	106.8%	107.2%	4412.6330	15993.8390
σ		0.3%	10.6224	192.8330	3.2797	10.1550	925.8747	25.1768	72.3416	3697.6029	2.0%	1.7%	226.2518	213.7699
%RSD		0.3	44.9396	1.1713	20.4530	18.4801	6.4255	1.3832	2.0239	1.2954	1.9	1.6	5.1274	1.3366

6100167-17@MH1H66 10/19/2016 02:27:03

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	02:27:03	91.2%	241.3495	93.7%	13016.3680	23448.5390	5326.2837	35.1600	195925.6700	7028.4144	37.7286	54.5019	10.4945	15.2283	31876.0460	2216.7901	2857.8202	3797.0405	1863.1208	4941.3201
2	02:27:16	92.0%	214.4447	94.5%	13049.7280	23078.4120	5143.7081	0.3681	199031.6600	7334.5945	27.0517	57.0133	50.5789	-2.0655	35184.8250	2814.2789	3205.7592	3769.7724	2024.5771	4831.1746
3	02:27:29	92.5%	188.2445	96.9%	13290.0340	23237.7280	5052.8043	71.4259	199091.2500	7045.5401	43.7017	52.1990	23.4631	-2.1323	34889.3810	2357.6811	3335.7254	3760.1631	1948.5668	4877.5934
x		91.9%	214.6795	95.1%	13118.7100	23254.8930	5174.2654	35.6513	198016.1900	7136.1830	36.1607	54.5714	28.1788	3.6768	33983.4170	2462.9167	3133.1016	3775.6587	1945.4216	4883.3627
σ		0.6%	26.5533	1.6%	149.3059	185.6596	139.2769	35.5314	1810.6897	172.0426	8.4350	2.4079	20.4540	10.0039	1831.0061	312.3365	247.0985	19.1304	80.7741	55.2989
%RSD		0.7	12.3688	1.7	1.1381	0.7984	2.6917	99.6637	0.9144	2.4108	23.3265	4.4123	72.5866	272.0812	5.3879	12.6816	7.8867	0.5067	4.1520	1.1324

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:27:03	97.4%	138.1995	3440.4975	63.7625	862.3690	4593.2190	2247.9695	9859.1207	138383.2900	104.4%	105.2%	5736.7114	30895.2790
2	02:27:16	98.7%	142.2833	3569.5708	59.1420	846.6826	6778.5650	2293.2615	9783.7891	140863.2100	107.8%	108.5%	5850.3151	29802.6270
3	02:27:29	99.2%	75.0361	3569.0658	70.7850	982.9313	6427.7035	2145.2003	9803.7040	140826.3700	109.8%	110.1%	5900.5814	28645.0520
x		98.4%	118.5063	3526.3780	64.5631	897.3277	5933.1625	2228.8104	9815.5379	140024.2900	107.3%	107.9%	5829.2026	29780.9860
σ		0.9%	37.7016	74.3752	5.8627	74.5487	1173.6109	75.8672	39.0352	1421.2659	2.7%	2.5%	83.9502	1125.2693
%RSD		0.9	31.8140	2.1091	9.0805	8.3079	19.7805	3.4039	0.3977	1.0150	2.5	2.3	1.4402	3.7785

6100167-18@MH1H67 10/19/2016 02:31:04

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	02:31:04	96.4%	154.2417	98.6%	16688.7220	29154.0810	7059.5321	-25.4943	24474.2980	4323.0616	61.2656	113.3040	64.7315	0.5786	53066.9400	4217.5136	5304.0850	5906.6784	3218.1139	8420.7322
2	02:31:17	96.2%	160.1978	101.0%	16638.7080	28693.4510	7062.9691	-8.3707	24967.7820	4279.7693	54.7711	96.0136	51.8466	3.7975	52384.6510	3973.3439	5056.0333	6031.4369	3263.5761	8530.4717
3	02:31:30	96.6%	162.6709	103.3%	16635.2790	29073.9130	7244.8281	38.0617	24351.1050	4456.5645	42.3354	89.5271	26.4584	13.7896	52080.5790	4172.3475	5203.2070	5957.6766	3433.2930	8437.6091
x		96.4%	159.0368	101.0%	16654.2370	28973.8080	7122.4431	1.3989	24597.7280	4353.1318	52.7907	99.6149	47.6788	6.0552	52510.7230	4121.0683	5187.7751	5965.2640	3304.9944	8462.9377
σ		0.2%	4.3329	2.4%	29.9144	246.0818	106.0025	32.8850	326.3417	92.1537	9.6192	12.2908	19.4740	6.8888	505.1214	129.9110	124.7438	62.7244	113.4113	59.0918
%RSD		0.2	2.7245	2.3	0.1796	0.8493	1.4883	2350.7747	1.3267	2.1170	18.2215	12.3383	40.8440	113.7667	0.9619	3.1524	2.4046	1.0515	3.4315	0.6982

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:31:04	103.2%	107.7268	5091.2115	19.3522	258.2826	6841.0761	3330.7145	15516.9660	320791.6900	107.5%	107.8%	4645.6330	53140.6750
2	02:31:17	103.3%	37.9069	4942.4185	25.0810	235.1210	6222.5926	3364.1041	15718.4430	325931.4600	111.1%	110.8%	4814.5418	53683.3940
3	02:31:30	102.2%	40.6691	5059.6803	33.8473	233.6041	7353.0843	3454.0466	16384.1520	330622.6900	112.7%	112.5%	4786.9219	55906.9130
x		102.9%	62.1009	5031.1035	26.0935	242.3359	6805.5843	3382.9551	15873.1870	325781.9500	110.4%	110.4%	4749.0322	54243.6610
σ		0.6%	39.5373	78.4048	7.3004	13.8311	566.0810	63.7904	453.8304	4917.2067	2.7%	2.4%	90.6050	1465.7565
%RSD		0.6	63.6661	1.5584	27.9778	5.7074	8.3179	1.8856	2.8591	1.5094	2.4	2.2	1.9079	2.7022

QJ14032-PS1@MH1HS2A 10/19/2016 02:35:05

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	02:35:05	96.3%	76.1482	106.4%	4293.3601	17402.4660	3136.4394	-10.6010	39532.0950	4033.3717	50.1956	122.7905	69.7322	12.7693	47591.4990	2550.3949	4076.5880	4364.8461	2328.5696	6154.3032
2	02:35:18	97.4%	74.8090	108.0%	4442.8666	17825.7350	3216.8487	-2.2930	39724.5330	4010.4423	40.8871	117.9453	66.5304	0.2225	47655.7320	2515.1899	3797.2818	4411.0857	2434.6917	6437.0081
3	02:35:32	99.9%	94.2345	110.1%	4531.7856	17627.4260	3178.7194	-32.7812	40350.9700	4179.1873	46.7676	132.4917	59.9053	9.4808	47943.1450	2612.4143	3963.5274	4500.9511	2449.6321	6180.5361
x		97.9%	81.7306	108.1%	4422.6708	17618.5430	3177.3358	-15.2251	39869.1990	4074.3338	45.9501	124.4092	65.3893	7.4909	47730.1250	2559.3330	3945.7991	4425.6276	2404.2978	6257.2825
σ		1.8%	10.8494	1.9%	120.4890	211.7745	40.2225	15.7613	428.1764	91.5267	4.7078	7.4070	5.0119	6.5058	187.2551	49.2246	140.4945	69.2080	66.0066	156.1986
%RSD		1.9	13.2746	1.7	2.7243	1.2020	1.2659	103.5221	1.0740	2.2464	10.2454	5.9538	7.6647	86.8497	0.3923	1.9233	3.5606	1.5638	2.7454	2.4963

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:35:05	105.9%	648.9271	17384.7830	520.3089	6441.3470	28569.4350	2716.3253	13802.9210	109383.5200	108.7%	107.8%	3145.5862	79929.8280
2	02:35:18	105.5%	511.8656	17606.6040	518.0117	6452.9897	31629.3930	2875.5609	13979.6940	113599.8400	109.4%	110.0%	3355.0424	80955.4300
3	02:35:32	106.4%	658.3925	18274.1110	471.1991	6550.2292	29158.8710	2867.3130	14133.1220	112348.9900	113.2%	113.3%	3296.3204	80224.3600
x		105.9%	606.3951	17755.1660	503.1732	6481.5220	29785.9000	2819.7331	13971.9120	111777.4500	110.4%	110.4%	3265.6497	80369.8730
σ		0.5%	82.0016	462.9028	27.7142	59.7863	1623.4872	89.6487	165.2383	2165.4863	2.4%	2.8%	108.0439	528.0583
%RSD		0.4	13.5228	2.6071	5.5079	0.9224	5.4505	3.1793	1.1826	1.9373	2.2	2.5	3.3085	0.6570

SEQ-CCV@CCV10 10/19/2016 02:39:12 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	[illegible]
1	02:39:25	94.0%	205595.3000	93.8%	583289.0600	451418.7800	608343.2300	5535.2035	±3702590.6000	783720.6900	5688.6167	18208.2930	8618.3372	75.3363	3000.1982	1482234.0000	±2656222.8000	±289599[illegible]
2	02:39:38	94.0%	200686.7400	96.4%	574537.5100	446545.6900	603384.1800	4840.5597	±3654242.4000	776902.1500	5509.8294	17865.8570	8602.2659	96.2361	1925.6039	1481235.6000	±2641472.4000	±286082[illegible]
3	02:39:51	92.7%	198317.6000	96.6%	584408.3800	442428.0700	596888.6300	5171.0998	±3655646.0000	777919.8000	5927.6124	17691.2930	8293.9938	85.0289	2674.9034	1492821.2000	±2652429.1000	±286710[illegible]
x		93.6%	90.780%	95.6%	580744.9800	93.560%	95.373%	5182.2877	±102.018%	100.716%	5708.6862	93.356%	8504.8656	85.5338	2533.5685	1485430.2000	±2650041.4000	±287464[illegible]
σ		0.7%	n/a	1.6%	5404.8864	n/a	n/a	347.4570	±n/a	n/a	209.6133	n/a	182.7971	10.4590	551.0625	6420.1741	±7659.5857	±1875[illegible]
%RSD		0.8	1.8419	1.6	0.9307	1.0073	0.9528	6.7047	±0.7496	0.4719	3.6718	1.4675	2.1493	12.2280	21.7505	0.4322	±0.2890	±[illegible]

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:39:25	99.0%	58652.0160	378358.1900	44029.3830	652635.8600	3083.1844	2247007.3000	2258221.5000	749871.8500	111.3%	111.1%	±5102995.2000	4601.5885
2	02:39:38	101.4%	57184.0100	377033.2100	43745.3180	652231.8100	6166.5205	±2172958.1000	2265191.9000	752299.4900	114.4%	115.3%	±5032890.9000	3151.2966
3	02:39:51	102.7%	57435.3630	374645.2200	43838.8030	658498.1100	6027.9330	±2180464.9000	2290764.8000	758425.2100	115.9%	117.6%	±4979358.0000	3313.8243
x		101.0%	57757.1300	100.943%	43871.1680	102.405%	5092.5460	±2200143.4000	109.025%	104.201%	113.9%	114.7%	±98.572%	3688.9031
σ		1.9%	785.1186	n/a	144.7715	n/a	1741.5373	±40758.4690	n/a	n/a	2.4%	3.3%	±n/a	794.5752
%RSD		1.9	1.3593	0.4995	0.3300	0.5359	34.1978	±1.8525	0.7544	0.5850	2.1	2.9	±1.2306	21.5396

SEQ-CCB@CCB10 10/19/2016 02:43:40 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	02:43:54	92.3%	31.8939	92.9%	109.5487	-75.5811	-78.6900	-38.4309	272.9551	266.8406	-3.3392	-0.3476	0.1849	11.5599	2708.8020	397.0719	714.0546	788.3564	441.2309	1255.1356
2	02:44:07	92.6%	31.6307	93.5%	80.1228	-72.8121	-86.6136	-36.0576	306.4482	275.4207	0.0066	1.7457	3.5023	7.8480	4429.2876	469.3582	667.6627	711.5606	496.4455	1203.6396
3	02:44:20	92.8%	3.0412	93.8%	58.3549	-20.4757	-78.6022	-56.3750	297.8574	109.8632	3.4272	5.2662	-9.8901	14.8766	3200.5154	395.1664	691.6283	814.6098	428.8978	1122.4034
x		92.6%	22.1886	93.4%	82.6755	-56.2896	-81.3019	-43.6212	292.4202	217.3748	0.0315	2.2214	-2.0677	11.4282	3446.2017	420.5322	691.1152	771.5089	455.5247	1193.7262
σ		0.2%	16.5827	0.4%	25.6922	31.0466	4.6003	11.1087	17.3959	93.2065	3.3833	2.8370	6.9746	3.5161	886.1653	42.2953	23.2002	53.5505	35.9710	66.9191
%RSD		0.3	74.7351	0.5	31.0759	55.1552	5.6583	25.4663	5.9490	42.8783	10729.5080	127.7101	337.3189	30.7672	25.7143	10.0576	3.3569	6.9410	7.8966	5.6059

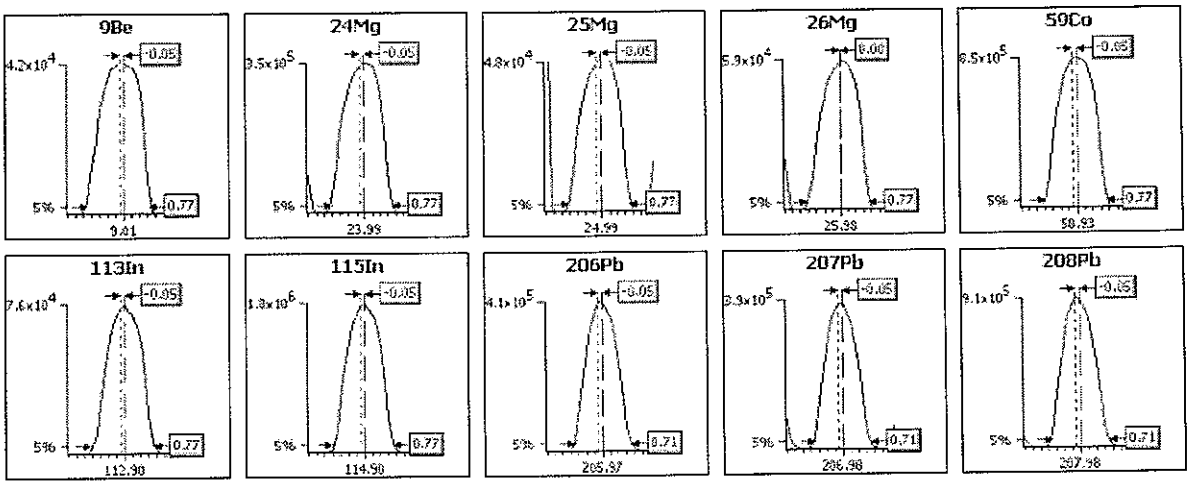
Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	02:43:54	98.3%	-4.8169	76.1554	0.0000	49.1387	10642.8080	968.2226	269.4284	51.3045	108.0%	108.2%	754.6031	3098.7459
2	02:44:07	99.6%	-78.0725	19.6754	6.5995	52.2538	9844.6170	1000.7729	229.6388	85.9662	108.1%	109.6%	766.0373	3333.3858
3	02:44:20	98.5%	19.5009	16.0329	0.0000	64.5815	11581.0430	916.4756	226.4502	74.2039	110.0%	110.2%	801.8782	3838.8980
x		98.8%	-21.1295	37.2879	2.1998	55.3247	10689.4890	961.8237	241.8391	70.4915	108.7%	109.3%	774.1729	3423.6766
σ		0.7%	50.7910	33.7095	3.8102	8.1666	869.1539	42.5114	23.9461	17.6265	1.1%	1.0%	24.6652	378.2468
%RSD		0.7	240.3795	90.4032	173.2051	14.7612	8.1309	4.4199	9.9017	25.0052	1.0	0.9	3.1860	11.0480

Performance Report

Sample details
Sample name : SEQ-TUN1@TUNE01
Acquired at : 10/19/2016 07:39:25
Report name : 200_8 + IS TEST_NO SCREEN [7/9/2015 09:58:10]

Mass Calibration verification

Acquisition parameters
Sweeps : 10
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	0.11	0.77	-0.05
24Mg	0.85	0.65	0.11	0.77	-0.05
25Mg	0.85	0.65	0.11	0.77	-0.05
26Mg	0.85	0.65	0.11	0.77	0.00
59Co	0.85	0.65	0.11	0.77	-0.05
113In	0.85	0.65	0.11	0.77	-0.05
115In	0.85	0.65	0.11	0.77	-0.05
206Pb	0.85	0.65	0.11	0.71	-0.05
207Pb	0.85	0.65	0.11	0.71	-0.05
208Pb	0.85	0.65	0.11	0.71	-0.05

Sample details
Sample name : SEQ-TUN1@TUNE01
Acquired at : 10/19/2016 07:39:25
Report name : 200_8 + IS TEST_NO SCREEN [7/9/2015 09:58:10]

Tune conditions

Major	
Extraction	-200
Lens 1	0.3
Focus	18.4
D1	-41.6
Pole Bias	1.5
Hexapole Bias	-3.5
Nebuliser	0.78
Sampling Depth	130

Minor	
Lens 2	-26.7
Lens 3	-189.0
Forward power	1400
Horizontal	95
Vertical	375
D2	-160
DA	-32.9
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 thing	0.00

Sensitivity and stability results

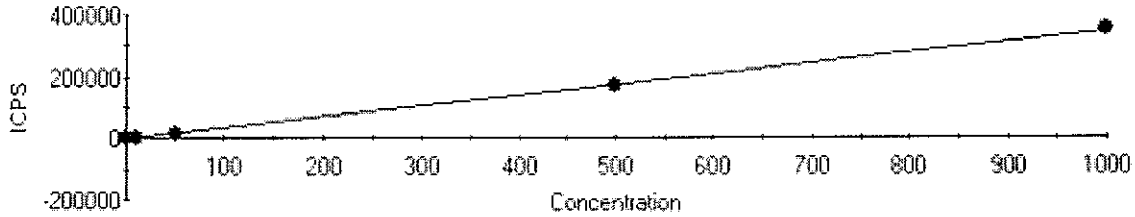
Acquisition parameters
Sweeps : 30

Run	Time	6Li	9Be	24Mg	25Mg	26Mg	45Sc	59Co	89Y	113In	115In	159Tb	206Pb	207Pb	208Pb	209Bi
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	3.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Countrate	>4000	>4000	>4000	>4000	>4000	>5000	>4000	>5000	>10000	>20000	>20000	>20000	>20000	>20000	>20000
1	07:40:04	105120.95	44689.574	363016.06	50375.856	59842.986	1232246.3	890695.95	114290.61	78840.393	1873535.7	167390.35	432009.89	383018.89	949117.27	114310.86
2	07:40:11	105056.88	45108.301	364722.36	49953.535	59272.600	1243996.8	891939.45	115769.14	78181.406	1879921.4	170395.41	435996.96	386161.05	953742.50	115772.52
3	07:40:19	105994.33	44813.516	362634.61	50439.541	59742.327	1254314.0	904181.42	116022.34	77969.598	1875251.4	169138.94	436248.61	388278.44	963698.18	116177.64
4	07:40:27	105987.59	45764.904	365756.00	49876.447	59812.788	1237317.4	904688.32	116336.31	79206.892	1896127.0	171179.94	442178.38	391958.07	962068.36	116039.22
5	07:40:34	105279.43	45222.199	364229.86	50932.277	60087.927	1248940.9	896621.48	116822.49	78487.358	1893818.5	172117.40	439922.80	391457.16	965779.29	118081.94
x		105487.83	45119.699	364071.78	50315.531	59751.725	1243363.1	897625.32	115848.18	78537.129	1883730.8	170044.41	437271.33	388174.72	958881.12	116076.43
σ		466.38	420.02	1271.30	425.21	297.80	8825.68	6599.65	955.27	497.91	10556.72	1842.13	3919.89	3732.84	7118.38	1345.67
%RSD		0.4421	0.9309	0.3492	0.8451	0.4984	0.7098	0.7352	0.8246	0.6340	0.5604	1.0833	0.8964	0.9616	0.7424	1.1593

Result : The performance report passed.

Fully Quant Calibration

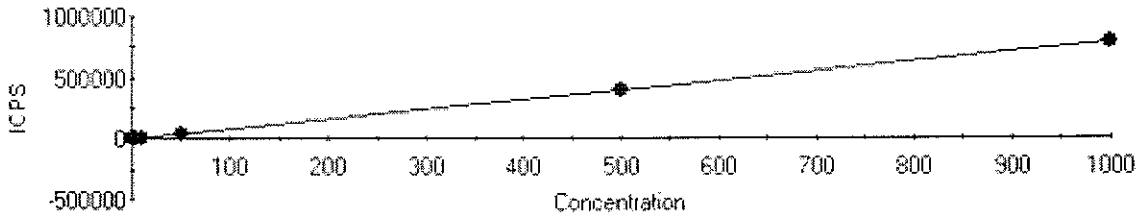
9Be FQ Block 1



Intercept CPS=-7.059925 Intercept Conc=-0.020405
Sensitivity=345.986282 Correlation Coeff=0.999922

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.091	0.091	24.52	0.00
SEQ-CAL4@S04	1.000	1.122	0.122	381.29	12.24
SEQ-CAL5@S05	10.000	9.834	0.166	3395.51	1.66
SEQ-CAL6@S06	50.000	50.527	0.527	17474.47	1.05
SEQ-CAL7@S07	500.000	501.371	1.371	173460.53	0.27
SEQ-CAL8@S08	1000.000	1030.055	30.055	356377.67	3.01

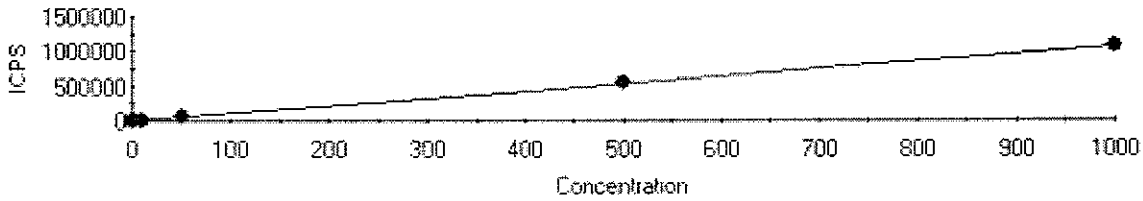
51V FQ Block 1



Intercept CPS=12.308140 Intercept Conc=0.015547
Sensitivity=791.666988 Correlation Coeff=0.999994

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	-0.018	0.018	-2.26	0.00
SEQ-CAL4@S04	5.000	5.073	0.073	4028.20	1.45
SEQ-CAL5@S05	10.000	10.177	0.177	8069.49	1.77
SEQ-CAL6@S06	50.000	50.488	0.488	39981.75	0.98
SEQ-CAL7@S07	500.000	495.545	4.455	392319.21	0.89
SEQ-CAL8@S08	1000.000	998.084	1.916	790162.71	0.19

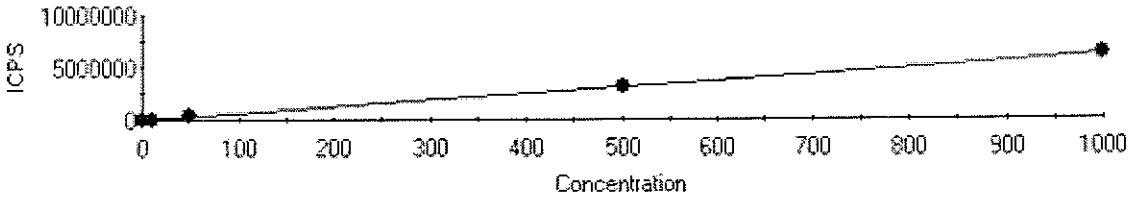
52Cr FQ Block 1



Intercept CPS=175.438568 Intercept Conc=0.162997
Sensitivity=1076.329942 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	-0.004	0.004	171.31	0.00
SEQ-CAL4@S04	2.000	1.991	0.009	2318.49	0.45
SEQ-CAL5@S05	10.000	10.346	0.346	11311.64	3.46
SEQ-CAL6@S06	50.000	50.780	0.780	54831.40	1.56
SEQ-CAL7@S07	500.000	498.868	1.132	537121.54	0.23
SEQ-CAL8@S08	1000.000	1002.889	2.889	1079615.44	0.29

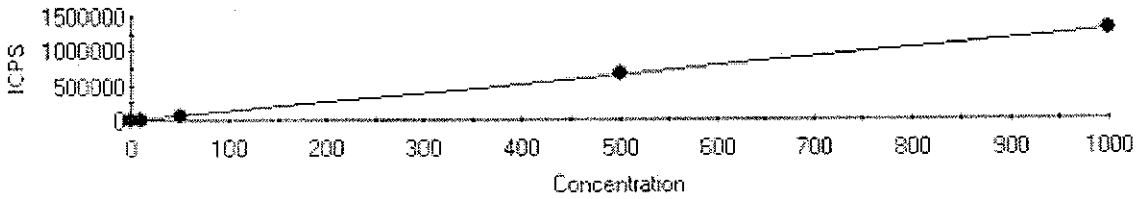
59Co FQ Block 1



Intercept CPS=16.246846 Intercept Conc=0.002618
Sensitivity=6205.718315 Correlation Coeff=0.999989

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.000	0.000	16.60	0.00
SEQ-CAL4@S04	1.000	0.977	0.023	6076.54	2.34
SEQ-CAL5@S05	10.000	10.047	0.047	62363.46	0.47
SEQ-CAL6@S06	50.000	49.570	0.430	307632.78	0.86
SEQ-CAL7@S07	500.000	502.710	2.710	3119692.52	0.54
SEQ-CAL8@S08	1000.000	995.753	4.247	6179378.76	0.42

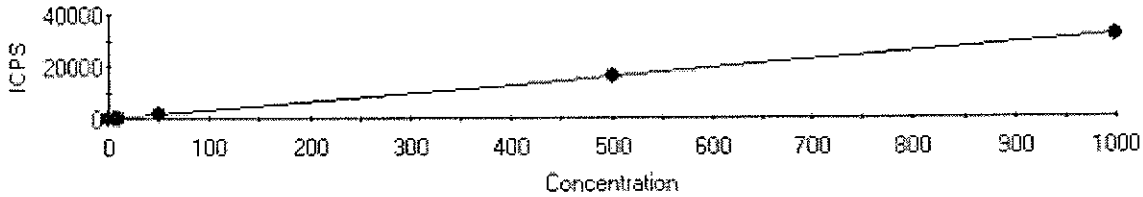
60Ni FQ Block 1



Intercept CPS=407.039201 Intercept Conc=0.311605
Sensitivity=1306.266297 Correlation Coeff=1.000000

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.003	0.003	410.40	0.00
SEQ-CAL4@S04	1.000	1.000	0.000	1712.73	0.04
SEQ-CAL5@S05	10.000	9.990	0.010	13457.13	0.10
SEQ-CAL6@S06	50.000	49.706	0.294	65336.82	0.59
SEQ-CAL7@S07	500.000	500.932	0.932	654757.93	0.19
SEQ-CAL8@S08	1000.000	1002.438	2.438	1309857.39	0.24

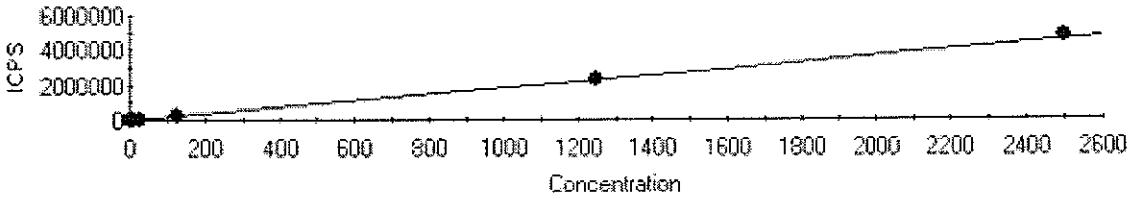
78Se FQ Block 1



Intercept CPS=8.668027 Intercept Conc=0.270729
Sensitivity=32.017410 Correlation Coeff=0.999986

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	-0.028	0.028	7.77	0.00
SEQ-CAL4@S04	5.000	5.321	0.321	179.05	6.43
SEQ-CAL5@S05	10.000	9.633	0.367	317.10	3.67
SEQ-CAL6@S06	50.000	49.853	0.147	1604.82	0.29
SEQ-CAL7@S07	500.000	501.671	1.671	16070.88	0.33
SEQ-CAL8@S08	1000.000	992.113	7.887	31773.55	0.79

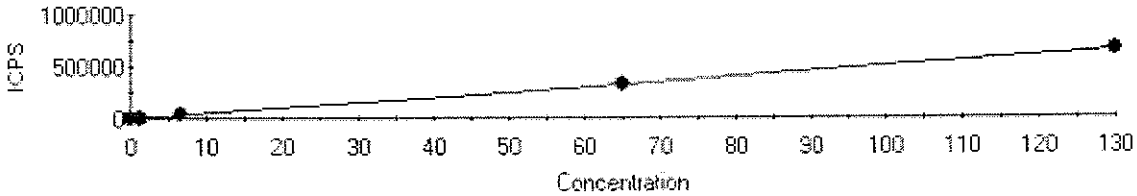
95Mo FQ Block 1



Intercept CPS=17.035420 Intercept Conc=0.009418
Sensitivity=1808.788186 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.000	0.000	17.81	0.00
SEQ-CAL2@S02	2.000	2.009	0.009	3650.74	0.45
SEQ-CAL3@S03	4.000	4.021	0.021	7290.12	0.52
SEQ-CAL4@S04	10.000	9.901	0.099	17925.03	0.99
SEQ-CAL5@S05	25.000	24.807	0.193	44887.43	0.77
SEQ-CAL6@S06	125.000	123.755	1.245	223863.77	1.00
SEQ-CAL7@S07	1250.000	1301.704	51.704	2354524.53	4.14
SEQ-CAL8@S08	2500.000	2603.251	103.251	4708747.18	4.13

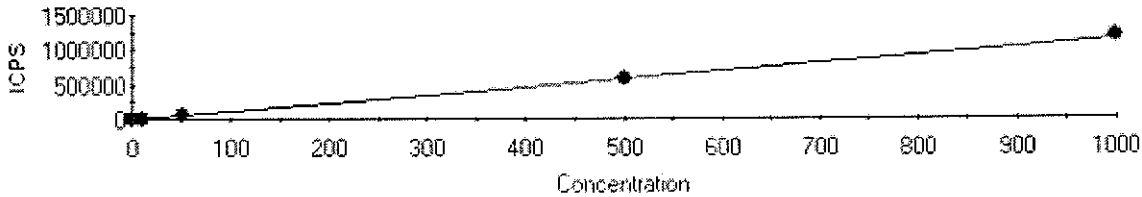
107Ag FQ Block 1



Intercept CPS=6.960083 Intercept Conc=0.001372
Sensitivity=5072.188741 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.000	0.000	7.71	0.00
SEQ-CAL4@S04	1.000	0.991	0.009	5035.36	0.86
SEQ-CAL5@S05	1.300	1.291	0.009	6555.78	0.68
SEQ-CAL6@S06	6.500	6.478	0.022	32866.29	0.33
SEQ-CAL7@S07	65.000	65.163	0.163	330527.60	0.25
SEQ-CAL8@S08	130.000	129.871	0.129	658736.90	0.10

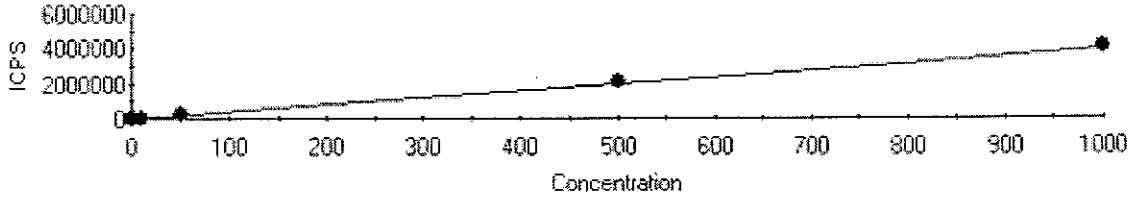
111Cd FQ Block 1



Intercept CPS=5.987215 Intercept Conc=0.005134
Sensitivity=1166.223565 Correlation Coeff=0.999987

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.001	0.001	6.68	0.00
SEQ-CAL4@S04	1.000	0.919	0.081	1077.76	8.10
SEQ-CAL5@S05	10.000	9.945	0.055	11603.93	0.55
SEQ-CAL6@S06	50.000	49.154	0.846	57330.30	1.69
SEQ-CAL7@S07	500.000	501.443	1.443	584800.25	0.29
SEQ-CAL8@S08	1000.000	1014.044	14.044	1182608.27	1.40

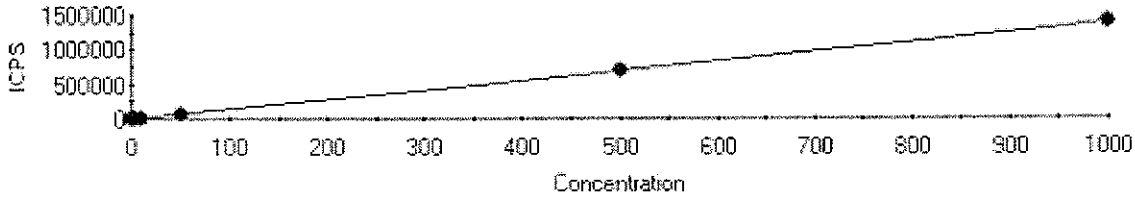
121Sb FQ Block 1



Intercept CPS=19.523347 Intercept Conc=0.004951
Sensitivity=3942.996329 Correlation Coeff=0.999969

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.001	0.001	23.27	0.00
SEQ-CAL4@S04	2.000	1.960	0.040	7745.93	2.02
SEQ-CAL5@S05	10.000	9.795	0.205	38640.15	2.05
SEQ-CAL6@S06	50.000	48.937	1.063	192976.40	2.13
SEQ-CAL7@S07	500.000	513.302	13.302	2023967.01	2.66
SEQ-CAL8@S08	1000.000	1010.603	10.603	3984823.98	1.06

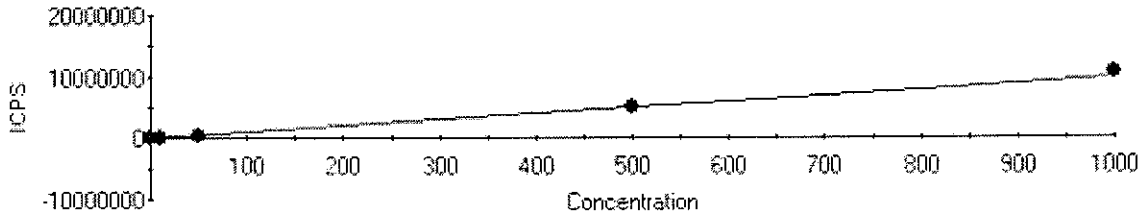
137Ba FQ Block 1



Intercept CPS=9.051704 Intercept Conc=0.006599
Sensitivity=1371.712922 Correlation Coeff=0.999991

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.032	0.032	53.54	0.00
SEQ-CAL3@S03	5.000	4.875	0.125	6696.36	2.50
SEQ-CAL5@S05	10.000	9.982	0.018	13700.87	0.18
SEQ-CAL6@S06	50.000	49.132	0.868	67403.46	1.74
SEQ-CAL7@S07	500.000	501.254	1.254	687585.55	0.25
SEQ-CAL8@S08	1000.000	1011.799	11.799	1387906.83	1.18

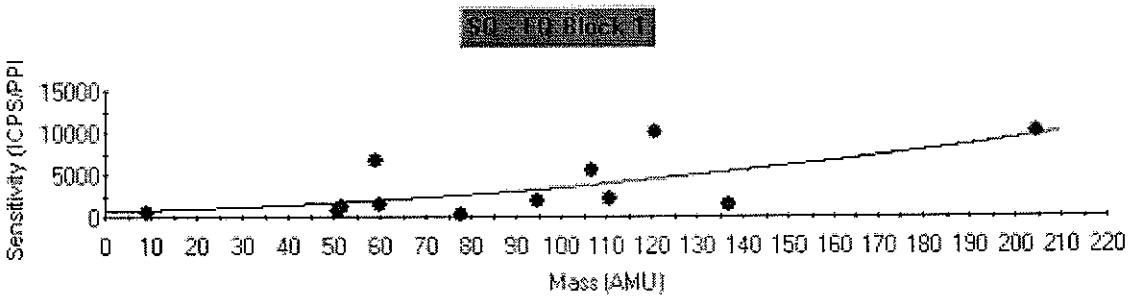
205Tl FQ Block 1



Intercept CPS=-49.166929 Intercept Conc=-0.004897
Sensitivity=10040.983697 Correlation Coeff=0.999954

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.010	0.010	54.30	0.00
SEQ-CAL4@S04	1.000	0.982	0.018	9808.87	1.82
SEQ-CAL5@S05	10.000	9.826	0.174	98616.51	1.74
SEQ-CAL6@S06	50.000	49.321	0.679	495179.94	1.36
SEQ-CAL7@S07	500.000	507.490	7.490	5095652.58	1.50
SEQ-CAL8@S08	1000.000	1036.197	36.197	10404387.46	3.62

Semi Quant Calibration



Coeff 0=632.498530 Coeff 1=14.746219 Coeff 2=0.143966

Symbol	Mass	RSF	Available	Excluded	Sensitivity Measured	Corrected	Calculated	%Error
9Be	9.01	0.7500	1	1	345.99	461.32	777.09	68.5
51V	50.94	0.9900	1	1	791.67	801.59	1757.36	119.2
52Cr	51.94	0.9800	1	1	1076.33	1311.24	1786.82	36.3
59Co	58.93	0.9300	1	1	6205.72	6672.82	2001.55	-70.0
60Ni	59.93	0.9100	1	1	1306.27	5487.22	2033.33	-62.9
78Se	77.92	0.1000	1	1	32.02	1356.10	2655.52	95.8
95Mo	94.91	0.9800	1	1	1808.79	12487.84	3328.72	-73.3
107Ag	106.91	0.9300	1	1	5072.19	10621.16	3854.29	-63.7
111Cd	110.90	0.5660	1	1	1166.22	16022.28	4038.66	-74.8
121Sb	120.90	0.3900	1	1	3943.00	17659.82	4519.83	-74.4
137Ba	136.91	0.9100	1	1	1371.71	13316.05	5349.72	-59.8
205Tl	204.97	1.0000	1	1	10040.98	14242.53	9703.58	-31.9

Dilution Corrected Concentrations

SEQ-CAL1@S01 10/19/2016 07:51:01

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:51:01	99.5%	0.0791	98.5%	-0.0082	-0.0540	0.0043	3.8840	-0.0004	0.0590	-0.0085	0.0765	0.0156	-0.0614	-0.0009	-0.0001	0.0026	0.0011	-0.0016	99.9%
2	07:51:19	99.9%	0.1273	99.2%	0.0162	0.0166	-0.0194	-3.1940	-0.0005	-0.0393	0.0043	-0.1663	-0.0448	0.3533	-0.0010	0.0035	-0.0037	-0.0010	-0.0015	99.7%
3	07:51:32	100.6%	0.0675	102.4%	-0.0080	-0.0178	0.0036	-0.6893	0.0011	-0.0119	0.0042	0.0058	0.0292	-0.2919	0.0019	-0.0022	0.0011	-0.0001	0.0032	100.4%
x		100.0%	0.0913	100.0%	-0.0000	-0.0184	-0.0038	-0.0000	0.0001	0.0026	0.0000	-0.0280	0.0000	0.0000	-0.0000	0.0004	0.0000	-0.0000	0.0000	100.0%
σ		0.6%	0.0317	2.1%	0.0141	0.0353	0.0135	3.5890	0.0009	0.0507	0.0073	0.1249	0.0394	0.3269	0.0017	0.0029	0.0033	0.0011	0.0028	0.4%
%RSD		0.6	34.7300	2.1	0.0000	191.9000	351.9000	0.0000	1535.0000	1968.0000	0.0000	446.1000	0.0000	0.0000	0.0000	674.7000	0.0000	0.0000	0.0000	0.4

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:51:01	-0.0091	-0.0014	-0.0005	0.0007	0.0013	-0.0024	0.0526	98.5%	98.3%	0.0089	0.0000
2	07:51:19	-0.0034	0.0006	0.0010	0.0034	-0.0013	0.0044	0.0225	100.4%	100.6%	0.0092	0.0000
3	07:51:32	0.0126	0.0012	-0.0005	-0.0023	-0.0000	0.0009	0.0222	101.1%	101.1%	0.0128	0.0000
x		0.0000	0.0001	0.0000	0.0006	-0.0000	0.0010	0.0324	100.0%	100.0%	0.0103	0.0000
σ		0.0112	0.0014	0.0009	0.0029	0.0013	0.0034	0.0175	1.3%	1.5%	0.0021	0.0000
%RSD		0.0000	912.8000	0.0000	485.8000	0.0000	353.9000	53.8400	1.3	1.5	20.8000	0.0000

SEQ-CAL2@S02 10/19/2016 07:55:22

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:55:36	100.5%	0.2179	97.6%	-0.0121	0.9668	0.4280	9.7360	0.2301	0.2266	0.0420	1.1750	0.1710	-1.4870	0.6348	2.0000	1.1840	0.7015	1.6650	100.8%
2	07:55:50	101.3%	0.2170	98.0%	-0.0123	1.0120	0.3942	13.9600	0.2164	0.2446	0.0804	1.0790	0.0993	-0.6723	0.6670	1.9600	1.1810	0.6752	1.7360	100.3%
3	07:56:04	101.1%	0.3004	99.8%	-0.0212	1.0540	0.4261	9.2260	0.2063	0.2607	0.0417	0.6860	-0.1247	3.6560	0.6491	2.0660	1.1750	0.7184	1.7610	101.6%
x		101.0%	0.2451	98.5%	-0.0152	1.0110	0.4161	10.9800	0.2176	0.2440	0.0547	0.9799	0.0485	0.4989	0.6503	2.0090	1.1800	0.6984	1.7210	100.9%
σ		0.4%	0.0479	1.2%	0.0052	0.0439	0.0190	2.6010	0.0120	0.0170	0.0222	0.2590	0.1542	2.7650	0.0161	0.0535	0.0044	0.0218	0.0496	0.6%
%RSD		0.4	19.5400	1.2	34.4200	4.3390	4.5700	23.7000	5.4940	6.9890	40.7000	26.4300	318.0000	554.2000	2.4810	2.6640	0.3736	3.1210	2.8840	0.6

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:55:36	0.0213	0.2188	0.0131	0.2020	1.4670	0.4121	2.1240	102.1%	101.4%	0.2134	0.0000
2	07:55:50	0.0055	0.2245	0.0130	0.1978	1.5620	0.4016	2.2170	103.0%	102.6%	0.2094	0.0000
3	07:56:04	-0.0028	0.2208	0.0099	0.1838	1.5040	0.4196	1.9820	104.0%	103.8%	0.2151	0.0000
x		0.0080	0.2214	0.0120	0.1945	1.5110	0.4111	2.1080	103.0%	102.6%	0.2126	0.0000
σ		0.0122	0.0029	0.0018	0.0095	0.0482	0.0090	0.1184	0.9%	1.2%	0.0029	0.0000
%RSD		153.1000	1.3110	15.3600	4.8920	3.1910	2.1960	5.6190	0.9	1.1	1.3860	0.0000

SEQ-CAL3@S03 10/19/2016 07:59:41

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:59:41	97.9%	0.6409	94.7%	-0.0043	2.4960	1.0540	19.1900	0.4945	0.7682	0.1092	2.9730	0.1151	1.3560	1.3810	4.0710	2.3640	1.3120	3.4290	97.3%
2	07:59:55	99.8%	0.4851	95.4%	0.0018	2.5560	0.9870	12.4000	0.4987	0.7802	0.0949	2.4420	0.2730	-1.1350	1.3630	3.9390	2.3370	1.3820	3.5530	98.5%
3	08:00:09	100.4%	0.6328	96.0%	-0.0114	2.6280	1.0900	19.6200	0.5310	0.7811	0.0573	2.6370	0.1226	-0.5990	1.3390	4.0530	2.3600	1.3240	3.6270	96.7%
x		99.4%	0.5862	95.4%	-0.0046	2.5600	1.0440	17.0700	0.5081	0.7765	0.0872	2.6840	0.1702	-0.1260	1.3610	4.0210	2.3540	1.3390	3.5360	97.5%
σ		1.3%	0.0877	0.6%	0.0066	0.0662	0.0524	4.0530	0.0200	0.0072	0.0268	0.2689	0.0891	1.3110	0.0210	0.0714	0.0144	0.0374	0.0999	0.9%
%RSD		1.3	14.9600	0.7	142.2000	2.5840	5.0190	23.7400	3.9350	0.9246	30.7300	10.0200	52.3400	1041.0000	1.5420	1.7760	0.6119	2.7900	2.8250	1.0

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:59:41	0.0122	0.4956	0.0182	0.5370	2.9750	0.9667	4.8520	98.9%	98.7%	0.5046	0.0000
2	07:59:55	0.0287	0.5135	0.0195	0.5148	2.9910	1.0320	4.9150	100.9%	100.5%	0.5046	0.0000
3	08:00:09	0.0141	0.4777	0.0254	0.4848	3.1120	0.9840	4.8590	101.8%	102.2%	0.5144	0.0000
x		0.0183	0.4956	0.0210	0.5122	3.0260	0.9942	4.8750	100.5%	100.5%	0.5079	0.0000
σ		0.0090	0.0179	0.0039	0.0262	0.0748	0.0339	0.0343	1.5%	1.8%	0.0057	0.0000
%RSD		49.2800	3.6100	18.3300	5.1150	2.4720	3.4080	0.7045	1.5	1.7	1.1190	0.0000

SEQ-CAL4@S04 10/19/2016 08:03:44

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:03:44	100.0%	1.0020	94.3%	-0.0019	4.9400	1.9760	32.5800	0.9597	1.0840	0.1454	5.5680	0.4907	-0.4003	3.1870	9.8730	5.8500	3.3100	8.4680	99.3%
2	08:03:58	99.2%	1.1420	95.3%	-0.0089	5.1250	2.0560	22.9000	0.9758	0.9859	0.1743	5.4610	0.3205	-0.4594	3.3070	9.8790	5.9710	3.3970	8.6300	97.5%
3	08:04:12	100.2%	1.2230	96.9%	-0.0266	5.1520	1.9410	28.9100	0.9942	0.9288	0.1838	4.9360	0.3118	-0.0109	3.2300	9.9490	6.1230	3.3290	8.6970	99.3%
x		99.8%	1.1220	95.5%	-0.0125	5.0730	1.9910	28.1300	0.9766	0.9996	0.1678	5.3210	0.3743	-0.2902	3.2410	9.9010	5.9820	3.3450	8.5980	98.7%
σ		0.5%	0.1120	1.4%	0.0127	0.1153	0.0585	4.8890	0.0172	0.0785	0.0200	0.3384	0.1009	0.2437	0.0608	0.0422	0.1368	0.0457	0.1178	1.1%
%RSD		0.5	9.9810	1.4	102.1000	2.2730	2.9400	17.3800	1.7650	7.8550	11.9100	6.3590	26.9500	83.9600	1.8740	0.4262	2.2870	1.3660	1.3700	1.1

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:03:44	0.0425	0.9776	0.0384	0.9297	7.3920	1.9620	9.8870	99.5%	99.7%	0.9789	0.0000
2	08:03:58	0.0745	0.9961	0.0379	0.8807	7.3850	1.9810	9.5860	100.8%	100.8%	0.9819	0.0000
3	08:04:12	0.0488	1.0000	0.0431	0.9466	7.4170	1.9350	9.6520	103.4%	102.8%	0.9846	0.0000
x		0.0553	0.9914	0.0398	0.9190	7.3980	1.9600	9.7080	101.2%	101.1%	0.9818	0.0000
σ		0.0170	0.0121	0.0029	0.0342	0.0168	0.0233	0.1584	2.0%	1.6%	0.0029	0.0000
%RSD		30.7100	1.2240	7.2200	3.7230	0.2276	1.1870	1.6320	2.0	1.5	0.2929	0.0000

SEQ-CAL5@S05 10/19/2016 08:07:46

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:07:46	100.2%	9.8310	94.8%	6.1080	10.2900	10.4900	58.9100	9.9410	9.7370	0.2822	10.4600	0.6727	-3.4110	7.7900	24.5200	14.6200	8.4740	21.2600	96.3%
2	08:08:00	100.1%	9.7980	95.7%	6.1670	10.2200	10.2900	52.7200	10.0900	10.1000	0.3842	9.0800	0.5029	-0.8428	7.9450	24.9100	14.8700	8.5900	21.5700	97.2%
3	08:08:13	101.8%	9.8740	95.9%	6.0410	10.0200	10.2600	76.3700	10.1100	10.1300	0.3328	9.3570	0.2264	3.4070	7.9730	25.0000	15.0200	8.5410	22.0000	97.0%
x		100.7%	9.8340	95.5%	6.1060	10.1800	10.3500	62.6600	10.0500	9.9900	0.3331	9.6330	0.4673	-0.2821	7.9020	24.8100	14.8400	8.5350	21.6100	96.9%
σ		1.0%	0.0383	0.6%	0.0628	0.1401	0.1256	12.2600	0.0931	0.2203	0.0510	0.7319	0.2252	3.4430	0.0986	0.2562	0.2004	0.0580	0.3714	0.5%
%RSD		1.0	0.3890	0.6	1.0280	1.3770	1.2130	19.5700	0.9271	2.2050	15.3200	7.5980	48.2000	1221.0000	1.2480	1.0330	1.3510	0.6791	1.7180	0.5

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:07:46	0.5045	1.2840	0.3311	9.6940	9.1700	9.6320	10.1700	98.0%	98.0%	9.9070	0.0000
2	08:08:00	0.4997	1.2760	0.3617	10.0200	9.4370	9.7690	9.6930	99.9%	100.7%	9.7620	0.0000
3	08:08:13	0.4845	1.3130	0.3267	10.1200	9.5660	9.9840	10.0800	101.2%	101.7%	9.8100	0.0000
x		0.4962	1.2910	0.3399	9.9450	9.3910	9.7950	9.9820	99.7%	100.2%	9.8260	0.0000
σ		0.0104	0.0196	0.0191	0.2241	0.2017	0.1773	0.2545	1.6%	1.9%	0.0741	0.0000
%RSD		2.1040	1.5200	5.6100	2.2530	2.1480	1.8100	2.5490	1.6	1.9	0.7535	0.0000

SEQ-CAL6@S06 10/19/2016 08:11:47

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:11:47	100.4%	50.7200	93.7%	30.3500	51.1600	51.2000	300.7000	49.1000	49.0700	2.0340	50.5600	3.1230	0.4161	39.0500	121.8000	72.3200	41.3600	105.6000	96.6%
2	08:12:01	100.6%	50.5500	94.9%	30.2700	50.9000	51.0100	361.0000	49.5000	49.7800	2.1480	49.5900	3.0400	-2.6270	39.4100	122.9000	73.3100	42.0100	107.3000	96.8%
3	08:12:15	100.3%	50.3000	94.3%	30.7000	49.4000	50.1200	330.5000	50.1100	50.2800	2.0610	49.4100	2.9640	-1.3270	40.2300	126.5000	74.2000	42.6600	109.3000	98.4%
x		100.4%	50.5300	94.3%	30.4400	50.4900	50.7800	330.7000	49.5700	49.7100	2.0810	49.8500	3.0420	-1.1790	39.5700	123.8000	73.2800	42.0100	107.4000	97.3%
σ		0.2%	0.2108	0.6%	0.2317	0.9489	0.5771	30.1300	0.5068	0.6073	0.0596	0.6149	0.0797	1.5270	0.6048	2.4890	0.9384	0.6529	1.8470	1.0%
%RSD		0.2	0.4172	0.7	0.7612	1.8800	1.1360	9.1110	1.0270	1.2220	2.8640	1.2330	2.6200	129.5000	1.5290	2.0110	1.2810	1.5540	1.7200	1.0

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:11:47	2.2960	6.3010	1.6410	48.5100	45.0800	48.4000	48.2300	99.3%	99.1%	49.4500	0.0000
2	08:12:01	2.2980	6.5440	1.7930	48.8800	45.8000	48.8600	48.9600	101.5%	101.1%	49.4500	0.0000
3	08:12:15	2.4500	6.5890	1.8110	50.0700	47.1100	49.5500	50.2000	103.0%	104.4%	49.0600	0.0000
x		2.3480	6.4780	1.7480	49.1500	45.9900	48.9400	49.1300	101.3%	101.6%	49.3200	0.0000
σ		0.0880	0.1550	0.0934	0.8137	1.0300	0.5775	0.9962	1.9%	2.7%	0.2241	0.0000
%RSD		3.7480	2.3930	5.3430	1.6550	2.2400	1.1800	2.0280	1.8	2.6	0.4544	0.0000

SEQ-CAL7@S07 10/19/2016 08:15:49

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:15:49	99.6%	500.9000	93.3%	300.3000	498.1000	499.2000	2476.0000	ŕ502.4000	499.9000	18.3200	496.9000	26.9800	1.1650	400.7000	1287.0000	ŕ773.3000	426.0000	ŕ1123.0000	97.2%
2	08:16:03	100.7%	499.7000	95.6%	301.1000	497.6000	500.0000	2777.0000	ŕ500.0000	497.0000	18.5600	504.0000	26.2800	-1.6320	406.3000	1293.0000	ŕ771.5000	430.3000	ŕ1122.0000	97.0%
3	08:16:16	100.3%	503.5000	94.7%	305.4000	490.9000	497.5000	2615.0000	ŕ505.7000	505.9000	19.1000	504.1000	26.9700	-0.3149	409.0000	1324.0000	ŕ781.4000	439.4000	ŕ1131.0000	98.2%
x		100.2%	501.4000	94.5%	302.3000	495.5000	498.9000	2623.0000	ŕ502.7000	500.9000	18.6600	501.7000	26.7500	-0.2606	405.3000	1302.0000	ŕ775.4000	431.9000	ŕ1126.0000	97.5%
σ		0.5%	1.9440	1.2%	2.7390	3.9990	1.2810	150.5000	ŕ2.9070	4.5680	0.3963	4.1110	0.4022	1.3990	4.2390	19.9900	ŕ5.2960	6.8690	ŕ4.8180	0.6%
%RSD		0.5	0.3877	1.2	0.9061	0.8070	0.2569	5.7370	ŕ0.5782	0.9118	2.1240	0.8194	1.5040	536.8000	1.0460	1.5360	ŕ0.6831	1.5900	ŕ0.4280	0.6

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:15:49	23.6500	64.9200	17.2200	499.8000	481.3000	507.8000	497.5000	101.5%	102.9%	ŕ508.8000	0.0000
2	08:16:03	23.4400	65.0600	17.5700	499.3000	484.6000	513.6000	503.1000	104.8%	105.7%	ŕ506.5000	0.0000
3	08:16:16	23.9000	65.5100	17.4800	505.2000	494.6000	518.6000	503.1000	107.3%	107.5%	ŕ507.2000	0.0000
x		23.6700	65.1600	17.4200	501.4000	486.8000	513.3000	501.3000	104.5%	105.3%	ŕ507.5000	0.0000
σ		0.2304	0.3103	0.1806	3.2690	6.9090	5.4030	3.2220	2.9%	2.3%	ŕ1.1580	0.0000
%RSD		0.9733	0.4762	1.0360	0.6519	1.4190	1.0530	0.6429	2.8	2.2	ŕ0.2282	0.0000

SEQ-CAL8@S08 10/19/2016 08:19:52

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:19:52	96.5%	ж1040.0000	87.6%	606.5000	ж1014.0000	ж1017.0000	4415.0000	ŕ994.2000	999.3000	37.8900	ж1004.0000	52.1300	1.4680	ŕ822.1000	тж2577.0000	ŕ1530.0000	ŕ872.4000	ŕ2228.0000	92.1%
2	08:20:06	97.2%	ж1022.0000	89.5%	608.0000	977.9000	987.5000	4638.0000	ŕ987.6000	993.1000	37.4900	976.0000	52.1000	0.5005	ŕ833.7000	тж2613.0000	ŕ1542.0000	ŕ877.8000	ŕ2251.0000	95.7%
3	08:20:21	97.4%	ж1028.0000	89.4%	618.6000	ж1002.0000	ж1004.0000	4845.0000	тж1005.0000	ж1015.0000	35.9100	996.1000	54.7900	0.6004	ŕ835.0000	тж2621.0000	ŕ1562.0000	ŕ884.9000	ŕ2261.0000	94.6%
x		97.1%	ж1030.0000	88.8%	611.0000	ж998.1000	ж1003.0000	4633.0000	тж995.8000	ж1002.0000	37.1000	ж992.1000	53.0100	0.8563	ŕ830.3000	тж2603.0000	ŕ1544.0000	ŕ878.4000	ŕ2247.0000	94.1%
σ		0.5%	ж9.2990	1.0%	6.5850	ж18.5400	ж14.8200	215.4000	тж9.0120	ж11.1700	1.0490	ж14.5700	1.5460	0.5322	ŕ7.1010	тж23.3700	ŕ16.0700	ŕ6.2610	ŕ17.0200	1.8%
%RSD		0.5	ж0.9027	1.2	1.0780	ж1.8580	ж1.4780	4.6500	тж0.9051	ж1.1150	2.8280	ж1.4690	2.9170	62.1500	ŕ0.8553	тж0.8976	ŕ1.0400	ŕ0.7127	ŕ0.7576	1.9

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:19:52	46.6400	128.8000	34.8200	ж1004.0000	ŕ950.9000	тж1001.0000	тж1011.0000	102.0%	101.5%	тж1047.0000	0.0000
2	08:20:06	47.1900	130.0000	34.9200	ж1008.0000	ŕ953.5000	тж1015.0000	тж1008.0000	105.0%	106.7%	тж1028.0000	0.0000
3	08:20:21	47.3800	ж130.9000	35.0800	ж1030.0000	ŕ964.5000	тж1016.0000	тж1017.0000	106.9%	107.5%	тж1034.0000	0.0000
x		47.0700	ж129.9000	34.9400	ж1014.0000	ŕ956.3000	тж1011.0000	тж1012.0000	104.6%	105.2%	тж1036.0000	0.0000
σ		0.3829	ж1.0320	0.1320	ж13.5400	ŕ7.1900	тж8.5050	тж4.7840	2.5%	3.2%	тж9.4660	0.0000
%RSD		0.8134	ж0.7949	0.3778	ж1.3360	ŕ0.7519	тж0.8416	тж0.4729	2.3	3.1	тж0.9135	0.0000

SEQ-ICV@ICV01 10/19/2016 08:23:58 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:24:12	96.5%	107.9000	85.1%	0.0564	100.6000	99.2800	609.4000	102.3000	102.5000	7.3330	206.6000	11.1500	0.2698	3.3700	10.7000	6.3870	3.5800	9.2770	93.6%
2	08:24:25	96.0%	107.7000	85.8%	0.0698	100.2000	99.6000	589.4000	102.3000	101.7000	7.9070	205.7000	11.3900	-0.8572	3.4280	10.7800	6.4560	3.7490	9.3870	94.7%
3	08:24:44	97.6%	106.0000	87.0%	0.0705	99.4900	98.9600	625.0000	102.9000	101.9000	7.9870	209.5000	11.3900	-2.1350	3.4790	10.7100	6.4670	3.6390	9.4410	95.4%
x		96.7%	108.288%	86.0%	0.0656	100.101%	101.307%	608.0000	103.547%	104.111%	7.7430	103.127%	11.3100	-0.9074	3.4260	10.7300	6.4370	3.6560	9.3680	94.6%
σ		0.8%	n/a	0.9%	0.0079	n/a	n/a	17.8600	n/a	n/a	0.3565	n/a	0.1376	1.2030	0.0545	0.0415	0.0433	0.0855	0.0839	0.9%
%RSD		0.9	0.9682	1.1	12.1100	0.5726	0.3217	2.9380	0.3635	0.3965	4.6040	0.9636	1.2170	132.6000	1.5900	0.3871	0.6728	2.3380	0.8953	0.9

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:24:12	4.7550	103.8000	3.4890	103.1000	0.1690	200.2000	101.7000	101.8%	103.0%	ŕ220.4000	0.0000
2	08:24:25	4.6990	103.0000	3.5490	102.2000	0.1594	202.0000	100.4000	104.9%	105.7%	ŕ218.0000	0.0000
3	08:24:44	4.9690	102.8000	3.5350	101.2000	0.1860	202.7000	101.2000	105.7%	107.2%	ŕ215.4000	0.0000
x		4.8080	104.248%	3.5240	103.200%	0.1715	101.841%	101.118%	104.1%	105.3%	ŕ105.325%	0.0000
σ		0.1427	n/a	0.0315	n/a	0.0135	n/a	n/a	2.1%	2.2%	ŕn/a	0.0000
%RSD		2.9680	0.5370	0.8949	0.9352	7.8590	0.6290	0.6663	2.0	2.0	ŕ1.1540	0.0000

SEQ-ICB@ICB01 10/19/2016 08:28:28 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:28:28	96.8%	0.1321	86.3%	-0.0019	-0.0107	-0.0016	-0.1969	0.0139	0.0075	0.0177	-0.0920	0.2426	-3.6470	0.0254	0.0725	0.0471	0.0146	0.0552	97.1%
2	08:28:42	98.8%	0.0752	87.9%	-0.0122	0.0374	0.0766	6.9240	0.0148	-0.0525	0.0051	-0.0112	0.0230	-0.1445	0.0259	0.0534	0.0386	0.0142	0.0541	93.6%
3	08:28:56	98.1%	0.0635	89.5%	-0.0061	0.0341	0.0565	2.4640	0.0151	-0.0374	0.0318	0.2417	-0.0697	1.4010	0.0275	0.0678	0.0410	0.0232	0.0644	94.8%
x		97.9%	0.0902	87.9%	-0.0067	0.0203	0.0438	3.0640	0.0146	-0.0275	0.0182	0.0461	0.0653	-0.7969	0.0262	0.0646	0.0422	0.0173	0.0579	95.2%
σ		1.0%	0.0367	1.6%	0.0052	0.0269	0.0406	3.5980	0.0006	0.0312	0.0133	0.1741	0.1604	2.5870	0.0011	0.0100	0.0044	0.0051	0.0056	1.8%
%RSD		1.0	40.6600	1.8	76.9700	132.8000	92.6300	117.4000	4.2330	113.6000	73.2600	377.2000	245.6000	324.6000	4.2670	15.4300	10.4500	29.4500	9.7460	1.9

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:28:28	-0.0040	0.0225	0.0011	0.0069	0.0303	0.0878	0.0282	101.2%	101.3%	0.0357	0.0000
2	08:28:42	0.0115	0.0117	-0.0005	0.0127	0.0434	0.0897	0.0251	102.9%	102.5%	0.0415	0.0000
3	08:28:56	0.0042	0.0156	0.0026	0.0153	0.0449	0.0865	0.0391	104.4%	105.9%	0.0432	0.0000
x		0.0039	0.0166	0.0011	0.0117	0.0395	0.0880	0.0308	102.8%	103.2%	0.0401	0.0000
σ		0.0077	0.0054	0.0016	0.0043	0.0080	0.0016	0.0073	1.6%	2.4%	0.0039	0.0000
%RSD		196.8000	32.8500	145.6000	36.8100	20.2800	1.8230	23.6100	1.6	2.3	9.7680	0.0000

SEQ-IFA@ICSA01 10/19/2016 08:32:35 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:32:35	93.4%	0.3964	92.3%	518.0000	-0.4735	21.8700	85.6200	1.2790	5.7540	-0.0085	-0.1191	-0.2016	4.7250	674.5000	τ2183.0000	τ1305.0000	725.3000	τ1890.0000	91.6%
2	08:32:49	96.7%	0.3085	97.0%	518.5000	-0.5404	21.3800	95.9700	1.2620	5.6880	0.0187	-0.0481	-0.1516	2.7840	678.7000	τ2183.0000	τ1297.0000	τ737.4000	τ1890.0000	93.5%
3	08:33:05	95.3%	0.2976	100.8%	517.7000	-0.8127	21.7900	130.0000	1.2740	5.5780	-0.0085	-0.1223	-0.3755	6.5410	τ691.0000	τ2161.0000	τ1287.0000	τ732.9000	τ1866.0000	93.5%
x		95.2%	1.#IO%	96.7%	518.1000	-121.778%	103.237%	103.9000	127.172%	94.559%	0.0006	-32.174%	-0.2429	4.6830	τ681.4000	τ2176.0000	τ1296.0000	τ731.9000	τ1882.0000	92.9%
σ		1.7%	n/a	4.3%	0.3952	n/a	n/a	23.2200	n/a	n/a	0.0157	n/a	0.1175	1.8790	τ8.5380	τ12.5100	τ8.9380	τ6.1290	τ13.5100	1.1%
%RSD		1.7	16.2000	4.4	0.0763	29.5100	1.2220	22.3600	0.7063	1.5650	2669.0000	43.4600	48.4000	40.1200	τ1.2530	τ0.5748	τ0.6895	τ0.8374	τ0.7177	1.2

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:32:35	-0.0001	0.0116	0.7599	0.4774	1.0610	1.1950	2.0360	99.5%	100.9%	0.0269	0.0000
2	08:32:49	0.0207	0.0097	0.6962	0.4963	0.1398	1.1230	2.0420	104.5%	105.0%	0.0217	0.0000
3	08:33:05	-0.0054	0.0137	0.6631	0.2507	0.1460	1.1000	1.9680	108.5%	109.7%	0.0227	0.0000
x		0.0050	1.#IO%	0.7064	58.303%	0.4490	75.959%	167.962%	104.2%	105.2%	1.#IO%	0.0000
σ		0.0138	n/a	0.0492	n/a	0.5303	n/a	n/a	4.5%	4.4%	n/a	0.0000
%RSD		273.2000	17.0500	6.9660	33.4800	118.1000	4.3410	2.0270	4.3	4.2	11.7100	0.0000

SEQ-IFB@ICSAB01 10/19/2016 08:36:38 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:36:38	89.4%	20.0500	102.2%	505.3000	21.7700	43.8900	255.3000	20.3300	23.9800	0.6232	20.3200	0.7610	4.6330	τ681.4000	τ2139.0000	τ1269.0000	711.8000	τ1838.0000	90.7%
2	08:36:52	89.3%	19.6000	104.3%	512.5000	21.5200	43.4600	243.6000	20.6800	24.4900	0.8106	20.7000	0.4660	9.6050	670.9000	τ2128.0000	τ1262.0000	τ722.5000	τ1849.0000	91.7%
3	08:37:06	89.4%	18.5900	105.8%	510.8000	21.3800	43.3300	222.5000	20.5800	23.9800	0.6088	19.4400	0.9187	2.8700	678.4000	τ2148.0000	τ1277.0000	τ722.6000	τ1848.0000	92.8%
x		89.4%	102.175%	104.1%	509.5000	113.466%	108.899%	240.5000	102.663%	100.639%	0.6809	106.060%	0.7152	5.7030	τ676.9000	τ2138.0000	τ1269.0000	τ719.0000	τ1845.0000	91.7%
σ		0.1%	n/a	1.8%	3.7540	n/a	n/a	16.6300	n/a	n/a	0.1126	n/a	0.2298	3.4920	τ5.3910	τ10.1700	τ7.7110	τ6.2310	τ6.4540	1.1%
%RSD		0.1	3.8500	1.8	0.7368	0.9156	0.6763	6.9160	0.8824	1.2080	16.5400	3.2090	32.1300	61.2400	τ0.7964	τ0.4755	τ0.6075	τ0.8667	τ0.3498	1.2

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:36:38	0.8977	18.2700	1.3780	18.4200	0.1361	20.4300	22.0600	106.9%	106.5%	19.4200	0.0000
2	08:36:52	0.8513	18.4300	1.3080	19.2400	0.1380	20.8200	22.9700	109.4%	109.1%	19.6600	0.0000
3	08:37:06	0.8652	18.3700	1.3660	19.6200	0.1553	21.2300	23.0700	111.0%	111.8%	19.5700	0.0000
x		0.8714	101.974%	1.3510	95.479%	0.1431	94.680%	103.187%	109.1%	109.1%	93.102%	0.0000
σ		0.0238	n/a	0.0378	n/a	0.0106	n/a	n/a	2.1%	2.6%	n/a	0.0000
%RSD		2.7320	0.4470	2.8010	3.2210	7.4030	1.9180	2.4550	1.9	2.4	0.6165	0.0000

SEQ-CCV@CCV01 10/19/2016 08:40:44 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:40:58	97.5%	497.2000	111.9%	300.3000	505.2000	505.9000	2654.0000	τ504.0000	498.6000	20.2500	516.4000	28.9200	-0.5808	405.8000	τ1299.0000	τ773.6000	428.0000	τ1125.0000	106.9%
2	08:41:12	96.5%	498.6000	113.2%	300.9000	504.4000	507.7000	2594.0000	τ501.9000	499.5000	19.3200	511.1000	26.7600	2.2520	408.5000	τ1308.0000	τ778.3000	437.0000	τ1124.0000	107.8%
3	08:41:25	96.9%	497.3000	114.1%	301.7000	498.3000	499.7000	2621.0000	τ497.4000	496.4000	19.2000	509.5000	26.5700	2.5980	408.2000	τ1299.0000	τ774.0000	433.5000	τ1123.0000	109.8%
x		96.9%	99.536%	113.1%	301.0000	100.523%	100.888%	2623.0000	τ100.213%	99.636%	19.5900	102.466%	27.4200	1.4230	407.5000	τ1302.0000	τ775.3000	432.9000	τ1124.0000	108.2%
σ		0.5%	n/a	1.1%	0.7208	n/a	n/a	30.0900	τn/a	n/a	0.5731	n/a	1.3050	1.7440	1.5100	τ5.1860	τ2.6340	4.5080	τ0.8995	1.5%
%RSD		0.5	0.1539	1.0	0.2395	0.7514	0.8337	1.1470	τ0.6706	0.3156	2.9260	0.7002	4.7610	122.6000	0.3706	τ0.3983	τ0.3398	1.0410	τ0.0800	1.4

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:40:58	24.0700	65.8800	17.7900	511.1000	491.2000	532.5000	511.5000	118.8%	119.4%	τ504.9000	0.0000
2	08:41:12	24.5200	66.1100	18.0100	514.7000	496.1000	530.7000	515.6000	121.0%	121.5%	τ499.6000	0.0000
3	08:41:25	24.3900	66.0700	17.9100	513.2000	495.5000	528.2000	514.8000	121.9%	122.6%	τ495.1000	0.0000
x		24.3300	101.574%	17.9000	102.599%	494.2000	106.092%	102.795%	120.6%	121.2%	τ99.973%	0.0000
σ		0.2318	n/a	0.1097	n/a	2.6470	n/a	n/a	1.6%	1.6%	τn/a	0.0000
%RSD		0.9529	0.1876	0.6128	0.3537	0.5355	0.4016	0.4175	1.3	1.3	τ0.9818	0.0000

SEQ-CCB@CCB01 10/19/2016 08:45:01 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:45:01	94.9%	0.1316	103.9%	0.0031	-0.0325	0.0586	16.2500	0.0451	0.0224	-0.0085	0.0896	-0.0691	1.5130	0.0813	0.2693	0.1550	0.0772	0.2399	105.9%
2	08:45:15	96.5%	0.1763	105.0%	-0.0073	-0.0039	0.0473	13.2800	0.0435	0.0352	0.0034	-0.0770	-0.0174	1.1910	0.1144	0.2854	0.1515	0.0933	0.2723	107.5%
3	08:45:28	95.6%	0.0659	106.0%	0.0213	-0.0524	0.0549	17.5200	0.0366	0.0945	0.0036	-0.1720	-0.0496	1.0020	0.0859	0.3239	0.1818	0.1045	0.2812	105.5%
x		95.7%	0.1246	105.0%	0.0057	-0.0296	0.0536	15.6800	0.0418	0.0507	-0.0005	-0.0532	-0.0454	1.2350	0.0939	0.2929	0.1628	0.0917	0.2645	106.3%
σ		0.8%	0.0556	1.0%	0.0145	0.0244	0.0058	2.1770	0.0045	0.0385	0.0069	0.1324	0.0261	0.2586	0.0179	0.0281	0.0166	0.0138	0.0217	1.1%
%RSD		0.8	44.5900	1.0	252.9000	82.2900	10.7500	13.8800	10.8300	75.8800	1344.0000	249.2000	57.5200	20.9300	19.0900	9.5920	10.2000	15.0000	8.2220	1.0

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:45:01	-0.0048	0.0084	0.0009	0.0320	0.0683	0.0523	0.0739	109.9%	111.1%	0.0766	0.0000
2	08:45:15	-0.0055	0.0071	0.0023	0.0313	0.0545	0.0589	0.0810	112.4%	112.2%	0.0863	0.0000
3	08:45:28	0.0154	0.0052	0.0022	0.0519	0.0706	0.0693	0.0980	112.9%	114.3%	0.0830	0.0000
x		0.0017	0.0069	0.0018	0.0384	0.0645	0.0602	0.0843	111.7%	112.5%	0.0820	0.0000
σ		0.0119	0.0016	0.0008	0.0117	0.0087	0.0086	0.0124	1.6%	1.6%	0.0049	0.0000
%RSD		688.3000	23.4100	43.2200	30.4200	13.5300	14.2200	14.6800	1.5	1.4	6.0070	0.0000

SEQIBLI

~~Q[illegible]~~ 10/19/2016 08:49:04

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:49:04	96.9%	0.4073	117.0%	37.8700	28.8800	7.6880	42.9900	6.3970	5.6990	1.2980	33.2500	1.8000	2.0370	5.5370	16.8800	10.0200	5.5840	14.5000	106.2%
2	08:49:18	98.2%	0.3454	118.6%	38.3800	28.7500	7.6570	19.3500	6.3590	5.8050	1.3430	30.6200	1.5770	3.2010	5.5800	16.9600	10.0300	5.5870	14.5000	107.4%
3	08:49:32	98.2%	0.4605	120.4%	39.0000	28.9600	7.8310	41.3300	6.4290	5.7280	1.2840	33.5000	1.7210	2.0260	5.5280	17.0700	10.1200	5.8040	14.6600	106.4%
x		97.8%	0.4044	118.7%	38.4100	28.8700	7.7250	34.5600	6.3950	5.7440	1.3080	32.4600	1.6990	2.4220	5.5480	16.9700	10.0500	5.6580	14.5600	106.7%
σ		0.7%	0.0576	1.7%	0.5620	0.1046	0.0925	13.1900	0.0349	0.0546	0.0307	1.5940	0.1131	0.6750	0.0278	0.0917	0.0540	0.1263	0.0926	0.6%
%RSD		0.7	14.2400	1.4	1.4630	0.3625	1.1970	38.1700	0.5454	0.9500	2.3450	4.9130	6.6530	27.8800	0.5013	0.5401	0.5374	2.2320	0.6361	0.6

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:49:04	0.0772	0.5245	0.0205	0.2983	0.5565	5.1310	226.4000	113.1%	113.2%	0.2810	0.0000
2	08:49:18	0.0628	0.5394	0.0265	0.3281	0.5574	5.1200	227.8000	116.3%	116.0%	0.2974	0.0000
3	08:49:32	0.0704	0.5410	0.0274	0.2679	0.5580	5.2540	230.1000	117.9%	118.7%	0.2882	0.0000
x		0.0701	0.5350	0.0248	0.2981	0.5573	5.1680	228.1000	115.7%	116.0%	0.2888	0.0000
σ		0.0072	0.0091	0.0037	0.0301	0.0007	0.0746	1.8800	2.4%	2.8%	0.0082	0.0000
%RSD		10.2600	1.7000	15.0800	10.1000	0.1298	1.4440	0.8241	2.1	2.4	2.8440	0.0000

CM 10/21

SED1BL2

[redacted] 10/19/2016 08:53:55

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:53:55	100.8%	0.5187	118.0%	16.5500	28.1000	6.3570	39.0800	7.2880	4.9620	0.7819	13.7800	0.9723	-1.0150	7.2480	22.3100	13.5900	7.6700	19.4200	107.9%
2	08:54:09	99.3%	0.4614	120.2%	16.4200	28.6300	6.4480	29.9200	7.2920	4.9480	0.7457	14.7400	1.0030	-0.7268	7.4390	22.2200	13.4300	7.7530	19.5700	106.3%
3	08:54:23	100.8%	0.3089	120.2%	16.7600	28.4400	6.4350	47.9500	7.3450	5.0380	0.7120	13.9700	0.8388	1.5060	7.5700	22.6400	13.7200	7.7500	19.5800	106.0%
X		100.3%	0.4297	119.4%	16.5800	28.3900	6.4130	38.9800	7.3090	4.9830	0.7465	14.1600	0.9379	-0.0784	7.4190	22.3900	13.5800	7.7240	19.5300	106.8%
σ		0.9%	0.1084	1.3%	0.1726	0.2712	0.0489	9.0170	0.0317	0.0482	0.0350	0.5081	0.0871	1.3800	0.1622	0.2175	0.1501	0.0472	0.0908	1.0%
%RSD		0.9	25.2300	1.1	1.0410	0.9553	0.7621	23.1300	0.4335	0.9682	4.6840	3.5870	9.2890	1761.0000	2.1860	0.9714	1.1050	0.6106	0.4648	0.9

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:53:55	0.1572	4.8640	0.1270	3.1080	1.3930	13.0600	46.5200	114.5%	112.5%	0.2539	0.0000
2	08:54:09	0.1920	4.8190	0.1386	3.4680	1.3980	13.4200	47.1400	114.9%	115.3%	0.2704	0.0000
3	08:54:23	0.1924	4.7710	0.1099	3.4100	1.4090	13.4000	46.7200	118.1%	117.2%	0.2630	0.0000
X		0.1805	4.8180	0.1252	3.3280	1.4000	13.2900	46.7900	115.9%	115.0%	0.2624	0.0000
σ		0.0202	0.0464	0.0145	0.1935	0.0081	0.2021	0.3202	2.0%	2.4%	0.0082	0.0000
%RSD		11.1900	0.9635	11.5600	5.8140	0.5820	1.5200	0.6842	1.7	2.0	3.1340	0.0000

SED1BL5

[redacted] 10/19/2016 08:57:55

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:57:55	99.2%	1.7540	109.0%	4.1030	4.3900	1.0780	-8.3600	14.0400	12.5800	0.3947	3.6410	-0.1031	4.1170	1.4800	4.3120	2.4620	1.3840	3.6420	107.3%
2	08:58:09	100.8%	1.6180	110.9%	3.9930	4.5530	1.0730	-21.4300	14.0400	12.6700	0.4181	3.4770	0.1140	0.4715	1.4160	4.3910	2.5740	1.4370	3.5820	107.4%
3	08:58:23	99.8%	1.5300	111.1%	4.2730	4.5540	1.0740	-9.5050	14.2600	12.7400	0.3332	2.9410	0.1393	1.5060	1.5150	4.2300	2.6450	1.4940	3.7850	108.1%
X		99.9%	1.6340	110.3%	4.1230	4.4990	1.0750	-13.1000	14.1100	12.6600	0.3820	3.3530	0.0501	2.0320	1.4700	4.3110	2.5600	1.4380	3.6700	107.6%
σ		0.8%	0.1126	1.2%	0.1412	0.0945	0.0027	7.2380	0.1280	0.0793	0.0439	0.3661	0.1333	1.8790	0.0503	0.0804	0.0920	0.0554	0.1042	0.4%
%RSD		0.8	6.8920	1.1	3.4260	2.1000	0.2487	55.2600	0.9071	0.6267	11.4900	10.9200	266.1000	92.4700	3.4180	1.8650	3.5950	3.8510	2.8410	0.4

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:57:55	0.6443	1.7240	0.3571	9.8830	0.1452	0.9545	92.8800	121.8%	120.6%	0.1640	0.0000
2	08:58:09	0.6329	1.7290	0.3408	9.8190	0.1451	0.9576	93.6900	124.7%	122.7%	0.1735	0.0000
3	08:58:23	0.6173	1.7530	0.3476	10.1800	0.1584	0.9232	94.4400	127.0%	125.2%	0.1613	0.0000
X		0.6315	1.7350	0.3485	9.9600	0.1496	0.9451	93.6700	124.5%	122.9%	0.1663	0.0000
σ		0.0136	0.0155	0.0082	0.1920	0.0076	0.0191	0.7799	2.6%	2.3%	0.0064	0.0000
%RSD		2.1490	0.8905	2.3450	1.9270	5.1110	2.0170	0.8326	2.1	1.9	3.8360	0.0000

SED1BL4

[redacted] 10/19/2016 09:01:55

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:01:55	98.2%	2.0900	109.4%	3.9690	6.8650	2.2620	-11.3900	19.6500	16.0100	0.3225	2.9840	0.0734	2.6270	0.8081	2.1130	1.2680	0.7324	1.7750	107.7%
2	09:02:09	99.1%	2.2780	111.4%	4.0850	6.9560	2.3790	-13.5000	19.6100	16.0800	0.4230	3.1600	0.1014	2.5920	0.8144	2.0990	1.1780	0.6847	1.7910	106.2%
3	09:02:23	99.3%	2.1440	112.9%	4.0990	6.8790	2.2780	-19.9300	19.6800	16.5000	0.2871	3.0490	0.0076	2.9900	0.8345	2.0900	1.3340	0.7044	1.8570	107.7%
X		98.9%	2.1710	111.2%	4.0510	6.9000	2.3060	-14.9400	19.6500	16.2000	0.3442	3.0640	0.0608	2.7360	0.8190	2.1010	1.2600	0.7072	1.8080	107.2%
σ		0.6%	0.0966	1.8%	0.0717	0.0492	0.0633	4.4500	0.0375	0.2693	0.0705	0.0890	0.0481	0.2202	0.0138	0.0117	0.0785	0.0240	0.0434	0.9%
%RSD		0.6	4.4480	1.6	1.7710	0.7130	2.7450	29.7800	0.1911	1.6630	20.4900	2.9060	79.1400	8.0470	1.6840	0.5554	6.2310	3.3890	2.4000	0.8

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:01:55	0.6267	3.8750	0.4079	11.1100	0.1929	1.1170	102.5000	121.4%	119.4%	0.2718	0.0000
2	09:02:09	0.6743	3.8200	0.3821	10.7800	0.1687	1.1850	103.6000	124.8%	121.9%	0.2789	0.0000
3	09:02:23	0.6516	3.9270	0.4162	10.7200	0.1788	1.1870	105.2000	125.6%	123.7%	0.2860	0.0000
X		0.6509	3.8740	0.4021	10.8700	0.1801	1.1630	103.8000	124.0%	121.7%	0.2789	0.0000
σ		0.0238	0.0534	0.0178	0.2098	0.0122	0.0399	1.3760	2.2%	2.1%	0.0071	0.0000
%RSD		3.6580	1.3780	4.4290	1.9300	6.7500	3.4290	1.3260	1.8	1.7	2.5530	0.0000

SED1BL5

[redacted] 10/19/2016 09:05:56

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:05:56	99.9%	0.7137	113.9%	24.8800	18.6400	4.7380	35.7300	7.4430	3.2830	0.9989	14.3100	0.7414	4.6220	3.6560	10.5900	6.5300	3.6540	9.2450	106.1%
2	09:06:09	100.1%	0.7902	115.1%	25.5700	18.5600	4.7600	47.3500	7.6660	3.3320	0.9787	15.2000	0.6903	0.8678	3.6830	11.1900	6.5510	3.7540	9.5800	107.0%
3	09:06:23	100.1%	0.7245	116.3%	25.7700	18.6100	4.6770	49.2000	7.4730	3.3690	0.8649	13.4900	0.7604	2.3890	3.7510	11.3700	6.7180	3.7750	9.5970	106.4%
X		100.0%	0.7428	115.1%	25.4100	18.6000	4.7250	44.0900	7.5270	3.3280	0.9475	14.3300	0.7307	2.6260	3.6970	11.0500	6.6000	3.7280	9.4740	106.5%
σ		0.1%	0.0414	1.2%	0.4659	0.0409	0.0427	7.3040	0.1208	0.0431	0.0722	0.8511	0.0363	1.8880	0.0493	0.4061	0.1030	0.0649	0.1986	0.5%
%RSD		0.1	5.5690	1.0	1.8340	0.2199	0.9039	16.5600	1.6040	1.2940	7.6230	5.9380	4.9660	71.9000	1.3350	3.6750	1.5610	1.7400	2.0960	0.4

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:05:56	0.1376	2.2470	0.0771	2.1250	0.4040	8.8730	65.0500	119.2%	118.3%	0.3223	0.0000
2	09:06:09	0.1593	2.3040	0.0745	2.0780	0.3824	9.0020	65.9300	122.0%	120.6%	0.3432	0.0000
3	09:06:23	0.1905	2.2650	0.0832	2.2360	0.4022	9.0790	65.3500	124.7%	122.1%	0.3327	0.0000
X		0.1625	2.2720	0.0783	2.1460	0.3962	8.9850	65.4400	122.0%	120.3%	0.3327	0.0000
σ		0.0266	0.0292	0.0045	0.0814	0.0120	0.1042	0.4463	2.8%	1.9%	0.0104	0.0000
%RSD		16.3800	1.2840	5.7540	3.7940	3.0260	1.1600	0.6820	2.3	1.6	3.1400	0.0000

6100167-12RE1@MH1K61@2X 10/19/2016 09:09:57

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:09:57	99.4%	1.2450	114.9%	1.6370	11.9800	1.6820	-5.6630	15.0800	12.1000	0.2309	2.7960	0.0235	2.3940	0.2698	0.3304	0.2756	0.1570	0.3011	106.4%
2	09:10:11	100.7%	1.2730	116.1%	1.5910	12.2800	1.6610	-1.7550	15.3500	12.5100	0.2681	2.4510	-0.0673	3.3670	0.2457	0.3738	0.2782	0.1176	0.3264	105.8%
3	09:10:25	99.4%	1.3820	117.5%	1.6510	11.8800	1.5800	-1.7400	15.3300	12.4200	0.3657	1.8650	0.0983	1.6140	0.2132	0.4046	0.2666	0.1324	0.3231	108.9%
X		99.8%	1.3000	116.2%	1.6260	12.0500	1.6410	-3.0530	15.2500	12.3400	0.2882	2.3710	0.0181	2.4580	0.2429	0.3696	0.2735	0.1357	0.3169	107.0%
σ		0.8%	0.0725	1.3%	0.0314	0.2106	0.0538	2.2610	0.1518	0.2148	0.0696	0.4709	0.0829	0.8785	0.0284	0.0373	0.0061	0.0199	0.0138	1.6%
%RSD		0.8	5.5750	1.1	1.9300	1.7490	3.2760	74.0500	0.9956	1.7410	24.1500	19.8600	456.9000	35.7400	11.6900	10.0900	2.2300	14.6800	4.3450	1.5

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:09:57	0.2125	0.1683	0.0705	2.2420	0.1675	0.2217	51.4100	118.8%	117.1%	0.1195	0.0000
2	09:10:11	0.2007	0.1778	0.0833	2.3380	0.1671	0.2632	53.3800	121.3%	119.0%	0.1056	0.0000
3	09:10:25	0.2493	0.1682	0.0915	2.3650	0.1626	0.2207	52.9300	121.7%	121.6%	0.1157	0.0000
X		0.2208	0.1714	0.0818	2.3150	0.1657	0.2352	52.5700	120.6%	119.2%	0.1136	0.0000
σ		0.0253	0.0055	0.0106	0.0646	0.0027	0.0242	1.0330	1.6%	2.3%	0.0072	0.0000
%RSD		11.4700	3.2080	12.9900	2.7890	1.6430	10.3000	1.9660	1.3	1.9	6.3260	0.0000

CJ 11/01/21

SEQ-CCV@CCV02 10/19/2016 09:14:02 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:14:16	99.5%	506.1000	106.5%	300.2000	507.4000	507.6000	2482.0000	r507.7000	504.1000	19.4400	508.3000	28.0000	-0.1917	402.9000	r1301.0000	r770.6000	430.7000	r1121.0000	101.6%
2	09:14:29	99.4%	499.3000	108.0%	297.1000	501.1000	502.9000	2725.0000	r497.7000	496.4000	19.5100	511.4000	27.6600	1.4300	401.9000	r1291.0000	r765.6000	433.4000	r1121.0000	102.8%
3	09:14:43	99.2%	510.1000	105.9%	304.0000	505.2000	505.8000	2588.0000	r505.0000	501.5000	19.3600	510.5000	27.4800	-3.6790	408.8000	r1311.0000	r775.5000	435.3000	r1134.0000	102.2%
x		99.4%	101.039%	106.8%	300.4000	100.906%	101.086%	2598.0000	r100.694%	100.132%	19.4400	102.007%	27.7100	-0.8138	404.5000	r1301.0000	r770.6000	433.1000	r1125.0000	102.2%
σ		0.2%	n/a	1.1%	3.5030	n/a	n/a	122.2000	rn/a	n/a	0.0754	n/a	0.2621	2.6110	3.7390	r9.6210	r4.9050	2.2930	r7.7270	0.6%
%RSD		0.2	1.0810	1.0	1.1660	0.6344	0.4745	4.7020	r1.0210	0.7868	0.3879	0.3148	0.9458	320.8000	0.9242	r0.7394	r0.6365	0.5294	r0.6867	0.6

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:14:16	24.0000	65.4600	17.4000	506.6000	488.6000	522.6000	514.8000	115.0%	115.7%	r501.3000	0.0000
2	09:14:29	23.9800	65.8600	17.7400	510.7000	r479.9000	528.4000	513.7000	116.4%	117.3%	r498.6000	0.0000
3	09:14:43	24.5000	67.1000	18.1800	513.5000	497.4000	539.2000	517.1000	117.7%	119.9%	r494.9000	0.0000
x		24.1600	101.751%	17.7700	102.054%	r488.6000	106.013%	103.045%	116.4%	117.7%	r99.653%	0.0000
σ		0.2928	n/a	0.3927	n/a	r8.7750	n/a	n/a	1.3%	2.1%	rn/a	0.0000
%RSD		1.2120	1.2910	2.2100	0.6835	r1.7960	1.5890	0.3380	1.2	1.8	r0.6440	0.0000

SEQ-CCB@CCB02 10/19/2016 09:18:19 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:18:19	96.2%	0.1327	94.3%	0.0175	-0.0510	0.0338	11.3800	0.0395	0.0272	0.0043	-0.1660	-0.0575	0.5673	0.0964	0.3501	0.1665	0.1026	0.2623	99.5%
2	09:18:33	96.7%	0.1210	95.8%	0.0229	-0.0578	0.0220	12.3400	0.0456	-0.0173	-0.0085	-0.1664	-0.0790	1.1270	0.0825	0.2878	0.1739	0.1208	0.2397	99.8%
3	09:18:46	97.1%	0.1386	97.8%	0.0276	-0.0164	0.0461	11.2000	0.0343	-0.0414	0.0041	-0.0652	0.1250	-1.9050	0.0807	0.3161	0.1437	0.1095	0.2674	101.3%
x		96.7%	0.1308	96.0%	0.0227	-0.0417	0.0340	11.6400	0.0398	-0.0105	-0.0000	-0.1326	-0.0038	-0.0703	0.0866	0.3180	0.1614	0.1109	0.2565	100.2%
σ		0.4%	0.0090	1.7%	0.0050	0.0222	0.0120	0.6155	0.0056	0.0348	0.0073	0.0583	0.1121	1.6140	0.0086	0.0312	0.0158	0.0092	0.0147	1.0%
%RSD		0.4	6.8560	1.8	22.1200	53.2200	35.4100	5.2880	14.2000	331.2000	24360.0000	43.9800	2925.0000	2294.0000	9.9430	9.8050	9.7680	8.2640	5.7430	1.0

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:18:19	0.0151	0.0058	-0.0005	0.0572	0.0754	0.0608	0.0782	105.5%	106.1%	0.0768	0.0000
2	09:18:33	0.0050	0.0057	0.0025	0.0479	0.0724	0.0599	0.0700	107.1%	109.1%	0.0776	0.0000
3	09:18:46	0.0025	0.0056	-0.0005	0.0523	0.0730	0.0498	0.0685	109.2%	108.5%	0.0703	0.0000
x		0.0075	0.0057	0.0005	0.0525	0.0736	0.0568	0.0722	107.3%	107.9%	0.0749	0.0000
σ		0.0066	0.0001	0.0017	0.0047	0.0016	0.0061	0.0052	1.8%	1.6%	0.0040	0.0000
%RSD		87.9900	2.1710	353.1000	8.8660	2.1250	10.8100	7.2350	1.7	1.5	5.3150	0.0000

Mass Uncorrected ICPS

SEQ-CAL1@S01 10/19/2016 07:51:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	07:51:01	95997.5250	20.0000	123165.3900	73.3336	198.0022	180.0018	96.6672	13.3333	476.6792	0.0000	11.1111	10.0000	136.6677	20.0000	16.6667	43.3334	26.6667	20.0000	40091.5420
2	07:51:19	96388.2940	36.6667	124047.2600	113.3340	214.6692	154.0013	80.6670	13.3333	353.3402	3.3333	3.3333	0.0000	143.3345	20.0000	23.3334	23.3334	20.0000	20.0000	39977.7090
3	07:51:32	97105.8700	16.6667	128028.5500	76.6670	202.6689	180.0018	88.6671	23.3334	400.0088	3.3333	8.8889	10.0000	133.3343	30.0001	13.3333	40.0001	23.3334	36.6667	40272.3390
x		96497.2300	24.4445	125080.4000	87.7782	205.1134	171.3350	88.6671	16.6667	410.0094	2.2222	7.7778	6.6667	137.7788	23.3334	17.7778	35.5556	23.3334	25.5556	40113.8630
σ		562.1453	10.7152	2590.9707	22.1947	8.5982	15.0114	8.0001	5.7735	62.2747	1.9245	4.0062	5.7735	5.0918	5.7735	5.0918	10.7152	3.3333	9.6225	148.5776
%RSD		0.5826	43.8348	2.0714	25.2849	4.1919	8.7614	9.0226	34.6411	15.1886	86.6025	51.5079	86.6025	3.6957	24.7436	28.6411	30.1365	14.2857	37.6533	0.3704

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	07:51:01	76.6670	0.0000	0.0000	6.6667	76.6670	10.0000	80.0004	161084.6200	158733.8100	40.0001	103222.7100
2	07:51:19	90.0004	10.0000	3.3333	10.0000	66.6669	36.6667	40.0001	164067.2500	162451.9600	43.3334	104213.9300
3	07:51:32	126.6676	13.3333	0.0000	3.3333	73.3336	23.3334	40.0001	165244.9600	163317.2600	80.0004	105353.6200
x		97.7783	7.7778	1.1111	6.6667	72.2225	23.3334	53.3335	163465.6100	161501.0100	54.4446	104263.4200
σ		25.8918	6.9389	1.9245	3.3333	5.0918	13.3334	23.0942	2144.4331	2435.2092	22.1946	1066.3133
%RSD		26.4801	89.2143	173.2051	50.0000	7.0501	57.1429	43.3014	1.3119	1.5079	40.7654	1.0227

SEQ-CAL2@S02 10/19/2016 07:55:22

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	07:55:36	96977.8480	66.6669	122043.7400	66.6669	1046.7269	641.3560	160.6681	1416.7771	690.0262	13.3333	46.6668	30.0001	113.3340	2056.8993	3617.3862	3927.5149	2360.3064	5645.0855	40446.4420
2	07:55:50	97789.8100	66.6669	122618.0600	66.6669	1100.0666	601.3532	163.3348	1340.0988	716.6949	23.3334	43.3334	23.3334	126.6676	2173.5932	3567.3665	3944.1888	2286.9543	5921.9282	40225.4650
3	07:56:04	97537.1170	96.6672	124821.0700	53.3335	1122.0692	644.0228	160.6681	1300.0930	750.0309	13.3333	31.1112	33.3334	203.3356	2146.9201	3814.1333	3980.8714	2467.0014	6092.0405	40741.0870
x		97434.9250	76.6670	123160.9600	62.2224	1089.6209	628.9107	161.5570	1352.3229	718.9174	16.6667	40.3705	28.8889	147.7791	2125.8042	3666.2953	3950.8584	2371.4207	5886.3514	40470.9980
σ		415.5152	17.3207	1466.0977	7.6981	38.7421	23.9027	1.5396	59.2948	30.0640	5.7735	8.1902	5.0918	48.5731	61.1455	130.4513	27.2964	90.5366	225.5914	258.6865
%RSD		0.4265	22.5921	1.1904	12.3718	3.5556	3.8006	0.9530	4.3847	4.1819	34.6411	20.2875	17.6253	32.8687	2.8763	3.5581	0.6909	3.8178	3.8324	0.6392

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	07:55:36	143.3345	1116.7353	30.0001	243.3366	6255.4848	1653.4837	2957.1475	166915.0600	163802.5400	2123.5813	106341.6900
2	07:55:50	110.0007	1153.4065	30.0001	240.0032	6705.8057	1623.4783	3110.5321	168320.6200	165737.1400	2106.9108	109252.5700
3	07:56:04	93.3338	1150.0727	23.3334	226.6695	6542.3533	1716.8288	2813.7687	170004.8700	167594.0500	2190.2638	109043.4100
x		115.5563	1140.0715	27.7778	236.6697	6501.2146	1664.5969	2960.4828	168413.5200	165711.2400	2140.2520	108212.5500
σ		25.4591	20.2784	3.8490	8.8194	227.9616	47.6572	148.4098	1546.9948	1895.8861	44.1063	1623.5899
%RSD		22.0318	1.7787	13.8564	3.7265	3.5064	2.8630	5.0130	0.9186	1.1441	2.0608	1.5004

SEQ-CAL3@S03 10/19/2016 07:59:41

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103R
1	07:59:41	94495.2420	203.3356	118470.2700	76.6670	2239.6092	1275.4228	246.6700	2937.1411	1343.4326	30.0001	101.1117	60.0002	156.6680	4314.3568	7122.7893	7573.1531	4260.9984	11246.9530	39050.35
2	07:59:55	96320.9190	153.3346	119301.0300	86.6671	2276.2849	1219.4151	229.3362	2987.1574	1370.1032	26.6667	85.5560	63.3336	116.6674	4311.0219	6979.3448	7583.1614	4544.4689	11800.9880	39519.04
3	08:00:09	96866.6720	203.3356	120037.2900	66.6669	2327.6313	1304.0935	250.0034	3200.5633	1380.1047	16.6667	90.0004	30.0001	123.3342	4267.6681	7232.8762	7713.2708	4387.7253	12138.0980	38782.54
x		95894.2770	186.6686	119269.5300	76.6670	2281.1751	1266.3105	242.0032	3041.6206	1364.5469	24.4445	92.2227	51.1113	132.2232	4297.6823	7111.6701	7623.1951	4397.7309	11728.6800	39117.31
σ		1241.9490	26.8681	783.9858	10.0001	44.2143	43.0684	11.0958	139.9017	18.9570	6.9389	8.0124	18.3587	21.4307	26.0465	127.1309	78.1682	141.9999	449.9514	372.785
%RSD		1.2951	15.4649	0.6573	13.0435	1.9382	3.4011	4.5850	4.5996	1.3893	28.3864	8.6881	35.9190	16.2079	0.6061	1.7876	1.0254	3.2289	3.8363	0.953

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	07:59:41	120.0008	2443.6617	40.0001	616.6876	12228.2190	3734.1001	6535.6818	161674.9600	159374.8800	4951.3480	103843.0500
2	07:59:55	156.6680	2567.0290	43.3334	600.0198	12481.8960	4047.5675	6735.8278	164936.1000	162275.5200	5041.3975	105744.7800
3	08:00:09	126.6676	2406.9853	56.6668	570.0179	13086.0780	3890.8324	6715.8130	166426.2200	165034.5300	5228.1696	108223.7000
x		134.4454	2472.5587	46.6668	595.5751	12598.7310	3890.8333	6662.4409	164345.7600	162228.3100	5073.6384	105937.1800
σ		19.5318	83.8438	8.8192	23.6502	440.7024	156.7337	110.2318	2430.0184	2830.1188	141.1990	2196.6537
%RSD		14.5277	3.3910	18.8983	3.9710	3.4980	4.0283	1.6545	1.4786	1.7445	2.7830	2.0735

SEQ-CAL4@S04 10/19/2016 08:03:44

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo
1	08:03:44	96502.8330	320.0056	117889.4600	80.0004	4277.0059	2285.6206	388.0083	5665.0979	1730.1646	40.0001	185.5574	136.6677	130.0009	9922.0783	17246.3430	18689.1910	10716.3120	27735.5780
2	08:03:58	95738.1450	370.0075	119209.8500	70.0003	4291.0125	2327.6313	373.3410	5825.1990	1626.8122	46.6668	178.8906	86.6671	126.6676	10415.9640	17460.0840	19300.4660	11126.8050	28601.5890
3	08:04:12	96651.0620	403.3423	121243.1400	43.3334	4425.7437	2249.6116	377.3412	6042.0072	1583.4712	50.0001	165.5571	93.3338	136.6677	10385.9290	17951.0390	20205.7630	11133.4800	29430.8960
x		96297.3460	364.4518	119447.4800	64.4447	4331.2540	2287.6212	379.5635	5844.1014	1646.8160	45.5557	176.6684	105.5562	131.1121	10241.3240	17552.4890	19398.4740	10992.1990	28589.3540
σ		489.9214	41.9452	1689.4203	18.9543	82.1296	39.0483	7.5820	189.1643	75.3648	5.0918	10.1837	27.1488	5.0918	276.8822	361.3211	763.0217	238.9482	847.7251
%RSD		0.5088	11.5091	1.4144	29.4117	1.8962	1.7069	1.9976	3.2368	4.5764	11.1770	5.7643	25.7197	3.8836	2.7036	2.0585	3.9334	2.1738	2.9652

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:03:44	183.3352	4817.9430	83.3337	1066.7292	30333.8570	7576.4892	13359.8090	162645.3800	161043.9100	9751.8943	106780.1100
2	08:03:58	253.3369	4968.0238	83.3337	1023.3909	30671.6540	7743.2963	13112.7830	164698.5200	162801.4700	9888.7087	106921.7700
3	08:04:12	203.3356	5098.0957	96.6672	1123.4027	31504.4950	7736.6240	13523.3840	169003.1100	166015.4800	10112.2880	108324.9000
x		213.3359	4961.3542	87.7782	1071.1743	30836.6690	7685.4698	13331.9920	165449.0000	163286.9500	9917.6303	107342.2600
σ		36.0564	140.1954	7.6981	50.1539	602.5120	94.4389	206.7090	3244.6296	2521.0913	181.9291	853.9314
%RSD		16.9012	2.8257	8.7699	4.6821	1.9539	1.2288	1.5505	1.9611	1.5440	1.8344	0.7955

SEQ-CAL5@S05 10/19/2016 08:07:46

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98M
1	08:07:46	96661.1680	3217.2358	118558.0700	9501.6295	8368.5167	11048.0430	1429.4457	58722.3800	12495.2480	73.3336	331.1171	133.3343	76.6670	24145.3560	42663.2070	46501.9640	27300.9320	69346.822
2	08:08:00	96607.2670	3237.2429	119692.8000	9685.1564	8363.8457	10937.2420	1407.4423	60215.4330	13086.0780	100.0006	291.1158	130.0009	120.0008	24960.8870	43935.9140	47946.1030	28056.5610	71332.094
3	08:08:13	98254.7830	3270.5882	119990.0100	9514.9768	8308.4616	10879.8400	1442.1144	60611.3840	13179.5470	86.6671	298.8938	123.3342	190.0020	25218.2630	44401.5010	48757.0660	28093.3410	73277.475
x		97174.4060	3241.6890	119413.6300	9567.2542	8346.9413	10955.0410	1426.3341	59849.7320	12920.2910	86.6671	307.0422	128.8898	128.8899	24774.8350	43666.8740	47735.0440	27816.9450	71318.797
σ		936.0219	26.9526	755.6872	102.3241	33.4061	85.5023	17.5442	996.1861	371.0529	13.3335	21.2091	5.0918	57.1880	560.1285	899.8352	1142.2700	447.2582	1965.360
%RSD		0.9632	0.8314	0.6328	1.0695	0.4002	0.7805	1.2300	1.6645	2.8719	15.3847	6.9075	3.9505	44.3696	2.2609	2.0607	2.3929	1.6079	2.755

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:07:46	1143.4052	6292.1768	706.6941	10946.5870	37339.8610	36824.4310	13596.8270	160219.5300	158320.0200	97469.7330	103897.0000
2	08:08:00	1150.0727	6345.5472	783.3671	11480.5780	39026.9240	37942.3480	13179.5470	163303.6900	162706.4600	98699.5620	105478.3800
3	08:08:13	1126.7365	6582.3822	713.3613	11700.8590	39910.7490	39134.0500	13850.5430	165390.9200	164287.8500	100151.9800	106705.9200
x		1140.0715	6406.7020	734.4742	11376.0080	38759.1780	37966.9430	13542.3060	162971.3800	161771.4400	98773.7600	105360.4300
σ		12.0200	154.4659	42.4735	387.8566	1306.1902	1155.0058	338.8045	2601.6575	3091.8339	1342.6641	1408.1710
%RSD		1.0543	2.4110	5.7828	3.4094	3.3700	3.0421	2.5018	1.5964	1.9112	1.3593	1.3365

SEQ-CAL6@S06 10/19/2016 08:11:47

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo
1	08:11:47	96849.8270	16434.8420	117183.7600	46347.8460	40931.2720	53419.8260	6685.7909	287477.9800	60883.1920	516.6813	1572.3582	860.0407	140.0011	120817.5300	211641.9000	229702.4400	133087.0900
2	08:12:01	97092.3940	16598.4730	118747.1800	46857.1140	41133.5150	53333.3200	6783.1964	293960.4200	62645.1010	546.6831	1545.6869	790.0343	90.0004	123996.5700	217320.2000	236821.6500	137512.2200
3	08:12:15	96762.2350	16398.1090	117896.2100	47202.2250	40483.9420	53271.6270	6733.1592	296204.8700	62987.4550	533.3490	1565.6904	803.3688	113.3340	126804.9100	224132.6400	240208.8000	139976.0700
x		96901.4850	16477.1410	117942.3900	46802.3950	40849.5760	53341.5910	6734.0488	292547.7500	62171.9160	532.2378	1561.2452	817.8146	114.4452	123873.0000	217698.2400	235577.6300	136858.4600
σ		171.0341	106.6689	782.7344	429.8098	332.4031	74.4450	48.7088	4531.7035	1129.1188	15.0317	13.8802	37.1717	25.0188	2995.6044	6253.9465	5362.5189	3490.7086
%RSD		0.1765	0.6474	0.6637	0.9184	0.8137	0.1396	0.7233	1.5490	1.8161	2.8242	0.8890	4.5452	21.8610	2.4183	2.8728	2.2763	2.5506

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:11:47	4877.9750	30905.7780	3504.0085	54898.5960	184030.7000	185867.5100	64974.7010	162394.2800	160117.7600	492231.4500	104571.3300
2	08:12:01	4968.0238	32671.9380	3897.5020	56323.9420	190478.1500	191182.7100	67294.8210	165961.1700	163327.4400	502089.2200	107029.6900
3	08:12:15	5311.5512	33039.9310	3954.1931	57987.6870	197202.6000	195257.9700	69709.5810	168439.4600	168656.7700	514406.6800	108820.7700
x		5052.5167	32205.8830	3785.2345	56403.4090	190570.4900	190769.4000	67326.3670	165598.3000	164033.9900	502909.1200	106807.2600
σ		228.8042	1140.8584	245.1928	1546.0776	6586.4360	4708.8521	2367.5978	3038.8823	4313.1262	11110.3290	2133.4332
%RSD		4.5285	3.5424	6.4776	2.7411	3.4562	2.4683	3.5166	1.8351	2.6294	2.2092	1.9975

SEQ-CAL7@S07 10/19/2016 08:15:49

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo
1	08:15:49	96145.7460	161674.9600	116700.9400	456266.2100	396819.6400	522648.0500	64036.0760	τ2938133.9000	616102.8000	4667.8648	15480.9480	7389.6688	153.3346	1247498.1000	2252166.3000	τ2472944.4000
2	08:16:03	97200.2040	165316.2400	119598.2300	468782.8600	397113.3900	522293.1700	64515.4470	τ2998494.2000	628317.7900	4717.8906	15663.4820	7136.1331	106.6673	1300211.5000	2325998.2000	τ2535773.5000
3	08:16:16	96745.3910	164983.6200	118460.1400	471241.8900	395779.0500	525837.6600	64690.0150	τ3015502.6000	636045.0300	4911.3263	15854.9250	7433.0375	130.0009	1313631.0000	2391723.6000	τ2579899.6000
x		96697.1130	163991.6100	118253.1000	465430.3200	396570.6900	523592.9600	64413.8460	τ2984043.6000	626821.8700	4765.6939	15666.4520	7319.6131	130.0009	1287113.5000	2323296.1000	τ2529539.2000
σ		528.8840	2013.1545	1459.6991	8031.0289	701.1391	1952.0479	338.6017	τ40658.2460	10054.9230	128.5778	187.0062	160.3712	23.3337	34957.9290	69817.8640	τ53749.4570
%RSD		0.5469	1.2276	1.2344	1.7255	0.1768	0.3728	0.5257	τ1.3625	1.6041	2.6980	1.1937	2.1910	17.9488	2.7160	3.0051	τ2.1249

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:15:49	49829.5240	321368.2800	37132.3470	571535.0100	1988033.0000	1974648.4000	681318.5800	165971.3500	166144.4700	τ5255265.2000	110760.6500
2	08:16:03	50791.4920	331260.6900	38963.3190	587300.4200	2060266.7000	2055888.2000	709892.2300	171254.6600	170650.1200	τ5373704.6000	113028.3100
3	08:16:16	52169.2610	336114.0500	39073.7920	599549.1400	2125602.8000	2100542.7000	721887.1400	175378.8500	173564.5200	τ5473390.7000	117720.6300
x		50930.0930	329581.0100	38389.8190	586128.1900	2057967.5000	2043693.1000	704365.9800	170868.2900	170119.7000	τ5367453.5000	113936.5300
σ		1176.0103	7515.0159	1090.4031	14043.8060	68813.7270	63826.9860	20841.2210	4715.6343	3738.3543	τ109197.0000	3549.6818
%RSD		2.3091	2.2802	2.8403	2.3960	3.3438	3.1231	2.9589	2.7598	2.1975	τ2.0344	3.1182

SEQ-CAL8@S08 10/19/2016 08:19:52

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95M
1	08:19:52	93158.2150	μ315425.4800	109630.4100	866368.3500	μ762050.8500	μ1008528.9000	122445.7600	τ5502161.5000	1165953.8000	9141.2603	μ29624.8580	13503.3550	150.0012	τ2470060.2000	τμ4353041.20
2	08:20:06	93821.6520	μ316325.9700	111911.2800	886640.0900	765065.6300	1017086.8000	124097.2700	τ5584304.1000	1183982.8000	9394.8520	29903.5460	14004.1110	140.0011	τ2565625.1000	τμ4521276.30
3	08:20:21	93990.0450	μ317996.0800	111820.1700	901595.9000	μ775338.2800	μ1022117.6000	124934.6200	τμ5691282.7000	μ1211320.7000	8894.3489	30168.8650	14558.3140	140.0011	τ2585829.1000	τμ4563906.40
x		93656.6370	μ316582.5100	111120.6200	884868.1100	μ767484.9200	μ1015911.1000	123825.8800	τμ5592582.8000	μ1187085.8000	9143.4871	μ29899.0900	14021.9270	143.3345	τ2540504.8000	τμ4479408.00
σ		439.7813	μ1304.3610	1291.3652	17680.4960	μ6966.2536	μ6870.2305	1266.4262	τμ94832.0160	μ22842.0450	250.2590	μ272.0306	527.7054	5.7736	τ61637.5540	τμ111493.29
%RSD		0.4696	μ0.4120	1.1621	1.9981	μ0.9077	μ0.6763	1.0227	τμ1.6957	μ1.9242	2.7370	μ0.9098	3.7634	4.0281	τ2.4341	τμ2.48

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:19:52	95384.4560	619951.7000	73042.2600	μ1119205.9000	τ3844385.5000	τμ3816430.5000	τμ1370671.9000	166728.3500	163989.2000	τμ10671910.0000	113767.4400
2	08:20:06	98942.1780	641420.3600	75102.2770	μ1152514.4000	τ3955946.5000	τμ3971549.1000	τμ1404519.9000	171686.0200	172243.0800	τμ11012492.0000	117990.7600
3	08:20:21	100138.5000	μ651135.8900	76093.8040	μ1187178.8000	τ4041616.0000	τμ4019931.3000	τμ1436516.1000	174675.5000	173574.7100	τμ11153300.0000	118696.5300
x		98155.0460	μ637502.6500	74746.1140	μ1152966.4000	τ3947316.0000	τμ3935970.3000	τμ1403902.6000	171029.9600	169935.6600	τμ10945900.0000	116818.2400
σ		2472.8375	μ15956.9670	1556.6370	μ33988.6810	τ98898.0870	τμ106313.3800	τμ32926.4730	4013.9894	5192.6535	τμ247507.2400	2665.5354
%RSD		2.5193	μ2.5030	2.0826	μ2.9479	τ2.5055	τμ2.7011	τμ2.3454	2.3470	3.0557	τμ2.2612	2.2818

SEQ-ICV@ICV01 10/19/2016 08:23:58 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo
1	08:24:12	93104.3340	31788.8150	106493.4500	153.3346	77911.7720	100218.7100	12528.6270	551481.4900	116812.3600	1800.1782	6203.2268	2940.4755	133.3343	9962.1221	17774.0250	19414.0410	11040.0330
2	08:24:25	92622.7860	31969.4470	107370.3400	173.3350	78380.4420	101719.2400	12678.1680	557322.0200	117149.9900	1963.5454	6246.5898	3020.5017	116.6674	10302.5010	18201.5360	19958.5520	11757.5980
3	08:24:44	94178.6480	31889.1660	108763.4200	176.6684	78584.8620	101762.3900	12752.2710	567787.4300	118889.0200	1996.8860	6406.7012	3020.5017	96.6672	10569.4740	18285.0370	20209.1040	11537.3160
x		93301.9230	31882.4760	107542.4000	167.7793	78292.3590	101233.4500	12653.0220	558863.6500	117617.1200	1920.2032	6285.5059	2993.8263	115.5563	10278.0320	18086.8660	19860.5660	11444.9830
σ		796.5288	90.5015	1144.7255	12.6200	345.0817	879.0500	113.9227	8261.5610	1114.3555	105.2729	107.1742	46.2032	18.3588	304.4144	274.1263	406.4878	367.5857
%RSD		0.8537	0.2839	1.0644	7.5218	0.4408	0.8683	0.9004	1.4783	0.9474	5.4824	1.7051	1.5433	15.8873	2.9618	1.5156	2.0467	3.2118

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:24:12	9655.1245	492157.6100	7209.5243	113112.6800	743.3637	754556.7900	136899.7500	166429.6200	166270.0700	τ2278784.1000	112144.1200
2	08:24:25	9725.1991	497732.5100	7476.4064	114317.6100	720.0285	777830.9800	138537.6100	171495.8100	170653.5200	τ2313351.8000	113713.4400
3	08:24:44	10385.9290	501610.5100	7523.1116	114388.4900	836.7052	788257.5500	140930.6400	172820.5500	173146.6700	τ2318870.0000	115218.8800
x		9922.0843	497166.8800	7403.0141	113939.5900	766.6991	773548.4400	138789.3400	170248.6600	170023.4200	τ2303668.6000	113692.1500
σ		403.2267	4751.7672	169.1865	717.0064	61.7395	17253.7090	2027.2033	3373.0619	3481.3306	τ21726.5330	1537.4899
%RSD		4.0639	0.9558	2.2854	0.6293	8.0526	2.2305	1.4606	1.9813	2.0476	τ0.9431	1.3523

SEQ-ICB@ICB01 10/19/2016 08:28:28 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	08:28:28	93407.4190	33.3334	107920.1300	73.3336	204.0023	168.6682	86.0004	90.0004	366.6741	6.6667	5.5556	13.3333	73.3336	96.6672	136.6677	176.6684	66.6669	196.6688	38946.5810
2	08:28:42	95276.6680	16.6667	109971.1500	60.0002	268.6706	241.3365	104.0006	96.6672	303.3384	3.3333	7.7778	10.0000	126.6676	100.0006	106.6673	153.3346	66.6669	196.6688	37547.3800
3	08:28:56	94613.1250	13.3333	111951.7700	70.0003	246.6700	224.0028	95.3338	100.0006	326.6725	10.0000	15.5556	10.0000	153.3346	106.6673	133.3343	163.3348	96.6672	233.3363	38036.0710
x		94432.4040	21.1111	109947.6800	67.7780	239.7810	211.3358	95.1116	95.5561	332.2283	6.6667	9.6296	11.1111	117.7786	101.1117	125.5564	164.4459	76.6670	208.8913	38176.6770
σ		947.6378	10.7152	2015.9270	6.9389	32.8800	37.9540	9.0022	5.0918	32.0313	3.3333	5.2509	1.9245	40.7345	5.0918	16.4432	11.7065	17.3207	21.1700	710.1188
%RSD		1.0035	50.7561	1.8335	10.2377	13.7125	17.9591	9.4648	5.3286	9.6413	50.0000	54.5287	17.3205	34.5857	5.0358	13.0962	7.1187	22.5921	10.1345	1.8601

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:28:28	83.3337	113.3340	3.3333	13.3333	190.0020	350.0067	46.6668	165350.1900	163632.8600	313.3387	108422.7200
2	08:28:42	116.6674	63.3336	0.0000	20.0000	246.6700	363.3406	43.3334	168154.2500	165482.5600	376.6745	111091.3100
3	08:28:56	103.3339	83.3337	6.6667	23.3334	256.6703	356.6737	63.3336	170629.7400	170962.5800	406.6758	113629.0600
x		101.1117	86.6671	3.3333	18.8889	231.1141	356.6737	51.1113	168044.7300	166692.6700	365.5630	111047.7000
σ		16.7776	25.1664	3.3333	5.0918	35.9535	6.6669	10.7152	2641.4826	3811.7506	47.6503	2603.4439
%RSD		16.5931	29.0380	100.0000	26.9564	15.5566	1.8692	20.9645	1.5719	2.2867	13.0348	2.3444

SEQ-IFA@ICSA01 10/19/2016 08:32:35 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	
1	08:32:35	90111.0640	120.0008	115387.6700	777965.1000	285.3378	21715.2380	2681.7288	7403.0130	7379.6607	0.0000	4.4444	26.6667	200.0022	2069157.6000	τ3762266.7000	τ4110144.4000	2315270.5000	τ61
2	08:32:49	93282.8160	96.6672	121300.5600	818557.7300	294.6714	21685.8340	2700.4010	7676.5731	7673.2370	6.6667	6.6667	10.0000	173.3350	2188144.1000	τ3954284.1000	τ4295089.5000	τ2473947.9000	τ64
3	08:33:05	91939.2330	96.6672	126054.5900	849334.6600	266.6706	22102.1690	2805.7662	8056.9020	7826.7010	0.0000	4.4444	10.0000	233.3363	τ2313842.9000	τ4066440.8000	τ4425565.1000	τ2553807.5000	τ65
x		91777.7050	104.4450	120914.2700	815285.8300	282.2266	21834.4140	2729.2987	7712.1627	7626.5329	2.2222	5.1852	15.5556	202.2245	τ2190381.5000	τ3927663.9000	τ4276933.0000	τ2447675.3000	τ63
σ		1592.0337	13.4717	5343.9400	35797.1040	14.2573	232.3482	66.8777	328.3941	227.1502	3.8490	1.2830	9.6225	30.0623	τ122357.9800	τ153824.4300	τ158492.2600	τ121419.3600	τ2
%RSD		1.7347	12.8983	4.4196	4.3907	5.0517	1.0641	2.4504	4.2581	2.9784	173.2051	24.7436	61.8590	14.8658	τ5.5861	τ3.9164	τ3.7057	τ4.9606	

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:32:35	93.3338	63.3336	1613.4765	2046.8971	4381.0554	4587.8240	2747.0817	162672.5200	163015.2500	223.3361	104099.2900
2	08:32:49	143.3345	56.6668	1553.4661	2173.5932	670.0247	4531.1289	2893.7938	170901.4400	169526.0500	176.6684	108854.5000
3	08:33:05	90.0004	80.0004	1536.7966	1940.2070	723.3621	4611.1692	2897.1282	177400.8500	177166.3400	196.6688	110608.8200
x		108.8896	66.6669	1567.9130	2053.5657	1924.8141	4576.7074	2846.0012	170324.9400	169902.5500	198.8911	107854.2000
σ		29.8767	12.0186	40.3298	116.8359	2127.3346	41.1618	85.6831	7381.0683	7083.0563	23.4131	3368.0759
%RSD		27.4376	18.0278	2.5722	5.6894	110.5216	0.8994	3.0106	4.3335	4.1689	11.7718	3.1228

SEQ-IFB@ICSAB01 10/19/2016 08:36:38 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	9
1	08:36:38	86112.5900	7079.4221	127785.1600	840011.9400	17090.7170	42999.4520	5386.2618	129614.1200	32611.7220	150.0012	597.7974	270.0040	196.6688	τ2285335.1000	τ4030484.3000	τ4369253.7000	2482389
2	08:36:52	85981.3570	7062.7425	130398.5500	869394.4700	17043.9620	43047.0100	5377.5900	134602.4900	33983.3990	196.6688	615.5764	273.3374	276.6709	2299130.2000	τ4096350.7000	τ4438236.2000	τ2574795
3	08:37:06	86146.2400	6799.2083	132370.0700	879687.5400	17037.2830	43444.2260	5392.9325	135959.1200	33792.6910	150.0012	585.5744	290.0046	173.3350	2359546.5000	τ4197324.1000	τ4559724.7000	τ2613732
x		86080.0620	6980.4576	130184.5900	863031.3200	17057.3210	43163.5630	5385.5948	133391.9100	33462.6040	165.5571	599.6494	277.7820	215.5582	τ2314670.6000	τ4108053.0000	τ4455738.2000	τ2556972
σ		87.1216	157.1879	2299.9289	20588.9640	29.1139	244.2219	7.6929	3341.2431	743.0291	26.9435	15.0865	10.7155	54.1958	τ39471.0440	τ84033.2360	τ96434.1000	τ67461
%RSD		0.1012	2.2518	1.7667	2.3857	0.1707	0.5658	0.1428	2.5048	2.2205	16.2745	2.5159	3.8575	25.1421	τ1.7053	τ2.0456	τ2.1643	τ2

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:36:38	2126.9154	96974.4790	3187.2253	24138.6710	676.6919	84820.5280	32063.1090	174692.4900	171995.1100	207658.2600	108982.6900
2	08:36:52	2066.9016	99986.8480	3090.5252	25692.9220	700.0270	88374.1380	34147.3450	178801.2200	176241.9700	215412.2500	111364.6300
3	08:37:06	2130.2496	101200.1600	3277.2573	26575.4540	790.0343	91457.7460	34813.1970	181442.7900	180480.5900	219498.2600	112461.3400
x		2108.0222	99387.1630	3185.0026	25469.0160	722.2510	88217.4710	33674.5510	178312.1700	176239.2200	214189.5900	110936.2200
σ		35.6505	2175.7340	93.3859	1233.7253	59.8503	3321.3814	1434.7113	3401.6217	4242.7369	6013.9503	1778.4555
%RSD		1.6912	2.1892	2.9320	4.8440	8.2866	3.7650	4.2605	1.9077	2.4074	2.8078	1.6031

SEQ-CCV@CCV01 10/19/2016 08:40:44 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo
1	08:40:58	93791.3420	192428.5900	139928.6800	546783.4000	443136.0200	582126.3600	71602.2050	τ3523781.5000	734694.6600	5668.4333	17678.2830	8670.7997	136.6677	1499760.2000	τ2697626.9000	τ2935377.9000
2	08:41:12	92828.1980	195176.2400	141533.2300	554305.7300	445978.0700	589377.9500	72357.4840	τ3551999.9000	745034.0900	5458.3048	17652.6780	8143.6459	190.0020	1531366.9000	τ2755222.0000	τ2995737.6000
3	08:41:25	93242.4050	196381.7900	142769.0000	560608.4700	449072.9800	590760.8600	72663.9130	τ3550840.3000	746898.1200	5521.6764	17922.0930	8243.7361	200.0022	1543329.4000	τ2759772.1000	τ3004360.4000
x		93287.3150	194662.2000	141410.3000	553899.2000	446062.3600	587421.7200	72207.8670	τ3542207.2000	742208.9600	5549.4715	17751.0180	8352.7272	175.5573	1524818.8000	τ2737540.3000	τ2978492.0000
σ		483.1398	2026.1101	1424.1444	6921.4979	2969.3739	4637.7547	546.4381	τ15967.6630	6573.9756	107.7865	148.7075	279.9680	34.0485	22510.5780	τ34640.8620	τ37585.9490
%RSD		0.5179	1.0408	1.0071	1.2496	0.6657	0.7895	0.7568	τ0.4508	0.8857	1.9423	0.8377	3.3518	19.3945	1.4763	τ1.2654	τ1.2619

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:40:58	60040.9510	386084.5700	45396.3970	691165.1400	2396107.8000	2443826.4000	823782.8900	194205.7800	192874.5600	τ6054741.4000	123844.5200
2	08:41:12	62077.8970	393245.2400	46646.0320	706625.1700	2457536.6000	2474026.6000	844230.4900	197723.7400	196225.1300	τ6094404.4000	128802.7100
3	08:41:25	62255.7740	396317.7800	46780.0520	710543.6200	2475287.2000	2483289.1000	849900.7400	199345.2500	197948.5600	τ6093410.7000	129387.5900
x		61458.2070	391882.5300	46274.1600	702777.9700	2442977.2000	2467047.4000	839304.7100	197091.5900	195682.7500	τ6080852.2000	127344.9400
σ		1230.5980	5250.9398	763.1132	10246.0740	41549.1160	20636.3330	13738.0140	2627.4009	2580.1164	τ22618.0580	3045.5246
%RSD		2.0023	1.3399	1.6491	1.4579	1.7008	0.8365	1.6368	1.3331	1.3185	τ0.3720	2.3916

SEQ-CCB@CCB01 10/19/2016 08:45:01 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	08:45:01	91393.7740	40.0001	130009.7100	96.6672	299.3383	252.6702	133.3343	310.0053	456.6781	0.0000	12.2222	13.3333	173.3350	303.3384	536.6825	583.3520	300.0050	893.3772	42495.7590
2	08:45:15	92882.0780	56.6668	131379.1800	80.0004	310.6720	243.3366	128.0009	303.3384	480.0127	3.3333	6.6667	23.3334	170.0016	423.3432	576.6850	580.0185	363.3406	1026.7246	43125.3800
3	08:45:28	92033.5130	16.6667	132535.7900	130.0009	288.6712	247.3367	134.6677	260.0037	566.6843	3.3333	3.3333	10.0000	163.3348	326.6725	656.6904	693.3598	406.6758	1066.7292	42301.5230
x		92103.1220	37.7779	131308.2300	102.2228	299.5605	247.7812	132.0010	291.1158	501.1250	2.2222	7.4074	15.5556	168.8905	351.1180	590.0193	618.9101	356.6738	995.6104	42640.8870
σ		746.5896	20.0925	1264.5367	25.4591	11.0020	4.6826	3.5277	27.1493	57.9624	1.9245	4.4905	6.9389	5.0918	63.6276	61.1050	64.4968	53.6470	90.7679	430.6761
%RSD		0.8106	53.1858	0.9630	24.9054	3.6727	1.8898	2.6725	9.3259	11.5665	86.6025	60.6218	44.6072	3.0149	18.1214	10.3564	10.4210	15.0409	9.1168	1.0100

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:45:01	93.3338	53.3335	3.3333	46.6668	386.6749	243.3366	120.0008	179637.4700	179426.7000	800.0352	114840.8100
2	08:45:15	93.3338	46.6668	6.6667	46.6668	330.0060	276.6709	133.3343	183758.6200	181146.9800	916.7129	115910.9300
3	08:45:28	143.3345	36.6667	6.6667	73.3336	406.6758	323.3391	160.0014	184619.1200	184585.1100	896.7109	119162.5700
x		110.0007	45.5557	5.5556	55.5557	374.4522	281.1155	137.7788	182671.7300	181719.5900	871.1530	116638.1000
σ		28.8679	8.3887	1.9245	15.3961	39.7694	40.1860	20.3673	2662.7445	2626.4458	62.3965	2250.7729
%RSD		26.2434	18.4143	34.6410	27.7129	10.6207	14.2952	14.7826	1.4577	1.4453	7.1625	1.9297

SEQIBLI

~~[illegible]~~ 10/19/2016 08:49:04

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo
1	08:49:04	93838.4910	156.6680	146392.6100	72128.3400	24775.0470	8977.7642	1180.0766	46287.5400	9147.9337	363.3406	1140.0715	580.0185	183.3352	20593.2980	35224.7780	38176.6590	21548.8420	56612.3920
2	08:49:18	95027.4130	133.3343	148296.4300	74050.3670	24797.1070	9039.8256	1142.7385	46692.9390	9448.2406	380.0079	1062.2843	540.0160	206.6690	21157.9260	36084.8080	38983.4050	21986.5550	57729.3840
3	08:49:32	95088.0420	183.3352	150586.9600	76406.4100	24857.9390	9150.6030	1196.7454	47922.6470	9471.5982	360.0071	1150.0727	556.6837	183.3352	21268.1830	36837.8190	39894.0090	23176.1710	59228.9840
x		94651.3150	157.7792	148425.3300	74195.0390	24810.0310	9056.0643	1173.1868	46967.7090	9355.9242	367.7852	1117.4762	558.9061	191.1131	21006.4690	36049.1350	39018.0240	22237.1900	57856.9200
σ		704.5785	25.0189	2100.1422	2142.7010	42.9309	87.5562	27.6548	851.4792	180.5033	10.7156	48.0584	20.0936	13.4718	362.0382	807.1119	859.1985	842.1182	1312.9498
%RSD		0.7444	15.8569	1.4149	2.8879	0.1730	0.9668	2.3572	1.8129	1.9293	2.9135	4.3006	3.5952	7.0491	1.7235	2.2389	2.2021	3.7870	2.2693

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:49:04	303.3384	3063.8495	53.3335	420.0097	2757.0847	23162.8040	353564.2700	184867.4300	182782.5700	3137.2079	132992.3900
2	08:49:18	273.3374	3217.2358	70.0003	470.0122	2823.7718	23647.3830	364705.0100	190049.3100	187391.6600	3407.3051	134893.4200
3	08:49:32	296.6715	3273.9227	73.3336	393.3418	2867.1187	24613.2750	373581.4300	192646.4600	191734.1400	3377.2939	137332.8700
x		291.1158	3185.0027	65.5558	427.7879	2815.9917	23807.8200	363950.2400	189187.7300	187302.7900	3307.2690	135072.8900
σ		15.7532	108.6827	10.7152	38.9225	55.4281	738.4250	10029.8990	3960.4412	4476.4506	148.0397	2175.8025
%RSD		5.4113	3.4123	16.3452	9.0985	1.9683	3.1016	2.7558	2.0934	2.3900	4.4762	1.6108

[illegible]

SEQ1BL2

Q114028-PS1@MH1[illegible]A 10/19/2016 08:53:55

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo
1	08:53:55	98234.5660	203.3356	147534.1800	31818.9200	24471.5600	7573.1531	1014.7233	53175.0640	8093.6012	223.3361	485.5685	283.3378	130.0009	27214.0060	47007.8890	52279.8940	29882.3650	76561.0360
2	08:54:09	96795.9240	183.3352	150285.3600	32163.4630	24513.0040	7566.4809	994.0543	54093.7940	8207.0362	210.0024	511.1255	293.3381	133.3343	28267.2120	47376.4620	52269.8370	30557.9390	78043.5620
3	08:54:23	98207.6110	120.0008	150356.5200	32859.2780	24381.9860	7528.4493	1024.0577	54694.0360	8380.5277	200.0022	483.3462	283.3378	173.3350	29116.5530	48857.6030	54113.9130	30939.2250	79116.1070
x		97746.0340	168.8905	149392.0200	32280.5540	24455.5170	7556.0278	1010.9451	53987.6310	8227.0551	211.1136	493.3467	286.6712	145.5567	28199.2570	47747.3180	52887.8810	30459.8430	77906.9010
σ		822.9293	43.5047	1609.3328	529.9705	66.9663	24.1155	15.3543	765.0305	144.5070	11.7066	15.4369	5.7737	24.1143	953.0924	979.0361	1061.7863	535.2152	1283.0058
%RSD		0.8419	25.7591	1.0773	1.6418	0.2738	0.3192	1.5188	1.4170	1.7565	5.5451	3.1290	2.0140	16.5670	3.3798	2.0505	2.0076	1.7571	1.6468

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:53:55	506.6808	28641.7150	326.6725	4227.6495	6852.5817	59577.9200	73499.2550	187207.9300	181718.2100	2813.7687	250877.9000
2	08:54:09	600.0198	28671.8090	360.0071	4761.2465	6935.9783	61749.0020	74967.8400	187881.6200	186234.9100	3073.8529	255291.5900
3	08:54:23	610.0205	28818.9400	290.0046	4757.9114	7116.1174	62776.0000	75955.9920	193054.9900	189259.7600	3037.1739	262420.3200
x		572.2404	28710.8220	325.5614	4582.2691	6968.2258	61367.6400	74807.6960	189381.5100	185737.6300	2974.9319	256196.6100
σ		56.9960	94.8350	35.0145	307.1142	134.6948	1632.7909	1236.1732	3199.1099	3795.2897	140.7711	5824.1863
%RSD		9.9602	0.3303	10.7551	6.7022	1.9330	2.6607	1.6525	1.6892	2.0434	4.7319	2.2733

SEQ1B13

6100163-12RE1@MH1G89@2X 10/19/2016 08:57:55

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	
1	08:57:55	95963.8390	653.3568	136287.3200	7376.3247	3917.5106	1433.4463	221.3360	96165.9580	18602.3460	113.3340	134.4454	50.0001	223.3361	5468.3108	8931.0515	9341.4637	5324.8924	14164.3590	430
2	08:58:09	97523.6400	613.3540	138757.6000	7312.9402	3982.8723	1428.7789	195.3354	97958.2750	19080.0020	120.0008	128.8898	50.0001	156.6680	5338.2335	9278.0655	9962.1221	5641.7501	14214.4370	430
3	08:58:23	96634.2180	580.0185	138913.2800	7830.0372	4076.9140	1438.1137	220.0027	99804.8650	19243.6790	96.6672	111.1118	76.6670	176.6684	5755.1545	9011.1305	10319.1870	5915.2572	15145.9400	433
x		96707.2320	615.5765	137986.0700	7506.4340	3992.4323	1433.4463	212.2247	97976.3660	18975.3420	110.0007	124.8157	58.8891	185.5575	5520.5663	9073.4158	9874.2575	5627.2999	14508.2460	431
σ		782.4596	36.7196	1473.2184	282.0349	80.1306	4.6674	14.6417	1819.5208	333.2298	12.0186	12.1887	15.3961	34.2114	213.3161	181.6983	494.7482	295.4475	552.8268	1
%RSD		0.8091	5.9651	1.0677	3.7572	2.0071	0.3256	6.8992	1.8571	1.7561	10.9260	9.7653	26.1443	18.4371	3.8640	2.0025	5.0105	5.2503	3.8104	

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:57:55	1716.8288	10115.6250	913.3792	13386.5150	796.7016	4434.4146	151776.5000	199164.6900	194794.8500	1926.8709	261099.7700
2	08:58:09	1723.4967	10355.8950	890.0436	13580.1360	813.3697	4544.4689	156505.6700	203826.3200	198180.1900	2076.9039	271013.6700
3	08:58:23	1700.1590	10602.8460	916.7129	14224.4530	890.0436	4434.4146	160063.4900	207549.1400	202248.3200	1966.8794	275165.6400
x		1713.4948	10358.1220	906.7119	13730.3680	833.3716	4471.0994	156115.2200	203513.3800	198407.7900	1990.2181	269093.0200
σ		12.0208	243.6183	14.5311	438.7052	49.7819	63.5399	4157.2700	4200.9774	3731.9438	77.6917	7226.9487
%RSD		0.7015	2.3520	1.6026	3.1951	5.9736	1.4211	2.6629	2.0642	1.8809	3.9037	2.6857

SEQ1BL4

6100163-12RE1@MH1G91@2X 10/19/2016 09:01:55

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	1
1	09:01:55	95253.0890	783.3671	136825.3100	7166.1567	6021.9939	2811.1012	372.6743	135021.9800	23623.9890	93.3338	112.2229	76.6670	196.6688	3000.4951	4391.0602	4834.6185	2833.7749	6925.9706	43195
2	09:02:09	96078.3730	870.0416	139332.9700	7509.7672	6003.9820	2905.7977	378.6746	137363.3300	24188.8040	120.0008	116.6674	83.3337	193.3354	3090.5252	4457.7593	4594.4941	2710.4040	7142.8050	42602
3	09:02:23	96347.8690	830.0379	141272.5600	7639.8755	5983.9688	2829.1068	358.0070	139691.7400	25141.3840	83.3337	114.4452	63.3336	203.3356	3200.5633	4487.7741	5254.8516	2817.1031	7483.0785	43195
x		95893.1100	827.8155	139143.6100	7438.5998	6003.3149	2848.6686	369.7853	137359.0200	24318.0590	98.8894	114.4452	74.4448	197.7799	3097.1945	4445.5312	4894.6547	2787.0940	7183.9514	42998
σ		570.4184	43.3800	2229.6636	244.7468	19.0213	50.2877	10.6323	2334.6855	766.9106	18.9544	2.2223	10.1836	5.0919	100.2007	49.5029	334.2473	66.9366	280.8239	342
%RSD		0.5948	5.2403	1.6024	3.2902	0.3168	1.7653	2.8753	1.6998	3.1537	19.1672	1.9418	13.6794	2.5745	3.2352	1.1135	6.8288	2.4017	3.9090	0

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	09:01:55	1673.4873	22731.7180	1043.3932	15045.7740	1030.0584	5181.4762	167128.9400	198514.0200	192891.5800	3200.5633	241030.1200
2	09:02:09	1833.5182	22932.2210	1000.0550	14942.2700	933.3813	5628.4085	173381.0700	204044.4700	196875.6300	3353.9519	247209.4300
3	09:02:23	1793.5102	23807.8010	1100.0666	15005.7080	993.3876	5691.7812	177421.2400	205326.1800	199720.0100	3490.6700	249867.3000
x		1766.8386	23157.2460	1047.8383	14997.9170	985.6091	5500.5553	172643.7500	202628.2200	196495.7400	3348.3951	246035.6200
σ		83.2827	572.2463	50.1537	52.1898	48.8057	278.1414	5185.6156	3620.1764	3430.0294	145.1332	4534.0208
%RSD		4.7137	2.4711	4.7864	0.3480	4.9518	5.0566	3.0037	1.7866	1.7456	4.3344	1.8428

SEQ1BL5

QJ14030-PS1@MH1H17A 10/19/2016 09:05:56

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo
1	09:05:56	96775.7110	273.3374	142521.8300	46230.5850	16100.9120	5599.0570	780.7002	52933.6610	5381.5924	280.0043	495.5691	310.0053	230.0029	13703.6540	22283.9450	25117.9860	14241.1460	36459.632
2	09:06:09	96974.4790	306.6718	144028.6300	48016.4730	16235.1510	5671.1017	812.7030	55173.5870	5521.6764	276.6709	530.0154	230.0029	163.3348	14024.1420	23921.4320	25602.6680	14868.8160	38394.239
3	09:06:23	96998.0620	283.3378	145481.4900	48891.1160	16195.7470	5543.0227	800.7019	54409.0000	5641.7501	243.3366	468.9010	276.6709	190.0020	14501.5570	24663.4100	26659.0310	15182.6680	39063.749
x		96916.0840	287.7823	144010.6500	47712.7250	16177.2700	5604.3938	798.0350	54172.0830	5515.0063	266.6706	498.1618	272.2264	194.4466	14076.4510	23622.9290	25793.2280	14764.2100	37972.540
σ		122.1371	17.1059	1479.9138	1356.0251	69.0003	64.2060	16.1672	1138.6019	130.2070	20.2765	30.6396	40.1859	33.5555	401.5152	1217.4941	787.9977	479.3983	1352.304
%RSD		0.1260	5.9440	1.0276	2.8421	0.4265	1.1456	2.0259	2.1018	2.3610	7.6036	6.1505	14.7620	17.2570	2.8524	5.1539	3.0551	3.2470	3.561

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	09:05:56	460.0116	13313.0740	200.0022	2913.8002	2073.5698	41099.3610	105454.7800	194900.4100	191056.7700	3770.7819	156481.9400
2	09:06:09	523.3484	13887.2660	196.6688	2900.4626	2003.5541	42485.7120	109087.2600	199430.4200	194794.8500	4097.5899	163419.0700
3	09:06:23	613.3540	13880.5890	223.3361	3173.8873	2140.2519	43624.4190	110284.9200	203914.9400	197151.5100	4017.5542	165149.9300
x		532.2380	13693.6430	206.6690	2996.0500	2072.4586	42403.1640	108275.6500	199415.2600	194334.3800	3961.9753	161683.6400
σ		77.0567	329.5990	14.5300	154.1559	68.3557	1264.5517	2515.2728	4507.2820	3073.3536	170.3456	4587.1870
%RSD		14.4779	2.4069	7.0306	5.1453	3.2983	2.9822	2.3230	2.2602	1.5815	4.2995	2.8371

6100167-12RE1@MH1H61@2X 10/19/2016 09:09:57

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	09:09:57	96226.5950	486.6797	143710.3200	3160.5493	10288.4850	2111.5785	303.3384	107953.8600	18705.8920	66.6669	104.4450	56.6668	190.0020	1040.0595	716.6949	1103.4003	640.0225	1220.0819	42663.207
2	09:10:11	97520.2710	503.3473	145227.4800	3107.1976	10512.7420	2077.5707	306.6718	111175.6700	19547.6600	76.6670	92.2227	46.6668	206.6690	963.3844	820.0370	1130.0702	493.3467	1340.0988	42455.572
3	09:10:25	96186.1700	553.3502	146910.8700	3257.2501	10464.0190	2042.2294	304.6718	112252.1100	19624.4920	106.6673	74.4447	66.6669	180.0018	846.7061	893.3772	1093.3991	556.6837	1336.7649	43671.310
x		96644.3450	514.4590	145282.8900	3174.9990	10421.7490	2077.1262	304.8940	110460.5500	19292.6810	83.3337	90.3708	56.6668	192.2243	950.0500	810.0364	1108.9565	563.3510	1298.9819	42930.030
σ		758.8430	34.6964	1600.9950	76.0627	117.9526	34.6767	1.6778	2236.5826	509.6246	20.8169	15.0856	10.0001	13.4718	97.3639	88.7647	18.9565	73.5649	68.3497	650.308
%RSD		0.7852	6.7443	1.1020	2.3957	1.1318	1.6695	0.5503	2.0248	2.6415	24.9801	16.6930	17.6471	7.0084	10.2483	10.9581	1.7094	13.0584	5.2618	1.514

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	09:09:57	650.0232	1006.7224	183.3352	3070.5185	910.0456	1050.0606	83262.8940	194270.4800	189055.5800	1346.7664	120239.9500
2	09:10:11	630.0218	1080.0642	220.0027	3253.9156	923.3802	1263.4211	88057.7570	198258.5400	192234.5500	1203.4130	124026.9800
3	09:10:25	760.0318	1030.0584	243.3366	3313.9372	906.7119	1070.0630	87771.6770	198973.9100	196412.4400	1353.4341	125284.0400
x		680.0256	1038.9483	215.5581	3212.7904	913.3792	1127.8482	86364.1090	197167.6400	192567.5200	1301.2045	123183.6600
σ		70.0054	37.4703	30.2466	126.8134	8.8201	117.8347	2689.5376	2534.3856	3689.7149	84.7555	2625.6671
%RSD		10.2945	3.6066	14.0318	3.9471	0.9657	10.4477	3.1142	1.2854	1.9161	6.5136	2.1315

SEQ-CCV@CCV02 10/19/2016 09:14:02 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo
1	09:14:16	95872.8870	186415.2200	133158.1200	520301.7000	422039.5500	555282.0200	67965.1130	3384622.3000	708370.1000	5174.8057	16541.7030	7986.8402	136.6677	1427338.4000	2590525.9000	2803404.4000
2	09:14:29	95802.1470	186530.8900	135055.8100	522195.8100	423099.1400	556361.8000	68596.4950	3364850.1000	707229.5600	5251.5164	16833.3480	8006.8578	166.6682	1442564.5000	2604864.0000	2822289.6000
3	09:14:43	95573.0880	186908.5300	132464.7700	524478.4100	423548.0000	556764.0000	68362.0730	3360056.9000	703402.3900	5184.8114	16718.6930	7830.0372	76.6670	1457316.4000	2626118.3000	2840223.4000
x		95749.3740	186618.2100	133559.5600	522325.3100	422895.5600	556135.9400	68307.8940	3369843.1000	706334.0100	5203.7112	16697.9140	7941.2451	126.6676	1442406.4000	2607169.4000	2821972.5000
σ		156.7117	257.9870	1341.3579	2091.3650	774.5551	766.3714	319.1590	13021.6320	2602.1209	41.7017	146.9289	96.8275	45.8264	14989.6260	17907.8860	18411.5410
%RSD		0.1637	0.1382	1.0043	0.4004	0.1832	0.1378	0.4672	0.3864	0.3684	0.8014	0.8799	1.2193	36.1784	1.0392	0.6869	0.6524

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	09:14:16	57487.8610	368375.3100	42633.0660	658312.8000	2292783.4000	2308270.3000	799905.3300	188044.9400	186891.5200	5824459.1000	119787.3600
2	09:14:29	58175.5480	375477.1800	44036.3990	672281.5800	2280686.5000	2363768.0000	808086.9300	190277.3400	189477.5600	5874143.6000	123422.1700
3	09:14:43	59212.2090	381194.5600	44987.7060	674328.4900	2363010.4000	2412769.2000	817403.8500	192421.7800	193712.0800	5960129.5000	126375.6600
x		58291.8720	375015.6800	43885.7240	668307.6200	2312160.1000	2361602.5000	808465.3700	190248.0200	190027.0600	5886244.1000	123195.0700
σ		868.0395	6422.0750	1184.5292	8716.0672	44451.0550	52283.0970	8755.3940	2188.5660	3443.3245	68639.8360	3300.0165
%RSD		1.4891	1.7125	2.6991	1.3042	1.9225	2.2139	1.0830	1.1504	1.8120	1.1661	2.6787

SEQ-CCB@CCB02 10/19/2016 09:18:19 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	09:18:19	92727.1750	36.6667	117994.1400	110.0007	240.0032	210.6691	113.3340	250.0034	423.3432	3.3333	3.3333	0.0000	146.6678	330.0060	643.3561	580.0185	363.3406	906.7119	39894.0090
2	09:18:33	93171.6850	33.3334	119790.7400	120.0008	240.6699	198.6688	114.0007	290.0046	373.3410	0.0000	3.3333	3.3333	156.6680	290.0046	540.0160	613.3540	430.0102	843.3724	40021.2330
3	09:18:46	93521.9210	40.0001	122334.2800	130.0009	271.3374	228.0029	116.6674	226.6695	350.0067	3.3333	6.6667	10.0000	106.6673	290.0046	603.3533	523.3484	400.0088	956.7170	40647.3350
x		93140.2600	36.6667	120039.7200	120.0008	250.6701	212.4469	114.6674	255.5592	382.2303	2.2222	4.4444	4.4444	136.6677	303.3384	595.5752	572.2403	397.7865	902.2671	40187.5260
σ		398.3037	3.3333	2180.7548	10.0001	17.9015	14.7476	1.7639	32.0310	37.4676	1.9245	1.9245	5.0918	26.4579	23.0948	52.1073	45.5042	33.3903	56.8029	403.2555
%RSD		0.4276	9.0909	1.8167	8.3334	7.1414	6.9418	1.5382	12.5337	9.8024	86.6025	43.3013	114.5644	19.3593	7.6135	8.7491	7.9519	8.3940	6.2956	1.0034

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	09:18:19	130.0009	36.6667	0.0000	73.3336	393.3418	263.3372	120.0008	172518.2200	171424.4900	766.6990	112825.8100
2	09:18:33	110.0007	36.6667	6.6667	63.3336	386.6749	263.3372	110.0007	175144.3900	176275.9500	796.7016	114263.6000
3	09:18:46	106.6673	36.6667	0.0000	70.0003	396.6753	226.6695	110.0007	178464.7000	175307.4900	713.3613	117058.8300
x		115.5563	36.6667	2.2222	68.8892	392.2307	251.1146	113.3340	175375.7700	174335.9800	758.9206	114716.0800
σ		12.6200	0.0000	3.8490	5.0918	5.0920	21.1701	5.7736	2979.9865	2567.4997	42.2111	2152.4781
%RSD		10.9210	0.0000	173.2051	7.3913	1.2982	8.4304	5.0943	1.6992	1.4727	5.5620	1.8764

Analyte ICPS

SEQ-CAL1@S01 10/19/2016 07:51:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	07:51:01	99.5%	27.3709	98.5%	-13.4089	-42.7531	4.6634	7.0579	-2.7074	77.0037	-2.2216	2.4493	4.3774	-1.0482	-2.9740	-0.1152	8.4280	3.7201	-5.5498	99.9%
2	07:51:19	99.9%	44.0320	99.2%	26.3735	13.1240	-20.9128	-5.8052	-2.8219	-51.3099	1.1231	-5.3233	-12.5654	6.0306	-3.2147	6.3697	-12.1616	-3.2945	-5.2130	99.7%
3	07:51:32	100.6%	23.3428	102.4%	-12.9646	-14.0622	3.8549	-1.2527	6.5841	-15.6009	1.0986	0.1859	8.1880	-4.9824	6.1886	-3.9375	3.7336	-0.4256	10.7628	100.4%
x		100.0%	31.5819	100.0%	-0.0000	-14.5637	-4.1315	-0.0000	0.3516	3.3643	0.0000	-0.9961	0.0000	0.0000	0.0000	0.7723	0.0000	-0.0000	0.0000	100.0%
σ		0.6%	10.9686	2.1%	22.8412	27.9419	14.5386	6.5224	5.3978	66.2258	1.9240	3.9977	11.0475	5.5808	5.3609	5.2106	10.7907	3.5266	9.3224	0.4%
%RSD		0.6	34.7307	2.1	0.0000	191.8593	351.8988	0.0000	1535.3760	1968.4776	0.0000	446.1391	0.0000	0.0000	0.0000	674.6645	0.0000	0.0000	0.0000	0.4

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	07:51:01	-19.6995	-6.9601	-1.1130	0.7734	5.5707	-9.3730	72.1430	98.5%	98.3%	89.8643	752.8404
2	07:51:19	-7.3540	3.0581	2.2260	4.0174	-5.5401	17.1558	30.8945	100.4%	100.6%	92.2467	-665.4678
3	07:51:32	27.0535	6.1550	-1.1130	-2.7123	-0.0306	3.4632	30.4228	101.1%	101.1%	128.2776	-87.3727
x		0.0000	0.7510	0.0000	0.6928	-0.0000	3.7487	44.4868	100.0%	100.0%	103.4629	0.0000
σ		24.2285	6.8552	1.9278	3.3655	5.5555	13.2667	23.9522	1.3%	1.5%	21.5232	713.1795
%RSD		0.0000	912.8118	0.0000	485.7663	0.0000	353.9016	53.8411	1.3	1.5	20.8028	0.0000

SEQ-CAL2@S02 10/19/2016 07:55:22

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	07:55:36	100.5%	75.3856	97.6%	-19.6067	765.3493	460.6437	17.6930	1427.9176	296.0504	11.0021	37.6150	47.9800	-25.3899	2044.6091	3618.2272	3909.7903	2346.7302	5640.3622	100.8%
2	07:55:50	101.3%	75.0656	98.0%	-19.9304	801.1896	424.2463	25.3777	1342.7725	319.4674	21.0470	34.5452	27.8596	-11.4759	2148.3429	3545.5608	3901.6576	2258.5789	5880.5339	100.3%
3	07:56:04	101.1%	103.9279	99.8%	-34.4735	834.8057	458.6693	16.7657	1280.1235	340.5777	10.9064	21.9642	-35.0001	62.4132	2090.7618	3737.3256	3881.5061	2403.2316	5964.2292	101.6%
x		101.0%	84.7931	98.5%	-24.6702	800.4482	447.8531	19.9455	1350.2712	318.6985	14.3185	31.3748	13.6132	8.5158	2094.5713	3633.7045	3897.6514	2336.1802	5828.3751	100.9%
σ		0.4%	16.5721	1.2%	8.4915	34.7342	20.4679	4.7273	74.1819	22.2736	5.8272	8.2931	43.2856	47.1921	51.9717	96.8148	14.5615	72.9011	168.1156	0.6%
%RSD		0.4	19.5441	1.2	34.4199	4.3393	4.5702	23.7009	5.4939	6.9889	40.6973	26.4324	317.9686	554.1712	2.4813	2.6644	0.3736	3.1205	2.8844	0.6

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	07:55:36	45.8850	1109.9339	28.8793	235.5499	6156.6078	1624.9367	2913.0296	102.1%	101.4%	2142.9106	578.1662
2	07:55:50	11.8066	1138.9576	28.6794	230.6301	6558.3322	1583.6493	3041.1892	103.0%	102.6%	2102.2266	2190.7953
3	07:56:04	-6.0215	1120.1761	21.7467	214.3459	6314.0100	1654.5088	2718.5450	104.0%	103.8%	2159.8017	809.6833
x		17.2234	1123.0225	26.4351	226.8419	6342.9834	1621.0316	2890.9213	103.0%	102.6%	2134.9796	1192.8816
σ		26.3738	14.7197	4.0615	11.0980	202.4234	35.5908	162.4543	0.9%	1.2%	29.5956	871.9369
%RSD		153.1281	1.3107	15.3641	4.8924	3.1913	2.1956	5.6195	0.9	1.1	1.3862	73.0950

SEQ-CAL3@S03 10/19/2016 07:59:41

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	07:59:41	97.9%	221.7408	94.7%	-6.9942	1976.2840	1134.7193	34.8758	3068.7664	1003.5030	28.5954	95.1973	32.2990	23.1427	4449.0317	7363.7274	7808.9028	4388.6244	11615.7780	97.3%
2	07:59:55	99.8%	167.8226	95.4%	2.9010	2023.2653	1062.3305	22.5298	3094.7378	1019.1707	24.8464	78.1757	76.6126	-19.3686	4390.5052	7125.1573	7720.7184	4622.5736	12032.6500	98.5%
3	08:00:09	100.4%	218.9382	96.0%	-18.4804	2080.8599	1173.4215	35.6606	3295.4551	1020.2662	15.0172	84.4219	34.3941	-10.2241	4314.2008	7330.3556	7795.7810	4429.2331	12285.8850	96.7%
x		99.4%	202.8339	95.4%	-7.5246	2026.8031	1123.4904	31.0220	3152.9864	1014.3133	22.8197	85.9316	47.7685	-2.1500	4384.5792	7273.0801	7775.1341	4480.1437	11978.1050	97.5%
σ		1.3%	30.3530	0.6%	10.7006	52.3777	56.3903	7.3650	124.0630	9.3780	7.0124	8.6107	25.0017	22.3762	67.6105	129.1870	47.5799	125.0079	338.3671	0.9%
%RSD		1.3	14.9645	0.7	142.2084	2.5843	5.0192	23.7412	3.9348	0.9246	30.7294	10.0204	52.3391	1040.7688	1.5420	1.7762	0.6119	2.7903	2.8249	1.0

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	07:59:41	26.3015	2513.6906	40.1316	626.2265	12488.4150	3811.6926	6655.5358	98.9%	98.7%	5066.5681	959.0122
2	07:59:55	61.9283	2604.4490	42.9478	600.3629	12556.2990	4069.4790	6741.4356	100.9%	100.5%	5066.5028	970.7340
3	08:00:09	30.4141	2422.9656	56.0642	565.3515	13062.9740	3879.7868	6664.9550	101.8%	102.2%	5165.3974	1637.1987
x		39.5480	2513.7017	46.3812	597.3137	12702.5630	3920.3195	6687.3088	100.5%	100.5%	5099.4895	1188.9817
σ		19.4907	90.7417	8.5031	30.5518	313.9653	133.5875	47.1112	1.5%	1.8%	57.0780	388.2116
%RSD		49.2837	3.6099	18.3331	5.1149	2.4717	3.4076	0.7045	1.5	1.7	1.1193	32.6508

SEQ-CAL4@S04 10/19/2016 08:03:44

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	08:03:44	100.0%	346.5850	94.3%	-3.0762	3911.2002	2127.0290	59.2130	5955.7755	1416.0144	38.0733	178.2571	137.7158	-6.8329	10265.8510	17858.8270	19326.6390	11073.5900	28681.8210	99.3%
2	08:03:58	99.2%	395.2887	95.3%	-14.5005	4057.6802	2212.5132	41.6140	6055.5426	1287.8301	45.6545	174.8586	89.9427	-7.8419	10652.1280	17869.2430	19726.4140	11363.9660	29231.7310	97.5%
3	08:04:12	100.2%	423.1677	96.9%	-43.2234	4078.7998	2089.6120	52.5419	6169.5542	1213.2235	48.1217	158.0252	87.5016	-0.1864	10404.3580	17995.9280	20228.4840	11135.9370	29457.2140	99.3%
x		99.8%	388.3471	95.5%	-20.2667	4015.8934	2143.0514	51.1230	6060.2908	1305.6893	43.9498	170.3803	105.0534	-4.9537	10440.7790	17907.9990	19760.5120	11191.1640	29123.5890	98.7%
σ		0.5%	38.7604	1.4%	20.6854	91.2798	62.9977	8.8849	106.9684	102.5683	5.2366	10.8339	28.3129	4.1593	195.6972	76.3265	451.8888	152.8630	398.8477	1.1%
%RSD		0.5	9.9809	1.4	102.0661	2.2730	2.9396	17.3795	1.7651	7.8555	11.9149	6.3587	26.9509	83.9641	1.8744	0.4262	2.2868	1.3659	1.3695	1.1

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:03:44	91.5091	4958.4374	84.7302	1084.1972	31026.0710	7736.7291	13562.6880	99.5%	99.7%	9828.7408	2813.8453
2	08:03:58	160.6052	5052.6313	83.7152	1027.1284	30996.6870	7812.4883	13149.4250	100.8%	100.8%	9858.8848	1798.3245
3	08:04:12	105.2446	5074.1169	95.1768	1103.9837	31131.0960	7630.0078	13239.6810	103.4%	102.8%	9886.4707	1109.8602
x		119.1196	5028.3952	87.8741	1071.7698	31051.2850	7726.4084	13317.2650	101.2%	101.1%	9858.0321	1907.3433
σ		36.5781	61.5303	6.3447	39.9063	70.6630	91.6770	217.2808	2.0%	1.6%	28.8744	857.2077
%RSD		30.7070	1.2237	7.2202	3.7234	0.2276	1.1865	1.6316	2.0	1.5	0.2929	44.9425

SEQ-CAL5@S05 10/19/2016 08:07:46

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	08:07:46	100.2%	3401.2880	94.8%	9930.9702	8144.9192	11291.4480	107.0554	61687.9580	12718.8920	73.8922	335.0022	188.7879	-58.2185	25090.4200	44344.1370	48302.9690	28347.4720	72018.0230	96.3%
2	08:08:00	100.1%	3390.0174	95.7%	10026.1240	8094.1172	11072.2050	95.8016	62586.5560	13192.8180	100.6170	290.7097	141.1328	-14.3856	25589.7740	45049.8160	49126.1870	28733.7080	73060.2420	97.2%
3	08:08:13	101.8%	3416.3977	95.9%	9822.1882	7932.5014	11044.9520	138.7773	62767.1220	13238.5490	87.1582	299.5815	63.5452	58.1572	25679.9370	45217.2190	49612.8210	28570.2020	74522.1710	97.0%
x		100.7%	3402.5677	95.5%	9926.4273	8057.1793	11136.2020	113.8781	62347.2120	13050.0860	87.2224	308.4311	131.1553	-4.8156	25453.3770	44870.3910	49013.9920	28550.4610	73200.1450	96.9%
σ		1.0%	13.2367	0.6%	102.0436	110.9218	135.1364	22.2854	578.0249	287.7324	13.3625	23.4349	63.2147	58.7751	317.5461	463.3712	662.0943	193.8732	1257.9224	0.5%
%RSD		1.0	0.3890	0.6	1.0280	1.3767	1.2135	19.5695	0.9271	2.2048	15.3200	7.5981	48.1984	1220.5134	1.2476	1.0327	1.3508	0.6791	1.7185	0.5

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:07:46	1087.5459	6512.5975	730.9035	11305.1550	38491.6430	37978.3030	13954.6270	98.0%	98.0%	99477.2780	1715.1595
2	08:08:00	1077.2583	6472.4900	798.4820	11681.1850	39612.3070	38518.1460	13295.7530	99.9%	100.7%	98017.4940	427.5742
3	08:08:13	1044.4565	6661.3742	721.2249	11807.4840	40151.2730	39365.4310	13825.0620	101.2%	101.7%	98502.2590	626.4985
x		1069.7536	6548.8206	750.2035	11597.9420	39418.4080	38620.6270	13691.8140	99.7%	100.2%	98665.6770	923.0774
σ		22.5037	99.5158	42.0896	261.3061	846.6348	699.2197	349.0628	1.6%	1.9%	743.4861	693.1365
%RSD		2.1036	1.5196	5.6104	2.2530	2.1478	1.8105	2.5494	1.6	1.9	0.7535	75.0898

SEQ-CAL6@S06 10/19/2016 08:11:47

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98M
1	08:11:47	100.4%	17549.3940	93.7%	49336.2890	40502.6710	55111.5710	546.5267	304704.1900	64095.4020	532.5193	1618.6488	876.4858	7.1025	125785.0400	220254.3900	238910.3200	138348.1500	357590.89(
2	08:12:01	100.6%	17490.7890	94.9%	49214.9520	40295.3760	54907.8620	656.0417	307172.7600	65019.6480	562.3993	1587.7362	853.2433	-44.8385	126949.6000	222388.9400	242186.2100	140541.8100	363285.35(
3	08:12:15	100.3%	17404.4130	94.3%	49919.5860	39110.2860	53948.4400	600.5453	310972.6400	65674.2910	539.6600	1582.0706	831.7578	-22.6448	129587.5000	228896.8900	245106.8500	142716.3000	370085.24(
x		100.4%	17481.5320	94.3%	49490.2760	39969.4440	54655.9580	601.0379	307616.5300	64929.7800	544.8595	1596.1519	853.8290	-20.1269	127440.7100	223846.7400	242067.7900	140535.4200	363653.83(
σ		0.2%	72.9325	0.6%	376.7115	751.2374	621.1360	54.7592	3157.6963	793.2714	15.6039	19.6878	22.3697	26.0619	1948.2265	4501.8963	3099.9592	2184.0850	6255.32
%RSD		0.2	0.4172	0.7	0.7612	1.8795	1.1364	9.1108	1.0265	1.2217	2.8638	1.2335	2.6199	129.4876	1.5287	2.0112	1.2806	1.5541	1.72(

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:11:47	4950.6964	31960.9990	3621.4535	56574.7930	189202.9300	190846.9100	66158.0870	99.3%	99.1%	496532.9800	1205.3621
2	08:12:01	4953.9452	33194.1820	3957.1808	57006.8920	192233.5200	192652.9300	67163.5750	101.5%	101.1%	496523.7100	1563.4654
3	08:12:15	5280.9112	33422.8220	3996.5985	58391.2570	197734.3900	195370.8000	68861.5610	103.0%	104.4%	492630.6400	-65.6245
x		5061.8509	32859.3340	3858.4109	57324.3140	193056.9400	192956.8800	67394.4070	101.3%	101.6%	495229.1100	901.0676
σ		189.7187	786.3357	206.1554	948.9217	4324.9261	2277.2105	1366.4390	1.9%	2.7%	2250.3418	856.1132
%RSD		3.7480	2.3930	5.3430	1.6554	2.2402	1.1802	2.0275	1.8	2.6	0.4544	95.0110

SEQ-CAL7@S07 10/19/2016 08:15:49

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	
1	08:15:49	99.6%	173290.7400	93.3%	488279.3900	394325.7600	537259.3800	4500.3397	τ 3117967.5000	652939.7700	4797.7065	15910.2670	7572.5890	19.8808	1290542.5000	2328181.4000	τ 2554509.2000	142
2	08:16:03	100.7%	172901.1000	95.6%	489470.3800	393936.9700	538141.7400	5046.7354	τ 3102552.6000	649216.3300	4860.4143	16135.3710	7375.7100	-27.8522	1308850.7000	2339611.1000	τ 2548565.8000	143
3	08:16:16	100.3%	174210.9400	94.7%	496518.3700	388657.9800	535437.1800	4752.8787	τ 3138508.7000	660896.5700	5000.4028	16140.9890	7569.8241	-5.3745	1317247.0000	2395730.1000	τ 2581402.1000	146
x		100.2%	173467.5900	94.5%	491422.7200	392306.9000	536946.1000	4766.6512	τ 3119676.3000	654350.8900	4886.1745	16062.2090	7506.0444	-4.4486	1305546.7000	2354507.5000	τ 2561492.4000	144
σ		0.5%	672.5896	1.2%	4452.9676	3166.0325	1379.2272	273.4581	τ 18038.8690	5966.6109	103.7745	131.6156	112.8814	23.8799	13655.3810	36154.3090	τ 17496.5630	22
%RSD		0.5	0.3877	1.2	0.9061	0.8070	0.2569	5.7369	τ 0.5782	0.9118	2.1238	0.8194	1.5039	536.7943	1.0460	1.5355	τ 0.6831	

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:15:49	50995.8880	329267.6800	38016.4590	582925.4700	2020187.0000	2002114.0000	682472.5000	101.5%	102.9%	τ 5108438.5000	3395.7243
2	08:16:03	50543.4990	330007.0900	38784.3560	582276.7500	2034271.7000	2025051.0000	690131.7400	104.8%	105.7%	τ 5085652.0000	2699.1389
3	08:16:16	51535.4790	332287.1600	38586.1580	589180.5700	2075957.4000	2044677.5000	690125.2300	107.3%	107.5%	τ 5093014.7000	5269.1670
x		51024.9550	330520.6400	38462.3240	584794.2600	2043472.0000	2023947.5000	687576.4900	104.5%	105.3%	τ 5095701.7000	3788.0101
σ		496.6285	1573.8821	398.6444	3812.4724	29001.2000	21303.1940	4420.1864	2.9%	2.3%	τ 11628.5100	1329.1641
%RSD		0.9733	0.4762	1.0365	0.6519	1.4192	1.0526	0.6429	2.8	2.2	τ 0.2282	35.0887

SEQ-CAL8@S08 10/19/2016 08:19:52

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo
1	08:19:52	96.5%	μ 359884.8200	87.6%	986060.9100	μ 803052.7600	μ 1094750.6000	8022.7480	τ 6169932.5000	1305417.0000	9922.2297	μ 32154.3440	14629.0600	25.0608	τ 2648068.6000	TM 4660633.2000
2	08:20:06	97.2%	μ 353556.5700	89.5%	988443.3200	774177.6900	1062928.7000	8427.6895	τ 6128748.5000	1297294.9000	9817.6934	31247.8410	14622.6890	8.5433	τ 2685295.1000	TM 4725610.5000
3	08:20:21	97.4%	μ 355712.8100	89.4%	1005680.6000	μ 793220.7600	μ 1080630.6000	8805.5446	TM 6239406.5000	μ 1325639.1000	9402.8279	31892.4490	15377.5330	10.2477	τ 2689710.2000	TM 4739946.8000
x		97.1%	μ 356384.7300	88.8%	993394.9500	μ 790150.4000	μ 1079440.0000	8418.6607	TM 6179362.5000	μ 1309450.4000	9714.2503	μ 31764.8780	14876.4270	14.6173	τ 2674358.0000	TM 4708730.1000
σ		0.5%	μ 3217.1846	1.0%	10706.1730	μ 14680.3470	μ 15949.3220	391.4764	TM 55928.4490	μ 14596.2000	274.7179	μ 466.5215	433.9822	9.0844	τ 22874.0440	TM 42265.4970
%RSD		0.5	μ 0.9027	1.2	1.0777	μ 1.8579	μ 1.4776	4.6501	TM 0.9051	μ 1.1147	2.8280	μ 1.4687	2.9172	62.1485	τ 0.8553	TM 0.8976

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:19:52	100548.3400	653268.7200	76864.4960	μ 1171226.5000	τ 3991373.1000	TM 3946251.9000	TM 1386380.3000	102.0%	101.5%	TM 10510036.0000	7771.9111
2	08:20:06	101734.1400	659214.0600	77076.3040	μ 1175943.7000	τ 4002412.3000	TM 4000915.7000	TM 1382226.5000	105.0%	106.7%	TM 10325739.0000	6362.8324
3	08:20:21	102135.8700	μ 663707.0400	77440.5890	μ 1200636.6000	τ 4048284.1000	TM 4007245.8000	TM 1395086.5000	106.9%	107.5%	TM 10377535.0000	6170.7527
x		101472.7900	μ 658729.9400	77127.1300	μ 1182602.3000	τ 4014023.2000	TM 3984804.5000	TM 1387897.8000	104.6%	105.2%	TM 10404437.0000	6768.4987
σ		825.4037	μ 5235.9726	291.3900	μ 15795.3030	τ 30179.9130	TM 33537.1440	TM 6562.9133	2.5%	3.2%	TM 95047.8040	874.2717
%RSD		0.8134	μ 0.7949	0.3778	μ 1.3356	τ 0.7519	TM 0.8416	TM 0.4729	2.3	3.1	TM 0.9135	12.9168

SEQ-ICV@ICV01 10/19/2016 08:23:58 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	9
1	08:24:12	96.5%	37344.1710	85.1%	91.7242	79665.5920	106855.3800	1107.4461	634791.3000	133858.2300	1920.3190	6616.2069	3129.1780	4.6054	10855.5710	19362.5320	21099.4070	11976.6360	31421.4
2	08:24:25	96.0%	37249.6650	85.8%	113.4325	79309.1650	107204.3500	1071.1203	634849.0300	132825.3300	2070.5926	6585.5369	3196.2731	-14.6322	11042.6040	19499.2980	21327.6290	12539.8260	31794.2
3	08:24:44	97.6%	36680.3240	87.0%	114.6903	78764.5850	106516.8200	1135.8749	638825.4900	133147.4000	2091.4034	6708.4055	3195.8873	-36.4418	11206.1770	19376.9530	21362.9920	12172.3060	31979.1
x		96.7%	108.288%	86.0%	106.6157	100.101%	101.307%	1104.8137	103.547%	104.111%	2027.4383	103.127%	3173.7795	-15.4895	11034.7840	19412.9280	21263.3430	12229.5890	31731.6
σ		0.8%	n/a	0.9%	12.9117	n/a	n/a	32.4574	n/a	n/a	93.3498	n/a	38.6265	20.5370	175.4340	75.1459	143.0689	285.9318	284.0
%RSD		0.9	0.9682	1.1	12.1105	0.5726	0.3217	2.9378	0.3635	0.3965	4.6043	0.9636	1.2171	132.5862	1.5898	0.3871	0.6728	2.3380	0.8

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:24:12	10250.3410	526632.1900	7701.3577	120259.9400	709.3866	789560.5300	139544.5700	101.8%	103.0%	τ 2213471.8000	4658.1867
2	08:24:25	10131.2150	522572.3300	7834.6237	119160.5500	668.9965	796390.6500	137714.8300	104.9%	105.7%	τ 2189331.1000	3345.3966
3	08:24:44	10713.4490	521234.0100	7802.9388	118031.3900	780.7029	799302.7300	138856.5900	105.7%	107.2%	τ 2162954.5000	3200.0353
x		10365.0020	104.248%	7779.6401	103.200%	719.6953	101.841%	101.118%	104.1%	105.3%	τ 106.325%	3734.5395
σ		307.5865	n/a	69.6209	n/a	56.5622	n/a	n/a	2.1%	2.2%	τ n/a	803.1971
%RSD		2.9675	0.5370	0.8949	0.9352	7.8592	0.6290	0.6663	2.0	2.0	τ 1.1545	21.5073

SEQ-ICB@ICB01 10/19/2016 08:28:28 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	08:28:28	96.8%	45.6936	86.3%	-3.0955	-8.5017	-1.7151	-0.3579	86.1954	9.7770	4.6448	-2.9460	68.0928	-62.2605	81.6931	131.1682	155.7522	48.7427	187.1182	97.1%
2	08:28:42	98.8%	26.0165	87.9%	-19.8031	29.5931	82.3941	12.5834	91.7546	-68.5734	1.3395	-0.3586	6.4451	-2.4663	83.3713	96.5693	127.5206	47.4574	183.3353	93.6%
3	08:28:56	98.1%	21.9569	89.5%	-9.8582	27.0198	60.8008	4.4777	93.5399	-48.8537	8.3246	7.7373	-19.5496	23.9188	88.6103	122.6390	135.3090	77.6415	218.1845	94.8%
x		97.9%	31.2223	87.9%	-10.9189	16.0371	47.1599	5.5678	90.4967	-35.8834	4.7697	1.4776	18.3295	-13.6027	84.5582	116.7922	139.5273	57.9472	196.2127	95.2%
σ		1.0%	12.6958	1.6%	8.4042	21.2901	43.6823	6.5391	3.8305	40.7538	3.4942	5.5733	45.0136	44.1558	3.6081	18.0252	14.5809	17.0679	19.1220	1.8%
%RSD		1.0	40.6626	1.8	76.9685	132.7552	92.6259	117.4465	4.2327	113.5729	73.2591	377.1926	245.5806	324.6110	4.2670	15.4336	10.4502	29.4542	9.7455	1.9

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:28:28	-8.5312	113.9052	2.4368	8.0944	127.2504	346.4094	38.6210	101.2%	101.3%	358.4234	2740.8091
2	08:28:42	24.8653	59.3895	-1.1130	14.8047	182.2291	353.7377	34.4584	102.9%	102.5%	416.7785	4149.0801
3	08:28:56	9.1306	78.9377	5.7495	17.8789	188.3695	341.1416	53.5731	104.4%	105.9%	433.3361	3071.1461
x		8.4883	84.0775	2.3578	13.5927	165.9497	347.0962	42.2175	102.8%	103.2%	402.8460	3320.3451
σ		16.7075	27.6189	3.4319	5.0036	33.6549	6.3261	10.0521	1.6%	2.4%	39.3518	736.4658
%RSD		196.8314	32.8493	145.5581	36.8110	20.2802	1.8226	23.8102	1.6	2.3	9.7684	22.1804

SEQ-IFA@ICSA01 10/19/2016 08:32:35 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98M
1	08:32:35	93.4%	137.1410	92.3%	842202.5000	-374.8490	23542.0780	155.6016	7937.2418	7516.2451	-2.2216	-3.8138	-56.5685	80.6516	2172710.0000	T3947960.8000	T4310139.1000	2426314.4000	T6401395.70
2	08:32:49	96.7%	106.7393	97.0%	842959.1900	-427.8468	23009.2260	174.3976	7829.6777	7430.4559	4.9058	-1.5406	-42.5369	47.5231	2186212.4000	T3948223.3000	T4285676.1000	T2466898.4000	T6400810.70
3	08:33:05	95.3%	102.9800	100.8%	841681.3500	-643.4154	23452.2280	236.2666	7908.8472	7286.7636	-2.2216	-3.9168	-105.3815	111.6492	T2225636.1000	T3908915.5000	T4251361.6000	T2451688.6000	T6321856.40
x		95.2%	1.#IO%	96.7%	842281.0100	-121.778%	103.237%	188.7553	127.172%	94.559%	0.1542	-32.174%	-68.1623	79.9413	T2194852.8000	T3935033.2000	T4282392.2000	T2448300.5000	T6374687.60
σ		1.7%	n/a	4.3%	642.5311	n/a	n/a	42.2057	n/a	n/a	4.1150	n/a	32.9875	32.0690	T27500.6650	T22619.0160	T29526.0040	T20503.0370	T45754.09
%RSD		1.7	16.2015	4.4	0.0763	29.5097	1.2225	22.3600	0.7063	1.5646	2668.9959	43.4625	48.3955	40.1156	T1.2530	T0.5748	T0.6895	T0.8374	T0.71

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:32:35	-0.2996	58.9716	1677.4337	556.7314	4455.0536	4711.8809	2793.4562	99.5%	100.9%	270.4285	-1137.0312
2	08:32:49	44.5543	49.1743	1536.7374	578.7783	586.6463	4427.4322	2800.6194	104.5%	105.0%	217.4722	-567.8135
3	08:33:05	-11.6285	69.3445	1463.7332	292.3746	612.7468	4338.4751	2700.1785	108.5%	109.7%	228.4460	-3440.7412
x		10.8754	1.#IO%	1559.3014	58.303%	1884.8156	75.959%	167.962%	104.2%	105.2%	1.#IO%	-1715.1953
σ		29.7118	n/a	108.6224	n/a	2225.9297	n/a	n/a	4.5%	4.4%	n/a	1521.2277
%RSD		273.2013	17.0485	6.9661	33.4843	118.0980	4.3415	2.0268	4.3	4.2	11.7054	88.6912

SEQ-IFB@ICSAB01 10/19/2016 08:36:38 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	
1	08:36:38	89.4%	6936.6354	102.2%	821541.1700	17235.1740	47242.5250	464.0159	126173.5800	31330.7970	163.1933	650.5575	213.5893	79.0859	T2194684.3000	T3869107.4000	T4192643.8000	2381104.3000	T(
2	08:36:52	89.3%	6781.7568	104.3%	833198.2100	17040.4030	46772.3200	442.7745	128358.7000	31990.6850	212.2685	662.6894	130.7801	163.9497	2160970.2000	T3848596.6000	T4168035.8000	T2417020.4000	T(
3	08:37:06	89.4%	6431.8332	105.8%	830510.3600	16926.1080	46638.9610	404.3819	127726.3600	31330.4040	159.4159	622.3321	257.8366	48.9894	2185035.3000	T3885292.4000	T4218974.7000	T2417392.9000	T(
x		89.4%	102.175%	104.1%	828416.5800	113.466%	108.899%	437.0575	102.663%	100.639%	178.2926	106.060%	200.7353	97.3417	T2180229.9000	T3867665.5000	T4193218.1000	T2405172.5000	T(
σ		0.1%	n/a	1.8%	6104.0645	n/a	n/a	30.2253	n/a	n/a	29.4846	n/a	64.4962	59.6148	T17363.1500	T19390.3870	T25474.2670	T20844.5210	
%RSD		0.1	3.8502	1.8	0.7368	0.9156	0.6763	6.9156	0.8824	1.2079	16.5372	3.2094	32.1300	61.2428	T0.7964	T0.4755	T0.6075	T0.8667	

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:36:38	1935.3816	92644.7220	3042.8312	21482.2380	571.4600	80570.5630	30260.7030	106.9%	106.5%	195037.3700	-1936.1276
2	08:36:52	1835.3909	93458.9530	2886.6347	22441.6150	579.0809	82102.2990	31506.5580	109.4%	109.1%	197444.2400	-2219.3090
3	08:37:06	1865.3102	93201.0140	3016.0605	22885.8780	652.0338	83720.6200	31651.1540	111.0%	111.8%	196464.7100	-3634.5936
x		1878.6942	101.974%	2981.8421	95.479%	600.8582	94.680%	103.187%	109.1%	109.1%	93.102%	-2596.6767
σ		51.3214	n/a	83.5315	n/a	44.4829	n/a	n/a	2.1%	2.6%	n/a	909.9459
%RSD		2.7318	0.4470	2.8013	3.2214	7.4032	1.9179	2.4550	1.9	2.4	0.6165	35.0427

SEQ-CCV@CCV01 10/19/2016 08:40:44 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	
1	08:40:58	97.5%	172016.4300	111.9%	488199.6100	399950.2300	544514.9200	4822.8119	T3127440.0000	651319.5400	5301.6801	16532.7410	8116.2484	-9.9133	1307024.9000	T2349740.8000	T2555471.0000	143
2	08:41:12	96.5%	172494.6200	113.2%	489255.2100	399285.4500	546474.4900	4713.6436	T3114392.8000	652469.9700	5060.3734	16364.2470	7508.9353	38.4354	1315870.5000	T2366147.1000	T2571183.3000	148
3	08:41:25	96.9%	172057.8000	114.1%	490539.5500	394471.1900	537840.7200	4762.5553	T3086614.1000	648480.2500	5026.4648	16313.2930	7457.5916	44.3535	1314956.4000	T2350061.0000	T2556842.9000	145
x		96.9%	99.536%	113.1%	489331.4600	100.523%	100.888%	4766.3369	T100.213%	99.636%	5129.5061	102.466%	7694.2584	24.2919	1312617.3000	T2355316.3000	T2561165.7000	144
σ		0.5%	n/a	1.1%	1171.8284	n/a	n/a	54.6823	Tn/a	n/a	150.0678	n/a	366.3546	29.7700	4864.6317	T9381.1012	T8702.5418	1
%RSD		0.5	0.1539	1.0	0.2395	0.7514	0.8337	1.1473	T0.6706	0.3156	2.9256	0.7002	4.7614	122.5511	0.3706	T0.3983	T0.3398	

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:40:58	51898.2920	334167.9100	39270.8830	596032.4400	2061802.2000	2099555.7000	701691.2400	118.8%	119.4%	T5069908.5000	-569.7460
2	08:41:12	52872.5760	335346.4500	39754.5620	600240.3700	2082145.3000	2092450.7000	707255.8400	121.0%	121.5%	T5015984.2000	1740.3520
3	08:41:25	52578.8940	335134.0800	39534.8150	598525.0700	2079714.6000	2082818.2000	706138.7600	121.9%	122.6%	T4971502.5000	1294.5748
x		52449.9210	101.574%	39520.0870	102.599%	2074554.1000	106.092%	102.795%	120.6%	121.2%	T99.973%	821.7269
σ		499.7828	n/a	242.1753	n/a	11110.0660	n/a	n/a	1.6%	1.6%	Tn/a	1225.4905
%RSD		0.9529	0.1876	0.6128	0.3537	0.5355	0.4016	0.4175	1.3	1.3	T0.9818	149.1360

SEQ-CCB@CCB01 10/19/2016 08:45:01 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	08:45:01	94.9%	45.5434	103.9%	5.0364	-25.7465	63.0694	29.5383	280.0359	29.2153	-2.2216	2.8691	-19.3804	25.8275	261.7779	487.0556	512.0954	258.1598	812.6299	105.9%
2	08:45:15	96.5%	61.0100	105.0%	-11.8002	-3.0948	50.9054	24.1268	270.2383	46.0416	0.8789	-2.4669	-4.8828	20.3381	368.4195	516.2250	500.4607	312.2302	922.4537	107.5%
3	08:45:28	95.6%	22.7891	106.0%	34.6801	-41.4468	59.1069	31.8325	227.2830	123.4503	0.9393	-5.5071	-13.9264	17.0958	276.8442	585.9466	600.7332	349.6466	952.5779	105.5%
x		95.7%	43.1141	105.0%	9.3054	-23.4294	57.6939	28.4992	259.1857	66.2357	-0.1345	-1.7016	-12.7299	21.0871	302.3472	529.7424	537.7631	306.6789	895.8872	106.3%
σ		0.8%	19.2259	1.0%	23.5324	19.2807	6.2039	3.9566	28.0595	50.2584	1.8078	4.2402	7.3225	4.4138	57.7140	50.8124	54.8431	45.9953	73.6593	1.1%
%RSD		0.8	44.5930	1.0	252.8889	82.2928	10.7531	13.8830	10.8260	75.8781	1344.4380	249.1888	57.5222	20.9312	19.0887	9.5919	10.1984	14.9979	8.2219	1.0

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:45:01	-10.3311	42.8417	1.9981	37.3039	286.8731	206.1409	101.3553	109.9%	111.1%	769.2743	-901.7517
2	08:45:15	-11.7848	35.8854	5.0041	36.5446	228.7412	232.3668	111.1693	112.4%	112.2%	866.4594	-929.3313
3	08:45:28	33.2769	26.4824	4.9640	60.5087	296.3742	273.0651	134.4215	112.9%	114.3%	833.7357	-9.1801
x		3.7203	35.0699	3.9887	44.7857	270.6629	237.1909	115.6487	111.7%	112.5%	823.1565	-613.4210
σ		25.6070	8.2101	1.7241	13.6218	36.6147	33.7219	16.9822	1.6%	1.6%	49.4487	523.4697
%RSD		688.2983	23.4106	43.2238	30.4155	13.5278	14.2172	14.6843	1.5	1.4	6.0072	85.3361

SCBBL1

~~QJ17004-PE2@MH1L05A~~ 10/19/2016 08:49:04

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	08:49:04	96.9%	140.9198	117.0%	61575.6320	22866.1930	8275.1454	78.1183	39700.8180	7444.7427	339.7834	1064.4577	505.2220	34.7776	17835.3840	30539.3850	33091.5070	18680.8970	49128.2170	106.2%
2	08:49:18	98.2%	119.5206	118.6%	62390.3440	22763.5840	8241.6188	35.1726	39461.7220	7582.6440	351.6069	980.4338	442.6116	54.6392	17973.6820	30682.0380	33135.1860	18688.1030	49113.2380	107.4%
3	08:49:32	98.2%	159.3416	120.4%	63399.5190	22927.5600	8428.3693	75.0997	39893.8020	7482.4073	336.2732	1072.6820	482.8674	34.5880	17805.8650	30869.9490	33420.1760	19416.1980	49663.7210	106.4%
x		97.8%	139.9273	118.7%	62455.1650	22852.4460	8315.0445	62.7969	39685.4470	7503.2647	342.5545	1039.1912	476.9003	41.3349	17871.6430	30697.1240	33215.6230	18928.3990	49301.7250	106.7%
σ		0.7%	19.9291	1.7%	913.6695	82.8477	99.5635	23.9709	216.4497	71.2774	8.0337	51.0513	31.7288	11.5223	89.5919	165.7978	178.4894	422.4614	313.5868	0.6%
%RSD		0.7	14.2425	1.4	1.4629	0.3625	1.1974	38.1721	0.5454	0.9500	2.3452	4.9126	6.6531	27.8753	0.5013	0.5401	0.5374	2.2319	0.6361	0.6

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:49:04	166.4834	2660.4617	45.3337	347.8361	2336.0364	20231.1720	310585.2300	113.1%	113.2%	2821.1066	13238.6010
2	08:49:18	135.4545	2735.7492	58.5728	382.6622	2339.5754	20188.4580	312505.8800	116.3%	116.0%	2985.7076	11986.7540
3	08:49:32	151.7329	2744.2665	60.5241	312.4114	2342.0781	20718.3190	315691.0100	117.9%	118.7%	2893.9205	11408.5230
x		151.2236	2713.4925	54.8102	347.6366	2339.2300	20379.3160	312927.3700	115.7%	116.0%	2900.2449	12211.2930
σ		15.5208	46.1230	8.2647	35.1258	3.0356	294.3608	2578.8528	2.4%	2.8%	82.4825	935.4728
%RSD		10.2634	1.6998	15.0788	10.1042	0.1298	1.4444	0.8241	2.1	2.4	2.8440	7.6607

10/21

SEN1812

[redacted] 10/19/2016 08:53:55

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	08:53:55	100.8%	179.4491	118.0%	26901.8380	22245.3760	6842.7066	71.0212	45230.3170	6461.5901	204.7470	441.3150	272.8896	-17.3184	23345.1160	40358.6510	44879.9500	25656.3170	65784.6710	107.9%
2	08:54:09	99.3%	159.6472	120.2%	26701.5380	22669.0490	6940.0236	54.3684	45254.1870	6464.0439	195.2631	471.9906	281.3548	-12.4054	23961.0180	40196.8880	44349.2500	25935.0000	66297.0250	106.3%
3	08:54:23	100.8%	106.8876	120.2%	27255.6090	22517.9480	6926.0029	87.1397	45582.1960	6580.9001	186.4366	447.2631	235.4143	25.7115	24383.8990	40944.6020	45339.9450	25923.7940	66335.1830	106.0%
x		100.3%	148.6613	119.4%	26952.9950	22477.4580	6902.9111	70.8431	45355.5670	6508.8447	195.4822	453.5229	263.2196	-1.3374	23896.6780	40500.0470	44856.3820	25838.3700	66138.9600	106.6%
σ		0.9%	37.5075	1.3%	280.5556	214.7195	52.6077	16.3864	196.6292	63.0155	9.1572	16.2676	24.4492	23.5535	522.3714	393.4004	495.7678	157.7624	307.4158	1.0%
%RSD		0.9	25.2301	1.1	1.0409	0.9553	0.7621	23.1305	0.4335	0.9682	4.6844	3.5869	9.2885	1761.1279	2.1860	0.9714	1.1052	0.6106	0.4648	0.9

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:53:55	338.9095	24670.3540	280.4163	3624.0479	5848.6302	51497.8270	63808.2000	114.5%	112.5%	2549.8877	118696.9400
2	08:54:09	413.9684	24444.2320	306.0187	4044.5105	5868.0129	52926.3940	64669.0020	114.9%	115.3%	2714.7807	117116.9000
3	08:54:23	414.7814	24199.5620	242.5147	3976.4835	5915.1428	52823.8120	64087.2760	118.1%	117.2%	2640.8782	119661.7500
x		389.2198	24438.0490	276.3166	3881.6806	5877.2620	52416.0110	64188.1590	115.9%	115.0%	2635.1822	118491.8600
σ		43.5719	235.4565	31.9499	225.6942	34.2073	796.8232	439.1791	2.0%	2.4%	82.5940	1284.7582
%RSD		11.1947	0.9635	11.5628	5.8143	0.5820	1.5202	0.6842	1.7	2.0	3.1343	1.0843

SEN1815

[redacted] 10/19/2016 08:57:55

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	08:57:55	99.2%	606.6911	109.0%	6669.9727	3475.4986	1159.9820	-15.1925	87104.9970	16429.8870	103.3621	116.5834	-28.9404	70.2713	4767.7911	7800.3053	8133.0602	4628.4470	12335.5770	107.3%
2	08:58:09	100.8%	559.9562	110.9%	6492.1209	3604.7575	1154.5993	-38.9427	87099.1700	16544.4020	109.4861	111.3144	32.0014	8.0489	4561.0326	7942.5733	8502.2032	4806.8238	12131.9940	107.4%
3	08:58:23	99.8%	529.3206	111.1%	6947.7380	3605.2973	1155.5305	-17.2733	88477.8510	16636.7560	87.2435	94.1655	39.1000	25.7139	4880.2355	7651.7044	8736.1579	4998.9851	12819.3640	108.1%
x		99.9%	565.3227	110.3%	6703.2772	3561.8512	1156.7039	-23.8028	87560.6730	16537.0150	100.0306	107.3544	14.0536	34.6780	4736.3531	7798.1943	8457.1404	4811.4186	12428.9780	107.6%
σ		0.8%	38.9634	1.2%	229.6272	74.7840	2.8768	13.1527	794.3054	103.6324	11.4894	11.7218	37.4027	32.0652	161.9070	145.4460	304.0636	185.3117	353.0750	0.4%
%RSD		0.8	6.8922	1.1	3.4256	2.0996	0.2487	55.2570	0.9071	0.6267	11.4859	10.9188	266.1424	92.4653	3.4184	1.8651	3.5953	3.8515	2.8407	0.4

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	08:57:55	1389.1209	8743.8237	788.2519	11525.6780	609.4926	3763.6948	127409.7600	121.8%	120.6%	1646.7019	112203.9100
2	08:58:09	1364.4946	8768.7904	752.3475	11451.4750	609.2005	3775.9733	128515.8000	124.7%	122.7%	1741.6776	116585.1200
3	08:58:23	1330.8281	8890.3220	767.2308	11870.9620	664.9240	3640.0707	129548.9600	127.0%	125.2%	1619.7758	115458.2000
x		1361.4812	8800.9787	769.2767	11616.0380	627.8724	3726.5796	128491.5100	124.5%	122.9%	1669.3851	114749.0800
σ		29.2630	78.3741	18.0394	223.8663	32.0830	75.1700	1069.8058	2.6%	2.3%	64.0383	2275.0605
%RSD		2.1494	0.8905	2.3450	1.9272	5.1106	2.0171	0.8326	2.1	1.9	3.8360	1.9826

SEN1814

[redacted] 10/19/2016 09:01:55

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	09:01:55	98.2%	723.1838	109.4%	6452.3178	5434.7444	2435.1013	-20.6962	121922.8900	20909.1480	84.4532	95.5482	20.5934	44.8452	2602.8904	3822.7180	4188.2106	2450.1211	6013.0730	107.7%
2	09:02:09	99.1%	788.1038	111.4%	6641.6248	5507.1268	2560.5888	-24.5391	121679.1800	21002.2800	110.7682	101.1831	28.4467	44.2478	2623.0641	3796.2529	3890.7981	2290.6030	6066.7085	106.2%
3	09:02:23	99.3%	741.9618	112.9%	6664.9849	5446.0143	2451.8222	-36.2235	122144.9900	21559.5860	75.1665	97.6119	2.1439	51.0364	2687.8962	3781.0059	4407.5469	2356.3695	6290.1302	107.7%
x		98.9%	751.0831	111.2%	6586.3092	5462.6285	2482.5041	-27.1530	121915.6800	21157.0050	90.1293	98.1144	17.0613	46.7098	2637.9502	3799.9922	4162.1852	2365.6979	6123.3039	107.2%
σ		0.6%	33.4073	1.8%	116.6263	38.9465	68.1382	8.0869	232.9901	351.7421	18.4671	2.8509	13.5024	3.7588	44.4150	21.1060	259.3556	80.1671	146.9437	0.9%
%RSD		0.6	4.4479	1.6	1.7707	0.7130	2.7447	29.7829	0.1911	1.6625	20.4895	2.9057	79.1407	8.0472	1.6837	0.5554	6.2312	3.3887	2.3997	0.8

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	09:01:55	1351.1844	19653.4430	900.4754	12957.4830	809.6112	4404.0914	140544.4200	121.4%	119.4%	2728.8807	97536.2850
2	09:02:09	1453.8066	19376.4920	843.3357	12571.7770	707.9839	4671.0589	142129.4100	124.8%	121.9%	2800.4807	98521.4840
3	09:02:23	1404.8706	19917.8550	918.6743	12503.7960	750.5555	4681.4587	144303.0100	125.6%	123.7%	2871.8523	97782.6230
x		1403.2872	19649.2630	887.4951	12677.6850	756.0502	4585.5463	142325.6200	124.0%	121.7%	2800.4045	97946.7970
σ		51.3294	270.7058	39.3108	244.6839	51.0360	157.2311	1886.9619	2.2%	2.1%	71.4858	512.7077
%RSD		3.6578	1.3777	4.4294	1.9300	6.7503	3.4288	1.3258	1.8	1.7	2.5527	0.5235

SEN1815

[redacted] 10/19/2016 09:05:56

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	09:05:56	99.9%	246.9471	113.9%	40455.1820	14754.0920	5099.3979	64.9280	46188.5330	4288.6154	261.5687	458.2045	208.0842	78.8923	11774.6220	19160.2820	21572.1250	12222.6880	31313.6250	106.1%
2	09:06:09	100.1%	273.3864	115.1%	41572.6050	14690.7420	5123.0953	86.0451	47570.7800	4353.0278	256.2731	486.5276	193.7211	14.8124	11862.3990	20246.4920	21641.1620	12559.0850	32448.1600	107.0%
3	09:06:23	100.1%	250.6648	116.3%	41899.8370	14734.0530	5034.3155	89.4165	46377.4300	4400.7168	226.4846	432.0408	213.4103	40.7863	12083.0590	20560.1230	22192.9850	12628.3370	32506.5500	106.4%
x		100.0%	256.9994	115.1%	41309.2080	14726.2960	5085.6029	80.1299	46712.2470	4347.4533	248.1088	458.9243	205.0719	44.8303	11906.6930	19988.9660	21802.0910	12470.0370	32089.4450	106.5%
σ		0.1%	14.3128	1.2%	757.4900	32.3799	45.9695	13.2727	749.4856	56.2592	18.9134	27.2506	10.1844	32.2308	158.9178	734.5938	340.2799	216.9905	672.5139	0.5%
%RSD		0.1	5.5692	1.0	1.8337	0.2199	0.9039	16.5640	1.6045	1.2941	7.6230	5.9379	4.9662	71.8951	1.3347	3.6750	1.5608	1.7401	2.0957	0.4

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	09:05:56	296.6247	11395.5400	170.1184	2478.0463	1695.9473	34985.0280	89230.7480	119.2%	118.3%	3236.6231	28005.4230
2	09:06:09	343.3282	11685.3750	164.3874	2423.0387	1605.1968	35496.4010	90434.6540	122.0%	120.6%	3446.4072	31218.5440
3	09:06:23	410.7614	11488.8530	183.7386	2607.9753	1688.2768	35798.1700	89639.0890	124.7%	122.1%	3340.2351	31016.8550
x		350.2381	11523.2560	172.7481	2503.0201	1663.1403	35426.5330	89768.1640	122.0%	120.3%	3341.0885	30080.2740
σ		57.3812	147.9489	9.9400	94.9640	50.3269	411.0489	612.2443	2.8%	1.9%	104.8946	1799.7011
%RSD		16.3835	1.2839	5.7540	3.7940	3.0260	1.1603	0.6820	2.3	1.6	3.1395	5.9830

[redacted] 10/19/2016 09:09:57

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	09:09:57	99.4%	430.6488	114.9%	2661.4265	9484.8769	1809.9624	-10.2909	93562.3490	15803.2130	60.4616	89.5359	6.5860	40.8564	869.0441	597.6731	910.5410	525.2695	1019.7708	106.4%
2	09:10:11	100.7%	440.5790	116.1%	2586.3593	9722.7715	1787.5402	-3.1899	95238.1440	16334.9380	70.2167	78.4680	-18.8909	57.4778	791.2635	676.0412	919.1809	393.2949	1105.5681	105.8%
3	09:10:25	99.4%	478.1841	117.5%	2683.7322	9401.4161	1700.4316	-3.1613	95147.0730	16224.7690	95.7566	59.7125	27.5849	27.5469	686.7638	731.9104	880.7796	443.0413	1094.3317	108.9%
x		99.8%	449.8039	116.2%	2643.8393	9536.3548	1765.9781	-5.5474	94649.1890	16120.9730	75.4783	75.9054	5.0933	41.9604	782.3571	668.5416	903.5005	453.8686	1073.2235	107.0%
σ		0.8%	25.0744	1.3%	51.0133	166.7478	57.8614	4.1081	942.3318	280.6471	18.2263	15.0759	23.2738	14.9960	91.4660	67.4321	20.1455	66.6502	46.6311	1.6%
%RSD		0.8	5.5745	1.1	1.9295	1.7485	3.2765	74.0546	0.9956	1.7409	24.1477	19.8615	456.9450	35.7384	11.6911	10.0865	2.2297	14.6849	4.3450	1.5

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	09:09:57	458.1804	853.4355	155.5279	2614.8676	702.9774	874.1765	70516.9330	118.8%	117.1%	1199.6442	-1554.1976
2	09:10:11	432.7153	901.7012	183.9049	2727.0649	701.3135	1037.6863	73221.2540	121.3%	119.0%	1060.1840	-71.2057
3	09:10:25	537.4386	853.3286	202.0542	2757.9880	682.4063	870.2484	72605.9660	121.7%	121.6%	1162.0342	-1253.9825
x		476.1114	869.4884	180.4957	2699.9735	695.5657	927.3704	72114.7170	120.6%	119.2%	1140.6208	-959.7953
σ		54.6158	27.8971	23.4497	75.3082	11.4267	95.5566	1417.5091	1.6%	2.3%	72.1539	784.0445
%RSD		11.4712	3.2085	12.9919	2.7892	1.6428	10.3040	1.9656	1.3	1.9	6.3258	81.6887

10/10/21

SEQ-CCV@CCV02 10/19/2016 09:14:02 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo
1	09:14:16	99.5%	175113.8400	106.5%	488044.1500	401657.0300	546378.1400	4509.6068	r3150392.6000	658509.6400	5091.2417	16273.0170	7857.8474	-3.2726	1297837.9000	r2353921.3000	r2545617.0000
2	09:14:29	99.4%	172760.5200	108.0%	482954.9000	396668.9500	541257.6700	4952.5352	r3088807.0000	648391.3300	5108.3824	16372.9960	7761.4408	24.4040	1294499.2000	r2335989.9000	r2529295.9000
3	09:14:43	99.2%	176496.2000	105.9%	494325.7400	399938.3800	544391.7700	4703.8127	r3133937.3000	655078.5400	5069.0083	16343.7750	7713.4010	-62.8045	1316826.3000	r2370790.2000	r2561701.2000
x		99.4%	101.039%	106.8%	488441.6000	100.906%	101.086%	4721.9849	r100.694%	100.132%	5089.5441	102.007%	7777.5631	-13.8910	1303054.4000	r2353567.1000	r2545538.0000
σ		0.2%	n/a	1.1%	5695.8325	n/a	n/a	222.0227	rn/a	n/a	19.7418	n/a	73.5604	44.5634	12043.0130	r17402.8360	r16202.7820
%RSD		0.2	1.0806	1.0	1.1661	0.6344	0.4745	4.7019	r1.0206	0.7868	0.3879	0.3148	0.9458	320.8070	0.9242	r0.7394	r0.6365

Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	09:14:16	51751.0570	332006.2400	38397.4670	590774.2900	2050882.3000	2060525.4000	706175.8100	115.0%	115.7%	r5033215.2000	-755.9304
2	09:14:29	51696.7040	334063.0800	39153.1030	595629.6300	r2014336.0000	2083591.6000	704688.4900	116.4%	117.3%	r5006869.6000	929.4098
3	09:14:43	52816.1470	340322.3700	40126.3780	598854.4800	2087997.3000	2125992.8000	709364.2400	117.7%	119.9%	r4969109.0000	1092.1589
x		52087.9690	101.751%	39225.6490	102.054%	r2051071.9000	106.013%	103.045%	116.4%	117.7%	r99.653%	421.8794
σ		631.2056	n/a	866.7356	n/a	r36831.0200	n/a	n/a	1.3%	2.1%	rn/a	1023.2540
%RSD		1.2118	1.2912	2.2096	0.6835	r1.7957	1.5888	0.3380	1.2	1.8	r0.6440	242.5466

SEQ-CCB@CCB02 10/19/2016 09:18:19 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	09:18:19	96.2%	45.9287	94.3%	28.5190	-40.3996	36.3915	20.6779	245.3423	35.5052	1.1301	-5.3163	-16.1458	9.6841	310.6157	633.2643	550.1416	343.1920	888.5418	99.5%
2	09:18:33	96.7%	41.8652	95.8%	37.1965	-45.7610	23.6901	22.4320	282.6463	-22.6180	-2.2216	-5.3270	-22.1682	19.2386	265.7428	520.6232	574.5158	403.9439	811.9601	99.8%
3	09:18:46	97.1%	47.9579	97.8%	44.8068	-12.9735	49.5719	20.3527	212.5691	-54.0447	1.0680	-2.0889	35.0875	-32.5247	259.9874	571.7331	474.6443	366.2393	905.6383	101.3%
x		96.7%	45.2506	96.0%	36.8408	-33.0447	36.5512	21.1542	246.8525	-13.7191	-0.0079	-4.2441	-1.0755	-1.2006	278.7819	575.2069	533.1006	371.1250	868.7134	100.2%
σ		0.4%	3.1024	1.7%	8.1498	17.5877	12.9416	1.1185	35.0630	45.4333	1.9174	1.8665	31.4625	27.5448	27.7186	56.4008	52.0709	30.6692	49.8877	1.0%
%RSD		0.4	6.8561	1.8	22.1216	53.2239	35.4069	5.2875	14.2040	331.1676	24359.9140	43.9783	2925.3655	2294.1710	9.9427	9.8053	9.7675	8.2639	5.7427	1.0

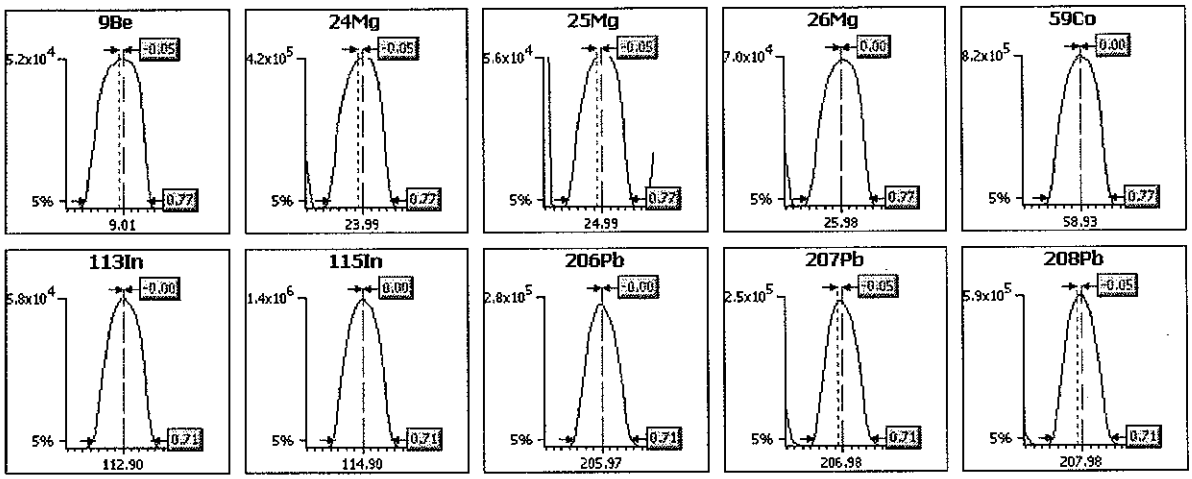
Run	Time	106Cd	107Ag	108Cd	111Cd	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	09:18:19	32.4637	29.6676	-1.1130	66.7224	316.3977	239.8903	107.2635	105.5%	106.1%	771.4830	2025.1661
2	09:18:33	10.8155	29.1183	5.4402	55.8719	304.0810	236.0002	95.9717	107.1%	109.1%	779.0913	417.0101
3	09:18:46	5.4644	28.4088	-1.1130	61.0417	306.3049	196.1557	93.9692	109.2%	108.5%	706.3469	3570.4199
x		16.2478	29.0649	1.0714	61.2120	308.9279	224.0154	99.0681	107.3%	107.9%	752.3071	2004.1987
σ		14.2959	0.6311	3.7835	5.4273	6.5639	24.2055	7.1677	1.8%	1.6%	39.9840	1576.8094
%RSD		87.9865	2.1713	353.1373	8.8663	2.1247	10.8053	7.2351	1.7	1.5	5.3149	78.6753

Performance Report

Sample details
Sample name : SEQ-TUN1@TUNE01
Acquired at : 10/24/2016 14:21:46
Report name : 200_8 + IS TEST_NO SCREEN [7/9/2015 09:58:10]

Mass Calibration verification

Acquisition parameters
Sweeps : 10
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	0.11	0.77	-0.05
24Mg	0.85	0.65	0.11	0.77	-0.05
25Mg	0.85	0.65	0.11	0.77	-0.05
26Mg	0.85	0.65	0.11	0.77	0.00
59Co	0.85	0.65	0.11	0.77	0.00
113In	0.85	0.65	0.11	0.71	-0.00
115In	0.85	0.65	0.11	0.71	0.00
206Pb	0.85	0.65	0.11	0.71	-0.00
207Pb	0.85	0.65	0.11	0.71	-0.05
208Pb	0.85	0.65	0.11	0.71	-0.05

Sample details
Sample name : SEQ-TUN1@TUNE01
Acquired at : 10/24/2016 14:21:46
Report name : 200_8 + IS TEST_NO SCREEN [7/9/2015 09:58:10]

Tune conditions

Major	
Extraction	-169
Lens 1	0.3
Focus	16.3
D1	-43.9
Pole Bias	1.5
Hexapole Bias	-3.5
Nebuliser	0.78
Sampling Depth	130

Minor	
Lens 2	-26.7
Lens 3	-189.0
Forward power	1404
Horizontal	95
Vertical	375
D2	-160
DA	-30.6
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 thing	0.00

Sensitivity and stability results

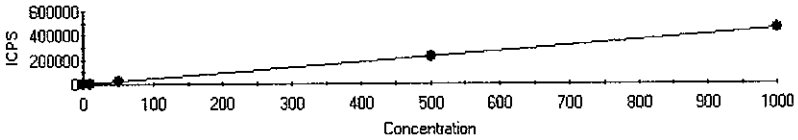
Acquisition parameters
Sweeps : 30

Run	Time	6Li	9Be	24Mg	25Mg	26Mg	45Sc	59Co	89Y	113In	115In	159Tb	206Pb	207Pb	208Pb	209Bi
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	3.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Countrate	>4000	>4000	>4000	>4000	>4000	>5000	>4000	>5000	>10000	>20000	>20000	>20000	>20000	>20000	>20000
1	14:22:25	111283.65	53768.539	425458.16	58749.219	68241.841	1290766.9	846807.79	96354.606	59390.030	1418316.4	115168.25	278989.57	245110.40	613819.15	69192.318
2	14:22:33	111529.97	54509.599	431960.98	59067.941	69148.655	1289826.4	854624.27	98072.834	61393.271	1435290.0	116785.35	283086.69	248538.27	619021.40	69588.660
3	14:22:41	112069.88	54432.473	436709.99	57491.215	70072.354	1292434.1	857482.17	96620.742	60547.628	1439396.3	117700.37	284785.19	250477.07	615297.58	69783.478
4	14:22:48	112066.51	55119.930	438101.26	59171.948	70438.501	1296966.6	852636.67	97345.075	61084.535	1443411.1	115941.31	280639.20	247603.27	612814.67	70529.200
5	14:22:56	111688.57	54901.950	435336.41	59051.166	68705.312	1291348.1	858034.12	99417.320	60577.828	1448185.2	117021.69	285957.81	251761.84	624822.10	71123.805
x		111727.71	54546.498	433513.36	58706.298	69321.333	1292268.4	853917.00	97562.115	60598.659	1436919.8	116523.39	282691.69	248698.17	617154.98	70043.492
σ		342.67	518.35	5046.95	697.28	920.15	2791.31	4537.11	1234.30	763.43	11444.67	984.56	2877.70	2581.04	4890.92	774.91
%RSD		0.3067	0.9503	1.1642	1.1877	1.3274	0.2160	0.5313	1.2651	1.2598	0.7965	0.8449	1.0180	1.0378	0.7925	1.1063

Result : The performance report passed.

Fully Quant Calibration

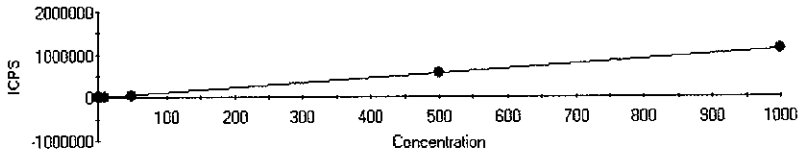
9Be FQ Block 1



Intercept CPS=21.326921 Intercept Conc=0.047612
Sensitivity=447.930827 Correlation Coeff=0.999992

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	-0.001	0.001	21.09	0.00
SEQ-CAL4@S04	1.000	1.005	0.005	471.67	0.54
SEQ-CAL5@S05	10.000	10.145	0.145	4565.65	1.45
SEQ-CAL6@S06	50.000	49.944	0.056	22392.62	0.11
SEQ-CAL7@S07	500.000	500.944	0.944	224409.72	0.19
SEQ-CAL8@S08	1000.000	993.418	6.582	445004.04	0.66

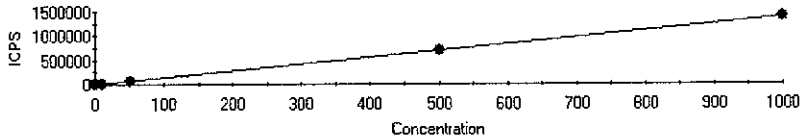
51V FQ Block 1



Intercept CPS=-202.009271 Intercept Conc=-0.182154
Sensitivity=1109.000641 Correlation Coeff=0.999996

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.118	0.118	-71.15	0.00
SEQ-CAL4@S04	5.000	4.900	0.100	5232.22	2.00
SEQ-CAL5@S05	10.000	9.697	0.303	10551.64	3.03
SEQ-CAL6@S06	50.000	46.988	3.012	51907.61	6.02
SEQ-CAL7@S07	500.000	501.245	1.245	555679.21	0.25
SEQ-CAL8@S08	1000.000	1002.770	2.770	1111870.70	0.28

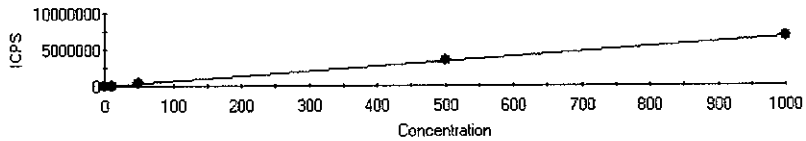
52Cr FQ Block 1



Intercept CPS=547.513109 Intercept Conc=0.392728
Sensitivity=1394.128503 Correlation Coeff=0.999982

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.017	0.017	570.60	0.00
SEQ-CAL4@S04	2.000	1.912	0.088	3213.01	4.40
SEQ-CAL5@S05	10.000	9.814	0.186	14229.55	1.86
SEQ-CAL6@S06	50.000	47.676	2.324	67013.76	4.65
SEQ-CAL7@S07	500.000	505.158	5.158	704802.85	1.03
SEQ-CAL8@S08	1000.000	999.154	0.846	1393496.27	0.08

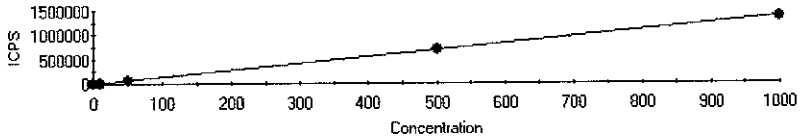
59Co FQ Block 1



Intercept CPS=34.090867 Intercept Conc=0.004994
Sensitivity=6826.723059 Correlation Coeff=0.999982

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.000	0.000	36.80	0.00
SEQ-CAL4@S04	1.000	0.971	0.029	6665.91	2.86
SEQ-CAL5@S05	10.000	9.941	0.059	67900.87	0.59
SEQ-CAL6@S06	50.000	49.286	0.714	336499.12	1.43
SEQ-CAL7@S07	500.000	515.560	15.560	3519618.71	3.11
SEQ-CAL8@S08	1000.000	998.899	1.101	6819242.03	0.11

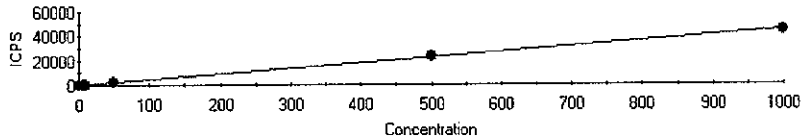
60Ni FQ Block 1



Intercept CPS=155.374406 Intercept Conc=0.112636
Sensitivity=1379.433623 Correlation Coeff=0.999881

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	-0.011	0.011	139.88	0.00
SEQ-CAL4@S04	1.000	1.190	0.190	1796.43	18.97
SEQ-CAL5@S05	10.000	10.297	0.297	14359.83	2.97
SEQ-CAL6@S06	50.000	51.586	1.586	71315.18	3.17
SEQ-CAL7@S07	500.000	503.898	3.898	695249.29	0.78
SEQ-CAL8@S08	1000.000	975.517	24.483	1345816.75	2.45

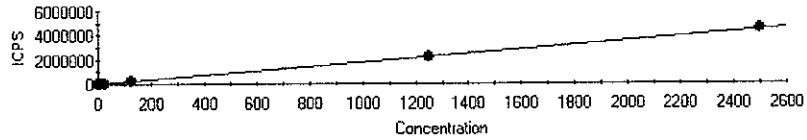
78Se FQ Block 1



Intercept CPS=10.380627 Intercept Conc=0.229803
Sensitivity=45.171853 Correlation Coeff=0.999842

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	-0.017	0.017	9.63	0.00
SEQ-CAL4@S04	5.000	4.912	0.088	232.25	1.77
SEQ-CAL5@S05	10.000	10.162	0.162	469.41	1.62
SEQ-CAL6@S06	50.000	48.981	1.019	2222.94	2.04
SEQ-CAL7@S07	500.000	500.027	0.027	22597.51	0.01
SEQ-CAL8@S08	1000.000	963.572	36.428	43536.69	3.64

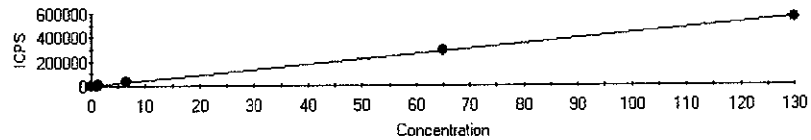
98Mo FQ Block 1



Intercept CPS=36.066399 Intercept Conc=0.020515
Sensitivity=1758.089320 Correlation Coeff=0.999830

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.016	0.016	63.61	0.00
SEQ-CAL2@S02	2.000	2.004	0.004	3559.72	0.21
SEQ-CAL3@S03	4.000	3.938	0.062	6958.65	1.56
SEQ-CAL4@S04	10.000	9.734	0.266	17149.26	2.66
SEQ-CAL5@S05	25.000	24.151	0.849	42495.45	3.40
SEQ-CAL6@S06	125.000	120.482	4.518	211853.97	3.61
SEQ-CAL7@S07	1250.000	1237.686	12.314	2175998.13	0.99
SEQ-CAL8@S08	2500.000	2580.550	80.550	4536872.82	3.22

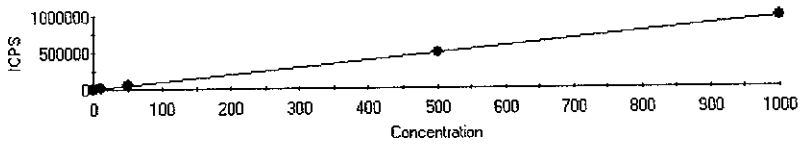
107Ag FQ Block 1



Intercept CPS=4.024004 Intercept Conc=0.000930
Sensitivity=4328.503136 Correlation Coeff=0.999883

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.001	0.001	6.69	0.00
SEQ-CAL4@S04	1.000	1.000	0.000	4330.73	0.04
SEQ-CAL5@S05	1.300	1.386	0.086	6001.79	6.59
SEQ-CAL6@S06	6.500	6.841	0.341	29613.98	5.24
SEQ-CAL7@S07	65.000	66.177	1.177	286449.51	1.81
SEQ-CAL8@S08	130.000	128.149	1.851	554695.34	1.42

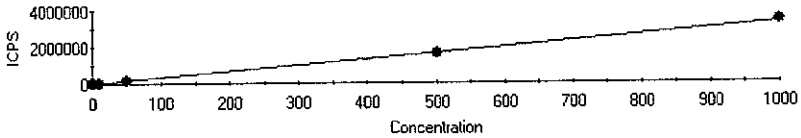
111Cd FQ Block 1



Intercept CPS=5.618086 Intercept Conc=0.005802
Sensitivity=968.328865 Correlation Coeff=0.999961

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	-0.000	0.000	5.55	0.00
SEQ-CAL4@S04	1.000	0.984	0.016	958.82	1.56
SEQ-CAL5@S05	10.000	10.340	0.340	10017.94	3.40
SEQ-CAL6@S06	50.000	50.518	0.518	48924.07	1.04
SEQ-CAL7@S07	500.000	501.146	1.146	485279.40	0.23
SEQ-CAL8@S08	1000.000	983.645	16.355	952497.40	1.64

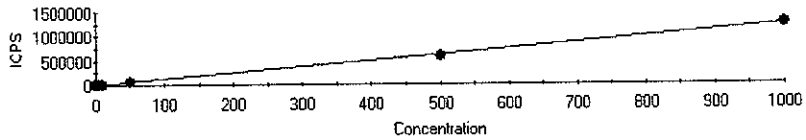
124Sb FQ Block 1



Intercept CPS=35.946704 Intercept Conc=0.010870
Sensitivity=3306.936763 Correlation Coeff=0.999658

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.001	0.001	39.99	0.00
SEQ-CAL4@S04	2.000	1.889	0.111	6283.79	5.53
SEQ-CAL5@S05	10.000	9.444	0.556	31265.19	5.56
SEQ-CAL6@S06	50.000	47.290	2.710	156419.66	5.42
SEQ-CAL7@S07	500.000	488.371	11.629	1615048.14	2.33
SEQ-CAL8@S08	1000.000	1034.144	34.144	3419883.60	3.41

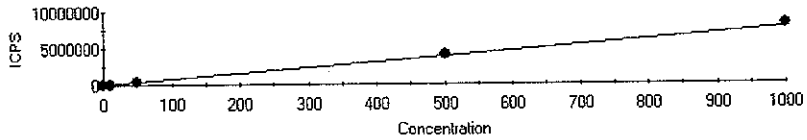
137Cs FQ Block 1



Intercept CPS=30.019391 Intercept Conc=0.024393
Sensitivity=1230.672175 Correlation Coeff=0.999397

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.001	0.001	31.15	0.00
SEQ-CAL3@S03	5.000	4.579	0.421	5665.81	8.41
SEQ-CAL5@S05	10.000	9.354	0.646	11541.52	6.46
SEQ-CAL6@S06	50.000	46.397	3.603	57129.25	7.21
SEQ-CAL7@S07	500.000	467.430	32.570	575283.45	6.51
SEQ-CAL8@S08	1000.000	1008.861	8.861	1241607.77	0.89

205Tl FQ Block 1

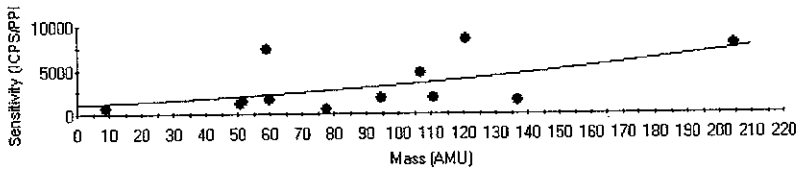


Intercept CPS=26.645603 Intercept Conc=0.003447
Sensitivity=7730.861631 Correlation Coeff=0.999965

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.000	0.000	26.67	0.00
SEQ-CAL4@S04	1.000	0.866	0.134	6719.53	13.43
SEQ-CAL5@S05	10.000	9.023	0.977	69785.33	9.77
SEQ-CAL6@S06	50.000	44.876	5.124	346955.13	10.25
SEQ-CAL7@S07	500.000	515.380	15.380	3984360.32	3.08
SEQ-CAL8@S08	1000.000	1045.160	45.160	8080017.21	4.52

Semi Quant Calibration

[redacted]



Coeff 0=1055.875387 Coeff 1=14.025219 Coeff 2=0.081295

Symbol	Mass	RSF	Available	Excluded	Sensitivity Measured	Corrected	Calculated	%Error
9Be	9.01	0.7500	1	1	447.93	597.24	1188.88	99.1
51V	50.94	0.9900	1	1	1109.00	1122.90	1981.36	76.5
52Cr	51.94	0.9800	1	1	1394.13	1698.40	2003.67	18.0
59Co	58.93	0.9300	1	1	6826.72	7340.56	2164.77	-70.5
60Ni	59.93	0.9100	1	1	1379.43	5794.58	2188.40	-62.2
78Se	77.92	0.1000	1	1	45.17	1913.25	2642.23	38.1
95Mo	94.91	0.9800	1	1	1758.09	12137.81	3119.18	-74.3
107Ag	106.91	0.9300	1	1	4328.50	9063.88	3484.33	-61.6
111Cd	110.90	0.5660	1	1	968.33	13303.49	3611.23	-72.9
121Sb	120.90	0.3900	1	1	3306.94	14811.05	3939.92	-73.4
137Ba	136.91	0.9100	1	1	1230.67	11946.88	4499.73	-62.3
205Tl	204.97	1.0000	1	1	7730.86	10965.76	7346.13	-33.0

Dilution Corrected Concentrations

SEQ-CAL1@S01 10/24/2016 14:33:17

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:33:17	98.6%	-0.0174	98.0%	-0.0029	0.0611	0.0144	1.9090	0.0020	-0.0215	-0.0085	-0.0823	-0.1460	2.7980	0.0000	0.0002	0.0297	0.0057	0.0052	0.0068
2	14:33:31	99.8%	0.0195	100.5%	0.0034	0.1342	0.0341	-0.4249	0.0008	-0.0043	0.0042	-0.0095	-0.0021	-0.0389	0.0000	0.0022	0.0155	-0.0012	-0.0004	0.0041
3	14:33:44	101.6%	-0.0037	101.5%	-0.0005	0.1587	0.0012	-1.4840	-0.0016	-0.0079	0.0043	0.0423	0.1480	-2.7590	0.0000	-0.0024	0.0019	-0.0046	-0.0048	-0.0110
x		100.0%	-0.0005	100.0%	-0.0000	0.1180	0.0166	-0.0000	0.0004	-0.0112	0.0000	-0.0165	0.0000	0.0000	0.0000	-0.0000	0.0157	0.0000	-0.0000	0.0000
σ		1.5%	0.0186	1.8%	0.0032	0.0508	0.0166	1.7360	0.0018	0.0091	0.0074	0.0626	0.1470	2.7780	0.0000	0.0023	0.0139	0.0053	0.0050	0.0096
%RSD		1.5	3484.0000	1.8	0.0000	43.0400	100.0000	0.0000	463.9000	80.8000	0.0000	379.3000	0.0000	0.0000	0.0000	0.0000	88.6800	0.0000	0.0000	0.0000

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:33:17	100.1%	0.0078	0.0014	0.0000	0.0012	0.0000	-0.0017	-0.0006	0.0059	98.5%	98.0%	0.0001	0.0000
2	14:33:31	100.5%	-0.0160	-0.0002	0.0000	0.0011	0.0000	-0.0021	0.0043	-0.0027	99.7%	100.2%	-0.0000	0.0000
3	14:33:44	99.4%	0.0082	0.0006	0.0000	-0.0024	0.0000	0.0037	0.0000	-0.0004	101.8%	101.8%	-0.0001	0.0000
x		100.0%	0.0000	0.0006	0.0000	-0.0001	0.0000	0.0000	0.0012	0.0009	100.0%	100.0%	0.0000	0.0000
σ		0.5%	0.0138	0.0008	0.0000	0.0020	0.0000	0.0032	0.0026	0.0044	1.6%	1.9%	0.0001	0.0000
%RSD		0.5	0.0000	128.5000	0.0000	2885.0000	0.0000	0.0000	216.5000	483.1000	1.6	1.9	1868.0000	0.0000

SEQ-CAL2@S02 10/24/2016 14:37:25

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:38	99.8%	0.1386	100.6%	-0.0002	1.0340	0.4713	36.2100	0.1966	0.1151	0.1874	1.2580	-0.0765	1.4590	0.0000	0.6817	1.9820	1.1650	0.7667	1.7870
2	14:37:51	101.2%	0.1730	101.0%	0.0067	1.0400	0.4549	17.1600	0.2001	0.1517	0.1070	0.9096	0.0544	0.8748	0.0000	0.6509	1.9560	1.2800	0.7101	1.6270
3	14:38:05	101.4%	0.1801	100.9%	-0.0074	1.0470	0.4027	18.9500	0.2027	0.1829	0.0674	0.8937	0.1192	-0.0576	0.0000	0.6769	2.0750	1.1810	0.6611	1.7610
x		100.8%	0.1639	100.8%	-0.0003	1.0400	0.4430	24.1100	0.1998	0.1499	0.1206	1.0200	0.0324	0.7589	0.0000	0.6698	2.0040	1.2090	0.7126	1.7250
σ		0.8%	0.0222	0.2%	0.0070	0.0067	0.0359	10.5200	0.0031	0.0339	0.0611	0.2056	0.0997	0.7652	0.0000	0.0166	0.0627	0.0623	0.0529	0.0862
%RSD		0.8	13.5200	0.2	2408.0000	0.6449	8.0960	43.6300	1.5300	22.6300	50.6900	20.1500	307.7000	100.8000	0.0000	2.4740	3.1290	5.1550	7.4180	4.9950

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:37:38	97.6%	-0.0252	0.2322	0.0099	0.2472	0.0000	0.0020	0.3523	1.9660	102.1%	102.8%	0.1814	0.0000
2	14:37:51	99.3%	-0.0011	0.2103	0.0033	0.2101	0.0000	0.0015	0.4314	1.8950	104.4%	105.1%	0.1819	0.0000
3	14:38:05	100.7%	0.0103	0.2158	0.0049	0.2395	0.0000	0.0049	0.4389	1.8930	105.0%	105.4%	0.1881	0.0000
x		99.2%	-0.0054	0.2194	0.0060	0.2323	0.0000	0.0028	0.4075	1.9180	103.8%	104.4%	0.1838	0.0000
σ		1.6%	0.0181	0.0114	0.0035	0.0196	0.0000	0.0019	0.0480	0.0418	1.5%	1.4%	0.0037	0.0000
%RSD		1.6	337.7000	5.2090	57.7000	8.4350	0.0000	65.7600	11.7700	2.1790	1.5	1.3	2.0120	0.0000

SEQ-CAL3@S03 10/24/2016 14:41:39

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:41:39	98.5%	0.5196	97.2%	0.0138	2.5470	0.9937	9.6930	0.4828	0.4472	0.1817	1.9730	0.1415	-1.0350	0.0000	1.4260	3.9540	2.4850	1.3790	3.3980
2	14:41:53	100.4%	0.4049	99.5%	0.0002	2.6100	1.0080	14.6500	0.4725	0.6554	0.1829	2.5530	0.1050	0.6185	0.0000	1.4210	3.9630	2.5250	1.3420	3.4800
3	14:42:06	100.8%	0.5574	101.5%	-0.0075	2.5290	1.0030	34.9700	0.5090	0.4554	0.2363	2.3570	-0.1879	4.5550	0.0000	1.4150	3.8960	2.4700	1.3580	3.5850
x		99.9%	0.4940	99.4%	0.0022	2.5620	1.0020	19.7700	0.4881	0.5193	0.2003	2.2940	0.0195	1.3790	0.0000	1.4210	3.9380	2.4930	1.3600	3.4880
σ		1.2%	0.0794	2.1%	0.0108	0.0424	0.0071	13.4000	0.0188	0.1179	0.0312	0.2954	0.1806	2.8720	0.0000	0.0056	0.0365	0.0285	0.0187	0.0940
%RSD		1.2	16.0700	2.1	497.3000	1.6550	0.7067	67.7600	3.8600	22.7000	15.5800	12.8800	925.1000	208.2000	0.0000	0.3967	0.9274	1.1450	1.3750	2.6940

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:41:39	100.5%	0.0231	0.5059	0.0255	0.5249	0.0000	-0.0027	0.9296	4.4110	99.8%	101.4%	0.4356	0.0000
2	14:41:53	99.9%	0.0175	0.4994	0.0150	0.5278	0.0000	0.0085	0.9649	4.6740	101.7%	102.7%	0.4308	0.0000
3	14:42:06	98.9%	0.0225	0.4949	0.0196	0.5896	0.0000	-0.0027	0.9248	4.6530	103.1%	104.6%	0.4676	0.0000
x		99.8%	0.0210	0.5001	0.0200	0.5474	0.0000	0.0010	0.9397	4.5790	101.6%	102.9%	0.4447	0.0000
σ		0.8%	0.0031	0.0055	0.0053	0.0365	0.0000	0.0064	0.0219	0.1461	1.7%	1.6%	0.0200	0.0000
%RSD		0.8	14.5000	1.1090	26.2700	6.6760	0.0000	635.6000	2.3330	3.1910	1.6	1.6	4.5030	0.0000

SEQ-CAL4@S04 10/24/2016 14:45:41

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:45:41	99.8%	0.9472	96.1%	0.0014	4.8190	1.9660	35.4500	0.9695	1.1490	0.3725	4.6900	0.2927	-0.5405	0.0000	3.3530	9.5980	6.1150	3.3600	8.5950
2	14:45:55	100.8%	0.9817	97.1%	-0.0026	4.9500	1.8840	33.7000	0.9568	1.2290	0.3018	4.9110	0.2730	1.1520	0.0000	3.2940	9.8480	6.2700	3.4260	8.7220
3	14:46:08	101.9%	1.0870	99.0%	0.0003	4.9310	1.8860	36.0700	0.9881	1.1900	0.2382	5.1340	0.0758	2.2140	0.0000	3.2920	9.7560	6.0880	3.4530	8.8190
x		100.8%	1.0050	97.4%	-0.0003	4.9000	1.9120	35.0700	0.9714	1.1900	0.3042	4.9120	0.2138	0.9419	0.0000	3.3130	9.7340	6.1580	3.4130	8.7120
σ		1.0%	0.0730	1.5%	0.0021	0.0711	0.0470	1.2310	0.0158	0.0402	0.0672	0.2220	0.1199	1.3890	0.0000	0.0348	0.1265	0.0985	0.0480	0.1126
%RSD		1.0	7.2560	1.5	755.6000	1.4500	2.4570	3.5090	1.6230	3.3810	22.0800	4.5200	56.0900	147.5000	0.0000	1.0500	1.3000	1.5990	1.4050	1.2930

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:45:41	97.0%	0.0351	1.0000	0.0305	0.8785	0.0000	-0.0083	1.8590	9.0880	101.0%	100.8%	0.8849	0.0000
2	14:45:55	98.6%	0.0362	0.9991	0.0456	1.0270	0.0000	0.0017	1.9210	9.4450	101.1%	102.9%	0.8654	0.0000
3	14:46:08	98.1%	0.0320	0.9994	0.0347	1.0480	0.0000	-0.0070	1.8880	9.1070	103.5%	104.2%	0.8469	0.0000
x		97.9%	0.0344	0.9996	0.0369	0.9844	0.0000	-0.0045	1.8890	9.2130	101.9%	102.7%	0.8657	0.0000
σ		0.8%	0.0022	0.0006	0.0078	0.0923	0.0000	0.0054	0.0309	0.2009	1.4%	1.7%	0.0190	0.0000
%RSD		0.8	6.4100	0.0571	21.0400	9.3790	0.0000	119.1000	1.6350	2.1800	1.4	1.7	2.1990	0.0000

SEQ-CAL5@S05 10/24/2016 14:49:42

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:42	100.1%	9.5790	95.3%	6.1070	9.7990	9.7900	23.6100	10.1200	10.2400	0.5440	10.0100	0.8814	-1.9370	0.0000	7.9530	24.3600	15.1000	8.5310	21.4200
2	14:49:56	100.5%	10.6100	100.0%	5.8180	9.7290	9.7170	62.7500	9.7420	10.4400	0.5373	10.1600	0.7822	-0.0300	0.0000	7.9740	23.9200	15.0300	8.3550	21.2400
3	14:50:09	102.1%	10.2500	100.0%	6.0260	9.5620	9.9350	96.9200	9.9640	10.2100	0.6630	10.3100	0.7384	-0.0765	0.0000	7.9890	24.1700	15.3400	8.5840	21.8200
x		100.9%	10.1500	98.4%	5.9840	9.6970	9.8140	61.0900	9.9410	10.3000	0.5814	10.1600	0.8007	-0.6810	0.0000	7.9720	24.1500	15.1600	8.4900	21.4900
σ		1.0%	0.5217	2.7%	0.1494	0.1220	0.1106	36.6800	0.1887	0.1275	0.0707	0.1508	0.0733	1.0880	0.0000	0.0181	0.2247	0.1629	0.1198	0.2982
%RSD		1.0	5.1420	2.7	2.4970	1.2590	1.1270	60.0400	1.8980	1.2380	12.1700	1.4840	9.1530	159.7000	0.0000	0.2274	0.9306	1.0750	1.4110	1.3880

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:49:42	99.2%	0.4177	1.3560	0.3641	10.1800	0.0000	8.9390	9.3270	9.1230	102.9%	102.3%	9.1080	0.0000
2	14:49:56	100.4%	0.4320	1.3710	0.3895	10.3900	0.0000	8.9520	9.4750	9.3630	102.8%	104.4%	8.9990	0.0000
3	14:50:09	98.7%	0.4346	1.4300	0.3100	10.4500	0.0000	8.8710	9.5280	9.5760	104.9%	105.8%	8.9630	0.0000
x		99.4%	0.4281	1.3860	0.3545	10.3400	0.0000	8.9210	9.4440	9.3540	103.6%	104.2%	9.0230	0.0000
σ		0.9%	0.0091	0.0389	0.0406	0.1379	0.0000	0.0435	0.1042	0.2269	1.2%	1.8%	0.0757	0.0000
%RSD		0.9	2.1240	2.8070	11.4500	1.3340	0.0000	0.4882	1.1030	2.4260	1.2	1.7	0.8387	0.0000

SEQ-CAL6@S06 10/24/2016 14:53:41

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:53:41	97.8%	50.9900	94.9%	29.8400	46.2200	47.1100	320.3000	48.4800	50.5200	2.6130	50.0200	3.4230	-0.3655	0.0000	39.5300	118.9000	74.4000	41.8900	107.2000
2	14:53:55	100.0%	49.3600	96.0%	30.3100	47.3400	47.6100	266.9000	49.2400	51.4200	2.5410	48.3400	3.4940	2.8680	0.0000	39.7000	120.9000	74.9600	41.6000	107.7000
3	14:54:08	101.4%	49.4700	96.9%	30.5900	47.4000	48.3100	378.2000	50.1300	52.8200	2.6720	48.5800	3.8540	-0.0541	0.0000	40.7000	121.6000	75.8200	42.3400	108.2000
x		99.7%	49.9400	95.9%	30.2500	46.9900	47.6800	321.8000	49.2900	51.5900	2.6080	48.9800	3.5900	0.8162	0.0000	39.9800	120.5000	75.0600	41.9500	107.7000
σ		1.8%	0.9113	1.0%	0.3771	0.6620	0.6047	55.6500	0.8236	1.1610	0.0654	0.9110	0.2315	1.7840	0.0000	0.6297	1.3730	0.7121	0.3731	0.5110
%RSD		1.8	1.8250	1.0	1.2470	1.4090	1.2680	17.2900	1.6710	2.2500	2.5070	1.8600	6.4460	218.6000	0.0000	1.5750	1.1400	0.9487	0.8895	0.4745

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:53:41	99.7%	2.2670	6.8790	1.8110	49.8200	0.0000	44.2500	46.7900	46.0300	102.5%	103.7%	44.8500	0.0000
2	14:53:55	99.5%	2.3000	6.8020	1.6830	50.5600	0.0000	44.1700	47.1600	46.1500	105.5%	105.5%	45.0200	0.0000
3	14:54:08	98.4%	2.3390	6.8410	1.7460	51.1700	0.0000	45.1900	47.9200	47.0100	105.7%	107.2%	44.7500	0.0000
x		99.2%	2.3020	6.8410	1.7470	50.5200	0.0000	44.5300	47.2900	46.4000	104.6%	105.5%	44.8800	0.0000
σ		0.7%	0.0363	0.0383	0.0643	0.6751	0.0000	0.5676	0.5739	0.5319	1.8%	1.8%	0.1374	0.0000
%RSD		0.7	1.5770	0.5605	3.6810	1.3360	0.0000	1.2750	1.2140	1.1460	1.7	1.7	0.3061	0.0000

SEQ-CAL7@S07 10/24/2016 14:57:41

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:57:41	93.6%	499.0000	91.2%	297.6000	502.3000	507.6000	2961.0000	r513.8000	499.2000	26.3400	500.1000	36.6200	5.0320	0.0000	398.5000	1228.0000	r820.9000	426.7000	r1178.0000
2	14:57:54	93.7%	504.0000	93.2%	297.7000	501.1000	504.2000	3092.0000	r511.3000	500.9000	26.8200	500.4000	37.3200	0.7750	0.0000	400.8000	1232.0000	r819.9000	425.4000	r1170.0000
3	14:58:07	94.4%	499.8000	92.2%	303.1000	500.3000	503.7000	2762.0000	r521.5000	511.6000	26.6300	499.7000	36.3600	4.3290	0.0000	408.2000	1253.0000	794.3000	435.6000	r1203.0000
x		93.9%	500.9000	92.2%	299.5000	501.2000	505.2000	2938.0000	r515.6000	503.9000	26.6000	500.0000	36.7700	3.3790	0.0000	402.5000	1238.0000	r811.7000	429.2000	r1184.0000
σ		0.4%	2.6950	1.0%	3.1340	1.0010	2.1500	166.5000	r5.3000	6.7470	0.2427	0.3414	0.4953	2.2820	0.0000	5.1050	13.6200	r15.0700	5.5460	r17.2400
%RSD		0.4	0.5380	1.1	1.0470	0.1997	0.4256	5.6660	r1.0280	1.3390	0.9125	0.0683	1.3470	67.5400	0.0000	1.2680	1.1000	r1.8570	1.2920	r1.4560

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:57:41	87.0%	22.1300	65.9400	16.6100	498.7000	0.0000	450.2000	482.5000	464.5000	103.6%	106.0%	r517.6000	0.0000
2	14:57:54	88.0%	21.8500	65.6900	16.4800	497.0000	0.0000	457.4000	488.2000	468.9000	107.0%	109.4%	r515.1000	0.0000
3	14:58:07	88.6%	23.1700	66.9000	16.8600	507.7000	0.0000	461.6000	494.4000	468.9000	106.8%	110.1%	r513.5000	0.0000
x		87.9%	22.3800	66.1800	16.6500	501.1000	0.0000	456.4000	488.4000	467.4000	105.8%	108.5%	r515.4000	0.0000
σ		0.8%	0.6984	0.6410	0.1941	5.7800	0.0000	5.7610	5.9640	2.5600	1.9%	2.2%	r2.0890	0.0000
%RSD		0.9	3.1200	0.9686	1.1660	1.1530	0.0000	1.2620	1.2210	0.5476	1.8	2.0	r0.4053	0.0000

SEQ-CAL8@S08 10/24/2016 15:01:40

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:40	84.8%	983.6000	81.2%	587.4000	993.0000	990.1000	4486.0000	r996.0000	967.3000	51.0600	949.3000	70.9300	1.9270	0.0000	r850.8000	m2566.0000	r1612.0000	854.8000	r2315.0000
2	15:01:53	85.1%	993.4000	82.8%	594.3000	m1001.0000	997.5000	4299.0000	r998.1000	976.5000	52.1800	957.8000	72.9200	0.6884	0.0000	809.4000	m2583.0000	r1612.0000	r912.6000	r2302.0000
3	15:02:06	85.8%	m1003.0000	83.7%	600.1000	m1014.0000	m1010.0000	4537.0000	m1003.0000	982.8000	51.2500	983.6000	71.8500	1.7070	0.0000	r856.3000	m2592.0000	r1617.0000	r908.1000	r2322.0000
x		85.2%	m993.4000	82.6%	593.9000	m1003.0000	m999.2000	4441.0000	m998.9000	975.5000	51.5000	963.6000	71.9000	1.4410	0.0000	r838.8000	m2581.0000	r1614.0000	r891.9000	r2313.0000
σ		0.5%	m9.8420	1.3%	6.3600	m10.5800	m9.9830	125.5000	m3.4390	7.8070	0.5973	17.8300	0.9967	0.6608	0.0000	r25.6600	m13.2100	r2.8620	r32.1700	r10.1200
%RSD		0.6	m0.9907	1.5	1.0710	m1.0550	m0.9992	2.8250	m0.3443	0.8003	1.1600	1.8500	1.3860	45.8600	0.0000	r3.0590	m0.5119	r0.1773	r3.6070	r0.4375

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:40	84.2%	43.0300	127.5000	32.0200	974.5000	0.0000	r968.2000	m1037.0000	m1007.0000	103.2%	105.4%	m1047.0000	0.0000
2	15:01:53	84.7%	43.6200	128.0000	32.0800	986.5000	0.0000	r969.3000	m1037.0000	m1009.0000	105.6%	108.2%	m1044.0000	0.0000
3	15:02:06	84.1%	43.8800	128.9000	32.4000	989.9000	0.0000	r973.6000	m1028.0000	m1011.0000	107.8%	110.5%	m1045.0000	0.0000
x		84.3%	43.5100	128.1000	32.1700	983.6000	0.0000	r970.4000	m1034.0000	m1009.0000	105.6%	108.0%	m1045.0000	0.0000
σ		0.3%	0.4313	0.6979	0.2054	8.0760	0.0000	r2.8450	m5.0860	m1.6270	2.3%	2.6%	m1.8030	0.0000
%RSD		0.4	0.9913	0.5446	0.6385	0.8210	0.0000	r0.2932	m0.4918	m0.1613	2.2	2.4	m0.1725	0.0000

SEQ-ICV@ICV01 10/24/2016 15:05:42 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:55	86.6%	104.1000	81.0%	0.0737	94.6500	94.9700	410.7000	99.5400	102.8000	10.4800	202.0000	15.6000	0.3575	0.0000	3.6900	10.9600	6.6170	3.6910	9.6270
2	15:06:09	86.5%	105.2000	80.9%	0.0761	95.0900	95.2900	503.0000	100.4000	104.7000	10.6500	200.3000	15.2500	-1.3540	0.0000	3.5570	10.8000	6.7630	3.7130	9.6520
3	15:06:22	87.6%	105.0000	83.5%	0.0599	96.2100	96.3200	481.3000	99.9100	104.5000	10.4800	201.7000	15.3700	-0.6210	0.0000	3.5820	10.9800	6.6470	3.8630	9.4980
x		86.9%	105.838%	81.8%	0.0699	95.315%	97.475%	465.0000	100.960%	106.145%	10.5400	100.159%	15.4100	-0.5390	0.0000	3.6100	10.9200	6.6760	3.7550	9.5920
σ		0.6%	n/a	1.4%	0.0087	n/a	n/a	48.2500	n/a	n/a	0.0959	n/a	0.1800	0.8585	0.0000	0.0709	0.0980	0.0770	0.0935	0.0825
%RSD		0.7	0.5617	1.8	12.4700	0.8428	0.7362	10.3800	0.4313	1.0410	0.9097	0.4633	1.1680	159.3000	0.0000	1.9630	0.8978	1.1530	2.4880	0.8602

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:55	92.0%	4.7170	105.8000	3.3880	103.7000	0.0000	0.1712	190.5000	92.9700	108.2%	112.5%	r221.4000	0.0000
2	15:06:09	91.6%	4.6620	106.2000	3.4000	103.4000	0.0000	0.1662	191.5000	93.2200	111.4%	113.7%	r221.7000	0.0000
3	15:06:22	90.8%	4.7690	106.6000	3.4320	104.3000	0.0000	0.1769	191.9000	94.2000	110.9%	114.9%	r220.9000	0.0000
x		91.4%	4.7160	107.268%	3.4070	104.815%	0.0000	0.1714	96.618%	93.462%	110.2%	113.7%	r107.969%	0.0000
σ		0.6%	0.0537	n/a	0.0225	n/a	0.0000	0.0053	n/a	n/a	1.8%	1.2%	r n/a	0.0000
%RSD		0.7	1.1380	0.3624	0.6592	0.4493	0.0000	3.1080	0.3874	0.6948	1.6	1.1	r0.1750	0.0000

SEQ-ICB@ICB01 10/24/2016 15:09:57 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:57	86.6%	0.0562	79.2%	0.0249	0.1213	0.0160	-17.3500	0.0466	0.0590	0.0339	0.0702	-0.0279	0.7621	0.0000	0.0557	0.1539	0.0965	0.0556	0.1336
2	15:10:10	87.4%	0.0295	81.2%	0.0212	0.1598	-0.0003	-22.0600	0.0395	0.0520	0.0336	-0.0404	-0.0116	0.0265	0.0000	0.0530	0.1882	0.1301	0.0494	0.1338
3	15:10:23	88.9%	0.0452	81.2%	-0.0116	0.1144	-0.0229	-18.9100	0.0283	0.0115	0.0339	0.0704	-0.0555	0.5481	0.0000	0.0455	0.1498	0.0807	0.0493	0.1474
x		87.6%	0.0436	80.5%	0.0115	0.1319	-0.0024	-19.4400	0.0381	0.0409	0.0338	0.0334	-0.0317	0.4456	0.0000	0.0514	0.1640	0.1024	0.0514	0.1383
σ		1.1%	0.0135	1.2%	0.0200	0.0245	0.0196	2.3990	0.0092	0.0256	0.0002	0.0639	0.0222	0.3784	0.0000	0.0053	0.0211	0.0252	0.0036	0.0079
%RSD		1.3	30.8400	1.5	174.4000	18.5500	821.5000	12.3400	24.0900	62.7700	0.5922	191.3000	69.9500	84.9200	0.0000	10.2600	12.8500	24.6300	6.9850	5.7230

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:57	90.2%	-0.0088	0.0297	0.0037	0.0770	0.0000	0.0534	0.2920	0.0174	102.9%	105.6%	0.0639	0.0000
2	15:10:10	90.9%	0.0046	0.0374	0.0018	0.0606	0.0000	0.0424	0.3129	0.0222	104.3%	107.5%	0.0648	0.0000
3	15:10:23	90.1%	-0.0141	0.0257	0.0000	0.0493	0.0000	0.0402	0.3000	0.0328	105.0%	109.2%	0.0688	0.0000
x		90.4%	-0.0061	0.0309	0.0018	0.0623	0.0000	0.0453	0.3016	0.0241	104.1%	107.4%	0.0658	0.0000
σ		0.4%	0.0096	0.0060	0.0018	0.0139	0.0000	0.0071	0.0106	0.0079	1.1%	1.8%	0.0026	0.0000
%RSD		0.5	157.5000	19.3200	100.7000	22.3300	0.0000	15.6600	3.5000	32.7800	1.1	1.7	3.9510	0.0000

SEQ-IFA@ICSA01 10/24/2016 15:13:58 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:58	77.9%	0.4223	73.7%	517.6000	-0.3858	20.0800	70.0100	1.4230	5.9390	0.0080	0.1527	-0.5412	9.4070	0.0000	648.4000	±2155.0000	±1360.0000	690.1000	±1934.0000
2	15:14:11	77.4%	0.2409	76.7%	511.9000	-0.3248	20.8600	56.7400	1.4470	5.9400	0.0254	0.0969	-0.6466	9.8670	0.0000	652.1000	±2153.0000	±1340.0000	691.9000	±1913.0000
3	15:14:25	80.2%	0.3517	78.9%	517.4000	-0.1169	20.7400	20.2300	1.4150	5.7220	-0.0085	0.0920	-0.5516	8.7980	0.0000	663.5000	±2153.0000	±1337.0000	693.3000	±1903.0000
x		78.5%	1.#IO%	76.4%	515.6000	-55.167%	97.902%	49.0000	142.799%	97.782%	0.0083	37.953%	-0.5798	9.3580	0.0000	654.7000	±2154.0000	±1346.0000	691.8000	±1917.0000
σ		1.5%	n/a	2.6%	3.2170	n/a	n/a	25.7800	n/a	n/a	0.0169	n/a	0.0581	0.5362	0.0000	7.8900	±1.0440	±12.2900	1.6120	±15.6000
%RSD		1.9	27.0300	3.4	0.6238	51.1100	2.0510	52.6100	1.1670	2.1390	204.2000	29.6100	10.0200	5.7300	0.0000	1.2050	±0.0485	±0.9134	0.2331	±0.8138

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:58	77.2%	-0.0072	0.0110	0.8374	0.5632	0.0000	0.1510	1.1500	1.9670	95.3%	97.1%	0.0312	0.0000
2	15:14:11	75.3%	-0.0159	0.0123	0.8356	0.7100	0.0000	0.1522	1.1100	1.7700	99.0%	101.8%	0.0245	0.0000
3	15:14:25	76.4%	-0.0136	0.0197	0.8429	0.4907	0.0000	0.1167	1.0770	1.8160	100.8%	102.9%	0.0263	0.0000
x		76.3%	-0.0123	1.#IO%	0.8386	83.994%	0.0000	0.1400	74.146%	154.248%	98.4%	100.6%	1.#IO%	0.0000
σ		0.9%	0.0046	n/a	0.0038	n/a	0.0000	0.0202	n/a	n/a	2.8%	3.1%	n/a	0.0000
%RSD		1.2	37.1400	32.9400	0.4544	19.0000	0.0000	14.4000	3.2860	5.5860	2.9	3.1	12.6500	0.0000

SEQ-IFB@ICSAB01 10/24/2016 15:27:12 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:12	77.6%	22.1500	78.8%	517.9000	20.9800	41.7600	170.4000	20.4800	24.8800	0.9827	18.5700	0.8671	8.0440	0.0000	655.0000	±2154.0000	±1346.0000	687.4000	±1907.0000
2	15:27:25	79.4%	22.9900	80.3%	526.0000	21.1700	42.1800	217.0000	20.6100	26.0600	1.0950	17.3300	0.5258	10.3100	0.0000	651.7000	±2146.0000	±1346.0000	701.2000	±1928.0000
3	15:27:39	80.1%	22.3700	82.9%	524.5000	21.0900	41.9000	193.3000	20.6600	25.8500	1.1600	18.8900	0.7641	11.7900	0.0000	662.5000	±2157.0000	±1349.0000	702.8000	±1926.0000
x		79.0%	118.437%	80.6%	522.8000	110.949%	104.862%	193.6000	102.930%	106.649%	1.0790	96.124%	0.7190	10.0500	0.0000	656.4000	±2152.0000	±1347.0000	697.1000	±1920.0000
σ		1.3%	n/a	2.1%	4.2750	n/a	n/a	23.2800	n/a	n/a	0.0896	n/a	0.1751	1.8850	0.0000	5.5670	±5.8360	±1.5060	8.4460	±11.6700
%RSD		1.6	1.9200	2.6	0.8176	0.4553	0.5100	12.0300	0.4536	2.4620	8.3030	4.5200	24.3500	18.7600	0.0000	0.8480	±0.2711	±0.1118	1.2120	±0.6076

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:12	81.0%	0.8977	18.5200	1.5190	19.5500	0.0000	0.1914	19.9700	20.5800	96.6%	99.2%	18.7100	0.0000
2	15:27:25	80.8%	0.8694	18.5400	1.4450	19.5600	0.0000	0.2366	19.6900	20.7700	100.5%	102.6%	18.8500	0.0000
3	15:27:39	81.8%	0.7563	18.6300	1.4130	19.4800	0.0000	0.1848	19.8800	20.4600	102.0%	104.7%	18.4900	0.0000
x		81.2%	0.8411	103.127%	1.4590	97.663%	0.0000	0.2043	90.216%	93.659%	99.7%	102.1%	88.962%	0.0000
σ		0.5%	0.0748	n/a	0.0543	n/a	0.0000	0.0282	n/a	n/a	2.8%	2.8%	n/a	0.0000
%RSD		0.6	8.8930	0.3139	3.7200	0.2335	0.0000	13.8100	0.7187	0.7586	2.8	2.7	0.9767	0.0000

SEQ-CCV@CCV01 10/24/2016 15:31:15 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:29	88.3%	537.1000	89.7%	301.2000	507.3000	506.9000	2823.0000	±513.5000	500.8000	26.8900	513.7000	38.1400	1.5360	0.0000	403.9000	1240.0000	±824.5000	428.4000	±1182.0000
2	15:31:42	89.2%	541.4000	91.6%	299.6000	519.7000	519.5000	2676.0000	±509.8000	496.9000	27.3200	524.7000	39.5600	0.1282	0.0000	403.2000	1243.0000	±815.7000	428.6000	±1179.0000
3	15:31:55	89.3%	538.8000	90.2%	305.0000	508.1000	506.3000	2601.0000	±518.3000	505.7000	27.8600	512.3000	37.6000	2.6510	0.0000	409.3000	1251.0000	786.2000	433.9000	±1187.0000
x		88.9%	107.823%	90.5%	301.9000	102.341%	102.175%	2700.0000	±102.773%	100.227%	27.3600	103.377%	38.4300	1.4390	0.0000	405.5000	1244.0000	±808.8000	430.3000	±1183.0000
σ		0.6%	n/a	1.0%	2.7980	n/a	n/a	112.6000	±n/a	n/a	0.4851	n/a	1.0100	1.2640	0.0000	3.3700	5.7730	±20.0700	3.1480	±3.8960
%RSD		0.7	0.4029	1.1	0.9266	1.3600	1.4560	4.1720	±0.8382	0.8771	1.7730	1.3150	2.6290	87.9000	0.0000	0.8312	0.4640	±2.4810	0.7315	±0.3294

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:29	93.1%	23.0100	65.7800	16.5600	506.1000	0.0000	464.0000	491.2000	461.4000	111.5%	113.4%	±513.8000	0.0000
2	15:31:42	92.1%	22.3900	65.8400	16.9500	502.9000	0.0000	458.5000	485.0000	462.6000	113.9%	114.9%	±514.3000	0.0000
3	15:31:55	94.5%	22.6600	67.0000	16.9000	512.7000	0.0000	467.7000	491.7000	468.9000	112.7%	116.6%	±507.7000	0.0000
x		93.2%	22.6900	101.856%	16.8000	101.448%	0.0000	463.4000	97.862%	92.859%	112.7%	114.9%	±102.385%	0.0000
σ		1.2%	0.3131	n/a	0.2124	n/a	0.0000	4.6200	n/a	n/a	1.2%	1.6%	±n/a	0.0000
%RSD		1.3	1.3800	1.0430	1.2640	0.9799	0.0000	0.9970	0.7659	0.8667	1.1	1.4	±0.7250	0.0000

SEQ-CCB@CCB01 10/24/2016 15:35:30 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:30	85.0%	0.0841	82.4%	0.0462	0.2013	0.0573	-32.0800	0.0533	0.1213	0.0046	-0.0281	0.0688	-1.6130	0.0000	0.1241	0.3471	0.2475	0.1299	0.3286
2	15:35:44	87.2%	0.0722	84.2%	0.0507	0.1928	0.0576	-18.5600	0.0515	0.0798	-0.0085	0.1721	0.0210	-1.4370	0.0000	0.1267	0.3748	0.2167	0.1195	0.3244
3	15:35:57	87.8%	0.0628	85.4%	0.0329	0.2061	0.0845	-25.2000	0.0508	0.0803	0.0045	0.0217	0.1184	-2.4510	0.0000	0.1377	0.3584	0.2339	0.1291	0.3114
x		86.7%	0.0730	84.0%	0.0433	0.2001	0.0665	-25.2800	0.0519	0.0938	0.0002	0.0553	0.0694	-1.8330	0.0000	0.1295	0.3601	0.2327	0.1262	0.3215
σ		1.5%	0.0107	1.5%	0.0092	0.0067	0.0156	6.7570	0.0013	0.0238	0.0075	0.1042	0.0487	0.5417	0.0000	0.0072	0.0139	0.0155	0.0058	0.0090
%RSD		1.7	14.6400	1.8	21.3500	3.3430	23.5000	26.7300	2.5370	25.4000	3785.0000	188.7000	70.2200	29.5500	0.0000	5.5640	3.8660	6.6380	4.5730	2.7940

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:30	97.5%	0.0186	0.0098	0.0054	0.0563	0.0000	0.0590	0.0964	0.0684	104.4%	106.2%	0.0908	0.0000
2	15:35:44	97.9%	-0.0233	0.0079	0.0035	0.0761	0.0000	0.0577	0.1079	0.0446	107.5%	109.2%	0.0925	0.0000
3	15:35:57	97.8%	0.0014	0.0063	0.0017	0.0439	0.0000	0.0687	0.1294	0.0395	106.6%	109.6%	0.0878	0.0000
x		97.8%	-0.0011	0.0080	0.0035	0.0588	0.0000	0.0618	0.1112	0.0508	106.2%	108.3%	0.0904	0.0000
σ		0.2%	0.0211	0.0018	0.0018	0.0163	0.0000	0.0060	0.0167	0.0154	1.6%	1.9%	0.0024	0.0000
%RSD		0.2	1896.0000	21.9500	51.3900	27.7100	0.0000	9.7260	15.0500	30.3100	1.5	1.7	2.6370	0.0000

SEQ-CCV@CCV02 10/24/2016 15:55:31 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:55:44	87.7%	533.0000	84.4%	300.4000	518.5000	518.4000	3128.0000	±517.6000	509.1000	26.4600	511.9000	38.2600	-0.6022	0.0000	407.5000	±1336.0000	780.5000	430.0000	±1183.0000
2	15:55:57	89.1%	523.6000	84.1%	305.9000	513.4000	514.0000	2645.0000	±522.3000	515.8000	25.1700	516.2000	38.2700	-0.6024	0.0000	415.0000	1278.0000	±837.7000	440.9000	±1199.0000
3	15:56:10	89.2%	528.8000	85.4%	304.5000	515.2000	512.9000	2714.0000	±521.3000	514.3000	26.9500	511.8000	38.9200	-1.5290	0.0000	412.1000	1260.0000	792.5000	436.9000	±1189.0000
x		88.6%	105.694%	84.6%	303.6000	103.145%	103.016%	2829.0000	±104.078%	102.615%	26.1900	102.656%	38.4800	-0.9111	0.0000	411.5000	±1291.0000	±803.6000	435.9000	±1191.0000
σ		0.8%	n/a	0.7%	2.8360	n/a	n/a	261.6000	±n/a	n/a	0.9168	n/a	0.3772	0.5349	0.0000	3.7710	±39.9600	±30.1600	5.5330	±7.7970
%RSD		0.9	0.8926	0.8	0.9340	0.5012	0.5687	9.2470	±0.4801	0.6917	3.5000	0.4928	0.9802	58.7100	0.0000	0.9163	±3.0940	±3.7530	1.2690	±0.6549

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:55:44	88.2%	22.9200	66.6300	16.9700	510.7000	0.0000	464.1000	490.7000	466.1000	104.4%	107.4%	±509.4000	0.0000
2	15:55:57	90.6%	22.6500	68.1100	17.1100	513.5000	0.0000	466.6000	490.0000	466.5000	106.8%	109.4%	±509.8000	0.0000
3	15:56:10	91.1%	23.0500	66.7500	16.7000	512.6000	0.0000	469.4000	487.8000	463.9000	108.9%	110.9%	±508.8000	0.0000
x		89.9%	22.8800	103.329%	16.9300	102.447%	0.0000	466.7000	97.904%	93.101%	106.7%	109.3%	±101.867%	0.0000
σ		1.5%	0.2037	n/a	0.2072	n/a	0.0000	2.6430	n/a	n/a	2.2%	1.8%	±n/a	0.0000
%RSD		1.7	0.8903	1.2200	1.2240	0.2754	0.0000	0.5662	0.3078	0.3018	2.1	1.6	±0.0977	0.0000

SEQ-CCB@CCB02 10/24/2016 15:59:45 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:45	87.9%	0.1060	79.5%	0.0402	0.2280	0.1083	-14.3500	0.0566	0.1087	0.0051	0.1631	0.0029	-0.6891	0.0000	0.1484	0.5072	0.2741	0.1597	0.3886
2	15:59:58	89.3%	0.0950	82.3%	0.0291	0.1552	0.0902	-7.0080	0.0644	0.0731	0.0182	0.0533	0.0729	-1.8790	0.0000	0.1269	0.4592	0.3055	0.1468	0.4089
3	16:00:11	89.1%	0.0448	83.1%	0.0604	0.1211	0.1115	0.0846	0.0630	0.0963	0.0053	0.0098	0.1767	-2.5000	0.0000	0.1619	0.4991	0.2793	0.1756	0.4363
x		88.8%	0.0819	81.6%	0.0432	0.1681	0.1033	-7.0900	0.0613	0.0927	0.0095	0.0754	0.0842	-1.6890	0.0000	0.1458	0.4885	0.2863	0.1607	0.4113
σ		0.7%	0.0326	1.9%	0.0159	0.0546	0.0115	7.2160	0.0042	0.0181	0.0075	0.0790	0.0874	0.9200	0.0000	0.0177	0.0257	0.0168	0.0144	0.0239
%RSD		0.8	39.8200	2.3	36.7200	32.4800	11.1200	101.8000	6.8420	19.5200	78.8500	104.7000	103.9000	54.4700	0.0000	12.1200	5.2590	5.8750	8.9660	5.8140

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:45	93.9%	-0.0106	0.0144	0.0055	0.0656	0.0000	0.0868	0.1005	0.0680	102.1%	104.6%	0.0946	0.0000
2	15:59:58	95.6%	-0.0069	0.0124	0.0036	0.0343	0.0000	0.0832	0.1264	0.0880	103.8%	106.0%	0.1023	0.0000
3	16:00:11	92.4%	-0.0136	0.0138	0.0000	0.0698	0.0000	0.1026	0.1320	0.0882	106.5%	108.1%	0.0919	0.0000
x		94.0%	-0.0104	0.0135	0.0031	0.0566	0.0000	0.0909	0.1196	0.0814	104.1%	106.2%	0.0963	0.0000
σ		1.6%	0.0034	0.0010	0.0028	0.0193	0.0000	0.0103	0.0168	0.0116	2.2%	1.8%	0.0054	0.0000
%RSD		1.7	32.5200	7.7720	92.2800	34.2100	0.0000	11.3700	14.0600	14.2900	2.1	1.7	5.6340	0.0000

SEQ-CCV@CCV03 10/24/2016 16:31:45 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:59	88.4%	520.1000	81.9%	306.6000	508.7000	509.1000	2705.0000	r519.3000	513.7000	27.1400	507.7000	38.5500	0.1590	0.0000	406.8000	1260.0000	781.8000	434.3000	r1203.0000
2	16:32:12	88.4%	526.6000	82.4%	305.5000	515.3000	516.7000	2834.0000	r521.7000	516.7000	26.8800	510.8000	38.6100	0.6193	0.0000	407.1000	1264.0000	783.0000	432.8000	r1194.0000
3	16:32:25	89.1%	523.0000	84.1%	305.7000	510.8000	509.7000	2567.0000	r522.4000	511.8000	26.0700	508.4000	37.7300	-1.9630	0.0000	409.6000	1253.0000	781.2000	431.8000	r1186.0000
x		88.6%	104.639%	82.8%	305.9000	102.323%	102.368%	2702.0000	r104.221%	102.816%	26.7000	101.792%	38.3000	-0.3949	0.0000	407.8000	1259.0000	782.0000	432.9000	r1194.0000
σ		0.4%	n/a	1.1%	0.5963	n/a	n/a	133.6000	rn/a	n/a	0.5594	n/a	0.4922	1.3770	0.0000	1.5260	5.4700	0.8918	1.2480	r8.6740
%RSD		0.5	0.6224	1.4	0.1949	0.6641	0.8294	4.9430	r0.3157	0.4862	2.0950	0.3237	1.2850	348.8000	0.0000	0.3743	0.4345	0.1140	0.2882	r0.7264

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:31:59	89.6%	22.9000	66.6500	16.9300	513.1000	0.0000	462.7000	488.7000	464.6000	106.9%	109.1%	r510.4000	0.0000
2	16:32:12	89.5%	23.0700	68.0600	17.0500	516.9000	0.0000	467.1000	494.4000	471.4000	108.1%	109.8%	r512.8000	0.0000
3	16:32:25	91.0%	22.6700	67.4000	17.0700	510.5000	0.0000	467.9000	497.3000	465.2000	109.0%	111.0%	r512.7000	0.0000
x		90.0%	22.8800	103.644%	17.0200	102.703%	0.0000	465.9000	98.700%	93.408%	108.0%	110.0%	r102.396%	0.0000
σ		0.9%	0.2021	n/a	0.0750	n/a	0.0000	2.8160	n/a	n/a	1.1%	1.0%	rn/a	0.0000
%RSD		1.0	0.8830	1.0470	0.4409	0.6304	0.0000	0.6044	0.8836	0.8063	1.0	0.9	r0.2621	0.0000

SEQ-CCB@CCB03 10/24/2016 16:36:00 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:36:00	88.2%	0.0889	77.4%	0.0285	0.1789	0.0177	-29.4300	0.0537	0.0444	0.0053	0.0634	-0.0049	-0.3251	0.0000	0.2080	0.6609	0.3911	0.2307	0.5614
2	16:36:13	89.6%	0.0448	78.2%	0.0234	0.1949	0.0130	-25.3300	0.0447	0.0221	-0.0085	0.0317	0.0546	-1.1270	0.0000	0.2111	0.6487	0.3433	0.2092	0.5493
3	16:36:27	89.9%	0.0527	79.6%	0.0245	0.1891	0.0061	-30.2000	0.0491	0.0371	0.0050	0.0562	0.0951	-1.3830	0.0000	0.2166	0.6355	0.4243	0.2156	0.6004
x		89.2%	0.0621	78.4%	0.0255	0.1876	0.0123	-28.3200	0.0492	0.0345	0.0006	0.0504	0.0483	-0.9451	0.0000	0.2119	0.6484	0.3862	0.2185	0.5704
σ		0.9%	0.0235	1.1%	0.0027	0.0081	0.0058	2.6170	0.0045	0.0114	0.0079	0.0166	0.0503	0.5519	0.0000	0.0044	0.0127	0.0407	0.0111	0.0267
%RSD		1.1	37.8500	1.4	10.5900	4.3370	47.3400	9.2420	9.1730	33.0600	1324.0000	32.9600	104.2000	58.4000	0.0000	2.0640	1.9610	10.5400	5.0580	4.6810

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:36:00	92.3%	0.0323	0.0085	0.0000	0.0433	0.0000	0.1417	0.1088	0.0736	102.8%	105.4%	0.0759	0.0000
2	16:36:13	94.1%	-0.0104	0.0050	0.0111	0.0693	0.0000	0.1287	0.1521	0.0646	103.6%	105.4%	0.0665	0.0000
3	16:36:27	94.6%	0.0012	0.0074	0.0036	0.0863	0.0000	0.1265	0.1477	0.0246	105.9%	108.1%	0.0624	0.0000
x		93.6%	0.0077	0.0070	0.0049	0.0663	0.0000	0.1323	0.1362	0.0543	104.1%	106.3%	0.0683	0.0000
σ		1.2%	0.0221	0.0018	0.0057	0.0217	0.0000	0.0083	0.0238	0.0261	1.6%	1.6%	0.0070	0.0000
%RSD		1.3	286.6000	25.4800	115.3000	32.7200	0.0000	6.2380	17.5000	48.0800	1.5	1.5	10.1800	0.0000

QJ24005-BLK1@PBS02 10/24/2016 16:40:02 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:40:02	87.2%	0.0042	76.2%	0.0086	0.1743	-0.2425	-105.3000	0.0099	-0.0697	0.0189	0.0084	0.1132	-2.5390	0.0000	0.0294	0.1616	0.0950	0.0302	0.0955
2	16:40:15	89.6%	-0.0224	77.5%	-0.0150	0.1353	-0.2447	-98.1500	0.0103	-0.0764	0.0052	0.1138	0.1388	-3.1920	0.0000	0.0352	0.1305	0.0934	0.0468	0.1010
3	16:40:29	89.3%	-0.0056	79.9%	-0.0111	0.1929	-0.2572	-112.7000	0.0087	-0.0628	0.0049	-0.0743	0.2077	-4.3600	0.0000	0.0414	0.1159	0.0723	0.0489	0.1273
x		88.7%	-0.0079	77.8%	-0.0058	0.1675	-0.2482	-105.4000	0.0096	-0.0696	0.0097	0.0159	0.1532	-3.3630	0.0000	0.0353	0.1360	0.0869	0.0420	0.1079
σ		1.3%	0.0134	1.9%	0.0127	0.0294	0.0079	7.2520	0.0009	0.0068	0.0080	0.0943	0.0489	0.9223	0.0000	0.0060	0.0233	0.0127	0.0102	0.0170
%RSD		1.5	169.5000	2.4	217.4000	17.5500	3.1980	6.8820	8.8880	9.7810	82.6800	591.4000	31.8900	27.4200	0.0000	16.8700	17.1600	14.5700	24.3700	15.7500

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:40:02	92.9%	-0.0008	0.0017	0.0019	0.0173	0.0000	0.0236	0.0245	-0.0016	101.0%	102.7%	0.0087	0.0000
2	16:40:15	93.1%	0.0039	0.0034	0.0000	0.0017	0.0000	0.0170	0.0339	-0.0047	102.1%	106.2%	0.0189	0.0000
3	16:40:29	94.9%	-0.0114	0.0033	0.0037	0.0127	0.0000	0.0266	0.0232	-0.0105	104.2%	106.8%	0.0119	0.0000
x		93.6%	-0.0028	0.0028	0.0019	0.0106	0.0000	0.0224	0.0272	-0.0056	102.4%	105.3%	0.0132	0.0000
σ		1.1%	0.0078	0.0009	0.0018	0.0080	0.0000	0.0049	0.0058	0.0046	1.6%	2.2%	0.0052	0.0000
%RSD		1.2	283.3000	33.9400	98.7100	75.5500	0.0000	21.7800	21.3700	81.5500	1.6	2.1	39.4600	0.0000

QJ24005-BS1@LCS02 10/24/2016 16:44:02 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:44:02	89.4%	2.1170	77.3%	0.0103	10.2700	4.0310	20.8500	1.9960	2.0780	0.6599	10.0100	0.9614	-2.2800	0.0000	2.5320	7.6680	4.7740	2.6550	6.8720
2	16:44:15	90.1%	2.4240	79.2%	0.0025	10.4900	4.0430	43.2400	2.0650	2.1180	0.5106	9.9220	0.8680	-2.5630	0.0000	2.5640	7.8880	4.7810	2.7720	7.0660
3	16:44:29	92.3%	2.2690	80.4%	0.0107	10.4500	4.0510	44.4600	1.9830	2.0570	0.5142	10.2200	0.9877	-2.6840	0.0000	2.5590	7.8290	4.8160	2.7360	6.9690
x		90.6%	113.499%	79.0%	0.0078	104.019%	101.039%	36.1900	100.731%	104.209%	0.5616	100.528%	0.9390	-2.5090	0.0000	2.5510	7.7950	4.7910	2.7210	6.9690
σ		1.5%	n/a	1.5%	0.0046	n/a	n/a	13.2900	n/a	n/a	0.0852	n/a	0.0629	0.2069	0.0000	0.0174	0.1135	0.0224	0.0598	0.0969
%RSD		1.6	6.7590	1.9	59.2700	1.1400	0.2553	36.7400	2.1720	1.4920	15.1700	1.5300	6.7020	8.2480	0.0000	0.6800	1.4560	0.4673	2.1970	1.3910

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:44:02	95.3%	0.0565	2.0840	0.0641	2.0910	0.0000	0.0184	3.8140	18.7500	100.9%	102.4%	1.8090	0.0000
2	16:44:15	93.3%	0.0997	2.1170	0.0853	2.2040	0.0000	0.0098	3.9320	18.5600	101.9%	104.2%	1.8390	0.0000
3	16:44:29	95.1%	0.0942	2.1720	0.0836	2.0320	0.0000	0.0071	3.9030	18.4200	104.7%	107.4%	1.8320	0.0000
x		94.6%	0.0835	106.226%	0.0777	105.458%	0.0000	0.0118	97.078%	92.897%	102.5%	104.6%	91.349%	0.0000
σ		1.1%	0.0235	n/a	0.0118	n/a	0.0000	0.0059	n/a	n/a	2.0%	2.5%	n/a	0.0000
%RSD		1.2	28.1300	2.0950	15.1300	4.1430	0.0000	50.0200	1.5800	0.8896	1.9	2.4	0.8545	0.0000

6100167-03@MH1H52 10/24/2016 16:48:01

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:48:01	90.5%	0.3320	86.1%	4.1470	22.0700	3.5450	-29.5300	3.9120	2.2790	0.2726	3.3360	0.3406	-0.3814	0.0000	1.0140	1.7240	1.2860	0.5816	1.5690
2	16:48:15	91.3%	0.3438	90.4%	4.5110	22.2000	3.5090	2.1310	3.9360	2.4080	0.3415	2.7840	0.1507	1.9920	0.0000	0.9417	1.6180	1.2430	0.6345	1.5700
3	16:48:28	92.2%	0.2922	89.8%	r 12.5300	22.7200	3.6440	-13.5400	3.8990	2.5060	0.2493	2.9920	0.2731	-1.3270	0.0000	1.0230	1.7210	1.3730	0.6133	1.5800
x		91.3%	0.3227	88.8%	r 7.0620	22.3300	3.5660	-13.6500	3.9160	2.3980	0.2878	3.0370	0.2548	0.0944	0.0000	0.9931	1.6880	1.3010	0.6098	1.5730
σ		0.8%	0.0270	2.3%	r 4.7360	0.3473	0.0702	15.8300	0.0185	0.1138	0.0479	0.2784	0.0963	1.7100	0.0000	0.0447	0.0603	0.0662	0.0266	0.0060
%RSD		0.9	8.3810	2.6	r 67.0700	1.5550	1.9690	116.0000	0.4720	4.7440	16.6500	9.1680	37.7800	1812.0000	0.0000	4.5010	3.5740	5.0880	4.3600	0.3798

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:48:01	95.2%	0.3173	2.4360	0.2444	6.3660	0.0000	0.6653	3.8980	64.0000	102.8%	103.4%	0.3230	0.0000
2	16:48:15	94.7%	0.3837	2.3640	0.2359	6.5500	0.0000	0.6984	3.9240	64.8900	106.7%	108.1%	0.3069	0.0000
3	16:48:28	93.9%	0.3077	2.4020	0.2518	6.6980	0.0000	0.6562	4.0000	66.2400	108.3%	108.8%	0.3224	0.0000
x		94.6%	0.3362	2.4010	0.2440	6.5380	0.0000	0.6733	3.9410	65.0500	105.9%	106.8%	0.3174	0.0000
σ		0.7%	0.0414	0.0358	0.0080	0.1662	0.0000	0.0222	0.0529	1.1260	2.8%	2.9%	0.0091	0.0000
%RSD		0.7	12.3100	1.4900	3.2600	2.5420	0.0000	3.2970	1.3430	1.7310	2.7	2.7	2.8620	0.0000

QJ24005-MS1@MH1H52S 10/24/2016 16:52:01 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:52:01	89.0%	9.2140	88.7%	4.8870	108.9000	38.1500	197.2000	83.4600	82.8700	0.9466	19.2200	1.4160	-0.0872	0.0000	r 60.5100	148.9000	93.3100	51.8200	134.7000
2	16:52:14	89.4%	9.0850	90.6%	4.7620	109.7000	38.5200	302.4000	84.7200	83.7700	1.2540	19.1100	1.4580	-0.2820	0.0000	50.4200	149.5000	93.5500	52.8700	133.4000
3	16:52:27	89.8%	8.9950	91.0%	6.5080	110.2000	38.6900	203.5000	85.5700	84.3500	1.2060	19.1100	1.7440	0.8630	0.0000	51.2600	153.3000	94.7900	53.0000	136.2000
x		89.4%	87.7566%	90.1%	5.3860	87.264%	87.223%	234.4000	80.669%	81.263%	1.1360	805.592%	1.5390	0.1646	0.0000	r 54.0600	150.6000	93.8800	52.5600	134.8000
σ		0.4%	n/a	1.2%	0.9741	n/a	n/a	59.0300	n/a	n/a	0.1655	n/a	0.1783	0.6126	0.0000	r 5.5990	2.3620	0.7954	0.6495	1.4170
%RSD		0.5	1.2090	1.3	18.0900	0.6353	0.7157	25.1900	1.2510	0.8919	14.5700	0.3290	11.5800	372.2000	0.0000	r 10.3600	1.5690	0.8473	1.2360	1.0520

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:52:01	92.1%	0.7851	11.0200	0.6091	15.5900	0.0000	0.6962	16.3000	371.0000	104.6%	105.6%	7.7960	0.0000
2	16:52:14	91.8%	0.6693	11.0100	0.5780	15.3400	0.0000	0.6912	15.9800	373.4000	108.5%	109.4%	7.9390	0.0000
3	16:52:27	91.3%	0.7939	11.1500	0.5930	15.9200	0.0000	0.7233	16.6200	379.1000	110.0%	112.2%	7.9790	0.0000
x		91.7%	0.7494	86.626%	0.5933	90.810%	0.0000	0.7036	61.781%	77.357%	107.7%	109.1%	75.872%	0.0000
σ		0.4%	0.0696	n/a	0.0155	n/a	0.0000	0.0173	n/a	n/a	2.8%	3.3%	n/a	0.0000
%RSD		0.4	9.2820	0.7205	2.6180	1.8500	0.0000	2.4540	1.9540	1.1090	2.6	3.0	1.2170	0.0000

QJ24005-DUP1@MH1H52D 10/24/2016 16:56:01

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:01	84.7%	0.2789	80.6%	5.0160	22.8100	3.6530	-20.7100	5.0810	2.8960	0.3107	3.7620	0.3093	-0.4998	0.0000	1.8030	2.2760	1.6670	0.7493	1.9980
2	16:56:14	87.7%	0.2163	84.3%	r 16.1500	23.1600	3.6340	-18.7600	5.0050	2.9000	0.3501	3.2310	0.2229	3.1280	0.0000	2.1410	2.1540	1.5590	0.7858	1.9760
3	16:56:27	89.0%	0.2624	86.3%	r 15.3100	23.3600	3.7110	-17.4200	5.1780	2.7780	0.4217	3.6810	0.3737	-1.8070	0.0000	1.3900	2.2960	1.6580	0.8121	2.0050
x		87.1%	0.2525	83.7%	r 12.1600	23.1100	3.6660	-18.9700	5.0880	2.8580	0.3608	3.5580	0.3020	0.2737	0.0000	1.7780	2.2420	1.6280	0.7824	1.9930
σ		2.2%	0.0324	2.9%	r 6.2010	0.2794	0.0401	1.6550	0.0866	0.0694	0.0563	0.2857	0.0757	2.5570	0.0000	0.3759	0.0770	0.0602	0.0315	0.0154
%RSD		2.6	12.8400	3.4	r 51.0000	1.2090	1.0950	8.7290	1.7030	2.4290	15.5900	8.0310	25.0700	934.3000	0.0000	21.1400	3.4330	3.6950	4.0310	0.7701

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:01	91.8%	0.2662	2.7750	0.1849	5.7180	0.0000	0.6612	5.4780	83.7900	104.8%	104.7%	0.3985	0.0000
2	16:56:14	92.4%	0.3296	2.7850	0.1936	5.9350	0.0000	0.7273	5.7430	83.8100	106.3%	109.4%	0.4206	0.0000
3	16:56:27	91.8%	0.3053	2.8670	0.1853	5.8560	0.0000	0.6710	5.6060	83.7800	109.3%	111.8%	0.4063	0.0000
x		92.0%	0.3004	2.8090	0.1879	5.8370	0.0000	0.6865	5.6090	83.7900	106.8%	108.6%	0.4085	0.0000
σ		0.3%	0.0319	0.0505	0.0049	0.1097	0.0000	0.0357	0.1323	0.0150	2.3%	3.6%	0.0112	0.0000
%RSD		0.4	10.6300	1.7980	2.5960	1.8800	0.0000	5.2000	2.3590	0.0179	2.2	3.3	2.7390	0.0000

SEQ-SRD1@MH1H52L@5X 10/24/2016 17:00:00

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:00	82.7%	0.0709	70.8%	0.9566	4.7670	0.4531	-116.1000	0.9207	0.5085	0.0489	0.2133	0.2323	-3.3660	0.0000	0.1480	0.3832	0.2854	0.1393	0.3430
2	17:00:13	83.5%	0.0965	73.5%	1.0870	4.8220	0.4599	-119.1000	0.8749	0.5092	0.0059	0.8282	0.0834	-0.6178	0.0000	0.1577	0.4210	0.2698	0.1322	0.3433
3	17:00:27	83.7%	0.0243	73.0%	1.2420	4.7710	0.4457	-116.4000	0.9064	0.4293	0.0490	0.8247	0.0981	-0.8711	0.0000	0.2110	0.4125	0.3206	0.1452	0.3614
x		83.3%	0.0639	72.5%	1.0950	4.7870	0.4529	-117.2000	0.9007	0.4823	0.0346	0.6221	0.1379	-1.6180	0.0000	0.1723	0.4056	0.2919	0.1389	0.3492
σ		0.5%	0.0366	1.4%	0.1426	0.0307	0.0071	1.6230	0.0234	0.0459	0.0248	0.3541	0.0820	1.5190	0.0000	0.0339	0.0199	0.0261	0.0065	0.0105
%RSD		0.6	57.2600	2.0	13.0300	0.6413	1.5620	1.3850	2.5980	9.5210	71.7700	56.9100	59.4800	93.8500	0.0000	19.7000	4.8970	8.9250	4.6700	3.0140

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:00	88.8%	0.0792	0.4909	0.0739	1.4220	0.0000	0.1223	0.8576	13.6200	98.6%	99.7%	0.0891	0.0000
2	17:00:13	88.3%	0.0626	0.5261	0.0388	1.3470	0.0000	0.1468	0.8437	13.9100	100.5%	103.3%	0.0796	0.0000
3	17:00:27	88.6%	0.0845	0.4876	0.0427	1.5750	0.0000	0.1394	0.8467	14.2100	101.3%	103.9%	0.0733	0.0000
x		88.6%	0.0754	0.5016	0.0518	1.4480	0.0000	0.1362	0.8494	13.9100	100.1%	102.3%	0.0807	0.0000
σ		0.2%	0.0114	0.0213	0.0192	0.1165	0.0000	0.0126	0.0073	0.2968	1.4%	2.2%	0.0079	0.0000
%RSD		0.3	15.1200	4.2550	37.1400	8.0440	0.0000	9.2360	0.8586	2.1330	1.4	2.2	9.8300	0.0000

QJ24005-PS1@MH1H52A 10/24/2016 17:04:00

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:00	83.2%	0.3761	75.7%	r 18.3700	21.4500	3.4960	-14.6100	4.0430	2.4500	0.6692	13.5200	1.2030	-1.3980	0.0000	0.8383	1.7560	1.2160	0.6312	1.5510
2	17:04:13	84.6%	0.2883	79.3%	4.1100	21.6500	3.5800	-29.3900	3.8850	2.4890	0.7433	14.2800	1.0920	1.0570	0.0000	0.9956	1.7520	1.1940	0.5792	1.6400
3	17:04:26	86.5%	0.2722	81.7%	r 11.7400	21.8600	3.5230	-17.3400	3.9100	2.3630	0.8010	14.4300	1.1960	-2.2040	0.0000	1.0320	1.5950	1.2760	0.6135	1.5060
x		84.8%	0.3122	78.9%	r 11.4100	21.6500	3.5330	-20.4400	3.9460	2.4340	0.7378	14.0800	1.1640	-0.8481	0.0000	0.9554	1.7010	1.2290	0.6080	1.5660
σ		1.7%	0.0559	3.0%	r 7.1350	0.2033	0.0429	7.8640	0.0849	0.0642	0.0661	0.4879	0.0622	1.6980	0.0000	0.1031	0.0915	0.0425	0.0264	0.0682
%RSD		2.0	17.9200	3.8	r 62.5500	0.9390	1.2150	38.4700	2.1530	2.6370	8.9590	3.4670	5.3450	200.2000	0.0000	10.7900	5.3760	3.4560	4.3450	4.3570

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:00	92.1%	0.3525	2.4160	0.2183	6.4460	0.0000	0.6611	11.2900	64.4000	100.2%	103.0%	0.3366	0.0000
2	17:04:13	91.5%	0.3188	2.3660	0.2597	6.4920	0.0000	0.6834	11.7700	65.1400	103.3%	107.4%	0.3057	0.0000
3	17:04:26	91.3%	0.3336	2.3580	0.2272	6.5420	0.0000	0.6990	11.3800	63.8300	108.0%	109.9%	0.3183	0.0000
x		91.7%	0.3349	2.3800	0.2351	6.4940	0.0000	0.6812	11.4800	64.4600	103.8%	106.8%	0.3202	0.0000
σ		0.4%	0.0169	0.0313	0.0218	0.0482	0.0000	0.0190	0.2554	0.6599	3.9%	3.5%	0.0155	0.0000
%RSD		0.5	5.0340	1.3160	9.2660	0.7429	0.0000	2.7950	2.2240	1.0240	3.8	3.3	4.8430	0.0000

SEQ-CCV@CCV04 10/24/2016 17:08:04 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:17	83.1%	511.8000	74.0%	302.0000	511.3000	513.5000	2484.0000	↑521.2000	509.8000	26.8800	501.8000	37.6700	-0.0381	0.0000	402.8000	1250.0000	784.5000	434.0000	↑1191.0000
2	17:08:31	85.2%	515.7000	74.6%	308.6000	532.3000	530.9000	2795.0000	↑526.6000	519.6000	28.6700	527.8000	39.3700	2.9960	0.0000	412.3000	1277.0000	798.9000	439.5000	↑1207.0000
3	17:08:44	84.9%	517.3000	75.2%	308.1000	508.7000	508.3000	2698.0000	↑526.1000	523.0000	25.9800	503.9000	36.9600	-0.5168	0.0000	414.8000	1269.0000	795.1000	441.9000	↑1191.0000
x		84.4%	102.986%	74.6%	306.2000	103.487%	103.514%	2659.0000	↑104.926%	103.496%	27.1800	102.231%	38.0000	0.8136	0.0000	410.0000	1265.0000	792.8000	438.5000	↑1196.0000
σ		1.1%	n/a	0.6%	3.7020	n/a	n/a	159.1000	↑n/a	n/a	1.3690	n/a	1.2390	1.9050	0.0000	6.3420	13.9700	7.4600	4.0480	↑9.1240
%RSD		1.3	0.5442	0.8	1.2090	2.5000	2.2890	5.9830	↑0.5706	1.3250	5.0360	2.8280	3.2590	234.1000	0.0000	1.5470	1.1040	0.9409	0.9232	↑0.7627

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:17	87.1%	22.8500	67.5600	17.5600	522.5000	0.0000	468.7000	497.2000	467.2000	102.0%	105.8%	↑516.9000	0.0000
2	17:08:31	85.1%	23.4300	68.0600	17.5000	514.2000	0.0000	467.2000	490.1000	463.3000	104.9%	105.9%	↑524.8000	0.0000
3	17:08:44	89.7%	23.4100	68.0100	16.7800	518.2000	0.0000	470.9000	498.2000	463.5000	107.6%	110.5%	↑511.3000	0.0000
x		87.3%	23.2300	104.424%	17.2800	103.660%	0.0000	468.9000	99.029%	92.927%	104.8%	107.4%	↑103.537%	0.0000
σ		2.3%	0.3274	n/a	0.4343	n/a	0.0000	1.8510	n/a	n/a	2.8%	2.7%	↑n/a	0.0000
%RSD		2.6	1.4090	0.4075	2.5130	0.8056	0.0000	0.3948	0.8902	0.4702	2.6	2.5	↑1.3050	0.0000

SEQ-CCB@CCB04 10/24/2016 17:12:19 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:19	85.6%	0.0316	73.9%	0.0866	0.1269	0.0340	-11.9300	0.0518	0.0952	0.0340	-0.0656	0.0882	-2.0950	0.0000	0.1690	0.5333	0.3370	0.1837	0.4877
2	17:12:32	86.9%	0.0738	74.6%	0.0593	0.2413	0.0219	-46.6000	0.0549	0.0741	-0.0085	0.1129	0.0890	-2.1340	0.0000	0.1875	0.5232	0.3379	0.1949	0.4837
3	17:12:45	88.2%	0.0292	76.9%	0.0496	0.2501	-0.0033	-44.6600	0.0472	0.1118	0.0051	0.1120	0.1419	-2.1540	0.0000	0.1631	0.5092	0.3493	0.1775	0.4668
x		86.9%	0.0449	75.2%	0.0652	0.2061	0.0176	-34.3900	0.0513	0.0937	0.0102	0.0531	0.1063	-2.1280	0.0000	0.1732	0.5219	0.3414	0.1854	0.4794
σ		1.3%	0.0251	1.6%	0.0192	0.0687	0.0190	19.4800	0.0039	0.0189	0.0217	0.1028	0.0308	0.0298	0.0000	0.0127	0.0121	0.0069	0.0088	0.0111
%RSD		1.5	55.8900	2.1	29.4100	33.3500	108.3000	56.6300	7.5410	20.1600	212.5000	193.5000	28.9300	1.4000	0.0000	7.3560	2.3250	2.0070	4.7510	2.3170

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:12:19	89.9%	-0.0157	0.0141	0.0077	0.0758	0.0000	0.0922	0.1767	0.0835	102.6%	104.5%	0.0931	0.0000
2	17:12:32	93.3%	-0.0286	0.0155	0.0056	0.0511	0.0000	0.1335	0.1841	0.0584	106.2%	107.1%	0.0944	0.0000
3	17:12:45	93.6%	-0.0253	0.0085	0.0000	0.0697	0.0000	0.1064	0.1878	0.0366	104.5%	108.9%	0.0817	0.0000
x		92.2%	-0.0232	0.0127	0.0044	0.0655	0.0000	0.1107	0.1829	0.0595	104.4%	106.8%	0.0898	0.0000
σ		2.1%	0.0067	0.0037	0.0040	0.0129	0.0000	0.0210	0.0057	0.0235	1.8%	2.2%	0.0070	0.0000
%RSD		2.2	28.9100	29.1700	89.6000	19.6200	0.0000	18.9800	3.0900	39.4700	1.7	2.1	7.7890	0.0000

Mass Uncorrected ICPS

SEQ-CAL1@S01 10/24/2016 14:33:17

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:33:17	107737.9800	13.3333	136013.2600	60.0002	797.3683	568.0177	375.3411	46.6668	123.3342	0.0000	6.6667	26.6667	196.6688	91211.9620	40.0001	86.6671	70.0003	53.3335	103.3339
2	14:33:31	109013.0500	30.0001	139353.2700	73.3336	868.0414	598.0197	375.3411	40.0001	150.0012	3.3333	10.0000	20.0000	150.0012	93872.1700	46.6668	63.3336	50.0001	36.6667	96.6672
3	14:33:44	111084.5700	20.0000	140802.0100	66.6669	879.3759	546.0164	364.0073	23.3334	146.6678	3.3333	12.2222	16.6667	103.3339	95394.5610	33.3334	40.0001	40.0001	23.3334	50.0001
x		109278.5300	21.1111	138722.8500	66.6669	848.2619	570.6846	371.5632	36.6667	140.0011	2.2222	9.6296	21.1111	150.0013	93492.8980	40.0001	63.3336	53.3335	37.7779	83.3337
σ		1689.0132	8.3887	2455.8322	6.6667	44.4380	26.1040	6.5436	12.0185	14.5299	1.9245	2.7962	5.0918	46.6674	2116.9364	6.6667	23.3335	15.2753	15.0309	29.0596
%RSD		1.5456	39.7360	1.7703	10.0000	5.2387	4.5742	1.7611	32.7778	10.3784	86.6025	29.0378	24.1188	31.1114	2.2643	16.6667	36.8422	28.6412	39.7876	34.8713

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:33:17	36633.6630	173.3350	10.0000	0.0000	6.6667	148265.9400	93.3338	33.3334	36.6667	111030.5800	106334.9400	26.6667	66153.1540
2	14:33:31	36790.9630	130.0009	3.3333	0.0000	6.6667	153596.6900	93.3338	50.0001	26.6667	112380.3500	108753.3000	26.6667	68298.9340
3	14:33:44	36399.3910	180.0018	6.6667	0.0000	3.3333	155268.0600	116.6674	36.6667	30.0001	114685.5300	110541.3400	26.6667	68520.5930
x		36608.0060	161.1126	6.6667	0.0000	5.5556	152376.8900	101.1117	40.0001	31.1112	112698.8200	108543.1900	26.6667	67657.5600
σ		197.0426	27.1489	3.3333	0.0000	1.9245	3656.9555	13.4717	8.8192	5.0918	1848.1729	2111.0543	0.0000	1307.5595
%RSD		0.5382	16.8509	50.0000	0.0000	34.6410	2.3999	13.3235	22.0480	16.3564	1.6399	1.9449	0.0000	1.9326

SEQ-CAL2@S02 10/24/2016 14:37:25

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98M
1	14:37:38	109110.8800	83.3337	139549.5800	66.6669	2033.5608	1175.4093	504.6807	1386.7724	316.6722	50.0001	65.5558	23.3334	170.0016	95222.7740	2130.2496	3564.0318	3694.0837	2456.9986	5775.167
2	14:37:51	110608.8200	100.0006	140145.3100	80.0004	1961.5449	1173.4091	472.6789	1420.1109	370.0075	30.0001	51.1113	50.0001	163.3348	97594.3930	2060.2334	3560.6972	4104.2596	2306.9593	5331.562
3	14:38:05	110757.2800	103.3339	139925.2900	53.3335	2008.2218	1116.7353	474.6791	1436.7802	413.3427	20.0000	51.1113	53.3335	150.0012	98359.2370	2143.5860	3780.7860	3797.4596	2153.5884	5775.167
x		110158.9900	95.5561	139873.4000	66.6669	2001.1092	1155.1845	484.0129	1414.5545	366.6742	33.3334	55.9261	42.2223	161.1125	97058.8010	2111.3563	3635.1717	3865.2677	2305.8488	5627.299
σ		910.7218	10.7153	301.2348	13.3334	36.5310	33.3131	17.9267	25.4627	48.4214	15.2753	8.3396	16.4430	10.1837	1635.3878	44.7731	126.1168	213.3296	151.7082	256.115
%RSD		0.8267	11.2136	0.2154	20.0001	1.8255	2.8838	3.7038	1.8001	13.2056	45.8258	14.9117	38.9439	6.3208	1.6849	2.1206	3.4693	5.5191	6.5793	4.551

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:37:38	35720.0380	113.3340	1023.3909	20.0000	250.0034	153233.9800	110.0007	1220.0819	2493.6753	115050.1000	111634.5800	1470.1189	69645.7610
2	14:37:51	36352.5380	163.3348	940.0486	6.6667	216.6693	157807.9000	110.0007	1510.1254	2450.3302	117663.2300	114118.4700	1506.7915	71049.8970
3	14:38:05	36867.9410	186.6686	966.7181	10.0000	246.6700	159418.9800	123.3342	1540.1304	2456.9986	118291.3000	114364.8700	1560.1339	71217.8710
x		36313.5050	154.4458	976.7192	12.2222	237.7809	156820.2800	114.4452	1423.4459	2467.0014	117001.5400	113372.6400	1512.3481	70637.8430
σ		574.9458	37.4666	42.5618	6.9389	18.3590	3208.5969	7.6981	176.7563	23.3397	1718.9283	1510.2376	45.2640	863.2633
%RSD		1.5833	24.2588	4.3576	56.7727	7.7210	2.0460	6.7265	12.4175	0.9461	1.4692	1.3321	2.9930	1.2221

SEQ-CAL3@S03 10/24/2016 14:41:39

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98M
1	14:41:39	107653.6600	250.0034	134852.8300	90.0004	3619.3870	1942.8743	549.3499	3247.2465	753.3646	50.0001	100.0006	43.3334	133.3343	93461.3020	4284.3427	6872.5968	7596.5059	4264.3332	10596.17
2	14:41:53	109684.3900	203.3356	137972.4500	66.6669	3696.0845	1949.5424	558.0171	3250.5810	1056.7281	50.0001	125.5564	60.0002	160.0014	96162.5890	4361.0458	7032.7192	7880.0804	4237.6541	11080.08
3	14:42:06	110156.7100	273.3374	140754.6100	53.3335	3694.0837	1924.8704	592.6860	3567.3665	796.7016	63.3336	115.5563	43.3334	223.3361	96856.5650	4417.7398	7036.0551	7843.3821	4364.3807	11610.74
x		109164.9200	242.2255	137859.9600	70.0003	3669.8518	1939.0957	566.6843	3355.0647	868.9314	54.4446	113.7044	48.8890	172.2239	95493.4850	4354.3761	6980.4570	7773.3228	4288.7894	11095.66
σ		1329.9251	35.6432	2952.5015	18.5594	43.7152	12.7626	22.9313	183.8663	164.0738	7.6981	12.8782	9.6226	46.2290	1793.8024	66.9482	93.4246	154.2234	66.8093	507.46
%RSD		1.2183	14.7149	2.1417	26.5133	1.1912	0.6582	4.0466	5.4803	18.8823	14.1392	11.3260	19.6825	26.8424	1.8785	1.5375	1.3384	1.9840	1.5578	4.57

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:41:39	36797.6570	203.3356	2163.5908	50.0001	510.0143	151410.4700	90.0004	3077.1874	5421.6162	112518.7100	110035.2500	3440.6510	68063.8480
2	14:41:53	36560.0340	196.6688	2180.2614	30.0001	523.3484	153518.7200	133.3343	3257.2501	5855.2183	114618.0200	111462.4800	3447.3202	69642.4020
3	14:42:06	36205.2850	210.0024	2196.9321	40.0001	593.3527	157997.8200	93.3338	3173.8873	5918.5927	116245.1600	113483.9300	3807.4638	70939.0370
x		36520.9920	203.3356	2180.2614	40.0001	542.2385	154309.0000	105.5562	3169.4416	5731.8091	114460.6300	111660.5600	3565.1450	69548.4290
σ		298.1093	6.6668	16.6707	10.0000	44.7655	3364.0320	24.1142	90.1136	270.4973	1868.2030	1732.8488	209.8808	1439.8963
%RSD		0.8163	3.2787	0.7646	25.0001	8.2557	2.1801	22.8449	2.8432	4.7192	1.6322	1.5519	5.8870	2.0704

SEQ-CAL4@S04 10/24/2016 14:45:41

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	26
1	14:45:41	109046.7800	443.3441	133340.7700	66.6669	6088.7050	3189.8929	730.6960	6432.2748	1683.4892	96.6672	215.5581	90.0004	136.6677	93663.3660	10005.5030	16605.1510	18588.9860	10322.5240	26
2	14:45:55	110139.8400	463.3451	134697.2100	60.0002	6320.1962	3127.8713	726.0290	6405.5893	1806.8462	80.0004	228.8918	113.3340	166.6682	94704.0650	9888.7087	17139.4750	19173.5310	10586.1600	27
3	14:46:08	111327.5100	516.6813	137370.1000	66.6669	6286.1726	3117.8679	728.0291	6749.1711	1790.1762	63.3336	237.7809	76.6670	183.3352	96859.9340	10098.9400	17349.8740	19023.2160	10903.2010	28
x		110171.3800	474.4569	135136.0300	64.4447	6231.6913	3145.2107	728.2514	6529.0117	1760.1705	80.0004	227.4103	93.3338	162.2237	95075.7880	9997.7171	17031.5000	18928.5780	10603.9620	27
σ		1140.6909	37.9103	2050.1933	3.8490	124.9929	39.0178	2.3414	191.1299	66.9290	16.6668	11.1852	18.5594	23.6491	1630.3820	105.3315	383.9228	303.5468	290.7477	
%RSD		1.0354	7.9902	1.5171	5.9726	2.0058	1.2405	0.3215	2.9274	3.8024	20.8334	4.9185	19.8850	14.5781	1.7148	1.0536	2.2542	1.6036	2.7419	

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:45:41	35509.2150	226.6695	4277.6728	60.0002	853.3734	150780.1200	70.0003	6142.0742	11216.9160	113828.1900	109458.3500	6925.9706	69094.9150
2	14:45:55	36081.4610	230.0029	4294.3474	90.0004	1000.0550	154186.5500	106.6673	6368.8968	11684.1700	113882.2000	111708.8100	6912.6271	69286.3640
3	14:46:08	35927.5200	226.6695	4391.0602	70.0003	1043.3932	156247.9600	76.6670	6402.2536	11530.6410	116653.6700	113146.4300	6852.5817	70710.6010
x		35839.3990	227.7806	4321.0268	73.3336	965.6072	153738.2100	84.4449	6304.4082	11477.2420	114788.0200	111437.8600	6897.0598	69697.2930
σ		296.1259	1.9245	61.2211	15.2754	99.5835	2761.3549	19.5317	141.5713	238.1602	1615.9275	1858.9072	39.0927	882.7554
%RSD		0.8263	0.8449	1.4168	20.8300	10.3130	1.7961	23.1296	2.2456	2.0751	1.4077	1.6681	0.5668	1.2666

SEQ-CAL5@S05 10/24/2016 14:49:42

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	26
1	14:49:42	109424.6200	4301.0172	132228.0200	10989.9720	11632.7710	14080.2290	1956.8773	66468.7770	13743.7140	143.3345	458.9005	230.0029	116.6674	96024.4740	23744.3010	42227.8480	45992.7160	26247
2	14:49:56	109829.4500	4794.5973	138666.2200	10973.2850	11935.8300	14151.0050	2048.8975	66740.7590	14608.3950	143.3345	471.1233	236.6697	150.0012	96438.8260	24466.2120	42579.4830	46991.1360	26384
3	14:50:09	111567.0900	4701.2153	138777.9000	11377.1150	11753.5930	14207.7600	2116.2463	68470.2150	14331.2870	173.3350	470.0122	220.0027	146.6678	98025.6630	24733.6010	43440.2070	48418.5970	27367
x		110273.7200	4598.9433	136557.3800	11113.4570	11774.0650	14146.3310	2040.6737	67226.5840	14227.7990	153.3346	466.6787	228.8918	137.7788	96829.6540	24314.7050	42749.1790	47134.1500	26666
σ		1138.2334	262.2022	3749.7505	228.4863	152.5632	63.8941	80.0022	1085.5682	441.5318	17.3208	6.7590	8.3889	18.3588	1056.2902	511.7558	623.7397	1219.2475	610
%RSD		1.0322	5.7014	2.7459	2.0559	1.2958	0.4517	3.9204	1.6148	3.1033	11.2961	1.4483	3.6650	13.3249	1.0909	2.1047	1.4591	2.5868	2

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:49:42	36309.0310	970.0517	5831.8700	720.0285	9841.9913	157570.5000	33066.6950	30959.2930	11410.4900	115998.7100	111064.3200	72077.9430	70283.9780
2	14:49:56	36754.1480	1020.0572	6028.6650	786.7007	10242.4330	157506.0600	33678.9360	31946.0320	11811.0010	115856.9100	113332.0500	72665.9290	71973.7890
3	14:50:09	36124.9670	1036.7258	6355.5542	633.3554	10422.6380	160297.5600	33819.4560	32568.2340	12281.6240	118254.1500	114857.6900	73351.4010	72662.5690
x		36396.0490	1008.9449	6072.0297	713.3615	10169.0210	158458.0400	33521.6960	31824.5200	11834.3710	116703.2600	113084.6900	72698.4240	71640.1120
σ		323.4907	34.6983	264.5216	76.8897	297.2031	1593.3947	400.2573	811.3237	436.0370	1344.9844	1908.7428	637.3508	1223.8991
%RSD		0.8888	3.4391	4.3564	10.7785	2.9226	1.0056	1.1940	2.5494	3.6845	1.1525	1.6879	0.8767	1.7084

SEQ-CAL6@S06 10/24/2016 14:53:41

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo
1	14:53:41	106840.8200	22300.6520	131663.2500	53222.0040	53748.4210	66001.3900	8477.9513	317054.0200	66938.8740	683.3590	2262.5037	953.3833	143.3345	94828.6870	117403.2300	205193.2200	225444.480
2	14:53:55	109269.4300	22060.0660	133222.3800	54714.1560	54554.5340	66569.5100	8433.2431	326468.6000	69078.1220	663.3575	2182.4842	1023.3909	196.6688	94771.4280	120138.6200	212566.4300	231503.950
3	14:54:08	110807.8900	22410.9230	134385.9900	55686.7010	54710.8030	66836.1220	8676.8055	334952.3300	71513.5110	690.0262	2170.2590	1063.3955	146.6678	98143.5910	123841.1400	214937.8900	235426.100
x		108972.7100	22257.2140	133090.5400	54540.9540	54337.9190	66469.0070	8529.3333	326158.3200	69176.8360	678.9143	2205.0823	1013.3899	162.2237	95914.5690	120461.0000	210899.1800	230791.510
σ		2000.1084	179.4154	1366.1505	1241.4438	516.4652	426.3449	129.6562	8953.1884	2288.9157	13.8788	50.1027	55.6838	29.8768	1930.6026	3231.0403	5081.7709	5028.800
%RSD		1.8354	0.8061	1.0265	2.2762	0.9505	0.6414	1.5201	2.7450	3.3088	2.0443	2.2721	5.4948	18.4171	2.0128	2.6822	2.4096	2.178

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:53:41	36486.4060	4537.7989	29454.3050	3567.3665	47936.0500	157017.7200	162625.0200	154549.3000	57232.9260	115563.2100	112579.4500	359670.2700	70062.2770
2	14:53:55	36416.1250	4697.8802	29735.2170	3383.9630	49695.4600	160066.8800	166012.0900	159385.0600	58849.8670	118949.8100	114503.2600	367209.5400	72800.3310
3	14:54:08	36034.6090	4797.9324	30046.2370	3527.3509	50516.6340	161318.7200	170517.6700	162536.7900	60101.3480	119074.7600	116400.4600	371040.4800	71923.3930
x		36312.3800	4677.8705	29745.2530	3492.8935	49382.7150	159467.7700	166384.9200	158823.7200	58728.0470	117862.5900	114494.3900	365973.4300	71595.3340
σ		243.1097	131.2161	296.0938	96.4349	1318.4120	2212.2006	3959.5134	4023.2276	1438.0859	1992.3025	1910.5174	5785.0151	1398.1963
%RSD		0.6695	2.8050	0.9954	2.7609	2.6698	1.3872	2.3797	2.5331	2.4487	1.6904	1.6687	1.5807	1.9529

SEQ-CAL7@S07 10/24/2016 14:57:41

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo
1	14:57:41	102315.8800	208882.5000	126490.5800	509776.4800	500809.4400	616040.0900	75727.4310	↑3245909.5000	637994.8000	5995.3096	19656.7840	8850.9733	203.3356	90666.5470	1159882.5000	2077928.0000
2	14:57:54	102342.8500	211413.3400	129330.1100	521483.2700	506443.7400	619255.2200	76394.3090	↑3306325.9000	655331.8900	6178.7657	19906.2150	9064.5168	143.3345	90653.0800	1197492.5000	2139263.6000
3	14:58:07	103118.2000	210946.0000	127906.8600	525124.1400	506930.4400	622422.2400	76197.3320	↑3338251.4000	662698.2000	6172.0945	20000.8670	8937.7247	196.6688	91023.4200	1210740.5000	2160872.1000
x		102592.3100	210413.9400	127909.1800	518794.6300	504727.8700	619239.1800	76106.3570	↑3296828.9000	652008.3000	6115.3899	19854.6220	8951.0716	181.1130	90781.0150	1189371.8000	2126021.3000
σ		455.6357	1346.6986	1419.7689	8019.3013	3402.1739	3191.1042	342.6207	↑46897.7380	12682.6350	104.0461	177.7487	107.3956	32.8865	210.0362	26383.5810	43028.4720
%RSD		0.4441	0.6400	1.1100	1.5458	0.6741	0.5153	0.4502	↑1.4225	1.9452	1.7014	0.8953	1.1998	18.1580	0.2314	2.2183	2.0239

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:57:41	31842.3360	42291.4760	278391.6600	32273.8530	474013.9100	168395.3200	1638925.1000	1581308.7000	577104.1800	116775.2200	115066.9800	↑4242012.0000	72639.0490
2	14:57:54	32227.0210	42914.3850	284998.3800	32906.1140	485559.9700	172294.0300	1712805.4000	1646212.7000	600320.9900	120574.3300	118699.9100	↑4354750.1000	73569.8220
3	14:58:07	32424.3870	45212.1490	288420.4700	33458.1230	493092.9800	173822.7200	1719001.3000	1658505.6000	597998.5000	120358.1600	119473.2700	↑4369156.5000	74759.4680
x		32164.5810	43472.6700	283936.8400	32879.3630	484222.2900	171504.0200	1690243.9000	1628675.7000	591807.8900	119235.9000	117746.7200	↑4321972.9000	73656.1130
σ		296.0070	1538.2923	5097.9847	592.5879	9609.6169	2798.6140	44551.2670	41478.8960	12786.6300	2133.7554	2352.7183	↑69621.7610	1062.8402
%RSD		0.9203	3.5385	1.7955	1.8023	1.9845	1.6318	2.6358	2.5468	2.1606	1.7895	1.9981	↑1.6109	1.4430

SEQ-CAL8@S08 10/24/2016 15:01:40

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	
1	15:01:40	92595.8470	372182.4300	112606.4500	897072.9200	951262.3900	1163263.7000	140552.1900	↑5666617.1000	1114312.6000	11253.6280	36133.8910	16478.2540	153.3346	80726.8410	↑2302253.4000	TM 4
2	15:01:53	93026.8800	378071.4500	114830.6800	925652.8400	↓963177.7900	1178173.7000	141973.3500	↑5792780.0000	1147544.0000	11560.6790	36650.3970	17012.5700	136.6677	83434.4560	2236331.2000	TM 4
3	15:02:06	93764.3990	↓384954.8100	116113.4900	945173.0200	↓969575.9700	↓1184538.7000	143052.7400	TM 5890058.0000	1169064.6000	11276.9900	37375.5630	16661.9220	150.0012	83871.7860	↑2400796.2000	TM 4
x		93129.0420	↓378402.8900	114516.8800	922632.9300	↓961338.7200	↓1175325.4000	141859.4200	TM 5783151.7000	1143640.4000	11363.7660	36719.9500	16717.5820	146.6678	82677.6950	↑2313126.9000	TM 4
σ		590.9371	↓6392.6364	1774.4534	24191.8320	↓9294.2704	↓10919.7720	1254.1630	TM 112031.2300	27583.8970	170.9318	623.7510	271.4719	8.8193	1703.5806	↑82769.9170	1
%RSD		0.6345	↓1.6894	1.5495	2.6220	↓0.9668	↓0.9291	0.8841	TM 1.9372	2.4119	1.5042	1.6987	1.6239	6.0131	2.0605	↑3.5783	

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:01:40	30838.8850	77216.5450	506796.6100	58635.1530	875548.4700	178226.7700	↑3355345.1000	TM 3244369.7000	TM 1215851.3000	116322.8100	114364.8700	TM 8529572.9000	72760.0100
2	15:01:53	31002.7740	79946.6580	519906.7100	60017.4630	905525.8700	179681.6600	↑3432715.9000	TM 3318246.4000	TM 1244713.1000	119051.1200	117460.6300	TM 8731017.9000	74749.3860
3	15:02:06	30788.7160	81678.6190	531590.8800	61577.8470	923256.5600	183741.6100	↑3505600.6000	TM 3344835.7000	TM 1270352.6000	121523.5100	119908.9500	TM 8922204.6000	76803.0640
x		30876.7920	79613.9410	519431.4000	60076.8210	901443.6300	180550.0100	↑3431220.5000	TM 3302483.9000	TM 1243639.0000	118965.8100	117244.8200	TM 8727598.5000	74770.8200
σ		111.9509	2249.3672	12403.9650	1472.2445	24114.6010	2858.1275	↑75138.9380	TM 52054.7700	TM 27266.5180	2601.4016	2778.3359	TM 196338.1800	2021.6122
%RSD		0.3626	2.8256	2.3880	2.4506	2.6751	1.5830	↑2.1899	TM 1.5762	TM 2.1925	2.1867	2.3697	TM 2.2496	2.7037

SEQ-ICV@ICV01 10/24/2016 15:05:42 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo
1	15:05:55	94542.3950	40171.8960	112397.2200	166.6682	99482.6960	122261.9800	14987.6780	567982.4000	118895.7700	2523.6836	8401.6583	3970.8670	143.3345	85106.5160	10182.3660	17576.9760	18682.5110
2	15:06:09	94532.2910	40583.7190	112198.1200	170.0016	100073.8000	122210.6300	15149.2790	573545.9100	121337.7200	2553.6920	8297.1179	3840.8112	116.6674	86560.1440	9908.7305	17493.4820	19283.7640
3	15:06:22	95707.8280	41079.2700	115772.5200	150.0012	100146.5900	122374.1400	15116.5580	586980.7400	124510.1900	2490.3411	8278.2118	3847.4807	126.6676	87704.3650	10165.6810	18111.3570	19297.1260
x		94927.5040	40611.6280	113455.9500	162.2237	99901.0280	122282.2500	15084.5050	576169.6800	121581.2300	2522.5722	8325.6627	3886.3863	128.8898	86457.0080	10085.5920	17727.2710	19087.8000
σ		675.7989	454.3307	2008.6726	10.7154	364.1104	83.6189	85.4357	9767.1564	2815.1167	31.6901	66.4896	73.2384	13.4717	1301.9922	153.3939	335.2371	351.0546
%RSD		0.7119	1.1187	1.7704	6.6053	0.3645	0.0684	0.5664	1.6952	2.3154	1.2563	0.7986	1.8845	10.4521	1.5059	1.5209	1.8911	1.8392

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:05:55	33665.5530	8777.5688	429648.5000	6342.2115	95162.1440	149431.4600	706.6941	612928.6500	116278.9200	121925.5100	122145.0900	↑1926396.5000	78423.4770
2	15:06:09	33538.4180	8787.5785	436951.1800	6448.9533	96219.8570	153776.3500	700.0270	626694.6300	119176.0700	125601.7200	123432.3000	↑1948792.9000	78837.0310
3	15:06:22	33227.2790	9121.2402	444840.3100	6602.3967	98372.7150	152749.2500	746.6973	634449.1000	120945.8900	125033.9700	124739.9700	↑1962708.9000	81261.5730
x		33477.0830	8895.4625	437146.6600	6464.5205	96584.9050	151985.6900	717.8061	624690.7900	118800.2900	124187.0600	123439.1200	↑1945966.1000	79507.3610
σ		225.4831	195.5933	7597.7892	130.7893	1636.1191	2270.8590	25.2416	10899.2650	2356.0678	1979.0308	1297.4531	↑18320.5000	1533.2005
%RSD		0.6735	2.1988	1.7380	2.0232	1.6940	1.4941	3.5165	1.7447	1.9832	1.5936	1.0511	↑0.9415	1.9284

SEQ-ICB@ICB01 10/24/2016 15:09:57 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:09:57	94650.1740	40.0001	109853.0700	90.0004	673.3583	514.0145	303.3384	286.6712	193.3354	10.0000	12.2222	23.3334	146.6678	82791.9560	183.3352	270.0040	310.0053	186.6686	446.6776
2	15:10:10	95498.9820	30.0001	112684.0700	86.6671	691.3596	497.3469	294.6714	253.3369	190.0020	10.0000	7.7778	16.6667	136.6677	84504.2700	180.0018	330.0060	410.0093	173.3350	456.6781
3	15:10:23	97031.7520	36.6667	112657.0700	36.6667	657.3571	464.6785	294.6714	190.0020	143.3345	10.0000	12.2222	13.3333	143.3345	85217.5480	160.0014	270.0040	273.3374	173.3350	496.6802
x		95726.9690	35.5556	111731.4100	71.1114	674.0250	492.0133	297.5604	243.3367	175.5573	10.0000	10.7407	17.7778	142.2233	84171.2580	174.4461	290.0047	331.1173	177.7795	466.6787
σ		1207.0465	5.0918	1626.7417	29.8765	17.0111	25.0967	5.0039	49.1043	27.9555	0.0000	2.5660	5.0918	5.0918	1246.6145	12.6200	34.6422	70.7396	7.6982	26.4589
%RSD		1.2609	14.3206	1.4559	42.0136	2.5238	5.1008	1.6816	20.1796	15.9239	0.0000	23.8904	28.6411	3.5802	1.4810	7.2343	11.9454	21.3639	4.3302	5.6696

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:09:57	33019.8580	130.0009	120.0008	6.6667	73.3336	143517.3100	276.6709	936.7149	50.0001	115951.4400	114641.6500	550.0166	74544.3800
2	15:10:10	33277.4620	156.6680	153.3346	3.3333	60.0002	146524.7200	243.3366	1020.0572	56.6668	117572.0600	116646.9200	566.6843	74436.8370
3	15:10:23	32993.0950	123.3342	106.6673	0.0000	50.0001	147327.5300	236.6697	983.3865	70.0003	118379.1000	118578.3300	610.0205	75502.2360
x		33096.8050	136.6677	126.6676	3.3333	61.1113	145789.8500	252.2257	980.0529	58.8891	117300.8600	116622.3000	575.5738	74827.8170
σ		157.0246	17.6386	24.0374	3.3333	11.7064	2008.6000	21.4309	41.7710	10.1836	1236.3398	1968.4560	30.9739	586.5333
%RSD		0.4744	12.9062	18.9767	100.0000	19.1558	1.3777	8.4967	4.2621	17.2928	1.0540	1.6879	5.3814	0.7838

SEQ-IFA@ICSA01 10/24/2016 15:13:58 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	
1	15:13:58	85170.4430	163.3348	102224.8700	717762.2800	552.0168	22023.3110	2857.1156	7386.3328	6338.8759	3.3333	13.3333	20.0000	236.6697	74137.7410	1602551.4000	±3099021.7000	±3439724.8000	1766
2	15:14:11	84611.9310	100.0006	106412.5100	738985.7400	528.6820	22310.0090	2861.1168	7816.6924	6599.0609	6.6667	11.1111	3.3333	236.6697	76379.5180	1677047.1000	±3221940.1000	±3526987.3000	1842
3	15:14:25	87684.1720	143.3345	109384.1300	767658.4600	543.3496	22517.8530	2833.1081	7850.0545	6532.3461	0.0000	11.1111	10.0000	226.6695	79539.7790	1747735.5000	±3299251.1000	±3604040.0000	1890
x		85822.1820	135.5566	106007.1700	741468.8300	541.3495	22283.7240	2850.4468	7684.3599	6490.0943	3.3333	11.8519	11.1111	233.3363	76685.6800	1675778.0000	±3206737.6000	±3523584.0000	1833
σ		1636.5326	32.3756	3596.8047	25040.5950	11.7952	248.3168	15.1485	258.6375	135.1406	3.3333	1.2830	8.3887	5.7736	2714.0017	72600.3610	±100976.6500	±82210.4750	62
%RSD		1.9069	23.8834	3.3930	3.3772	2.1789	1.1143	0.5314	3.3658	2.0823	100.0000	10.8253	75.4984	2.4744	3.5391	4.3323	±3.1489	±2.3331	

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:13:58	28250.4940	123.3342	43.3334	1403.4417	1706.8269	129296.3100	566.6843	3330.6100	2210.2687	107380.4600	105390.7100	260.0037	67670.9310
2	15:14:11	27561.7170	113.3340	50.0001	1456.7834	1900.1986	135908.3700	593.3527	3347.2828	2070.2357	111624.4500	110477.2300	220.0027	69914.4790
3	15:14:25	27983.0010	120.0008	80.0004	1503.4576	1753.5024	138608.6900	486.6797	3317.2718	2166.9249	113639.1800	111722.3100	236.6697	71459.7580
x		27931.7370	118.8897	57.7780	1454.5609	1786.8426	134604.4500	548.9056	3331.7215	2149.1431	110881.3600	109196.7500	238.8920	69681.7220
σ		347.2379	5.0918	19.5317	50.0450	100.9051	4791.1646	55.5144	15.0363	71.6900	3194.8474	3354.4032	20.0929	1905.1075
%RSD		1.2432	4.2828	33.8047	3.4406	5.6471	3.5594	10.1136	0.4513	3.3357	2.8813	3.0719	8.4109	2.7340

SEQ-IFB@ICSAB01 10/24/2016 15:27:12 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96
1	15:27:12	84776.7890	7726.6155	109252.5700	767104.5000	20265.2290	47598.9530	5955.2833	112677.3200	27819.1660	210.0024	687.8038	316.6722	230.0029	78406.6660	1696041.6000	±3244381.4000	±3564122.3
2	15:27:25	86725.0370	8200.3635	111405.1200	794587.9900	20624.0340	47974.9210	6073.3614	115880.5500	29772.0040	233.3363	641.1337	270.0040	260.0037	81036.2420	1734127.9000	±3321868.7000	±3665337.4
3	15:27:39	87475.5100	8063.5746	114972.4600	817480.2800	20684.8390	48232.2780	6070.6929	119669.1600	30430.8470	250.0034	706.6941	346.6733	283.3378	84342.7800	1808386.6000	±3424930.5000	±3764925.9
x		86325.7790	7996.8512	111876.7100	793057.5900	20524.7010	47935.3840	6033.1125	116075.6700	29340.6720	231.1141	678.5439	311.1165	257.7815	81261.8960	1746185.4000	±3330393.5000	±3664795.2
σ		1392.9566	243.8202	2888.9607	25222.7370	226.7566	318.5083	67.4153	3499.9984	1358.2172	20.0929	33.7469	38.6354	26.7368	2974.4835	57134.7790	±90575.9370	±100402.91
%RSD		1.6136	3.0490	2.5823	3.1804	1.1048	0.6645	1.1174	3.0153	4.6291	8.6939	4.9734	12.4183	10.3719	3.6604	3.2720	±2.7197	±2.73

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:27:12	29651.6120	1673.4873	70149.6130	2650.3863	17994.4580	137112.9200	720.0285	59316.2170	23456.8900	108817.3900	107657.0300	143466.5200	67942.9480
2	15:27:25	29591.4160	1673.4873	72353.4520	2597.0376	18545.5640	139830.5200	896.7109	60396.6290	24526.3740	113240.9300	111368.0000	149553.4400	69514.7640
3	15:27:39	29949.2520	1510.1254	74420.0340	2600.3719	18912.9860	143388.6300	736.6965	62322.8980	24626.6440	114992.7100	113602.0600	149621.2100	71778.9240
x		29730.7600	1619.0334	72307.6990	2615.9319	18484.3360	140110.6900	784.4786	60678.5810	24203.3030	112350.3400	110875.7000	147547.0500	69745.5460
σ		191.5983	94.3171	2135.5780	29.8849	462.3151	3147.2222	97.5526	1523.0417	648.3535	3182.5298	3002.9324	3534.0128	1928.3731
%RSD		0.6444	5.8255	2.9535	1.1424	2.5011	2.2462	12.4353	2.5100	2.6788	2.8327	2.7084	2.3952	2.7649

SEQ-CCV@CCV01 10/24/2016 15:31:15 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo
1	15:31:29	96354.6060	212672.1900	124489.9100	508353.3500	540212.8500	658168.9200	80654.2000	±3222673.9000	636355.6800	6549.0248	21605.6440	9805.2850	163.3348	91582.3240	1197962.1000	2138780.6000
2	15:31:42	97365.2890	216794.5300	127068.5600	516155.0600	546379.5000	667342.8600	81367.1780	±3265597.9000	644507.6600	6582.3822	21833.9660	10038.8730	140.0011	93356.9040	1220942.7000	2188784.2000
3	15:31:55	97523.6400	215787.6700	125162.3900	517671.0500	547878.4600	667240.4000	81348.3440	±3272129.3000	646323.3400	6885.9402	21867.3800	9828.6436	183.3352	92296.1560	1222814.3000	2173481.6000
x		97081.1790	215084.8000	125573.6200	514059.8200	544823.6000	664250.7300	81123.2410	±3253467.0000	642395.5600	6672.4491	21768.9960	9890.9339	162.2237	92411.7950	1213906.3000	2167015.5000
σ		634.1916	2149.1723	1337.6043	4999.7388	4062.7610	5267.2481	406.3102	±26866.8490	5308.8867	185.6396	142.4507	128.6503	21.6884	892.9239	13839.8060	25621.2410
%RSD		0.6533	0.9992	1.0652	0.9726	0.7457	0.7930	0.5009	±0.8258	0.8264	2.7822	0.6544	1.3007	13.3694	0.9662	1.1401	1.1823

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:31:29	34070.3910	45235.5980	285868.4000	33143.6410	496729.8300	179637.4700	1754185.6000	1676104.7000	605013.9600	125713.2400	123040.3800	±4502799.2000	78534.4290
2	15:31:42	33709.0480	44937.4580	292136.3400	34635.8550	503972.5900	178923.5900	1769923.7000	1689684.8000	619399.2100	128390.2700	124662.2500	±4566575.8000	79754.9860
3	15:31:55	34578.9720	44873.8120	293420.0400	34087.1200	507085.4000	180653.9800	1782458.9000	1691540.5000	620325.9800	126970.5300	126514.2400	±4574381.9000	80336.7410
x		34119.4700	45015.6230	290474.9300	33955.5390	502595.9400	179738.3500	1768856.1000	1685776.7000	614913.0500	127024.6800	124738.9600	±4547919.0000	79542.0520
σ		437.0342	193.1440	4040.6724	754.7588	5313.2665	869.5933	14166.8640	8427.4149	8585.3788	1339.3335	1738.2002	±39269.2890	919.8305
%RSD		1.2809	0.4291	1.3911	2.2228	1.0572	0.4838	0.8009	0.4999	1.3962	1.0544	1.3935	±0.8635	1.1564

SEQ-CCB@CCB01 10/24/2016 15:35:30 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:35:30	92737.2770	50.0001	114280.4800	126.6676	727.3624	612.0206	305.3385	336.6729	273.3374	3.3333	8.8889	13.3333	120.0008	85463.1710	376.6745	586.6856	743.3637	403.3423	1020.0572
2	15:35:44	95148.6710	46.6668	116808.9800	136.6677	801.3687	614.6875	333.3394	333.3394	230.0029	0.0000	17.7778	3.3333	123.3342	86906.7600	393.3418	646.6897	673.3583	383.3414	1033.3921
3	15:35:57	95872.8870	43.3334	118473.6500	110.0007	775.3664	650.6899	324.0058	333.3394	233.3363	3.3333	11.1111	13.3333	106.6673	89727.2960	426.6767	623.3547	726.6957	413.3427	1000.0550
x		94586.2780	46.6668	116521.0400	124.4453	768.0325	625.7993	320.8946	334.4506	245.5589	2.2222	12.5926	10.0000	116.6674	87365.7430	398.8977	618.9100	714.4726	400.0088	1017.8348
σ		1641.7142	3.3334	2111.3616	13.4717	37.5442	21.5871	14.2574	1.9246	24.1146	1.9245	4.6259	5.7735	8.8193	2168.7991	25.4599	30.2480	36.5684	15.2759	16.7793
%RSD		1.7357	7.1429	1.8120	10.8254	4.8884	3.4511	4.4430	0.5754	9.8203	86.6025	36.7353	57.7350	7.5593	2.4824	6.3826	4.8873	5.1182	3.8189	1.6485

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:35:30	35709.9990	183.3352	43.3334	10.0000	56.6668	148882.5600	303.3384	340.0064	113.3340	117690.2400	115232.3800	773.3662	73717.6790
2	15:35:44	35843.8570	110.0007	36.6667	6.6667	76.6670	150288.7500	306.6718	386.6749	86.6671	121205.9800	118504.0400	810.0361	74998.0880
3	15:35:57	35803.7000	156.6680	30.0001	3.3333	46.6668	153217.0300	346.6733	456.6781	80.0004	120192.6600	118983.5800	773.3662	75992.9660
x		35785.8520	150.0013	36.6667	6.6667	60.0002	150796.1100	318.8945	394.4531	93.3338	119696.2900	117573.3300	785.5895	74902.9110
σ		68.6909	37.1190	6.6667	3.3333	15.2754	2211.3251	24.1148	58.7235	17.6385	1809.6678	2041.4513	21.1714	1140.6253
%RSD		0.1919	24.7458	18.1819	50.0000	25.4588	1.4664	7.5620	14.8873	18.8983	1.5119	1.7363	2.6950	1.5228

SEQ-CCV@CCV02 10/24/2016 15:55:31 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo
1	15:55:44	95785.3040	208831.3400	117139.8600	477151.8500	524470.6500	637767.6600	78579.4820	±3054750.6000	608292.2400	6105.3828	20398.4150	9288.0757	123.3342	85766.0030	1135082.0000	±2165238.2000
2	15:55:57	97250.7400	207965.1600	116690.8100	484112.4200	530872.6800	649432.9800	79179.9920	±3079375.1000	615807.0700	5965.2898	21126.7420	9541.6714	126.6676	87468.7790	1163266.7000	2083521.1000
3	15:56:10	97348.4440	210499.1500	118439.8800	489222.0200	536135.0900	651753.1900	79602.3230	±3120215.8000	623406.3600	6422.2677	21065.4890	9745.2205	113.3340	88747.7510	1173966.7000	2088901.7000
x		96794.8290	209098.5500	117423.5200	483495.4300	530492.8100	646317.9400	79120.5990	±3084780.5000	615835.2200	6164.3135	20863.5490	9524.9892	121.1119	87327.5110	1157438.5000	±2112553.7000
σ		875.6381	1267.9575	908.3803	6058.6940	5841.4906	7495.0888	514.0006	±33065.5970	7557.0955	234.1192	403.9803	229.0286	6.9390	1495.8853	20086.8720	±45705.3760
%RSD		0.9046	0.6160	0.7736	1.2531	1.1011	1.1597	0.6496	±1.0719	1.2271	3.7980	1.9363	2.4045	5.7294	1.7130	1.7355	±2.1635

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:55:44	32280.5440	42288.1270	271745.0200	31872.4410	470319.2400	167305.4700	1645883.6000	1570244.2000	572641.4800	117642.9700	116603.0300	±4230364.3000	73717.6790
2	15:55:57	33153.6770	42174.2670	280381.4300	32451.1490	477731.1100	168867.2900	1674681.3000	1588049.6000	583024.6000	120415.5800	118777.5800	±4312940.7000	75014.8930
3	15:56:10	33344.3730	43634.4670	279426.0100	32210.2950	484976.7100	170259.5700	1713779.2000	1608441.8000	590114.1500	122675.5000	120405.4500	±4363537.0000	76352.6270
x		32926.1980	42698.9540	277184.1500	32177.9620	477675.6900	168810.7800	1678114.7000	1588911.9000	581926.7500	120244.6800	118595.3500	±4302280.7000	75028.4000
σ		567.2243	812.1762	4734.5878	290.7060	7328.8914	1477.8564	34077.7670	19113.4200	8787.9188	2520.6142	1907.7480	±67223.2960	1317.5259
%RSD		1.7227	1.9021	1.7081	0.9034	1.5343	0.8755	2.0307	1.2029	1.5101	2.0962	1.6086	±1.5625	1.7560

SEQ-CCB@CCB02 10/24/2016 15:59:45 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:59:45	96004.2620	60.0002	110291.6700	113.3340	829.3712	656.0237	335.3395	343.3398	250.0034	3.3333	16.6667	10.0000	130.0009	83094.6990	430.0102	816.7034	793.3679	473.3457	1156.7403
2	15:59:58	97506.7940	56.6668	114145.4700	100.0006	809.3694	643.3561	352.6735	400.0088	216.6693	6.6667	12.2222	10.0000	113.3340	86634.1770	383.3414	763.3654	903.3782	450.0111	1246.7522
3	16:00:11	97267.5850	36.6667	115303.2800	150.0012	787.3674	649.3565	357.3404	396.6753	246.6700	3.3333	10.0000	26.6667	100.0006	87404.8350	486.6797	840.0388	843.3724	540.0160	1346.7664
x		96926.2140	51.1113	113246.8000	121.1119	808.7026	649.5788	348.4511	380.0080	237.7809	4.4444	12.9630	15.5556	114.4452	85711.2370	433.3438	806.7025	846.7062	487.7909	1250.0863
σ		807.3420	12.6199	2623.8815	25.8919	21.0098	6.3367	11.5923	31.7993	18.3590	1.9245	3.3945	9.6225	15.0310	2298.5172	51.7497	39.3029	55.0808	46.7089	95.0569
%RSD		0.8329	24.6910	2.3170	21.3785	2.5980	0.9755	3.3268	8.3681	7.7210	43.3013	26.1862	61.8590	13.1338	2.6817	11.9420	4.8720	6.5053	9.5756	7.6040

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:59:45	34381.5590	126.6676	60.0002	10.0000	63.3336	144685.6100	390.0084	343.3398	110.0007	115056.8500	113548.0600	793.3679	72602.0890
2	15:59:58	34983.8500	136.6677	53.3335	6.6667	36.6667	146301.1600	386.6749	433.3437	136.6677	117031.8200	115033.2200	866.7080	73909.2250
3	16:00:11	33819.4560	126.6676	60.0002	0.0000	70.0003	147361.4100	463.3451	460.0116	140.0011	120000.1400	117362.7100	796.7016	74258.7230
x		34394.9550	130.0009	57.7780	5.5556	56.6669	146116.0600	413.3428	412.2317	128.8898	117362.9400	115314.6600	818.9258	73590.0120
σ		582.3125	5.7736	3.8490	5.0918	17.6384	1347.4696	43.3354	61.1340	16.4432	2488.2254	1922.8382	41.4141	873.2306
%RSD		1.6930	4.4412	6.6618	91.6515	31.1266	0.9222	10.4841	14.8300	12.7575	2.1201	1.6675	5.0571	1.1866

SEQ-CCV@CCV03 10/24/2016 16:31:45 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo
1	16:31:59	96529.7830	204637.5800	113676.3100	472908.5100	520748.2100	636348.5400	77743.0030	r2989811.1000	599061.8700	6362.2255	20553.2080	9518.3136	136.6677	85311.7590	1121719.2000	2021175.1000
2	16:32:12	96583.6850	207399.1100	114250.1000	473631.3900	527313.5700	644940.8200	78948.6600	r3020760.6000	606053.2100	6292.1768	20651.2070	9528.3241	143.3345	85183.9020	1130786.1000	2043188.9000
3	16:32:25	97331.5980	207791.2500	116660.4300	483782.1900	530513.2500	647252.7700	78814.1670	r3085118.4000	612123.7000	6208.7861	20912.9160	9434.8934	106.6673	85870.3140	1156506.9000	2058849.7000
x		96815.0220	206609.3100	114862.2800	476774.0300	526191.6800	642847.3700	78501.9440	r3031896.7000	605746.2600	6287.7295	20705.7770	9493.8437	128.8898	85455.3250	1136337.4000	2041071.2000
σ		448.1790	1718.7923	1583.4473	6079.9923	4978.2490	5745.6428	660.6928	r48619.7390	6536.3223	76.8163	185.9592	51.2972	19.5318	365.0328	18046.0210	18926.3460
%RSD		0.4629	0.8319	1.3786	1.2752	0.9461	0.8938	0.8416	r1.6036	1.0791	1.2217	0.8981	0.5403	15.1539	0.4272	1.5881	0.9273

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:31:59	32795.7160	42057.0590	270711.5300	31695.1560	471469.9400	165143.1400	1642748.5000	1568163.3000	577157.4000	120452.7400	118402.7300	r4304562.5000	74530.9370
2	16:32:12	32748.8810	42710.0930	278694.0500	32176.8440	478952.9500	167926.7700	1673202.4000	1600700.5000	591460.9200	121847.8100	119209.8500	r4354382.3000	75626.5960
3	16:32:25	33320.9540	42606.2740	280147.7200	32702.0460	479925.6200	168982.7400	1699074.1000	1631733.8000	590398.4100	122891.7200	120530.4200	r4401014.2000	76903.9120
x		32955.1840	42457.8090	276517.7600	32191.3490	476782.8400	167350.8800	1671675.0000	1600199.2000	586338.9100	121730.7600	119381.0000	r4353319.6000	75687.1480
σ		317.6309	350.9200	5080.6073	503.6018	4626.7348	1983.5240	28193.8270	31788.2170	7969.1480	1223.6987	1074.1200	r48234.5930	1187.6457
%RSD		0.9638	0.8265	1.8374	1.5644	0.9704	1.1852	1.6866	1.9865	1.3591	1.0053	0.8997	r1.1080	1.5692

SEQ-CCB@CCB03 10/24/2016 16:36:00 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:36:00	96290.6000	53.3335	107393.9500	93.3338	680.0254	528.0153	288.0046	320.0056	173.3350	3.3333	12.2222	13.3333	133.3343	82475.7680	580.0185	1040.0595	1096.7328	660.0240	1616.8104
2	16:36:13	97820.1330	36.6667	108412.6000	86.6671	733.3629	532.0156	300.6716	273.3374	150.0012	0.0000	11.1111	16.6667	123.3342	83569.0170	593.3527	1030.0584	976.7191	606.6869	1596.8069
3	16:36:27	98244.6740	40.0001	110450.2400	90.0004	703.3605	526.0152	292.0047	303.3384	170.0016	3.3333	12.2222	23.3334	120.0008	85543.9260	620.0211	1030.0584	1220.0819	636.6890	1773.5063
x		97451.8030	43.3334	108752.2600	90.0004	705.5830	528.6820	293.5603	298.8938	164.4459	2.2222	11.8519	17.7778	125.5564	83862.9040	597.7975	1033.3921	1097.8446	634.4666	1662.3745
σ		1027.7899	8.8192	1556.2002	3.3334	26.7381	3.0552	6.4752	23.6494	12.6200	1.9245	0.6415	5.0918	6.9390	1555.0482	20.3684	5.7742	121.6852	26.7379	96.7612
%RSD		1.0547	20.3520	1.4310	3.7037	3.7895	0.5779	2.2058	7.9123	7.6743	86.6025	5.4127	28.6411	5.5266	1.8543	3.4072	0.5588	11.0840	4.2142	5.8207

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:36:00	33782.6530	200.0022	36.6667	0.0000	43.3334	143083.8900	573.3514	366.6741	116.6674	115900.8000	114374.9900	646.6897	72353.4520
2	16:36:13	34435.0940	126.6676	23.3334	20.0000	66.6669	144658.5200	533.3490	503.3473	106.6673	116711.0700	114364.8700	570.0179	73915.9460
3	16:36:27	34629.1630	150.0012	33.3334	6.6667	83.3337	146893.9400	536.6825	500.0138	60.0002	119297.6500	117339.0800	550.0166	74473.8050
x		34282.3030	158.8903	31.1112	8.8889	64.4447	144878.7800	547.7943	456.6784	94.4450	117303.1700	115359.6400	588.9081	73581.0680
σ		443.4562	37.4667	6.9389	10.1835	20.0925	1914.5497	22.1958	77.9638	30.2462	1774.1456	1714.2452	51.0299	1099.1279
%RSD		1.2935	23.5802	22.3036	114.5644	31.1779	1.3215	4.0518	17.0719	32.0252	1.5124	1.4860	8.6652	1.4938

QJ24005-BLK1@PBS02 10/24/2016 16:40:02 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:40:02	95249.7210	20.0000	105667.2200	63.3336	251.3368	194.6687	108.6673	80.0004	46.6668	6.6667	10.0000	10.0000	100.0006	80925.2600	110.0007	273.3374	296.6715	113.3340	330.0060
2	16:40:15	97840.3490	10.0000	107444.5400	30.0001	252.0035	192.0020	122.0008	83.3337	40.0001	3.3333	14.4445	6.6667	90.0004	83084.6070	126.6676	230.0029	296.6715	160.0014	350.0067
3	16:40:29	97493.3170	16.6667	110784.2700	36.6667	234.0030	179.3351	94.6672	76.6670	56.6668	3.3333	6.6667	6.6667	73.3336	84154.3800	146.6678	213.3358	246.6700	170.0016	433.3437
x		96861.1290	15.5556	107965.3400	43.3334	245.7811	188.6686	108.4451	80.0004	47.7779	4.4444	10.3704	7.7778	87.7782	82721.4160	127.7787	238.8921	280.0043	147.7790	371.1188
σ		1406.2663	5.0918	2597.9729	17.6384	10.2056	8.1923	13.6682	3.3334	8.3887	1.9245	3.9021	1.9245	13.4716	1644.9119	18.3588	30.9727	28.8684	30.2464	54.8084
%RSD		1.4518	32.7327	2.4063	40.7040	4.1523	4.3422	12.6038	4.1667	17.5578	43.3013	37.6274	24.7436	15.3474	1.9885	14.3677	12.9652	10.3100	20.4673	14.7684

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:40:02	34026.8950	140.0011	10.0000	3.3333	20.0000	139668.0500	170.0016	106.6673	26.6667	113838.3200	111509.7200	96.6672	71238.0280
2	16:40:15	34067.0450	150.0012	16.6667	0.0000	6.6667	143805.1400	150.0012	136.6677	23.3334	115080.4800	115299.9000	183.3352	72618.8890
3	16:40:29	34752.9670	126.6676	16.6667	6.6667	16.6667	147971.2000	186.6686	106.6673	16.6667	117389.7200	115931.1900	126.6676	73808.4110
x		34282.3020	138.8900	14.4445	3.3333	14.4445	143814.7900	168.8905	116.6674	22.2222	115436.1700	114246.9400	135.5566	72555.1090
σ		408.1017	11.7065	3.8490	3.3333	6.9389	4151.5823	18.3589	17.3207	5.0918	1802.2230	2391.4176	44.0125	1286.3780
%RSD		1.1904	8.4286	26.6470	100.0000	48.0385	2.8868	10.8703	14.8463	22.9129	1.5612	2.0932	32.4680	1.7730

QJ24005-BS1@LCS02 10/24/2016 16:44:02 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	16:44:02	97668.5160	856.7070	107279.2700	66.6669	11658.8050	5878.5667	1002.7220	10873.1650	2410.3195	166.6682	441.1218	236.6697	106.6673	81977.9620	6622.4112	11644.1190	12765.6230	7189.5084
2	16:44:15	98389.5620	986.7202	109890.1800	56.6668	11767.6110	5768.4962	1025.3912	11503.9410	2510.3466	126.6676	427.7878	203.3356	100.0006	83225.8910	6832.5667	12201.5160	13022.6540	7643.2117
3	16:44:29	100755.2600	946.7160	111496.2300	70.0003	11955.8570	5890.5745	1048.7272	11226.9280	2480.3383	130.0009	448.9000	236.6697	100.0006	84739.7800	6952.6577	12345.0430	13373.1620	7693.2539
x		98937.7800	930.0477	109555.2300	64.4447	11794.0910	5845.8791	1025.6134	11201.3450	2467.0015	141.1122	439.2699	225.5584	102.2228	83314.5440	6802.5452	12063.5590	13053.8130	7508.6580
σ		1614.7470	66.5900	2128.3374	6.9389	150.2859	67.2840	23.0034	316.1651	51.3299	22.1948	10.6772	19.2455	3.8490	1383.0417	167.1575	370.2669	304.9658	277.5219
%RSD		1.6321	7.1598	1.9427	10.7673	1.2742	1.1510	2.2429	2.8226	2.0807	15.7285	2.4307	8.5324	3.7653	1.6600	2.4573	3.0693	2.3362	3.6960

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:44:02	34896.8500	240.0032	7993.5127	113.3340	1820.1822	138855.7500	153.3346	11584.0420	22016.6280	113706.6900	111125.0600	14347.9800	71594.1420
2	16:44:15	34150.6910	320.0056	8260.4179	153.3346	1950.2092	143957.5200	126.6676	12124.7470	22083.4560	114807.0500	113095.8000	14842.1060	72380.3310
3	16:44:29	34806.5050	316.6722	8650.7807	153.3346	1836.8522	145915.0300	120.0008	12304.9890	22447.6800	117950.2400	116545.6300	15239.4290	72682.7290
x		34618.0150	292.2270	8301.5704	140.0011	1869.0812	142909.4300	133.3343	12004.5930	22182.5880	115487.9900	113588.8300	14809.8380	72219.0680
σ		407.2278	45.2579	330.5608	23.0943	70.7516	3644.4788	17.6386	375.1915	231.9953	2202.2035	2743.7147	446.5996	561.9252
%RSD		1.1763	15.4872	3.9819	16.4958	3.7854	2.5502	13.2289	3.1254	1.0458	1.9069	2.4155	3.0156	0.7781

6100167-03@MH1H52 10/24/2016 16:48:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	16:48:01	99144.3630	153.3346	119493.5300	6772.5217	23809.8060	5226.1684	830.7046	23500.3350	2903.7970	70.0003	153.3346	103.3339	136.6677	117869.2000	2880.4563	2843.7781	3734.1001	1720.162
2	16:48:15	100037.4000	160.0014	125382.0500	7723.2793	23999.6370	5149.4580	881.3761	24777.0520	3207.2323	86.6671	128.8898	90.0004	173.3350	119827.8900	2797.0969	2790.4282	3774.1166	1956.877
3	16:48:28	100970.9700	140.0011	124530.4600	±21200.6430	24261.6650	5285.5361	864.7078	24436.1310	3317.2718	63.3336	136.6677	70.0003	120.0008	123847.9000	3040.5084	2970.4852	4170.9566	1896.864
x		100050.9100	151.1124	123135.3500	±11898.8150	24023.7030	5220.3875	858.9295	24237.8400	3142.7670	73.3336	139.6307	87.7782	143.3345	120515.0000	2906.0205	2868.2305	3893.0578	1857.968
σ		913.3780	10.1837	3182.5154	±8069.6342	226.8887	68.2230	25.8252	661.0529	214.1429	12.0186	12.4889	16.7776	27.2850	3047.9980	123.7030	92.4855	241.4977	123.057
%RSD		0.9129	6.7391	2.5846	±67.8188	0.9444	1.3069	3.0067	2.7274	6.8138	16.3889	8.9442	19.1136	19.0359	2.5291	4.2568	3.2245	6.2033	6.623

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:48:01	34853.3500	736.6965	9962.1221	460.0116	5865.2248	162404.4600	2453.6644	12481.8960	78077.1820	115840.0300	112279.1100	2610.3747	122121.4400
2	16:48:15	34655.9310	896.7109	10092.2660	463.3451	6295.5124	169739.9800	2680.3951	13096.0930	82374.8590	120260.2100	117322.1900	2593.7033	124638.6000
3	16:48:28	34378.2130	753.3646	10292.4900	496.6802	6468.9675	172338.1900	2540.3549	13439.9270	84941.6510	122074.1500	118088.6900	2740.4130	129218.5400
x		34629.1650	795.5906	10115.6260	473.3457	6209.9016	168160.8800	2558.1381	13005.9720	81797.8970	119391.4700	115896.6600	2648.1637	125326.2000
σ		238.6969	87.9684	166.4181	20.2769	310.8428	5151.6904	114.4067	485.3320	3468.4141	3206.5693	3156.2497	80.3239	3598.1665
%RSD		0.6893	11.0570	1.6452	4.2837	5.0056	3.0635	4.4723	3.7316	4.2402	2.6858	2.7233	3.0332	2.8710

QJ24005-MS1@MH1H52S 10/24/2016 16:52:01 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo
1	16:52:01	97476.4710	3690.7490	123057.2700	8207.0362	112900.0600	49472.2470	6290.8425	514991.7900	103590.1900	230.0029	808.9249	376.6745	136.6677	125422.6000	±173878.2900	248822.5600	274035.590
2	16:52:14	97924.5820	3660.7369	125686.2000	8170.3365	114055.0100	49816.7880	6524.3403	534836.5200	107154.4800	303.3384	802.2576	383.3414	133.3343	125838.2900	148913.0600	256782.7200	282433.500
3	16:52:27	98372.7150	3640.7289	126179.6400	11190.2160	113403.6000	49749.7560	6328.8689	542808.8400	108422.7200	290.0046	797.8128	470.0122	150.0012	131024.1100	152539.1000	265261.0000	288406.710
x		97924.5890	3664.0716	124974.3700	9189.1963	113452.8900	49679.5970	6381.3506	530879.0500	106389.1300	274.4486	802.9984	410.0093	140.0011	127428.3300	±158443.4800	256955.4300	281625.270
σ		448.1216	25.1763	1678.4881	1733.0312	579.0501	182.6711	125.2839	14324.5670	2505.5247	39.0642	5.5930	52.0708	8.8193	3120.9649	±13489.3270	8220.5842	7219.570
%RSD		0.4576	0.6871	1.3431	18.8594	0.5104	0.3677	1.9633	2.6983	2.3551	14.2337	0.6965	12.6999	6.2995	2.4492	±8.5137	3.1992	2.563

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:52:01	33702.3560	1636.8140	46136.7770	1173.4091	14788.6860	177645.5600	2620.3776	53218.6510	461476.2200	117855.6900	114624.7800	63675.5570	149577.1600
2	16:52:14	33615.3680	1460.1172	47443.4760	1146.7390	14992.3520	183836.8400	2683.7294	53835.6010	480473.4500	122334.2800	118767.4500	67184.0060	155020.5500
3	16:52:27	33424.6670	1716.8288	48482.2690	1186.7441	15693.5340	188718.6900	2830.4406	56531.8940	493237.1600	123979.6800	121800.5200	69249.4170	157967.3000
x		33580.7970	1604.5867	47354.1740	1168.9641	15158.1910	183400.3600	2711.5159	54528.7150	478395.6100	121389.8800	118397.5800	66702.9930	154188.3400
σ		142.0358	131.3551	1175.2933	20.3696	474.6730	5549.4532	107.7529	1762.0159	15982.0930	3169.3376	3602.1399	2817.8911	4256.5292
%RSD		0.4230	8.1862	2.4819	1.7425	3.1315	3.0259	3.9739	3.2314	3.3408	2.6109	3.0424	4.2245	2.7606

QJ24005-DUP1@MH1H52D 10/24/2016 16:56:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	16:56:01	92750.7470	123.3342	111877.5400	7666.5647	23772.3750	5178.8080	833.3715	28808.9090	3450.6548	76.6670	165.5571	90.0004	130.0009	118740.4300	4921.3317	3620.7209	4671.1998	2136.917
2	16:56:14	96034.5800	103.3339	116940.6600	±25672.3760	24283.0550	5186.1455	839.3721	29578.0390	3600.7129	86.6671	144.4456	123.3342	186.6686	122935.6400	6035.3361	3544.0240	4517.7890	2313.627
3	16:56:27	97506.7940	123.3342	119689.4200	±24906.3020	24356.5850	5253.5175	848.0395	31330.5620	3537.3547	103.3339	162.2237	86.6671	110.0007	126426.3600	4030.8934	3870.8239	4924.6669	2450.330
x		95430.7070	116.6674	116169.2000	±19415.0810	24137.3380	5206.1570	840.2610	29905.8370	3529.5741	88.8893	157.4088	100.0006	142.2234	122700.8100	4995.8537	3678.5229	4704.5519	2300.291
σ		2434.8495	11.5471	3962.6682	±10181.7210	318.1987	41.1792	7.3743	1292.3902	75.3311	13.4716	11.3495	20.2761	39.7685	3848.3437	1004.2971	170.8957	205.4791	157.131
%RSD		2.5514	9.8975	3.4111	±52.4423	1.3183	0.7910	0.8776	4.3215	2.1343	15.1555	7.2102	20.2760	27.9620	3.1364	20.1026	4.6458	4.3677	6.830

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:56:01	33615.3680	626.6883	11076.7440	340.0064	5158.1296	161104.9800	2400.3168	17289.7590	102147.3300	118065.0500	113666.1900	3253.9156	135380.5800
2	16:56:14	33822.8020	763.3654	11453.8780	366.6741	5511.6703	168877.4800	2703.7353	18609.0270	104433.0900	119851.5300	118791.0800	3587.3743	139874.5200
3	16:56:27	33618.7140	736.6965	12094.7070	360.0071	5578.3776	172908.8700	2567.0290	18642.4280	107191.5800	123178.9000	121310.7000	3540.6894	143706.9400
x		33685.6280	708.9167	11541.7760	355.5625	5416.0592	167630.4400	2557.0271	18180.4050	104590.6700	120365.1600	117922.6600	3460.6598	139654.0100
σ		118.8080	72.4496	514.6423	13.8783	225.8500	5999.9416	151.9563	771.5025	2525.8127	2595.3277	3895.5448	180.5609	4167.5530
%RSD		0.3527	10.2198	4.4590	3.9032	4.1700	3.5793	5.9427	4.2436	2.4150	2.1562	3.3035	5.2175	2.9842

SEQ-SRD1@MH1H52L@5X 10/24/2016 17:00:00

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:00:00	90407.3170	43.3334	98248.0440	1323.4297	4705.8843	1047.3937	182.6685	4634.5144	630.0218	13.3333	17.7778	26.6667	83.3337	81971.2350	393.3418	573.3514	756.6982	383.3414	946.7160
2	17:00:13	91238.8970	53.3335	101955.2000	1553.4661	4718.5576	1050.0606	177.3351	4564.4789	653.3568	3.3333	42.2223	30.0001	123.3342	83841.5090	430.0102	646.6897	740.0301	376.6745	976.7191
3	17:00:27	91477.9480	26.6667	101328.2400	1756.8364	4698.5472	1036.0590	180.6685	4704.5503	566.6843	13.3333	42.2223	30.0001	120.0008	85856.8550	563.3508	633.3554	870.0416	410.0093	1023.3909
x		91041.3870	41.1112	100510.4900	1544.5774	4707.6630	1044.5044	180.2240	4634.5145	616.6877	10.0000	34.0741	28.8889	108.8896	83889.8660	462.2343	617.7988	788.9233	390.0084	982.2753
σ		561.9785	13.4716	1984.2581	216.8400	10.1231	7.4345	2.6944	70.0357	44.8484	5.7735	14.1131	1.9245	22.1947	1943.2611	89.4682	39.0657	70.7432	17.6391	38.6383
%RSD		0.6173	32.7686	1.9742	14.0388	0.2150	0.7118	1.4950	1.5112	7.2725	57.7350	41.4187	6.6617	20.3827	2.3164	19.3556	6.3234	8.9671	4.5228	3.9335

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:00:00	32518.0540	263.3372	1780.1743	123.3342	1170.0753	136338.0700	476.6792	2503.6780	15386.3430	111108.1900	108267.5500	713.3613	81614.7160
2	17:00:13	32340.7570	243.3366	1963.5454	66.6669	1140.0715	140216.3900	570.0179	2530.3521	16097.5730	113298.3000	112080.0100	663.3575	84140.9230
3	17:00:27	32447.8040	280.0043	1820.1822	73.3336	1333.4311	143727.2500	546.6831	2543.6892	16508.3090	114121.8400	112815.6900	616.6876	83158.6130
x		32435.5390	262.2260	1854.6339	87.7782	1214.5260	140093.9000	531.1267	2525.9064	15997.4080	112842.7800	111054.4200	664.4688	82971.4170
σ		89.2829	18.3591	96.4180	30.9722	104.0619	3696.1149	48.5750	20.3727	567.6499	1557.6125	2441.3649	48.3464	1273.4647
%RSD		0.2753	7.0012	5.1988	35.2846	8.5681	2.6383	9.1456	0.8065	3.5484	1.3803	2.1984	7.2760	1.5348

QJ24005-PS1@MH1H52A 10/24/2016 17:04:00

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	17:04:00	91124.4240	156.6680	105013.0400	±26224.6610	22499.8090	4995.3721	824.7041	21562.2070	2763.7534	163.3348	572.2402	303.3384	116.6674	107336.6100	2180.2614	2647.0520	3233.9084	1706.8269
2	17:04:13	92693.5010	126.6676	109974.5300	6185.4369	22465.7250	5069.4130	804.0355	21669.1280	2933.8067	180.0018	600.0198	310.0053	153.3346	110919.2300	2690.3980	2750.4160	3307.2681	1633.4801
3	17:04:26	94751.2190	123.3342	113274.6800	±18100.7170	22690.9500	4984.0325	816.0366	22491.1210	2880.4563	193.3354	604.4645	286.6712	103.3339	113740.4400	2887.1250	2597.0376	3657.4022	1790.1762
x		92856.3810	135.5566	109420.7500	±16836.9390	22552.1610	5016.2726	814.9254	21907.4850	2859.3388	178.8907	592.2415	300.0050	124.4453	110665.4300	2585.9282	2664.8352	3399.5263	1710.1611
σ		1818.8754	18.3589	4158.5639	±10079.2100	121.3966	46.3690	10.3790	508.2624	86.9712	15.0311	17.4636	12.0189	25.8919	3209.4494	364.8281	78.2203	226.3193	78.4013
%RSD		1.9588	13.5433	3.8005	±59.8637	0.5383	0.9244	1.2736	2.3200	3.0417	8.4024	2.9487	4.0062	20.8058	2.9001	14.1082	2.9353	6.6574	4.5844

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:04:00	33732.4670	740.0301	9131.2502	380.0079	5508.3350	152661.1300	2276.9518	33799.3820	74752.7470	112889.9400	111776.3000	2707.0697	121604.5900
2	17:04:13	33508.3070	710.0277	9298.0859	470.0122	5765.1608	159456.2900	2440.3275	36563.3810	78275.5440	116447.7200	116565.8900	2567.0290	127159.8200
3	17:04:26	33424.6670	763.3654	9611.7452	426.6767	6028.6650	163683.7700	2590.3690	36730.7200	79876.0420	121702.5500	119294.2800	2733.7443	130077.3300
x		33555.1470	737.8077	9347.0271	425.5656	5767.3869	158600.3900	2435.8828	35697.8280	77634.7770	117013.4000	115878.8200	2669.2810	126280.5800
σ		159.1564	26.7382	243.9575	45.0124	260.1721	5560.9416	156.7559	1646.2298	2621.0635	4433.4565	3805.7895	89.5516	4304.2590
%RSD		0.4743	3.6240	2.6100	10.5771	4.5111	3.5063	6.4353	4.6116	3.3761	3.7888	3.2843	3.3549	3.4085

SEQ-CCV@CCV04 10/24/2016 17:08:04 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo
1	17:08:17	90834.8810	188851.4000	102636.1300	420819.5700	507618.6200	624002.5800	75800.0320	+2723633.8000	539793.6800	6125.3963	19749.2060	9041.1603	130.0009	77186.2900	1022955.0000	1848195.4000
2	17:08:31	93090.8640	194689.3000	103455.3300	433638.0600	517263.4700	630130.3600	76926.7700	+2778813.7000	555668.6000	6382.2395	20291.5100	9271.3920	170.0016	79220.3420	1062942.7000	1917481.9000
3	17:08:44	92737.2770	194777.8300	104251.0100	436315.0200	521117.1400	635740.1000	77664.3350	+2802237.0000	564516.1800	6095.3761	20415.1190	9124.5769	126.6676	80864.7250	1084118.0000	1931206.7000
x		92221.0070	192772.8400	103447.4900	430257.5500	515333.0800	629957.6800	76797.0460	+2768228.2000	553326.1500	6201.0040	20151.9450	9145.7097	142.2234	79090.4520	1056671.9000	1898961.4000
σ		1213.3695	3396.3555	807.4718	8282.3981	6953.2245	5870.6653	938.8973	+40356.5960	12526.6010	157.6707	354.2157	116.5616	24.1143	1842.6543	31059.9130	44496.9620
%RSD		1.3157	1.7618	0.7806	1.9250	1.3493	0.9319	1.2226	+1.4578	2.2639	2.5427	1.7577	1.2745	16.9552	2.3298	2.9394	2.3432

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:08:17	31882.4760	38872.9330	254304.5000	30474.3260	445784.9300	156458.2000	1550688.2000	1488845.3000	546479.2300	114965.7100	114786.8000	+4226195.6000	73166.5870
2	17:08:31	31143.2530	40540.1920	260660.7700	30905.7780	446652.6700	158676.1500	1576040.6000	1497163.1000	554634.9200	118254.1500	114901.5700	+4294774.3000	74974.5620
3	17:08:44	32819.1340	41126.1480	264526.7300	30099.7470	457495.7500	160524.8500	1615967.9000	1549047.2000	566309.3800	121222.8700	119939.3500	+4368175.7000	75475.3470
x		31948.2880	40179.7580	259830.6700	30493.2840	449977.7800	158553.0700	1580898.9000	1511685.2000	555807.8400	118147.5800	116542.5700	+4296381.9000	74538.8320
σ		839.8761	1169.0503	5161.4286	403.3498	6525.1878	2036.1163	32909.8930	32622.6320	9966.9691	3129.9433	2942.2530	+71003.6810	1214.4910
%RSD		2.6289	2.9096	1.9865	1.3227	1.4501	1.2842	2.0817	2.1580	1.7932	2.6492	2.5246	+1.6526	1.6293

SEQ-CCB@CCB04 10/24/2016 17:12:19 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:12:19	93451.1990	30.0001	102551.8500	170.0016	706.0274	534.6824	314.6721	296.6715	220.0027	10.0000	6.6667	10.0000	103.3339	79963.4720	463.3451	820.0370	923.3802	516.6813	1373.4371
2	17:12:32	94929.7330	46.6668	103526.1300	133.3343	654.6902	539.3493	259.3370	316.6722	200.0022	0.0000	14.4445	10.0000	106.6673	81160.6780	520.0149	820.0370	943.3823	556.6837	1390.1063
3	17:12:45	96331.0250	30.0001	106722.7800	123.3342	676.6919	508.0142	260.0037	283.3378	246.6700	3.3333	14.4445	23.3334	106.6673	81591.1730	463.3451	810.0361	986.7202	516.6813	1360.1017
x		94903.9860	35.5556	104266.9200	142.2234	679.1365	527.3486	278.0043	298.8938	222.2250	4.4444	11.8519	14.4445	105.5562	80905.1080	482.2351	816.7034	951.1609	530.0155	1374.5484
σ		1440.0856	9.6225	2181.9118	24.5708	25.7557	16.9059	31.7570	16.7780	23.4131	5.0918	4.4905	7.6980	1.9245	843.4094	32.7183	5.7740	32.3785	23.0954	15.0331
%RSD		1.5174	27.0634	2.0926	17.2762	3.7924	3.2058	11.4232	5.6134	10.5358	114.5644	37.8886	53.2939	1.8232	1.0425	6.7847	0.7070	3.4041	4.3575	1.0937

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:12:19	32899.4230	113.3340	56.6668	13.3333	70.0003	139062.2000	396.6753	563.3508	126.6676	115583.4700	113379.3000	780.0335	74292.3290
2	17:12:32	34154.0370	93.3338	63.3336	10.0000	50.0001	142538.7600	546.6831	600.0198	100.0006	119689.4200	116228.2800	810.0361	74971.2010
3	17:12:45	34251.0680	100.0006	36.6667	0.0000	66.6669	141387.6600	456.6781	613.3540	73.3336	117808.4200	118156.2200	716.6949	75424.9310
x		33768.1760	102.2228	52.2224	7.7778	62.2224	140996.2100	466.6789	592.2415	100.0006	117693.7700	115921.2700	768.9215	74896.1540
σ		753.9248	10.1836	13.8778	6.9389	10.7152	1771.0287	75.5023	25.8932	26.6670	2055.3763	2403.2138	47.6524	570.0186
%RSD		2.2326	9.9622	26.5745	89.2143	17.2209	1.2561	16.1786	4.3721	26.6668	1.7464	2.0731	6.1973	0.7611

Analyte ICPS

SEQ-CAL1@S01 10/24/2016 14:33:17

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:33:17	98.6%	-7.7960	98.0%	-5.4364	67.7446	20.1068	3.8697	13.4777	-29.6621	-2.2231	-3.7186	-40.1499	46.6269	-630.4538	0.6728	52.1414	17.7272	16.3229	21.5176
2	14:33:31	99.8%	8.7253	100.5%	6.3838	148.8517	47.5327	-0.8611	5.7641	-5.9076	1.0937	-0.4304	-0.5671	-0.6489	225.9682	6.5628	27.1846	-3.5763	-1.3304	12.9199
3	14:33:44	101.6%	-1.6482	101.5%	-0.9474	175.9853	1.6326	-3.0086	-11.1093	-10.9213	1.1294	1.9117	40.7171	-45.9780	404.4856	-7.2356	3.2983	-14.1508	-14.9925	-34.4376
x		100.0%	-0.2397	100.0%	0.0000	130.8605	23.0907	-0.0000	2.7108	-15.4970	0.0000	-0.7458	0.0000	0.0000	-0.0000	-0.0000	27.5414	0.0000	-0.0000	0.0000
σ		1.5%	8.3502	1.8%	5.9668	56.3185	23.0950	3.5191	12.5747	12.5209	1.9253	2.8284	40.4365	46.3059	553.2369	6.9237	24.4235	16.2371	15.7000	30.1320
%RSD		1.5	3484.0898	1.8	0.0000	43.0371	100.0187	0.0000	463.8655	80.7954	0.0000	379.2515	0.0000	0.0000	0.0000	0.0000	88.6792	0.0000	0.0000	0.0000

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:33:17	100.1%	15.2157	6.1486	0.0000	1.1273	-1593.5306	-6.1010	-2.0580	7.2330	98.5%	98.0%	0.5749	-131.6980
2	14:33:31	100.5%	-31.1948	-0.6924	0.0000	1.0215	1229.4436	-7.6509	14.0723	-3.3151	99.7%	100.2%	-0.0304	508.3337
3	14:33:44	99.4%	15.9791	2.5350	0.0000	-2.3546	364.0871	13.7520	0.1162	-0.5242	101.8%	101.8%	-0.4609	-376.6357
x		100.0%	0.0000	2.6637	0.0000	-0.0686	0.0000	0.0000	4.0435	1.1312	100.0%	100.0%	0.0278	-0.0000
σ		0.5%	27.0182	3.4223	0.0000	1.9804	1446.2764	11.9348	8.7530	5.4654	1.6%	1.9%	0.5204	456.9474
%RSD		0.5	0.0000	128.4798	0.0000	2885.2210	0.0000	0.0000	216.4705	483.1335	1.6	1.9	1868.4779	0.0000

SEQ-CAL2@S02 10/24/2016 14:37:25

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:37:38	99.8%	62.0986	100.6%	-0.3712	1146.4981	657.1158	73.3863	1342.0131	158.8214	49.0200	56.8048	-21.0272	24.3235	638.9654	2064.3265	3484.2073	3594.7440	2388.2519	5617.8441
2	14:37:51	101.2%	77.4835	101.0%	12.5186	1153.5338	634.1421	34.7799	1366.0606	209.3289	27.9878	41.0898	14.9610	14.5785	1912.0980	1970.9628	3438.5431	3950.3620	2211.9310	5113.9583
3	14:38:05	101.4%	80.6653	100.9%	-13.7862	1161.3724	561.3487	38.4114	1383.5688	252.3275	17.6359	40.3703	32.7952	-0.9605	2561.2523	2049.5521	3648.2019	3645.7131	2059.1930	5538.2109
x		100.8%	73.4158	100.8%	-0.5462	1153.8015	617.5355	48.8592	1363.8809	206.8259	31.5479	46.0883	8.9097	12.6472	1704.1052	2028.2805	3523.6508	3730.2730	2219.7920	5423.3378
σ		0.8%	9.9293	0.2%	13.1533	7.4407	49.9967	21.3185	20.8634	46.8033	15.9921	9.2877	27.4167	12.7522	977.8765	50.1853	110.2544	192.2988	164.6702	270.8728
%RSD		0.8	13.5247	0.2	2407.9315	0.6449	8.0962	43.6326	1.5297	22.6293	50.6913	20.1521	307.7194	100.8303	57.3836	2.4743	3.1290	5.1551	7.4183	4.9946

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:37:38	97.6%	-49.3351	1005.2370	19.7213	239.4009	-1407.7246	7.3259	1165.1127	2419.6909	102.1%	102.8%	1402.7628	58.4818
2	14:37:51	99.3%	-2.2386	910.1228	6.4811	203.4539	731.3963	5.6275	1426.6207	2332.1098	104.4%	105.1%	1406.5314	-79.9046
3	14:38:05	100.7%	20.0868	934.0745	9.7006	231.9487	1891.5986	18.2203	1451.2641	2329.1988	105.0%	105.4%	1454.0706	-66.0813
x		99.2%	-10.4956	949.8114	11.9677	224.9345	405.0901	10.3912	1347.6658	2360.3332	103.8%	104.4%	1421.1216	-29.1680
σ		1.6%	35.4399	49.4713	6.9051	18.9723	1673.6906	6.8331	158.5751	51.4259	1.5%	1.4%	28.5968	76.2210
%RSD		1.6	337.6637	5.2085	57.6982	8.4346	413.1650	65.7587	11.7666	2.1788	1.5	1.3	2.0123	261.3171

SEQ-CAL3@S03 10/24/2016 14:41:39

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:41:39	98.5%	232.7649	97.2%	25.9157	2824.3409	1385.3478	19.6453	3295.6218	616.9435	47.5194	89.1045	38.9184	-17.2570	1680.6937	4317.4513	6952.2331	7669.0756	4296.1410	10682.7730
2	14:41:53	100.4%	181.3783	99.5%	0.3778	2894.4311	1404.5873	29.6823	3225.3814	904.0388	47.8427	115.3405	28.8743	10.3072	2376.6170	4303.2228	6966.6048	7791.3640	4179.9429	10942.6260
3	14:42:06	100.8%	249.6705	101.5%	-14.0777	2805.0924	1398.7681	70.8751	3474.7936	628.1542	61.8150	106.4610	-51.6860	75.9161	1371.4664	4283.4699	6848.9169	7620.3557	4231.4864	11272.3280
x		99.9%	221.2712	99.4%	4.0719	2841.2881	1396.2344	40.0676	3331.9323	716.3788	52.3923	103.6354	5.3689	22.9888	1809.5923	4301.3813	6922.5849	7693.5985	4235.8567	10965.9090
σ		1.2%	35.5673	2.1%	20.2510	47.0187	9.8668	27.1480	128.6097	162.6149	8.1618	13.3443	49.6655	47.8636	514.8233	17.0653	64.2018	88.1022	58.2222	295.4664
%RSD		1.2	16.0741	2.1	497.3293	1.6548	0.7067	67.7554	3.8599	22.6996	15.5783	12.8762	925.0578	208.2045	28.4497	0.3967	0.9274	1.1451	1.3745	2.6944

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:41:39	100.5%	45.1078	2189.8136	50.6872	508.2560	867.1777	-9.9787	3074.0086	5428.6844	99.8%	101.4%	3367.3507	-517.7379
2	14:41:53	99.9%	34.2882	2161.8254	29.7959	511.0709	-106.7834	31.1655	3190.8894	5752.2740	101.7%	102.7%	3330.3865	159.7627
3	14:42:06	98.9%	44.0486	2142.0166	39.0679	570.9072	1789.5150	-9.9750	3058.1469	5726.4077	103.1%	104.6%	3615.0531	191.9221
x		99.8%	41.1482	2164.5519	39.8503	530.0780	849.9698	3.7373	3107.6816	5635.7887	101.6%	102.9%	3437.5968	-55.3510
σ		0.8%	5.9644	24.0148	10.4676	35.3871	948.2663	23.7535	72.4952	179.8233	1.7%	1.6%	154.7891	400.7615
%RSD		0.8	14.4950	1.1095	26.2674	6.6758	111.5647	635.5856	2.3328	3.1907	1.6	1.6	4.5028	724.0362

SEQ-CAL4@S04 10/24/2016 14:45:41

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:45:41	99.8%	424.2782	96.1%	2.6750	5344.1011	2741.0873	71.8518	6618.3934	1585.0075	97.4354	211.8477	80.5091	-9.0075	2142.7013	10153.4800	16873.7810	18868.3700	10464.8650	27022.4570
2	14:45:55	100.8%	439.7491	97.1%	-4.8739	5490.0985	2626.0039	68.2912	6531.4965	1695.9654	78.9447	221.8514	75.0720	19.1963	2578.0202	9973.3420	17313.4300	19348.1890	10670.4360	27421.4400
3	14:46:08	101.9%	487.0047	99.0%	0.6478	5468.4880	2629.4088	73.0973	6745.5571	1642.1995	62.3101	231.9040	20.8501	36.9035	2694.3870	9968.8072	17152.3590	18785.3810	10755.4090	27728.5670
x		100.8%	450.3440	97.4%	-0.5170	5434.2292	2665.5000	71.0801	6631.8157	1641.0575	79.5634	221.8577	58.8104	15.6974	2471.7028	10031.8760	17113.1900	19000.6470	10630.2360	27390.8210
σ		1.0%	32.6778	1.5%	3.9069	78.7976	65.4826	2.4943	107.6597	55.4877	17.5708	10.0281	32.9868	23.1546	290.8037	105.3364	222.4266	303.8272	149.3852	354.0492
%RSD		1.0	7.2562	1.5	755.6471	1.4500	2.4567	3.5091	1.6234	3.3812	22.0841	4.5199	56.0901	147.5056	11.7653	1.0500	1.2997	1.5990	1.4053	1.2926

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:45:41	97.0%	68.6088	4329.4749	60.7568	850.6682	-160.3725	-30.4280	6148.3154	11184.6770	101.0%	100.8%	6841.4184	858.5764
2	14:45:55	98.6%	70.8075	4324.7181	90.6895	994.1310	2610.7320	6.1049	6352.4243	11623.7430	101.1%	102.9%	6690.0906	-335.7327
3	14:46:08	98.1%	62.4834	4325.9315	68.9993	1014.8197	1218.6419	-25.7256	6242.7806	11207.2550	103.5%	104.2%	6547.1465	175.1693
x		97.9%	67.2999	4326.7082	73.4818	953.2063	1223.0005	-16.6829	6247.8401	11338.5590	101.9%	102.7%	6692.8852	232.6710
σ		0.8%	4.3137	2.4716	15.4616	89.4011	1385.5574	19.8744	102.1485	247.2348	1.4%	1.7%	147.1558	599.2273
%RSD		0.8	6.4096	0.0571	21.0414	9.3790	113.2916	119.1301	1.6349	2.1805	1.4	1.7	2.1987	257.5428

SEQ-CAL5@S05 10/24/2016 14:49:42

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:49:42	100.1%	4290.8519	95.3%	11448.9620	10867.5360	13648.6550	47.8550	69071.1950	14124.1500	142.2916	452.2985	242.4238	-32.2761	4385.2926	24080.4450	42832.0160	46605.2230	26572.0750	67348.9340
2	14:49:56	100.5%	4751.2178	100.0%	10906.0850	10789.3740	13547.2250	127.1802	66508.8870	14406.1890	140.5415	458.8694	215.1145	-0.4994	1963.2157	24145.7750	42045.0790	46376.2470	26025.3220	66765.3000
3	14:50:09	102.1%	4590.8865	100.0%	11297.1500	10604.0240	13850.2240	196.4248	68020.2640	14083.0220	173.4296	465.9162	203.0905	-1.2752	2740.8862	24189.4960	42501.0580	47338.7190	26738.5000	68600.3920
x		100.9%	4544.3187	98.4%	11217.3990	10753.6450	13682.0340	123.8200	67866.7820	14204.4540	152.0876	459.0280	220.2096	-11.3502	3029.7982	24138.5720	42459.3840	46773.3960	26445.2990	67571.5420
σ		1.0%	233.6891	2.7%	280.0876	135.3410	154.2329	74.3419	1288.0303	175.9137	18.5035	6.8102	20.1556	18.1265	1236.6150	54.8815	395.1203	502.7923	373.1084	937.5801
%RSD		1.0	5.1424	2.7	2.4969	1.2586	1.1273	60.0403	1.8979	1.2384	12.1663	1.4836	9.1529	159.7018	40.8151	0.2274	0.9306	1.0750	1.4109	1.3875

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:49:42	99.2%	816.3713	5868.5975	724.5698	9861.3725	5008.8856	32949.0630	30844.4630	11227.0190	102.9%	102.3%	70415.1490	1029.9018
2	14:49:56	100.4%	844.2736	5936.5069	775.0088	10060.3610	2102.4809	32995.5920	31334.4030	11522.2210	102.8%	104.4%	69568.7760	1273.8779
3	14:50:09	98.7%	849.3890	6188.2070	616.8208	10115.2300	2858.8243	32697.2390	31508.8550	11785.2680	104.9%	105.8%	69292.1390	1009.1720
x		99.4%	836.6780	5997.7704	705.4665	10012.3210	3323.3969	32880.6310	31229.2400	11511.5030	103.6%	104.2%	69758.6880	1104.3172
σ		0.9%	17.7711	168.3820	80.8058	133.5732	1507.8686	160.5174	344.4539	279.2787	1.2%	1.8%	585.0961	147.2092
%RSD		0.9	2.1240	2.8074	11.4542	1.3341	45.3713	0.4882	1.1030	2.4261	1.2	1.7	0.8387	13.3303

SEQ-CAL6@S06 10/24/2016 14:53:41

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	14:53:41	97.8%	22841.7730	94.9%	55939.5900	51262.6180	65673.8430	649.1586	330990.4000	69687.0720	683.4134	2259.6635	941.4273	-6.0920	3562.6020	119709.3100	209116.2300	229585.7300	130490.9600
2	14:53:55	100.0%	22111.4140	96.0%	56821.0740	52501.7100	66372.7600	540.9409	336180.1200	70928.0510	664.6298	2183.6033	960.8348	47.8009	1772.1132	120222.5000	212574.3000	231307.7300	129588.5000
3	14:54:08	101.4%	22160.6830	96.9%	57337.6100	52564.5210	67352.1310	766.4682	342224.5800	72864.3000	698.7831	2194.4124	1060.0975	-0.9025	4579.9500	123238.4400	213763.1700	233948.1700	131894.8900
x		99.7%	22371.2900	95.9%	56699.4240	52109.6170	66466.2450	652.1892	336465.0300	71159.8070	682.2754	2212.5597	987.4532	13.6021	3304.8884	121056.7500	211817.9000	231613.8800	130658.1200
σ		1.8%	408.1939	1.0%	706.9044	734.1939	843.0406	112.7942	5622.5071	1601.2426	17.1051	41.1495	63.6558	29.7304	1421.5481	1906.7469	2414.0455	2197.2767	1162.2442
%RSD		1.8	1.8246	1.0	1.2468	1.4089	1.2684	17.2947	1.6711	2.2502	2.5071	1.8598	6.4465	218.5719	43.0135	1.5751	1.1397	0.9487	0.8895

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:53:41	99.7%	4429.8625	29775.2280	3604.2685	48244.5220	3411.9232	163086.7900	154728.7000	56652.0530	102.5%	103.7%	346748.5200	-108.2852
2	14:53:55	99.5%	4495.1436	29443.3030	3348.4140	48960.9990	2988.2999	162799.3600	155967.2600	56795.1030	105.5%	105.5%	348069.0900	1352.3153
3	14:54:08	98.4%	4571.6185	29611.3270	3474.1099	49549.8320	3512.6760	166558.1500	158455.1600	57850.5400	105.7%	107.2%	345967.8500	-590.2313
x		99.2%	4498.8749	29609.9530	3475.5974	48918.4510	3304.2997	164148.1000	156383.7100	57099.2320	104.6%	105.5%	346928.4900	217.9329
σ		0.7%	70.9516	165.9672	127.9337	653.6942	278.2619	2092.1048	1897.8148	654.5714	1.8%	1.8%	1062.1151	1011.5263
%RSD		0.7	1.5771	0.5605	3.6809	1.3363	8.4212	1.2745	1.2136	1.1464	1.7	1.7	0.3061	464.1457

SEQ-CAL7@S07 10/24/2016 14:57:41

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96
1	14:57:41	93.6%	223505.4300	91.2%	557890.7100	557041.8500	707691.9700	6001.1916	↑3507707.5000	688567.8000	6890.3721	22588.3280	10072.3610	83.8636	1351.7060	1206520.6000	2159112.4000	↑2533070.1
2	14:57:54	93.7%	225764.0400	93.2%	558092.2200	555771.9000	702890.1000	6267.0097	↑3490834.1000	690961.8500	7016.4924	22601.9120	10262.9990	12.9154	-1066.1752	1213558.3000	2165406.3000	↑2530112.4
3	14:58:07	94.4%	223895.7000	92.2%	568167.0600	554829.9200	702183.9400	5596.9096	↑3560212.2000	705752.0800	6966.2377	22571.1360	9999.1307	72.1402	38.2726	1236107.8000	2203367.5000	2451086.0
x		93.9%	224388.3900	92.2%	561383.3300	555881.2200	704255.3300	5955.0370	↑3519584.6000	695093.9100	6957.7007	22587.1250	10111.4970	56.3064	107.9345	1218728.9000	2175962.1000	↑2504756.1
σ		0.4%	1207.2268	1.0%	5875.7459	1110.0136	2997.0818	337.4259	↑36181.8980	9307.5414	63.4921	15.4233	136.2180	38.0321	1210.4449	15456.4470	23941.4940	↑46503.2
%RSD		0.4	0.5380	1.1	1.0467	0.1997	0.4256	5.6662	↑1.0280	1.3390	0.9125	0.0683	1.3472	67.5450	1121.4627	1.2682	1.1003	↑1.8

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	14:57:41	87.0%	43245.6860	285408.1600	33050.4720	482922.7700	-2617.0082	1659324.0000	1595564.8000	571616.2800	103.6%	106.0%	↑4001482.3000	862.0895
2	14:57:54	88.0%	42706.5330	284339.2200	32790.6440	481236.2700	-3822.9754	1685950.3000	1614475.7000	577093.4100	107.0%	109.4%	↑3982103.6000	-383.9258
3	14:58:07	88.6%	45293.6100	289589.0700	33550.6470	491652.3200	-1536.1935	1701287.2000	1634996.0000	577050.6100	106.8%	110.1%	↑3969415.2000	261.4072
x		87.9%	43748.6100	286445.4800	33130.5880	485273.7800	-2658.7257	1682187.2000	1615012.2000	575253.4300	105.8%	108.5%	↑3984333.7000	246.5236
σ		0.8%	1364.8959	2774.3952	386.2835	5596.5266	1143.9616	21233.1860	19721.0730	3149.9423	1.9%	2.2%	↑16149.4360	623.1410
%RSD		0.9	3.1199	0.9686	1.1659	1.1533	43.0267	1.2622	1.2211	0.5476	1.8	2.0	↑0.4053	252.7713

SEQ-CAL8@S08 10/24/2016 15:01:40

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	
1	15:01:40	84.8%	440569.4700	81.2%	1101131.8000	1101226.2000	1380331.3000	9091.4019	↑6799138.9000	1334300.6000	13356.6540	42883.1830	19508.3130	32.1152	-2216.4066	↑2576334.5000	↑451168
2	15:01:53	85.1%	444992.4200	82.8%	1114152.6000	↑1110463.4000	1390637.4000	8712.4192	↑6813461.2000	1346963.1000	13648.6010	43266.3250	20056.0580	11.4727	-1092.7466	2450791.3000	↑454135
3	15:02:06	85.8%	↑449386.2300	83.7%	1124941.4000	↑1124528.5000	↑1407877.6000	9195.6243	↑6845023.8000	1355720.4000	13406.2000	44429.4340	19762.1630	28.4484	-1918.8231	↑2592899.0000	↑455746
x		85.2%	↑444982.7100	82.6%	1113408.6000	↑1112072.7000	↑1392948.8000	8999.8152	↑6819207.9000	1345661.4000	13470.4850	43526.3140	19775.5110	24.0121	-1742.6588	↑2540008.3000	↑453683
σ		0.5%	↑4408.3862	1.3%	11922.2470	↑11734.2330	↑13917.8320	254.2890	↑7023476.0360	10769.0920	156.2296	805.2445	274.1162	11.0131	582.1755	↑77706.8150	↑23222
%RSD		0.6	↑0.9907	1.5	1.0708	↑1.0552	↑0.9992	2.8255	↑0.3443	0.8003	1.1598	1.8500	1.3861	45.8648	33.4073	↑3.0593	↑0

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:01:40	84.2%	84108.2930	551913.5000	63720.1890	943659.8400	-7585.5554	↑3568729.8000	↑3428254.9000	↑1239796.4000	103.2%	105.4%	↑8095353.6000	1397.5568
2	15:01:53	84.7%	85250.9540	554253.2400	63845.1910	955279.6000	-10189.0910	↑3572754.7000	↑3430806.1000	↑1241191.5000	105.6%	108.2%	↑8068145.2000	1415.8728
3	15:02:06	84.1%	85753.1050	557907.2200	64482.2800	958535.9000	-9271.9391	↑3588566.9000	↑3400481.9000	↑1243745.4000	107.8%	110.5%	↑8076472.8000	1864.5155
x		84.3%	85037.4510	554691.3200	64015.8870	952491.7800	-9015.5286	↑3576683.8000	↑3419847.7000	↑1241577.7000	105.6%	108.0%	↑8079990.6000	1559.3150
σ		0.3%	842.9350	3020.7773	408.7155	7820.0541	1320.5717	↑10485.9840	↑16819.6410	↑2002.5997	2.3%	2.6%	↑13941.1230	264.4700
%RSD		0.4	0.9913	0.5446	0.6385	0.8210	14.6477	↑0.2932	↑0.4918	↑0.1613	2.2	2.4	↑0.1725	16.9607

SEQ-ICV@ICV01 10/24/2016 15:05:42 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	15:05:55	86.6%	46633.5870	81.0%	138.2182	104963.0100	132400.4700	832.4206	679529.9600	141775.0000	2742.0367	9125.6033	4290.9881	5.9581	1396.2502	11173.5660	19273.1830	20419.4390	11497.4050
2	15:06:09	86.5%	47127.0010	80.9%	142.6047	105456.9900	132848.3900	1019.5201	685398.5200	144492.2700	2785.1943	9046.1270	4193.3436	-22.5588	2231.6545	10769.6100	18995.8140	20868.7220	11564.1470
3	15:06:22	87.6%	47041.3470	83.5%	112.3685	106692.5700	134277.6500	975.3461	682069.3900	144208.3700	2741.4991	9110.1022	4227.9828	-10.3488	1575.8527	10846.1060	19311.6280	20510.6390	12031.6300
x		86.9%	105.838%	81.8%	131.0638	95.315%	97.475%	942.4289	100.960%	106.145%	2756.2434	100.159%	4237.4382	-8.9832	1734.5858	10929.7610	19193.5420	20599.6000	11697.7280
σ		0.6%	n/a	1.4%	16.3385	n/a	n/a	97.7967	n/a	n/a	25.0737	n/a	49.5042	14.3074	439.7411	214.5779	172.3128	237.4854	291.0876
%RSD		0.7	0.5617	1.8	12.4661	0.8428	0.7362	10.3771	0.4313	1.0409	0.9097	0.4633	1.1683	159.2691	25.3514	1.9632	0.8978	1.1529	2.4884

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:05:55	92.0%	9218.7271	457957.3300	6742.9043	100384.3800	3595.5867	631.1127	629932.3400	114417.6400	108.2%	112.5%	↑1711849.1000	2031.7029
2	15:06:09	91.6%	9111.3405	459757.6500	6766.4233	100083.9700	5703.8096	612.6426	633246.0200	114718.9500	111.4%	113.7%	↑1713691.7000	1668.6070
3	15:06:22	90.8%	9321.1519	461285.4000	6829.3386	100971.5300	2782.6602	651.8979	634716.9400	115927.6900	110.9%	114.9%	↑1707835.6000	3051.5682
x		91.4%	9217.0732	107.268%	6779.5554	104.815%	4027.3521	631.8844	96.618%	93.462%	110.2%	113.7%	↑107.969%	2250.6260
σ		0.6%	104.9155	n/a	44.6885	n/a	1507.6785	19.6391	n/a	n/a	1.8%	1.2%	↑n/a	717.0013
%RSD		0.7	1.1383	0.3624	0.6592	0.4493	37.4360	3.1080	0.3874	0.6948	1.6	1.1	↑0.1750	31.8579

SEQ-ICB@ICB01 10/24/2016 15:09:57 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:09:57	86.6%	25.1766	79.2%	46.5900	134.5657	22.3575	-35.1641	317.7570	81.4245	8.8636	3.1697	-7.6822	12.7015	1789.3274	168.6005	270.5158	297.6970	173.0492	420.1278
2	15:10:10	87.4%	13.1906	81.2%	39.6736	177.2219	-0.3897	-44.7082	269.3725	71.7686	8.7778	-1.8244	-3.2018	0.4418	1675.3260	160.5116	330.8246	401.3415	153.9248	420.8028
3	15:10:23	88.9%	20.2391	81.2%	-21.6471	126.8814	-31.9217	-38.3189	193.4037	15.8931	8.8726	3.1807	-15.2615	9.1348	2279.5808	137.8063	263.3885	248.9675	153.4369	463.5609
x		87.6%	19.5354	80.5%	21.5388	146.2230	-3.3180	-39.3971	260.1777	56.3621	8.8380	1.5087	-8.7152	7.4261	1914.7447	155.6395	288.2429	316.0020	160.1370	434.8305
σ		1.1%	6.0239	1.2%	37.5597	27.1194	27.2579	4.8625	62.6845	35.3781	0.0523	2.8866	6.0959	6.3060	321.0578	15.9648	37.0486	77.8188	11.1850	24.8835
%RSD		1.3	30.8357	1.5	174.3813	18.5466	821.5225	12.3424	24.0929	62.7694	0.5922	191.3286	69.9454	84.9169	16.7677	10.2575	12.8532	24.6260	6.9846	5.7226

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:09:57	90.2%	-17.1592	128.5556	7.3485	74.5353	3209.8677	196.8993	965.4636	21.3904	102.9%	105.6%	494.1124	2920.2779
2	15:10:10	90.9%	8.9353	162.0454	3.6022	58.6493	3472.4727	156.1403	1034.6533	27.2850	104.3%	107.5%	500.6699	1606.8902
3	15:10:23	90.1%	-27.6604	111.1380	0.0000	47.7579	3751.4903	148.1309	991.9820	40.4035	105.0%	109.2%	531.7496	1453.9226
x		90.4%	-11.9614	133.9130	3.6502	60.3141	3477.9436	167.0568	997.3663	29.6930	104.1%	107.4%	508.8440	1993.6969
σ		0.4%	18.8434	25.8731	3.6745	13.4661	270.8528	26.1528	34.9077	9.7326	1.1%	1.8%	20.1060	806.0794
%RSD		0.5	157.5352	19.3208	100.6642	22.3266	7.7877	15.6550	3.5000	32.7774	1.1	1.7	3.9513	40.4314

SEQ-IFA@ICSA01 10/24/2016 15:13:58 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	9
1	15:13:58	77.9%	189.1833	73.7%	970287.9700	-427.8140	27991.0850	141.8936	9712.6197	8192.0766	2.0964	6.8972	-148.8322	156.7810	-1659.1633	1963273.7000	±3788254.4000	±4195439.1000	2149616.5000	±6079789.
2	15:14:11	77.4%	107.9210	76.7%	959682.1000	-360.2351	29085.0720	114.9949	9875.9280	8193.9312	6.6317	4.3774	-177.8325	164.4452	-2564.3050	1974692.2000	±3785491.0000	±4134784.1000	2155222.0000	±6013652.
3	15:14:25	80.2%	157.5452	78.9%	969957.2100	-129.6483	28910.8600	41.0048	9656.9670	7893.1214	-2.2231	4.1552	-151.7188	146.6301	-1082.7313	2009163.8000	±3784779.3000	±4125666.8000	2159636.9000	±5984006.
x		78.5%	1.#IO%	76.4%	966642.4300	-55.167%	97.902%	99.2978	142.799%	97.782%	2.1684	37.953%	-159.4612	155.9521	-1768.7332	1982376.6000	±3786174.9000	±4151963.3000	2154825.1000	±6025816.
σ		1.5%	n/a	2.6%	6030.0864	n/a	n/a	52.2440	n/a	n/a	4.4278	n/a	15.9753	8.9364	746.8395	23890.6160	±1835.7193	±37926.0990	5021.9925	±49036.
%RSD		1.9	27.0285	3.4	0.6238	51.1060	2.0508	52.6135	1.1674	2.1394	204.2029	29.6119	10.0183	5.7302	42.2245	1.2052	±0.0485	±0.9134	0.2331	±0.

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:13:58	77.2%	-14.0172	47.5432	1666.3238	545.3307	-1350.3689	556.5300	3801.6040	2421.1524	95.3%	97.1%	241.1354	2036.4773
2	15:14:11	75.3%	-31.1792	53.1731	1662.7146	687.4992	242.4285	560.9111	3672.1581	2177.8430	99.0%	101.8%	189.5056	1031.8897
3	15:14:25	76.4%	-26.6624	85.4194	1677.2756	475.1767	-140.3848	430.1297	3560.1320	2234.8327	100.8%	102.9%	203.2896	1767.6825
x		76.3%	-23.9529	1.#IO%	1668.7713	83.994%	-416.1084	515.8569	74.146%	154.248%	98.4%	100.6%	1.#IO%	1612.0165
σ		0.9%	8.8960	n/a	7.5828	n/a	831.4256	74.2743	n/a	n/a	2.8%	3.1%	n/a	520.0702
%RSD		1.2	37.1397	32.9395	0.4544	19.0007	199.8099	14.3982	3.2855	5.5864	2.9	3.1	12.6511	32.2621

SEQ-IFB@ICSA801 10/24/2016 15:27:12 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	15:27:12	77.6%	9922.5235	78.8%	970970.5300	23265.7460	58218.3560	345.4452	139823.0000	34317.2190	257.0468	838.7849	238.4840	134.0584	-998.6506	1983188.7000	±3787035.2000	±4152923.9000	2141273.3000
2	15:27:25	79.4%	10295.9690	80.3%	986055.4900	23477.4160	58803.0160	439.8150	140731.0400	35944.7650	286.4410	782.7760	144.6071	171.7505	-381.8036	1973334.0000	±3772830.3000	±4154875.2000	2184013.3000
3	15:27:39	80.1%	10020.8550	82.9%	983201.2000	23391.0320	58408.4680	391.7685	141052.0400	35661.2360	303.3648	853.4361	210.1464	196.4294	920.9936	2006180.3000	±3792756.4000	±4161771.4000	2189223.8000
x		79.0%	118.437%	80.6%	980075.7400	110.949%	104.862%	392.3429	102.930%	106.649%	282.2842	96.124%	197.7458	167.4128	-153.1536	1987567.7000	±3784207.3000	±4156523.5000	2171503.5000
σ		1.3%	n/a	2.1%	8013.4512	n/a	n/a	47.1875	n/a	n/a	23.4371	n/a	48.1513	31.4109	980.0353	16855.3060	±10259.6570	±4648.3679	26309.4200
%RSD		1.6	1.9204	2.6	0.8176	0.4553	0.5100	12.0271	0.4536	2.4625	8.3027	4.5203	24.3501	18.7626	639.9037	0.8480	±0.2711	±0.1118	1.2116

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:27:12	81.0%	1754.4507	80149.2360	3022.8999	18934.8530	1997.1144	705.4297	66032.1180	25325.3210	96.6%	99.2%	144620.7900	843.5585
2	15:27:25	80.8%	1699.1542	80266.4980	2875.5144	18943.9370	255.7171	872.1801	65113.1870	25564.6310	100.5%	102.6%	145733.4300	92.8969
3	15:27:39	81.8%	1478.1576	80632.8200	2812.4303	18863.3200	670.8726	681.1203	65757.6410	25184.1120	102.0%	104.7%	142931.7100	923.8542
x		81.2%	1643.9208	103.127%	2903.6149	97.663%	974.5680	752.9100	90.216%	93.659%	99.7%	102.1%	88.962%	620.1032
σ		0.5%	146.1934	n/a	108.0120	n/a	909.5545	104.0036	n/a	n/a	2.8%	2.8%	n/a	458.3358
%RSD		0.6	8.8930	0.3139	3.7199	0.2335	93.3290	13.8136	0.7187	0.7586	2.8	2.7	0.9767	73.9128

SEQ-CCV@CCV01 10/24/2016 15:31:15 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96M
1	15:31:29	88.3%	240600.3800	89.7%	564562.9000	562567.9200	706642.8400	5721.1166	±3505526.2000	690845.0900	7034.5831	23204.4850	10489.4100	25.5961	882.2538	1222925.8000	2179290.0000	±2544238.70
2	15:31:42	89.2%	242527.2600	91.6%	561589.9200	576378.2000	724186.4400	5424.0539	±3479932.2000	685452.6800	7146.2401	23701.2940	10879.0130	2.1369	740.6983	1220830.2000	2184503.0000	±2517075.00
3	15:31:55	89.3%	241327.8000	90.2%	571787.8400	563492.6100	705845.3900	5272.3158	±3538579.9000	697555.0900	7287.7721	23140.1380	10340.9630	44.1888	962.5091	1239459.6000	2198886.1000	2426003.70
x		88.9%	107.823%	90.5%	565980.2200	102.341%	102.175%	5472.4954	±102.773%	100.227%	7156.1984	103.377%	10569.7950	23.9739	861.8204	1227738.5000	2187559.7000	±2495772.40
σ		0.6%	n/a	1.0%	5244.6196	n/a	n/a	228.2882	±n/a	n/a	126.8879	n/a	277.8862	21.0728	112.3083	10204.6720	10149.3480	±61929.21
%RSD		0.7	0.4029	1.1	0.9266	1.3605	1.4555	4.1716	±0.8382	0.8771	1.7731	1.3153	2.6291	87.8989	13.0315	0.8312	0.4640	±2.48

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:31:29	93.1%	44979.9780	284721.0000	32947.7250	490091.4200	1743.3893	1710163.0000	1624474.9000	567837.9400	111.5%	113.4%	±3972232.0000	1622.4900
2	15:31:42	92.1%	43760.4370	284979.8800	33722.8440	486994.0900	-2311.1893	1689923.0000	1603840.8000	569292.4100	113.9%	114.9%	±3976082.6000	1783.8702
3	15:31:55	94.5%	44280.9810	290025.1100	33627.1720	496435.8400	1159.8577	1723761.2000	1626051.9000	577049.8200	112.7%	116.6%	±3924575.2000	1266.4488
x		93.2%	44340.4650	101.856%	33432.5810	101.448%	197.3526	1707949.1000	97.862%	92.859%	112.7%	114.9%	±102.385%	1557.6030
σ		1.2%	611.9428	n/a	422.6133	n/a	2191.9658	17027.4130	n/a	n/a	1.2%	1.6%	±n/a	264.7432
%RSD		1.3	1.3801	1.0435	1.2641	0.9799	1110.6853	0.9970	0.7659	0.8667	1.1	1.4	±0.7250	16.9968

SEQ-CCB@CCB01 10/24/2016 15:35:30 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:35:30	85.0%	37.6681	82.4%	86.5917	223.2245	79.8981	-65.0091	364.0740	167.2733	1.1941	-1.2682	18.9130	-26.8857	1819.7454	375.7832	610.2737	763.7636	404.5844	1033.2505
2	15:35:44	87.2%	32.3524	84.2%	95.0935	213.8671	80.2787	-37.6235	351.3119	110.0325	-2.2231	7.7762	5.7626	-23.9407	1095.8361	383.5943	658.9619	668.6531	372.3053	1019.9782
3	15:35:57	87.8%	28.1133	85.4%	61.7474	228.5157	117.7942	-51.0625	346.7458	110.7330	1.1851	0.9801	32.5531	-40.8407	3515.6864	416.8657	630.1738	721.6893	402.1320	979.0715
x		86.7%	32.7113	84.0%	81.1442	221.8691	92.6570	-51.2317	354.0439	129.3463	0.0521	2.4960	19.0763	-30.5557	2143.7560	392.0811	633.1365	718.0353	393.0073	1010.7668
σ		1.5%	4.7875	1.5%	17.3276	7.4178	21.7702	13.6936	8.9813	32.8477	1.9703	4.7089	13.3960	9.0280	1242.0371	21.8165	24.4789	47.6605	17.9703	28.2397
%RSD		1.7	14.6357	1.8	21.3541	3.3433	23.4955	26.7287	2.5368	25.3951	3784.7771	188.6561	70.2233	29.5459	57.9374	5.5643	3.8663	6.6376	4.5725	2.7939

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:35:30	97.5%	36.3187	42.5453	10.7243	54.5201	4904.5925	217.4801	318.7362	84.1249	104.4%	106.2%	701.8270	1779.7487
2	15:35:44	97.9%	-45.6353	34.3874	6.9688	73.7341	2302.5424	212.6275	356.8726	54.8851	107.5%	109.2%	715.3030	1035.4794
3	15:35:57	97.8%	2.7971	27.3026	3.4739	42.4715	5068.4944	253.1908	427.8282	48.6017	106.6%	109.6%	678.8605	1666.2040
x		97.8%	-2.1732	34.7451	7.0557	56.9086	4091.8764	227.7661	367.8123	62.5372	106.2%	108.3%	698.6635	1493.8107
σ		0.2%	41.2025	7.6277	3.6260	15.7676	1551.7742	22.1517	55.3627	18.9576	1.6%	1.9%	18.4260	400.9660
%RSD		0.2	1895.9578	21.9532	51.3908	27.7068	37.9233	9.7256	15.0519	30.3141	1.5	1.7	2.6373	26.8418

SEQ-CCV@CCV02 10/24/2016 15:55:31 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	9
1	15:55:44	87.7%	238742.7500	84.4%	563202.6800	575041.2300	722717.9500	6340.4672	±3533314.5000	702234.1800	6921.6346	23122.6030	10521.9470	-10.0361	607.4859	1233996.9000	±2349658.9000	2408531.
2	15:55:57	89.1%	234526.6000	84.1%	573411.2200	569388.1100	716550.8100	5359.8285	±3565842.4000	711576.8800	6584.5987	23317.5870	10524.5660	-10.0389	1977.7605	1256658.3000	2246199.3000	±2584943.
3	15:56:10	89.2%	236884.6800	85.4%	570877.9200	571390.7600	714997.0400	5500.6468	±3558477.0000	709441.1400	7048.6342	23116.9270	10702.9130	-25.4774	1826.3687	1247766.2000	2215615.4000	2445363.
x		88.6%	105.694%	84.6%	569163.9400	103.145%	103.016%	5733.6475	±104.078%	102.615%	6851.6225	102.656%	10583.1420	-15.1841	1470.5384	1246140.5000	±2270491.2000	±2479612.
σ		0.8%	n/a	0.7%	5315.7201	n/a	n/a	530.2170	±n/a	n/a	239.8093	n/a	103.7331	8.9142	751.2487	11417.8360	±70245.9300	±93059.
%RSD		0.9	0.8926	0.8	0.9340	0.5012	0.5687	9.2475	±0.4801	0.6917	3.5000	0.4928	0.9802	58.7074	51.0866	0.9163	±3.0939	±3.

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:55:44	88.2%	44805.1200	288411.3800	33764.3990	494515.7900	479.7864	1710785.0000	1622855.4000	573601.8900	104.4%	107.4%	±3937926.3000	963.5146
2	15:55:57	90.6%	44276.4140	294802.1200	34048.6520	497191.3500	-12.7938	1719838.1000	1620341.8000	574143.4200	106.8%	109.4%	±3941292.7000	892.6390
3	15:56:10	91.1%	45056.2710	288939.7400	33236.0540	496331.6800	-1666.4653	1730250.7000	1613248.7000	570915.1000	108.9%	110.9%	±3933617.9000	1171.7729
x		89.9%	44712.6020	103.329%	33683.0350	102.447%	-399.8242	1720291.3000	97.904%	93.101%	106.7%	109.3%	±101.867%	1009.3088
σ		1.5%	398.0751	n/a	412.3638	n/a	1124.2524	9740.7699	n/a	n/a	2.2%	1.8%	±n/a	145.0923
%RSD		1.7	0.8903	1.2201	1.2242	0.2754	281.1867	0.5662	0.3078	0.3018	2.1	1.6	±0.0977	14.3754

SEQ-CCB@CCB02 10/24/2016 15:59:45 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:59:45	87.9%	47.4703	79.5%	75.3974	252.8536	150.9927	-29.0770	386.1118	149.9874	1.3261	7.3653	0.7990	-11.4848	2122.9514	449.4848	891.6740	845.7812	497.4327	1221.8885
2	15:59:58	89.3%	42.5482	82.3%	54.4851	172.0974	125.7114	-14.2029	439.7450	100.8051	4.7531	2.4090	20.0430	-31.3085	3381.8552	384.3433	807.3351	942.5799	457.2444	1285.5421
3	16:00:11	89.1%	20.0616	83.1%	113.1822	134.3183	155.3855	0.1715	430.3938	132.8920	1.3851	0.4439	48.5869	-41.6582	2785.9143	490.3809	877.5239	861.7486	546.8404	1371.6813
x		88.8%	36.6933	81.6%	81.0216	186.4231	144.0298	-14.3695	418.7502	127.8948	2.4881	3.4061	23.1430	-28.1505	2763.5736	441.4030	858.8443	883.3699	500.5058	1293.0373
σ		0.7%	14.6123	1.9%	29.7499	60.5523	16.0156	14.6250	28.6498	24.9690	1.9618	3.5668	24.0443	15.3326	629.7492	53.4788	45.1659	51.8952	44.8770	75.1771
%RSD		0.8	39.8227	2.3	36.7186	32.4811	11.1196	101.7781	6.8417	19.5231	78.8453	104.7183	103.8945	54.4665	22.7875	12.1156	5.2589	5.8747	8.9663	5.8140

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	15:59:45	93.9%	-20.6351	62.3742	11.0419	63.4917	4866.7406	320.1136	332.2589	83.6462	102.1%	104.6%	731.7530	1743.3529
2	15:59:58	95.6%	-13.4537	53.4831	7.1736	33.2665	2741.9052	306.5096	417.8653	108.2572	103.8%	106.0%	791.1638	2080.7115
3	16:00:11	92.4%	-26.5906	59.5607	0.0000	67.5623	1014.6817	378.2136	436.6197	108.6095	106.5%	108.1%	710.1858	1019.7125
x		94.0%	-20.2265	58.4727	6.0718	54.7735	2874.4425	334.9456	395.5813	100.1710	104.1%	106.2%	744.3676	1614.5923
σ		1.6%	6.5780	4.5443	5.6028	18.7364	1929.4465	38.0835	55.6348	14.3119	2.2%	1.8%	41.9369	542.0924
%RSD		1.7	32.5218	7.7717	92.2752	34.2071	67.1242	11.3701	14.0641	14.2875	2.1	1.7	5.6339	33.5746

SEQ-CCV@CCV03 10/24/2016 16:31:45 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96M
1	16:31:59	88.4%	232952.5000	81.9%	574797.1200	564115.5000	709772.4300	5482.9564	±3544790.5000	708619.1300	7099.5700	22932.0050	10601.0550	2.6503	1267.8389	1231827.1000	2214552.3000	2412274.70
2	16:32:12	88.4%	235863.8700	82.4%	572736.9100	571503.2100	720393.0600	5743.8295	±3561284.3000	712813.6100	7031.4232	23074.3630	10619.9230	10.3208	453.3985	1232630.5000	2222050.5000	2416053.50
3	16:32:25	89.1%	234249.1300	84.1%	573015.4400	566522.2200	710555.5700	5202.5808	±3566241.6000	705976.6200	6819.0486	22965.5560	10376.5850	-32.7143	-374.0697	1240204.2000	2202962.6000	2410698.90
x		88.6%	104.639%	82.8%	573516.4900	102.323%	102.368%	5476.4555	±104.221%	102.816%	6983.3473	101.792%	10532.5210	-6.5811	449.0559	1234887.2000	2213188.4000	2413009.00
σ		0.4%	n/a	1.1%	1117.7703	n/a	n/a	270.6829	±n/a	n/a	146.3097	n/a	135.3737	22.9547	820.9629	4622.0921	9616.7165	2751.78
%RSD		0.5	0.6224	1.4	0.1949	0.6641	0.8294	4.9427	±0.3157	0.4862	2.0951	0.3237	1.2853	348.7983	182.8198	0.3743	0.4345	0.11

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:31:59	89.6%	44763.7610	288491.0800	33698.0980	496868.4600	-1713.4300	1705396.6000	1616256.3000	571749.3500	106.9%	109.1%	±3946089.7000	666.0038
2	16:32:12	89.5%	45094.9500	294596.0900	33931.6200	500561.2100	-521.6778	1721852.9000	1635094.7000	580107.9200	108.1%	109.8%	±3964734.4000	1201.0330
3	16:32:25	91.0%	44308.3900	291726.5400	33976.0680	494327.5100	-1904.9862	1724582.3000	1644587.8000	572460.0300	109.0%	111.0%	±3963289.2000	1596.8623
x		90.0%	44722.3670	103.644%	33868.5950	102.703%	-1380.0313	1717277.3000	98.700%	93.408%	108.0%	110.0%	±102.396%	1154.6330
σ		0.9%	394.9107	n/a	149.3179	n/a	749.5009	10379.0690	n/a	n/a	1.1%	1.0%	±n/a	467.1606
%RSD		1.0	0.8830	1.0474	0.4409	0.6304	54.3104	0.6044	0.8836	0.8063	1.0	0.9	±0.2621	40.4597

SEQ-CCB@CCB03 10/24/2016 16:36:00 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:36:00	88.2%	39.8154	77.4%	53.4378	198.3517	24.6619	-59.6366	366.8124	61.2948	1.3890	2.8638	-1.3448	-5.4187	2905.4198	629.7200	1161.9943	1206.7568	718.6353	1765.1879
2	16:36:13	89.6%	20.0721	78.2%	43.8176	216.1796	18.0735	-51.3322	305.2084	30.4125	-2.2231	1.4316	15.0264	-18.7874	3342.2055	639.2868	1140.4008	1059.3421	651.6193	1726.9252
3	16:36:27	89.9%	23.5875	79.6%	45.9449	209.7002	8.5606	-61.2011	335.3871	51.2305	1.3007	2.5400	26.1483	-23.0461	3699.0638	655.8931	1117.2889	1309.2783	671.4644	1887.6103
x		89.2%	27.8250	78.4%	47.7334	208.0772	17.0987	-57.3899	335.8026	47.6460	0.1556	2.2785	13.2766	-15.7507	3315.5630	641.6333	1139.8947	1191.7924	680.5730	1793.2411
σ		0.9%	10.5317	1.1%	5.0533	9.0241	8.0948	5.3042	30.8041	15.7501	2.0604	0.7511	13.8298	9.1977	397.4922	13.2434	22.3570	125.6383	34.4240	83.9355
%RSD		1.1	37.8499	1.4	10.5866	4.3369	47.3414	9.2424	9.1733	33.0565	1324.3897	32.9629	104.1668	58.3953	11.9887	2.0640	1.9613	10.5420	5.0581	4.6807

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:36:00	92.3%	63.0965	36.9791	0.0000	41.8936	4367.7553	522.4742	359.6962	90.6295	102.8%	105.4%	587.0704	1005.6138
2	16:36:13	94.1%	-20.2891	21.8539	22.1260	67.1315	4816.4534	474.3392	502.8639	79.4569	103.6%	105.4%	514.3559	2494.6503
3	16:36:27	94.6%	2.3265	32.2059	7.2278	83.6026	4019.0320	466.1827	488.3813	30.2737	105.9%	108.1%	482.1411	1232.5056
x		93.6%	15.0446	30.3463	9.7846	64.2092	4401.0803	487.6654	450.3138	66.7867	104.1%	106.3%	527.8558	1577.5899
σ		1.2%	43.1231	7.7322	11.2824	21.0075	399.7538	30.4200	78.8105	32.1108	1.6%	1.6%	53.7515	802.2592
%RSD		1.3	286.6345	25.4797	115.3080	32.7173	9.0831	6.2379	17.5012	48.0797	1.5	1.5	10.1830	50.8535

Q324005-BLK1@PBS02 10/24/2016 16:40:02 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:40:02	87.2%	1.8652	76.2%	16.1786	193.3199	-338.0778	-213.4580	67.7882	-96.0770	4.9493	0.3779	31.1267	-42.3181	2692.6671	89.1372	284.1472	293.1946	94.1735	300.1540
2	16:40:15	89.6%	-10.0297	77.5%	-28.0494	150.0823	-341.1902	-198.9129	70.3355	-105.3591	1.3589	5.1412	38.1874	-53.1909	3807.6900	106.5583	229.4968	288.2133	145.9084	317.6057
3	16:40:29	89.3%	-2.4863	79.9%	-20.8917	213.9597	-358.6055	-228.3075	59.1810	-86.5794	1.2882	-3.3581	57.1219	-72.6561	2422.0109	125.2338	203.7853	223.1823	152.3048	400.2296
x		88.7%	-3.5503	77.8%	-10.9208	185.7873	-345.9578	-213.5595	65.7683	-96.0052	2.5321	0.7203	42.1453	-56.0550	2974.1227	106.9765	239.1431	268.1967	130.7956	339.3298
σ		1.3%	6.0184	1.9%	23.7401	32.5981	11.0632	14.6975	5.8452	9.3901	2.0936	4.2600	13.4420	15.3705	734.4655	18.0520	41.0402	39.0631	31.8765	53.4578
%RSD		1.5	169.5205	2.4	217.3836	17.5459	3.1978	6.8822	8.8875	9.7808	82.6826	591.3846	31.8944	27.4204	24.6952	16.8747	17.1613	14.5651	24.3712	15.7539

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:40:02	92.9%	-1.4746	7.3508	3.7821	16.7816	3279.9495	87.0707	81.1513	-1.9548	101.0%	102.7%	67.4499	1684.2081
2	16:40:15	93.1%	7.5554	14.6719	0.0000	1.6851	5742.6641	62.7454	112.1216	-5.7620	102.1%	106.2%	145.9459	704.6885
3	16:40:29	94.9%	-22.2826	14.2011	7.2730	12.3436	6351.0466	97.8548	76.8635	-13.0771	104.2%	106.8%	91.9498	1446.1432
x		93.6%	-5.4006	12.0746	3.6850	10.2701	5124.5534	82.5570	90.0455	-6.9313	102.4%	105.3%	101.7819	1278.3466
σ		1.1%	15.3015	4.0977	3.6374	7.7589	1626.1780	17.9847	19.2383	5.6526	1.6%	2.2%	40.1610	510.8635
%RSD		1.2	283.3299	33.9367	98.7087	75.5488	31.7331	21.7846	21.3651	81.5513	1.6	2.1	39.4580	39.9628

Q324005-BS1@LCS02 10/24/2016 16:44:02 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:44:02	89.4%	948.2006	77.3%	19.2448	11386.2520	5619.3072	42.2607	13625.8640	2866.3330	172.6177	452.3714	264.4175	-38.0065	2985.5489	7665.5313	13481.6610	14732.3610	8270.2548	21606.5830
2	16:44:15	90.1%	1085.6543	79.2%	4.6430	11633.9910	5636.0555	87.6342	14094.6260	2921.5666	133.5589	448.1887	238.7169	-42.7081	2577.3790	7762.3510	13867.2460	14753.3940	8633.5966	22216.0310
3	16:44:29	92.3%	1016.5318	80.4%	20.1303	11586.8700	5647.9433	90.1123	13539.3480	2837.0992	134.5064	461.7533	271.6489	-44.7278	2523.6630	7749.2744	13763.2090	14861.1230	8522.5405	21911.0290
x		90.6%	113.499%	79.0%	14.6727	104.019%	101.039%	73.3358	100.731%	104.209%	146.8943	100.528%	258.2611	-41.8141	2695.5303	7725.7189	13704.0390	14782.2930	8475.4640	21911.2140
σ		1.5%	n/a	1.5%	8.6972	n/a	n/a	26.9403	n/a	n/a	22.2821	n/a	17.3076	3.4487	252.5954	52.5325	199.4863	69.0747	186.1893	304.7240
%RSD		1.6	6.7592	1.9	59.2750	1.1404	0.2553	36.7355	2.1723	1.4920	15.1688	1.5297	6.7016	8.2477	9.3709	0.6800	1.4557	0.4673	2.1968	1.3907

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:44:02	95.3%	110.5010	9021.3379	127.6636	2025.0114	1417.0251	67.6547	12613.4040	23077.0620	100.9%	102.4%	13987.9760	2272.0839
2	16:44:15	93.3%	194.8403	9164.1353	169.8070	2134.3034	4522.6606	36.1511	13002.7300	22846.7850	101.9%	104.2%	14217.9990	1808.0493
3	16:44:29	95.1%	184.0244	9402.6171	166.3438	1967.7843	3287.6498	26.1382	12907.4380	22671.5020	104.7%	107.4%	14166.3900	33.4226
x		94.6%	163.1219	106.226%	154.6048	105.458%	3075.7785	43.3147	97.078%	92.897%	102.5%	104.6%	91.349%	1371.1853
σ		1.1%	45.8908	n/a	23.3959	n/a	1563.6208	21.6655	n/a	n/a	2.0%	2.5%	n/a	1181.5409
%RSD		1.2	28.1328	2.0947	15.1327	4.1425	50.8366	50.0188	1.5804	0.8896	1.9	2.4	0.8545	86.1693

6100167-03@MH1H52 10/24/2016 16:48:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:48:01	90.5%	148.7183	86.1%	7774.5491	24470.5790	4941.7613	-59.8500	26709.4540	3144.3831	71.3013	150.6735	93.6615	-6.3561	34814.4230	3071.5886	3031.2409	3967.9374	1811.7366	4931.5914
2	16:48:15	91.3%	153.9958	90.4%	8456.6514	24621.0560	4891.9999	4.3198	26868.1240	3322.1905	89.3257	125.7692	41.4359	33.1943	31279.0390	2851.5505	2844.4790	3836.8835	1976.3020	4936.3814
3	16:48:28	92.2%	130.8792	89.8%	±23482.8570	25200.1580	5080.8462	-27.4408	26618.8450	3457.2906	65.2183	135.1514	75.1146	-22.1200	35376.7990	3098.1576	3024.8782	4237.4795	1910.3188	4966.2487
x		91.3%	144.5311	88.8%	±13238.0190	24763.9310	4971.5358	-27.6570	26732.1410	3307.9547	75.2818	137.1980	70.0707	1.5727	33823.4200	3007.0989	2966.8660	4014.1001	1899.4525	4944.7405
σ		0.8%	12.1138	2.3%	±8878.8423	385.2027	97.8806	32.0854	126.1790	156.9387	12.5369	12.5776	26.4756	28.4968	2221.3674	135.3623	106.0380	204.2487	82.8191	18.7800
%RSD		0.9	8.3814	2.6	±67.0708	1.5555	1.9688	116.0121	0.4720	4.7443	16.6534	9.1675	37.7842	1811.9394	6.5675	4.5014	3.5741	5.0883	4.3602	0.3798

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:48:01	95.2%	620.1013	10543.7490	486.2957	6164.4793	17371.8310	2452.3511	12891.1870	78769.0280	102.8%	103.4%	2496.8729	50399.3920
2	16:48:15	94.7%	749.8872	10234.1470	469.3556	6342.3574	17741.3500	2574.3272	12976.9460	79861.9490	106.7%	108.1%	2372.9757	47653.4720
3	16:48:28	93.9%	601.3036	10394.9950	500.9896	6485.7712	19375.3140	2418.8461	13227.8890	81521.5630	108.3%	108.8%	2492.2508	51114.7360
x		94.6%	657.0974	10390.9640	485.5470	6330.8693	18162.8320	2481.8415	13032.0070	80050.8470	105.9%	106.8%	2454.0332	49722.5330
σ		0.7%	80.9062	154.8399	15.8303	160.9538	1066.1711	81.8282	174.9736	1385.9561	2.8%	2.9%	70.2358	1827.2081
%RSD		0.7	12.3127	1.4901	3.2603	2.5424	5.8701	3.2971	1.3426	1.7313	2.7	2.7	2.8621	3.6748

QJ24005-MS1@MH1H52S 10/24/2016 16:52:01 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo
1	16:52:01	89.0%	4127.2924	88.7%	9161.8166	120717.5800	53189.9860	399.5696	569781.7400	114307.3900	247.6096	868.2857	389.4705	-1.4537	39639.8130	±183213.7700	261828.9500	287934.9300	161397.2600
2	16:52:14	89.4%	4069.5906	90.6%	8926.3432	121652.7000	53704.2580	612.9000	578383.0400	115559.1700	328.1203	863.2987	400.9708	-4.6997	36560.0480	152661.0800	262866.8800	288659.4800	164695.1400
3	16:52:27	89.8%	4029.2698	91.0%	12200.5080	122249.3300	53940.3700	412.4284	584138.8600	116348.7200	315.4014	863.4152	479.5767	14.3831	40954.7080	155203.3600	269483.7700	292501.9600	165076.8400
x		89.4%	87.756%	90.1%	10096.2230	87.264%	87.223%	474.9660	80.669%	81.263%	297.0437	805.592%	423.3393	2.7432	39051.5230	±163692.7400	264726.5300	289698.7900	163723.0800
σ		0.4%	n/a	1.2%	1826.1641	n/a	n/a	119.6273	n/a	n/a	43.2810	n/a	49.0413	10.2102	2255.6204	±16953.4340	4152.4442	2454.4994	2023.2385
%RSD		0.5	1.2089	1.3	18.0876	0.6353	0.7157	25.1865	1.2513	0.8919	14.5706	0.3290	11.5844	372.1935	5.7760	±10.3569	1.5686	0.8473	1.2358

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:52:01	92.1%	1534.4423	47719.4410	1212.0026	15100.4660	29184.2540	2566.2060	53893.7880	456518.9100	104.6%	105.6%	60270.5130	73982.4770
2	16:52:14	91.8%	1308.0580	47657.8950	1150.1828	14857.1500	29887.0680	2547.7888	52839.7620	459554.9200	108.5%	109.4%	61373.7360	74016.7520
3	16:52:27	91.3%	1551.6951	48283.9130	1180.0048	15415.1030	32994.2410	2666.0505	54946.1210	466487.7700	110.0%	112.2%	61685.3500	73114.7670
x		91.7%	1464.7318	86.626%	1180.7300	90.810%	30688.5210	2593.3484	61.781%	77.357%	107.7%	109.1%	75.872%	73704.6660
σ		0.4%	135.9574	n/a	30.9163	n/a	2027.4976	63.6316	n/a	n/a	2.8%	3.3%	n/a	511.1543
%RSD		0.4	9.2821	0.7205	2.6184	1.8496	6.6067	2.4536	1.9542	1.1088	2.6	3.0	1.2165	0.6935

QJ24005-DUP1@MH1H52D 10/24/2016 16:56:01

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:56:01	84.7%	124.9084	80.6%	9403.1200	25297.2200	5092.3428	-41.9817	34685.5530	3994.6246	81.2693	169.9153	85.0724	-8.3298	40694.6930	5459.6283	4001.0664	5143.2163	2334.0134	6282.7472
2	16:56:14	87.7%	96.8955	84.3%	±30282.5400	25679.2780	5065.6955	-38.0148	34166.8020	4000.3479	91.5808	145.9596	61.2935	52.1360	40703.5600	6482.6951	3786.5040	4809.6082	2447.5203	6211.7209
3	16:56:27	89.0%	117.5515	86.3%	±28699.1380	25910.7900	5173.1340	-35.3116	35346.7140	3831.7053	110.2980	166.2676	102.7898	-30.1225	41159.3070	4209.7499	4036.6575	5117.4753	2529.6773	6303.8221
x		87.1%	113.1185	83.7%	±22794.9330	25629.0960	5110.3908	-38.4360	34733.0230	3942.2260	94.3830	160.7142	83.0519	4.5612	40852.5200	5384.0244	3941.4093	5023.4333	2437.0703	6266.0968
σ		2.2%	14.5231	2.9%	±11624.6410	309.8478	55.9469	3.3550	591.3869	95.7564	14.7164	12.9073	20.8218	42.6175	265.7224	1138.3571	135.3271	185.6247	98.2497	48.2554
%RSD		2.6	12.8388	3.4	±50.9966	1.2090	1.0948	8.7287	1.7027	2.4290	15.5922	8.0312	25.0708	934.3422	0.6504	21.1432	3.4335	3.6952	4.0315	0.7701

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	16:56:01	91.8%	520.3645	12013.5000	368.0327	5537.3477	19105.1840	2437.0237	18115.6430	103112.0900	104.8%	104.7%	3080.6144	61620.2630
2	16:56:14	92.4%	644.1063	12053.2310	385.1988	5747.3128	22405.2530	2680.9457	18990.7220	103137.3700	106.3%	109.4%	3251.2525	60149.1490
3	16:56:27	91.8%	596.6305	12410.4240	368.7534	5670.8331	22066.0800	2473.3767	18539.8750	103101.5200	109.3%	111.8%	3141.3992	60923.6590
x		92.0%	587.0338	12159.0520	373.9949	5651.8312	21192.1720	2530.4487	18548.7470	103116.9900	106.8%	108.6%	3157.7554	60897.6900
σ		0.3%	62.4266	218.5993	9.7095	106.2645	1815.3236	131.5956	437.6073	18.4197	2.3%	3.6%	86.4869	735.9011
%RSD		0.4	10.6342	1.7978	2.5962	1.8802	8.5660	5.2005	2.3592	0.0179	2.2	3.3	2.7389	1.2084

SEQ-SRD1@MH1H52L@SX 10/24/2016 17:00:00

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:00:00	82.7%	31.7406	70.8%	1793.2480	5286.1774	631.6163	-235.2893	6285.0874	701.4680	12.7873	9.6332	63.8845	-56.0892	9700.7344	448.2452	673.6750	880.5490	433.8997	1078.3658
2	17:00:13	83.5%	43.2269	73.5%	2037.5944	5347.5392	641.0993	-241.2803	5972.9059	702.3691	1.5501	37.4128	22.9454	-10.2965	8775.2203	477.5415	740.2419	832.4674	411.7976	1079.4322
3	17:00:27	83.7%	10.8957	73.0%	2327.4003	5291.3021	621.3813	-235.9335	6187.9079	592.1994	12.8198	37.2551	26.9703	-14.5178	11440.4960	639.0103	725.2424	989.3853	452.1394	1136.2161
x		83.3%	28.6211	72.5%	2052.7476	5308.3396	631.3656	-237.5010	6148.6337	665.3455	9.0524	28.1004	37.9334	-26.9678	9972.1502	521.5990	713.0531	900.8006	432.6122	1098.0047
σ		0.5%	16.3898	1.4%	267.3983	34.0445	9.8614	3.2888	159.7534	63.3480	6.4972	15.9932	22.5642	25.3080	1353.2086	102.7308	34.9174	80.3953	20.2017	33.0964
%RSD		0.6	57.2648	2.0	13.0264	0.6413	1.5619	1.3847	2.5982	9.5211	71.7733	56.9148	59.4838	93.8451	13.5699	19.6954	4.8969	8.9249	4.6697	3.0142

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:00:00	88.8%	154.7452	2125.0266	147.0747	1377.1554	6811.8851	450.7911	2836.0050	16759.7380	98.6%	99.7%	688.5319	14163.8500
2	17:00:13	88.3%	122.3887	2277.3696	77.2446	1304.0538	6874.8384	541.1448	2790.1785	17121.4310	100.5%	103.3%	615.7789	13827.1090
3	17:00:27	88.6%	165.1332	2110.7034	84.9551	1525.4340	10694.8700	514.0049	2800.0627	17490.3480	101.3%	103.9%	566.6871	12350.6240
x		88.6%	147.4224	2171.0332	103.0915	1402.2144	8127.1978	501.9803	2808.7488	17123.8390	100.1%	102.3%	623.6660	13447.1940
σ		0.2%	22.2933	92.3681	38.2852	112.7974	2223.8920	46.3615	24.1164	365.3109	1.4%	2.2%	61.3041	964.4682
%RSD		0.3	15.1220	4.2546	37.1371	8.0442	27.3636	9.2357	0.8586	2.1333	1.4	2.2	9.8296	7.1723

QJ24005-PS1@MH1H52A 10/24/2016 17:04:00

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:04:00	83.2%	168.4606	75.7%	±34435.4060	23789.1820	4873.6916	-29.6079	27601.7270	3379.0555	175.0353	610.6405	330.9186	-23.2914	34966.2800	2538.2724	3086.7517	3752.4842	1965.9732	4875.7375
2	17:04:13	84.6%	129.1323	79.3%	7705.5018	24005.1460	4990.8479	-59.5593	26524.1880	3432.8333	194.4298	645.1442	300.3164	17.6147	33886.0930	3014.7868	3079.8113	3684.6894	1804.1503	5157.1084
3	17:04:26	86.5%	121.9105	81.7%	±22010.5780	24239.9670	4911.1947	-35.1351	26691.2890	3259.8306	209.5254	651.6526	328.8642	-36.7288	32725.2070	3125.8205	2804.8842	3937.8089	1910.9641	4735.9907
x		84.8%	139.8345	78.9%	±21383.8290	24011.4320	4925.2447	-41.4341	26939.0680	3357.2398	192.9968	635.8124	320.0330	-14.1352	33859.1930	2892.9599	2990.4824	3791.6608	1893.6959	4922.9455
σ		1.7%	25.0526	3.0%	±13375.9690	225.4580	59.8285	15.9383	579.9298	88.5405	17.2897	22.0411	17.1060	28.3052	1120.7788	312.1451	160.7702	131.0285	82.2818	214.4912
%RSD		2.0	17.9159	3.8	±62.5518	0.9390	1.2147	38.4666	2.1527	2.6373	8.9585	3.4666	5.3451	200.2466	3.3101	10.7898	5.3761	3.4557	4.3450	4.3570

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:04:00	92.1%	688.8496	10457.9160	434.3103	6241.8140	18990.8390	2436.8107	37348.1200	79260.8970	100.2%	103.0%	2602.1226	50428.5460
2	17:04:13	91.5%	623.1146	10241.8710	516.7125	6286.5726	19966.8860	2518.8908	38934.8200	80169.6680	103.3%	107.4%	2363.7066	50749.3390
3	17:04:26	91.3%	651.9179	10207.9730	452.2045	6335.2129	18013.7320	2576.4288	37640.0740	78549.4950	108.0%	109.9%	2460.7272	50695.8010
x		91.7%	654.6274	10302.5870	467.7424	6287.8665	18990.4860	2510.7101	37974.3380	79326.6860	103.8%	106.8%	2475.5188	50624.5620
σ		0.4%	32.9512	135.5827	43.3429	46.7129	976.5769	70.1676	844.5140	812.0875	3.9%	3.5%	119.8943	171.8529
%RSD		0.5	5.0336	1.3160	9.2664	0.7429	5.1425	2.7947	2.2239	1.0237	3.8	3.3	4.8432	0.3395

SEQ-CCV@CCV04 10/24/2016 17:08:04 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96M
1	17:08:17	83.1%	229266.2100	74.0%	566110.9200	567036.4600	715942.9600	5034.1649	r3557974.6000	703246.0800	7031.0620	22665.9970	10360.7340	-0.6349	-199.5085	1219635.9000	2197547.9000	2420804.40
2	17:08:31	85.2%	230979.3400	74.6%	578596.5300	590318.7200	740152.7400	5664.0919	r3594710.9000	716783.6300	7499.9174	23841.7100	10828.2240	49.9278	905.8865	1248387.0000	2245511.7000	2465289.80
3	17:08:44	84.9%	231711.8000	75.2%	577608.2500	564155.7500	708586.9100	5468.4580	r3591857.8000	721455.2400	6796.8462	22761.6040	10165.3200	-8.6132	1629.5392	1256067.5000	2230740.8000	2453320.50
x		84.4%	102.986%	74.6%	574105.2400	103.487%	103.514%	5388.9049	r104.926%	103.496%	7109.2752	102.231%	10451.4260	13.5599	778.6391	1241363.5000	2224600.1000	2446471.50
σ		1.1%	n/a	0.6%	6940.8911	n/a	n/a	322.4105	rn/a	n/a	358.0017	n/a	340.6306	31.7472	921.1394	19204.5380	24564.4360	23019.95
%RSD		1.3	0.5442	0.8	1.2090	2.5000	2.2889	5.9829	r0.5706	1.3249	5.0357	2.8279	3.2592	234.1251	118.3012	1.5471	1.1042	0.94

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:08:17	87.1%	44666.0280	292424.4700	34943.5940	505955.2800	1099.9932	1727452.9000	1644045.9000	574912.8800	102.0%	105.8%	r3996293.2000	1528.1812
2	17:08:31	85.1%	45796.0750	294599.7100	34825.1160	497868.9000	335.3196	1722135.4000	1620695.5000	570149.8500	104.9%	105.9%	r4057085.2000	3166.9996
3	17:08:44	89.7%	45751.4190	294378.9400	33391.1060	501834.6900	-747.3912	1735680.5000	1647486.6000	570369.4000	107.6%	110.5%	r3953102.5000	645.3329
x		87.3%	45404.5070	104.424%	34386.6050	103.660%	229.3072	1728422.9000	99.029%	92.927%	104.8%	107.4%	r103.537%	1780.1712
σ		2.3%	639.9314	n/a	864.1605	n/a	928.2436	6824.4339	n/a	n/a	2.8%	2.7%	rn/a	1279.5800
%RSD		2.6	1.4094	0.4075	2.5131	0.8056	404.8035	0.3948	0.8902	0.4702	2.6	2.5	r1.3053	71.8796

SEQ-CCB@CCB04 10/24/2016 17:12:19 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	45Sc	47Ti	51V	52Cr	53Cl O	59Co	60Ni	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:12:19	85.6%	14.1604	73.9%	162.2668	140.7032	47.4413	-24.1817	353.5648	131.3714	8.9042	-2.9625	24.2472	-34.9219	3050.2980	511.6617	937.6241	1039.8240	572.1122	1533.4796
2	17:12:32	86.9%	33.0471	74.6%	111.1538	267.5732	30.5885	-94.4332	374.8684	102.2159	-2.2231	5.1017	24.4763	-35.5728	2814.9101	567.8960	919.7469	1042.7700	607.0060	1520.7104
3	17:12:45	88.2%	13.0734	76.9%	92.9832	277.3094	-4.5406	-90.5027	322.3523	154.1985	1.3396	5.0578	39.0142	-35.8967	1784.4080	494.0143	895.1428	1077.8382	552.9025	1467.6222
x		86.9%	20.0936	75.2%	122.1346	228.5286	24.4964	-69.7059	350.2618	129.2620	2.6736	2.3990	29.2459	-35.4638	2549.8720	524.5240	917.5046	1053.4774	577.3402	1507.2707
σ		1.3%	11.2312	1.6%	35.9233	76.2147	26.5210	39.4740	26.4134	26.0554	5.6823	4.6432	8.4604	0.4964	673.2780	38.5838	21.3293	21.1484	27.4280	34.9252
%RSD		1.5	55.8941	2.1	29.4129	33.3502	108.2652	56.6294	7.5410	20.1571	212.5343	193.5476	28.9285	1.3999	26.4044	7.3560	2.3247	2.0075	4.7508	2.3171

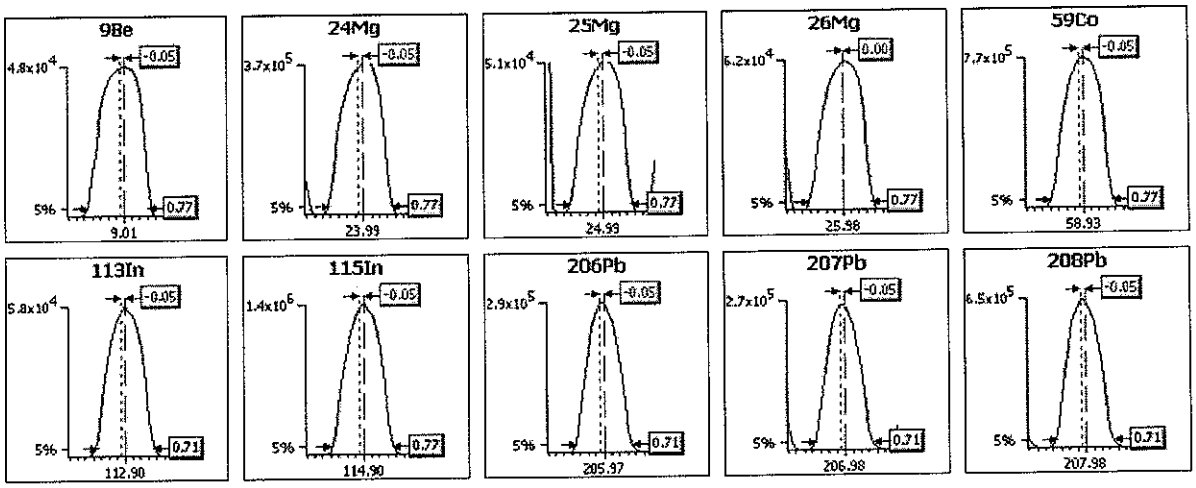
Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	115In	118Sn	121Sb	137Ba	159Tb	165Ho	205Tl	209Bi
1	17:12:19	89.9%	-30.6839	61.0055	15.2568	73.4120	3461.5115	339.7460	584.3855	102.7376	102.6%	104.5%	720.1161	3464.7948
2	17:12:32	93.3%	-55.9235	67.1371	11.2010	49.4982	3725.7927	492.2150	608.8445	71.8443	106.2%	107.1%	729.8304	2355.4105
3	17:12:45	93.6%	-49.4749	36.8016	0.0000	67.4499	1585.7676	392.3375	621.0959	45.0007	104.5%	108.9%	631.7400	1629.8101
x		92.2%	-45.3608	54.9814	8.8193	63.4534	2924.3573	408.0995	604.7753	73.1942	104.4%	106.8%	693.8955	2483.3385
σ		2.1%	13.1131	16.0399	7.9024	12.4478	1166.7595	77.4469	18.6904	28.8921	1.8%	2.2%	54.0470	924.1571
%RSD		2.2	28.9085	29.1733	89.6032	19.6172	39.8980	18.9775	3.0905	39.4732	1.7	2.1	7.7889	37.2143

Performance Report

Sample details
Sample name : SEQ-TUN1@TUNE01
Acquired at : 10/25/2016 08:31:07
Report name : 200_8 + IS TEST_NO SCREEN [7/9/2015 09:58:10]

Mass Calibration verification

Acquisition parameters
Sweeps : 10
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	0.11	0.77	-0.05
24Mg	0.85	0.65	0.11	0.77	-0.05
25Mg	0.85	0.65	0.11	0.77	-0.05
26Mg	0.85	0.65	0.11	0.77	0.00
59Co	0.85	0.65	0.11	0.77	-0.05
113In	0.85	0.65	0.11	0.71	-0.05
115In	0.85	0.65	0.11	0.77	-0.05
206Pb	0.85	0.65	0.11	0.71	-0.05
207Pb	0.85	0.65	0.11	0.71	-0.05
208Pb	0.85	0.65	0.11	0.71	-0.05

Sample details
Sample name : SEQ-TUN1@TUNE01
Acquired at : 10/25/2016 08:31:07
Report name : 200_8 + IS TEST_NO SCREEN [7/9/2015 09:58:10]

Tune conditions

Major	
Extraction	-169
Lens 1	0.3
Focus	16.3
D1	-43.9
Pole Bias	1.5
Hexapole Bias	-3.5
Nebuliser	0.78
Sampling Depth	130

Minor	
Lens 2	-26.7
Lens 3	-189.0
Forward power	1404
Horizontal	95
Vertical	375
D2	-160
DA	-30.6
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 thing	0.00

Sensitivity and stability results

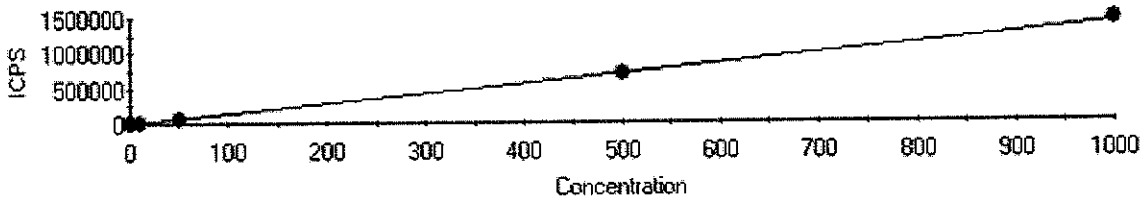
Acquisition parameters
Sweeps : 30

Run	Time	6Li	9Be	24Mg	25Mg	26Mg	45Sc	59Co	89Y	113In	115In	159Tb	206Pb	207Pb	208Pb	209Bi
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	3.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Countrate	>4000	>4000	>4000	>4000	>4000	>5000	>4000	>5000	>10000	>20000	>20000	>20000	>20000	>20000	>20000
1	08:31:45	105417.69	52078.745	389398.17	51559.129	62903.543	1212333.3	795270.65	92710.338	60312.741	1440234.8	119756.97	310920.89	274650.40	676659.14	74682.170
2	08:31:53	106429.37	52129.032	393067.81	53051.009	63024.376	1226794.1	809348.78	93225.567	62530.986	1459152.2	121172.20	315032.19	277666.65	678929.39	74809.881
3	08:32:01	105893.16	51689.868	395611.32	53460.061	63467.442	1226080.1	807054.30	92222.076	61920.160	1466611.9	121601.21	316343.22	277127.22	687559.88	75498.875
4	08:32:08	105754.90	51934.590	394529.11	52336.887	62809.564	1240150.7	818492.20	94451.457	62195.363	1465922.9	121283.67	314763.11	279408.82	686253.14	75112.359
5	08:32:16	105896.54	52333.535	395291.16	52578.274	62943.821	1241234.7	823316.70	95034.149	63551.359	1491451.9	122702.52	316953.95	282784.15	690418.12	76883.742
x		105878.33	52033.154	393579.51	52597.072	63029.749	1229318.6	810696.52	93528.717	62102.122	1464674.7	121303.31	314802.67	278327.45	683963.93	75397.405
σ		364.56	239.30	2535.01	723.91	256.61	11881.61	10875.22	1181.81	1175.57	18372.09	1055.38	2351.80	3017.84	5885.03	888.47
%RSD		0.3443	0.4599	0.6441	1.3763	0.4071	0.9665	1.3415	1.2636	1.8930	1.2543	0.8700	0.7471	1.0843	0.8604	1.1784

Result : The performance report passed.

Fully Quant Calibration

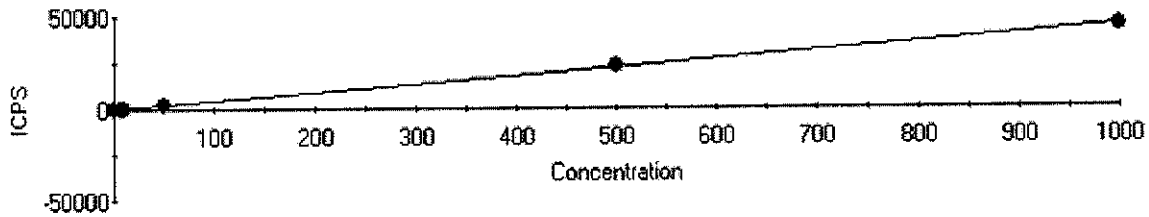
52Cr FQ Block 1



Intercept CPS=425.567958 Intercept Conc=0.301100
Sensitivity=1413.375395 Correlation Coeff=0.999971

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.047	0.047	491.99	0.00
SEQ-CAL4@S04	2.000	1.984	0.016	3229.37	0.81
SEQ-CAL5@S05	10.000	9.886	0.114	14397.66	1.14
SEQ-CAL6@S06	50.000	47.863	2.137	68073.64	4.27
SEQ-CAL7@S07	500.000	498.784	1.216	705395.17	0.24
SEQ-CAL8@S08	1000.000	1013.800	13.800	1433304.98	1.38

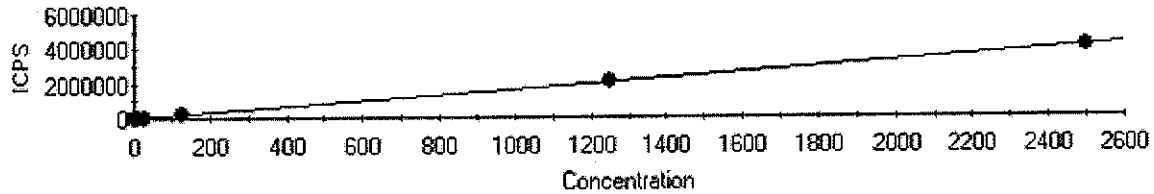
78Se FQ Block 1



Intercept CPS=30.319911 Intercept Conc=0.681411
Sensitivity=44.495743 Correlation Coeff=0.999834

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	-0.608	0.608	3.25	0.00
SEQ-CAL4@S04	5.000	4.724	0.276	240.52	5.52
SEQ-CAL5@S05	10.000	11.401	1.401	537.62	14.01
SEQ-CAL6@S06	50.000	51.330	1.330	2314.29	2.66
SEQ-CAL7@S07	500.000	505.040	5.040	22502.46	1.01
SEQ-CAL8@S08	1000.000	972.247	27.753	43291.15	2.78

95Mo FQ Block 1

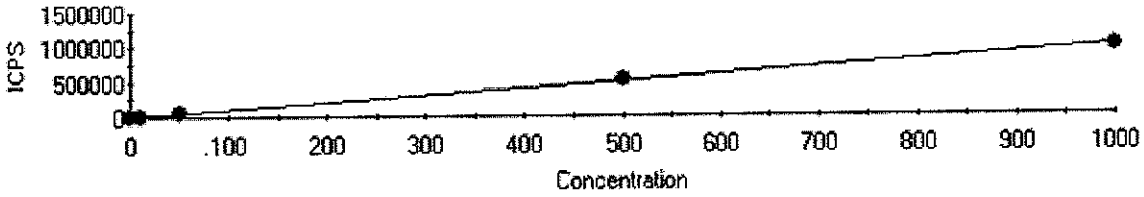


Intercept CPS=201.595267 Intercept Conc=0.122682
Sensitivity=1643.237506 Correlation Coeff=0.999954

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	-0.058	0.058	106.88	0.00
SEQ-CAL2@S02	2.000	1.983	0.017	3459.44	0.87
SEQ-CAL3@S03	4.000	4.199	0.199	7101.80	4.98
SEQ-CAL4@S04	10.000	10.477	0.477	17418.56	4.77
SEQ-CAL5@S05	25.000	25.162	0.162	41548.96	0.65
SEQ-CAL6@S06	125.000	125.180	0.180	205902.17	0.14
SEQ-CAL7@S07	1250.000	1243.355	6.645	2043329.40	0.53

SEQ-CAL8@S08	2500.000	2434.242	65.758	4000240.10	2.63

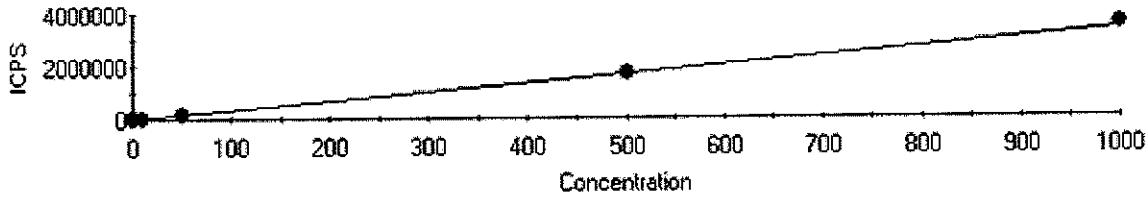
111Cd FQ Block 1



Intercept CPS=17.630778 Intercept Conc=0.017293
Sensitivity=1019.550448 Correlation Coeff=0.999939

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.000	0.000	17.71	0.00
SEQ-CAL4@S04	1.000	0.966	0.034	1002.10	3.44
SEQ-CAL5@S05	10.000	10.097	0.097	10312.09	0.97
SEQ-CAL6@S06	50.000	50.387	0.387	51389.64	0.77
SEQ-CAL7@S07	500.000	498.630	1.370	508396.13	0.27
SEQ-CAL8@S08	1000.000	974.193	25.807	993256.37	2.58

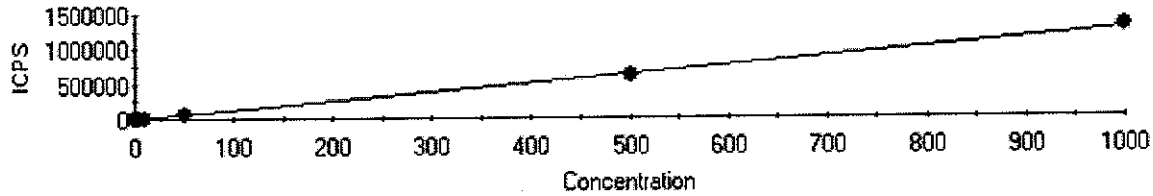
121Sb FQ Block 1



Intercept CPS=81.308152 Intercept Conc=0.024013
Sensitivity=3385.941751 Correlation Coeff=0.999873

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.013	0.013	124.55	0.00
SEQ-CAL4@S04	2.000	1.870	0.130	6413.81	6.49
SEQ-CAL5@S05	10.000	9.789	0.211	33225.79	2.11
SEQ-CAL6@S06	50.000	48.533	1.467	164410.57	2.93
SEQ-CAL7@S07	500.000	500.288	0.288	1694026.60	0.06
SEQ-CAL8@S08	1000.000	1035.676	35.676	3506819.63	3.57

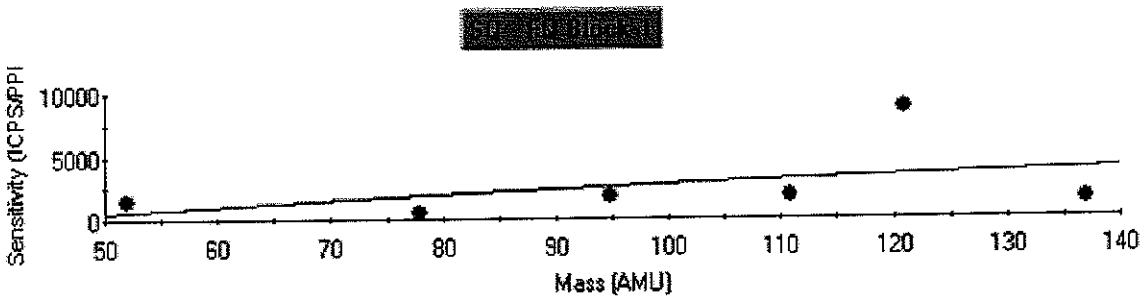
137Ba FQ Block 1



Intercept CPS=65.210240 Intercept Conc=0.051217
Sensitivity=1273.217230 Correlation Coeff=0.999668

Label	Defined	Measured	Error	Mean CPS	% Error
SEQ-CAL1@S01	0.000	0.007	0.007	74.52	0.00
SEQ-CAL3@S03	5.000	4.799	0.201	6175.11	4.02
SEQ-CAL5@S05	10.000	9.565	0.435	12243.12	4.35
SEQ-CAL6@S06	50.000	46.902	3.098	59781.71	6.20
SEQ-CAL7@S07	500.000	477.589	22.411	608140.30	4.48
SEQ-CAL8@S08	1000.000	1010.255	10.255	1286338.88	1.03

Semi Quant Calibration



Coeff 0=-2590.119992 Coeff 1=70.356251 Coeff 2=-0.169741

Symbol	Mass	RSF	Available	Excluded	Sensitivity Measured	Corrected	Calculated	%Error
52Cr	51.94	0.9800	1	1	1413.38	1721.85	606.29	-64.8
78Se	77.92	0.1000	1	1	44.50	1884.61	1861.33	-1.2
95Mo	94.91	0.9800	1	1	1643.24	11344.88	2558.22	-77.5
111Cd	110.90	0.5660	1	1	1019.55	14007.20	3124.91	-77.7
121Sb	120.90	0.3900	1	1	3385.94	15164.89	3434.99	-77.3
137Ba	136.91	0.9100	1	1	1273.22	12359.89	3860.57	-68.8

Dilution Corrected Concentrations

SEQ-CAL1@S01 10/25/2016 08:50:43

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:50:43	98.6%	99.8%	0.0337	0.0551	17.7000	-0.0243	-0.3448	-0.1227	1.5000	0.0000	0.0038	-0.0384	0.0184	0.0028	0.0197	99.4%	0.0032	0.0007	0.0057
2	08:50:54	100.9%	100.4%	-0.0373	0.0250	3.8320	0.0304	-0.7684	0.1420	-1.7790	0.0000	-0.0006	-0.0680	-0.0085	0.0076	0.0073	99.9%	0.0064	0.0006	-0.0011
3	08:51:06	100.5%	99.8%	0.0036	0.0608	-21.5300	-0.0061	-0.7121	-0.0193	0.2792	0.0000	-0.0033	-0.0665	-0.0099	-0.0104	-0.0270	100.6%	-0.0096	-0.0013	-0.0044
x		100.0%	100.0%	-0.0000	0.0470	0.0000	0.0000	-0.6084	0.0000	0.0000	0.0000	0.0000	-0.0576	0.0000	0.0000	0.0000	100.0%	-0.0000	0.0000	0.0001
σ		1.2%	0.4%	0.0357	0.0192	19.8900	0.0278	0.2300	0.1334	1.6580	0.0000	0.0036	0.0167	0.0159	0.0093	0.0242	0.6%	0.0085	0.0011	0.0051
%RSD		1.2	0.4	0.0000	40.9100	0.0000	0.0000	37.8000	0.0000	0.0000	0.0000	0.0000	28.9900	0.0000	0.0000	0.0000	0.6	0.0000	0.0000	6644.0000

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:50:43	0.0000	-0.0023	0.0168	0.0150	98.6%	98.6%	0.0000
2	08:50:54	0.0000	-0.0029	0.0182	0.0115	100.2%	101.2%	0.0000
3	08:51:06	0.0000	0.0052	0.0034	-0.0045	101.2%	100.2%	0.0000
x		0.0000	0.0000	0.0128	0.0073	100.0%	100.0%	0.0000
σ		0.0000	0.0045	0.0082	0.0104	1.3%	1.3%	0.0000
%RSD		0.0000	0.0000	64.1000	142.1000	1.3	1.3	0.0000

SEQ-CAL2@S02 10/25/2016 08:54:38

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:54:50	99.2%	97.6%	-0.0211	0.4630	10.1100	0.1084	0.5425	0.2594	-1.9240	0.0000	0.7724	1.8720	1.4630	0.7786	2.2270	98.7%	0.0071	0.0088	0.1524
2	08:55:02	100.8%	98.1%	0.0080	0.4697	57.1400	0.1072	0.7440	0.2652	0.4204	0.0000	0.8289	2.0720	1.4700	0.8215	1.9610	97.3%	0.0186	0.0087	0.1671
3	08:55:13	100.5%	99.6%	-0.0656	0.4636	63.9800	-0.0243	0.1318	0.3522	-1.3060	0.0000	0.8151	2.0040	1.4840	0.8544	2.1950	98.0%	0.0190	0.0202	0.1539
x		100.2%	98.4%	-0.0262	0.4654	43.7500	0.0638	0.4728	0.2923	-0.9366	0.0000	0.8055	1.9830	1.4720	0.8182	2.1280	98.0%	0.0149	0.0126	0.1578
σ		0.9%	1.1%	0.0371	0.0037	29.3300	0.0763	0.3120	0.0520	1.2150	0.0000	0.0294	0.1020	0.0110	0.0380	0.1453	0.7%	0.0068	0.0066	0.0081
%RSD		0.9	1.1	141.4000	0.7881	67.0400	119.6000	66.0000	17.7700	129.7000	0.0000	3.6550	5.1450	0.7449	4.6440	6.8270	0.7	45.5200	52.9400	5.1360

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:54:50	0.0000	0.0042	0.4168	2.1600	95.9%	97.0%	0.0000
2	08:55:02	0.0000	-0.0017	0.4312	2.1720	97.2%	99.2%	0.0000
3	08:55:13	0.0000	-0.0129	0.4117	2.0620	99.3%	98.7%	0.0000
x		0.0000	-0.0035	0.4199	2.1310	97.5%	98.3%	0.0000
σ		0.0000	0.0087	0.0101	0.0605	1.7%	1.1%	0.0000
%RSD		0.0000	251.0000	2.4140	2.8370	1.8	1.2	0.0000

SEQ-CAL3@S03 10/25/2016 08:58:40

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:58:40	98.5%	94.5%	-0.0453	1.0590	81.2900	0.0742	2.8980	0.4549	-2.7910	0.0000	1.7310	4.2510	2.8890	1.6160	4.2620	99.3%	0.0498	0.0215	0.4544
2	08:58:51	100.2%	96.5%	-0.0599	1.0460	79.7100	0.2427	2.5010	0.4427	-2.6960	0.0000	1.6990	4.1630	2.9730	1.6990	4.1720	98.3%	0.0674	0.0331	0.4214
3	08:59:03	101.3%	99.9%	-0.0064	1.0300	60.2000	0.1597	2.1740	0.4328	-3.1510	0.0000	1.6270	4.1840	2.9950	1.6200	4.0760	100.3%	0.0330	0.0281	0.4730
x		100.0%	97.0%	-0.0372	1.0450	73.7300	0.1589	2.5240	0.4435	-2.8790	0.0000	1.6860	4.1990	2.9520	1.6450	4.1700	99.3%	0.0501	0.0276	0.4496
σ		1.4%	2.7%	0.0276	0.0149	11.7400	0.0842	0.3624	0.0111	0.2400	0.0000	0.0533	0.0456	0.0563	0.0468	0.0927	1.0%	0.0172	0.0058	0.0261
%RSD		1.4	2.8	74.2400	1.4270	15.9300	53.0200	14.3600	2.5030	8.3370	0.0000	3.1590	1.0870	1.9080	2.8440	2.2230	1.0	34.3000	20.9800	5.8080

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:58:40	0.0000	-0.0175	0.9261	4.7190	93.1%	93.8%	0.0000
2	08:58:51	0.0000	-0.0097	0.9604	4.8180	96.1%	96.9%	0.0000
3	08:59:03	0.0000	-0.0056	0.9838	4.8590	99.1%	98.4%	0.0000
x		0.0000	-0.0109	0.9567	4.7990	96.1%	96.4%	0.0000
σ		0.0000	0.0061	0.0290	0.0723	3.0%	2.3%	0.0000
%RSD		0.0000	55.3200	3.0330	1.5070	3.1	2.4	0.0000

SEQ-CAL4@S04 10/25/2016 09:02:28

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:02:28	99.2%	94.5%	-0.0770	1.9970	80.6000	0.3450	4.9270	0.6134	-1.7310	0.0000	3.9260	10.3800	7.4170	4.1240	10.5300	99.5%	0.0781	0.0583	0.8927
2	09:02:39	100.5%	97.8%	-0.0216	1.9760	117.3000	0.4253	3.8190	0.6645	-1.9690	0.0000	3.9060	10.4900	7.2290	4.0230	10.4400	99.2%	0.0628	0.0463	0.9927
3	09:02:51	101.6%	98.4%	-0.0130	1.9780	128.4000	0.5142	5.4260	0.6346	0.6954	0.0000	4.0270	10.5600	7.5300	4.2170	10.7400	99.4%	0.0835	0.0340	1.0110
x		100.5%	96.9%	-0.0372	1.9840	108.8000	0.4281	4.7240	0.6375	-1.0010	0.0000	3.9530	10.4800	7.3920	4.1210	10.5700	99.3%	0.0748	0.0462	0.9656
σ		1.2%	2.1%	0.0347	0.0118	25.0300	0.0846	0.8223	0.0257	1.4740	0.0000	0.0649	0.0887	0.1522	0.0973	0.1559	0.2%	0.0108	0.0122	0.0638
%RSD		1.2	2.1	93.4300	0.5941	23.0100	19.7700	17.4100	4.0320	147.2000	0.0000	1.6420	0.8461	2.0590	2.3600	1.4750	0.2	14.3900	26.2900	6.6090

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:02:28	0.0000	-0.0124	1.8530	9.3860	94.8%	96.0%	0.0000
2	09:02:39	0.0000	-0.0115	1.8560	9.0070	98.5%	96.5%	0.0000
3	09:02:51	0.0000	-0.0108	1.9010	9.4950	99.9%	99.0%	0.0000
x		0.0000	-0.0116	1.8700	9.2960	97.8%	97.2%	0.0000
σ		0.0000	0.0008	0.0270	0.2558	2.6%	1.6%	0.0000
%RSD		0.0000	6.7440	1.4420	2.7520	2.7	1.7	0.0000

SEQ-CAL5@S05 10/25/2016 09:06:16

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:06:16	97.4%	92.9%	32.7400	9.9850	329.2000	0.9335	11.4000	0.8252	0.9277	0.0000	9.7650	25.1100	17.9900	9.9930	25.3900	97.6%	0.5666	0.4845	9.8220
2	09:06:27	99.6%	96.6%	32.0800	9.7130	260.3000	0.7333	11.0600	1.2060	-2.1950	0.0000	9.8180	25.2200	17.9900	10.1500	26.2000	101.5%	0.5046	0.4232	10.1800
3	09:06:39	101.8%	96.4%	33.1700	9.9590	280.8000	0.9353	11.7400	1.1350	-1.4380	0.0000	9.7920	25.1600	18.4800	10.3700	26.0700	99.2%	0.5856	0.4526	10.2900
x		99.6%	95.3%	32.6600	9.8860	290.1000	0.8674	11.4000	1.0550	-0.9017	0.0000	9.7920	25.1600	18.1500	10.1700	25.8900	99.4%	0.5523	0.4534	10.1000
σ		2.2%	2.1%	0.5489	0.1501	35.3800	0.1161	0.3433	0.2023	1.6290	0.0000	0.0265	0.0556	0.2844	0.1882	0.4328	1.9%	0.0424	0.0306	0.2446
%RSD		2.2	2.2	1.6800	1.5180	12.1900	13.3900	3.0110	19.1700	180.7000	0.0000	0.2710	0.2208	1.5670	1.8500	1.6720	1.9	7.6720	6.7560	2.4220

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:06:16	0.0000	10.4800	9.5730	9.2670	96.7%	95.0%	0.0000
2	09:06:27	0.0000	10.5900	9.8730	9.7890	97.8%	98.5%	0.0000
3	09:06:39	0.0000	10.9100	9.9210	9.6380	100.5%	99.2%	0.0000
x		0.0000	10.5600	9.7890	9.5650	98.4%	97.6%	0.0000
σ		0.0000	0.2200	0.1883	0.2685	2.0%	2.2%	0.0000
%RSD		0.0000	2.0640	1.9240	2.8070	2.0	2.3	0.0000

SEQ-CAL6@S06 10/25/2016 09:10:03

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:10:03	96.3%	91.5%	160.2000	48.4600	892.6000	4.2650	54.8200	5.9650	-3.0600	0.0000	48.1000	123.6000	89.1500	50.3500	128.5000	99.3%	2.7440	2.0900	50.0400
2	09:10:15	98.9%	94.4%	162.5000	47.2400	947.6000	4.0870	50.9100	5.6170	-1.3990	0.0000	49.4900	127.6000	91.3000	51.4400	131.2000	101.4%	2.7900	2.0860	50.5000
3	09:10:26	98.4%	95.1%	163.9000	47.8900	1173.0000	3.9350	48.2600	5.0700	-1.7910	0.0000	49.4900	124.3000	91.4100	51.4700	131.2000	100.1%	2.8480	2.0670	50.6200
x		97.9%	93.7%	162.2000	47.8600	1004.0000	4.0960	51.3300	5.5500	-2.0830	0.0000	49.0300	125.2000	90.6200	51.0900	130.3000	100.2%	2.7940	2.0810	50.3900
σ		1.4%	1.9%	1.8610	0.6133	148.8000	0.1650	3.3030	0.4515	0.8684	0.0000	0.8039	2.1420	1.2730	0.6355	1.5440	1.1%	0.0522	0.0127	0.3051
%RSD		1.4	2.1	1.1470	1.2810	14.8100	4.0280	6.4340	8.1340	41.6800	0.0000	1.6400	1.7110	1.4040	1.2440	1.1850	1.1	1.8680	0.6082	0.6054

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:10:03	0.0000	52.3400	48.0300	46.5500	96.5%	98.0%	0.0000
2	09:10:15	0.0000	53.1800	48.6300	47.2700	98.4%	98.4%	0.0000
3	09:10:26	0.0000	53.1000	48.9300	46.8800	101.6%	101.1%	0.0000
x		0.0000	52.8700	48.5300	46.9000	98.9%	99.2%	0.0000
σ		0.0000	0.4646	0.4577	0.3583	2.6%	1.7%	0.0000
%RSD		0.0000	0.8788	0.9431	0.7640	2.6	1.7	0.0000

SEQ-CAL7@S07 10/25/2016 09:13:50

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:13:50	93.4%	89.4%	1579.0000	497.4000	8895.0000	37.9100	500.1000	50.1700	0.4189	0.0000	485.4000	1227.0000	919.4000	514.6000	r1395.0000	90.8%	26.5300	20.2700	494.5000
2	09:14:01	94.5%	89.0%	1638.0000	504.9000	8665.0000	38.9400	518.0000	49.2500	2.6080	0.0000	503.9000	1248.0000	959.0000	526.6000	r1419.0000	90.0%	27.9000	20.1800	500.0000
3	09:14:13	94.2%	91.3%	1609.0000	494.0000	8313.0000	37.0000	497.0000	49.9000	1.3860	0.0000	502.5000	1256.0000	r990.1000	525.3000	r1410.0000	92.3%	27.2900	20.2500	501.4000
x		94.0%	89.9%	1609.0000	498.8000	8624.0000	37.9500	505.0000	49.7700	1.4710	0.0000	497.3000	1243.0000	r956.2000	522.2000	r1408.0000	91.0%	27.2400	20.2300	498.6000
σ		0.6%	1.2%	29.9500	5.5620	293.1000	0.9731	11.3600	0.4710	1.0970	0.0000	10.2700	14.8600	r35.4100	6.5690	r11.9000	1.1%	0.6862	0.0492	3.6520
%RSD		0.6	1.3	1.8620	1.1150	3.3980	2.5640	2.2480	0.9464	74.5700	0.0000	2.0660	1.1950	r3.7040	1.2580	r0.8450	1.2	2.5190	0.2430	0.7324

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:13:50	0.0000	541.7000	493.7000	472.4000	99.8%	100.3%	0.0000
2	09:14:01	0.0000	552.2000	503.6000	478.8000	101.3%	102.4%	0.0000
3	09:14:13	0.0000	556.4000	503.6000	481.5000	104.1%	104.7%	0.0000
x		0.0000	550.1000	500.3000	477.6000	101.7%	102.4%	0.0000
σ		0.0000	7.5560	5.7220	4.6540	2.2%	2.2%	0.0000
%RSD		0.0000	1.3730	1.1440	0.9745	2.1	2.2	0.0000

SEQ-CAL8@S08 10/25/2016 09:17:36

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:17:36	84.2%	80.0%	3140.0000	u1009.0000	16060.0000	74.7700	973.6000	99.6600	5.6760	0.0000	985.1000	r2438.0000	r1936.0000	1040.0000	r2779.0000	83.5%	52.0600	38.9900	971.1000
2	09:17:48	85.6%	82.7%	3128.0000	u1019.0000	15340.0000	71.4900	985.5000	95.1500	2.3880	0.0000	r1030.0000	r2425.0000	r1904.0000	1024.0000	r2718.0000	84.0%	51.9300	38.6500	963.5000
3	09:17:59	85.6%	82.8%	3219.0000	u1013.0000	14580.0000	73.2600	957.7000	97.9500	1.5840	0.0000	999.4000	r2440.0000	r1952.0000	r1099.0000	r2801.0000	85.0%	53.1200	39.8500	988.0000
x		85.1%	81.8%	3162.0000	u1014.0000	15330.0000	73.1700	972.2000	97.5800	3.2160	0.0000	r1005.0000	r2434.0000	r1931.0000	r1055.0000	r2766.0000	84.1%	52.3700	39.1700	974.2000
σ		0.8%	1.6%	49.6300	u4.8430	740.2000	1.6420	13.9600	2.2750	2.1680	0.0000	r22.7800	r8.5150	r24.3400	r39.6700	r43.0200	0.8%	0.6513	0.6183	12.5300
%RSD		0.9	2.0	1.5690	u0.4777	4.8290	2.2440	1.4350	2.3310	67.4100	0.0000	r2.2670	r0.3498	r1.2600	r3.7620	r1.5560	0.9	1.2440	1.5790	1.2870

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:17:36	0.0000	r1120.0000	rN1039.0000	rN1012.0000	97.9%	98.4%	0.0000
2	09:17:48	0.0000	r1123.0000	rN1028.0000	rN1008.0000	100.6%	100.0%	0.0000
3	09:17:59	0.0000	r1143.0000	rN1040.0000	rN1011.0000	102.1%	102.4%	0.0000
x		0.0000	r1129.0000	rN1036.0000	rN1010.0000	100.2%	100.3%	0.0000
σ		0.0000	r12.8400	rN6.8420	rN2.2780	2.1%	2.0%	0.0000
%RSD		0.0000	r1.1370	rN0.6606	rN0.2255	2.1	2.0	0.0000

SEQ-ICV@ICV01 10/25/2016 09:21:29 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:21:41	85.7%	80.0%	0.5842	96.4400	1669.0000	16.9900	230.5000	22.6600	-2.4920	0.0000	4.5280	10.2100	8.2670	4.4460	11.5400	90.5%	5.6440	3.9980	104.3000
2	09:21:52	87.3%	82.1%	0.6229	96.4600	1794.0000	16.2400	211.5000	21.2000	-0.7527	0.0000	4.5430	10.2200	8.1820	4.6700	11.6000	90.8%	5.7140	3.9770	102.6000
3	09:22:04	88.3%	82.2%	0.4054	98.5400	1785.0000	16.7300	224.7000	22.9700	-2.3640	0.0000	4.4270	10.2200	8.1680	4.7340	12.0200	89.3%	5.8150	4.1970	104.1000
x		87.1%	81.4%	0.5375	99.131%	1749.0000	16.6500	110.565%	22.2800	-1.8700	0.0000	4.4990	10.2100	8.2060	4.6170	11.7200	90.2%	5.7250	4.0570	104.719%
σ		1.3%	1.2%	0.1160	n/a	69.6300	0.3843	n/a	0.9454	0.9694	0.0000	0.0632	0.0063	0.0533	0.1510	0.2596	0.8%	0.0861	0.1212	n/a
%RSD		1.5	1.5	21.5800	1.2440	3.9810	2.3080	4.3890	4.2430	51.8500	0.0000	1.4060	0.0618	0.6489	3.2720	2.2150	0.9	1.5040	2.9880	0.8631

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:21:41	0.0000	0.2635	195.7000	96.4100	100.7%	102.3%	0.0000
2	09:21:52	0.0000	0.3314	197.7000	95.8900	103.3%	103.2%	0.0000
3	09:22:04	0.0000	0.3083	197.8000	97.3700	104.4%	105.5%	0.0000
x		0.0000	0.3011	99.543%	96.556%	102.8%	103.7%	0.0000
σ		0.0000	0.0345	n/a	n/a	1.9%	1.7%	0.0000
%RSD		0.0000	11.4600	0.5995	0.7757	1.8	1.6	0.0000

SEQ-ICB@ICB01 10/25/2016 09:25:29 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:25:29	86.7%	79.8%	0.0155	0.0436	54.2900	0.0449	-0.6068	0.0260	-0.8140	0.0000	0.0497	0.1039	0.1309	0.0632	0.2011	91.3%	0.0238	0.0031	0.0527
2	09:25:41	86.6%	80.2%	0.0265	0.0324	16.8100	-0.0210	-0.5940	0.1461	-2.2880	0.0000	0.0673	0.1146	0.1330	0.0708	0.1771	91.4%	0.0046	0.0074	0.0260
3	09:25:52	87.7%	82.5%	0.1388	0.0899	-16.2400	0.0417	-0.5182	0.0673	-1.4460	0.0000	0.0753	0.1212	0.1369	0.0523	0.1788	91.7%	0.0136	-0.0013	0.0640
x		87.0%	80.9%	0.0603	0.0553	18.2900	0.0219	-0.5730	0.0798	-1.5160	0.0000	0.0641	0.1132	0.1336	0.0621	0.1857	91.4%	0.0140	0.0031	0.0476
σ		0.6%	1.5%	0.0683	0.0305	35.2900	0.0372	0.0479	0.0610	0.7395	0.0000	0.0131	0.0087	0.0030	0.0093	0.0134	0.2%	0.0096	0.0044	0.0195
%RSD		0.7	1.8	113.2000	55.1100	193.0000	170.1000	8.3560	76.4500	48.7800	0.0000	20.4500	7.7230	2.2700	14.9400	7.2210	0.2	68.8300	141.5000	40.9500

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:25:29	0.0000	0.0582	0.4321	0.0198	95.8%	97.8%	0.0000
2	09:25:41	0.0000	0.0747	0.4950	0.0405	98.3%	99.3%	0.0000
3	09:25:52	0.0000	0.0750	0.4936	0.0220	100.6%	100.9%	0.0000
x		0.0000	0.0693	0.4736	0.0274	98.3%	99.3%	0.0000
σ		0.0000	0.0096	0.0359	0.0114	2.4%	1.5%	0.0000
%RSD		0.0000	13.8500	7.5890	41.5100	2.5	1.5	0.0000

SEQ-IFA@ICSA01 10/25/2016 09:29:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:29:18	76.6%	72.7%	2767.0000	20.9200	428.9000	-0.0427	-0.3626	-0.4740	8.2220	0.0000	818.1000	T2096.0000	T1655.0000	855.0000	T2347.0000	75.6%	-0.0073	1.0330	-1.1860
2	09:29:29	79.3%	77.3%	2734.0000	20.9900	162.9000	-0.0427	-0.3948	-0.5498	9.7060	0.0000	811.9000	T2101.0000	T1628.0000	854.3000	T2329.0000	76.6%	0.0226	0.9347	-1.3540
3	09:29:41	79.9%	79.0%	2820.0000	21.4600	326.6000	-0.0427	-0.8757	-0.5803	12.7700	0.0000	828.7000	T2123.0000	T1661.0000	881.3000	T2358.0000	75.8%	0.0184	0.8987	-1.3390
x		78.6%	76.3%	2774.0000	100.595%	306.1000	-0.0427	-181.446%	-0.5347	10.2300	0.0000	819.6000	T2106.0000	T1648.0000	863.5000	T2345.0000	76.0%	0.0112	0.9554	-184.695%
σ		1.8%	3.3%	43.4800	n/a	134.2000	0.0000	n/a	0.0548	2.3200	0.0000	8.5180	T14.2000	T17.5300	15.4000	T14.6500	0.5%	0.0162	0.0694	n/a
%RSD		2.3	4.3	1.5670	1.3800	43.8300	0.0000	52.7900	10.2400	22.6700	0.0000	1.0390	T0.6741	T1.0630	1.7830	T0.6248	0.7	144.0000	7.2590	7.1950

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:29:18	0.0000	0.2477	1.1290	1.8420	87.6%	89.2%	0.0000
2	09:29:29	0.0000	0.1964	1.3130	1.7500	91.7%	92.2%	0.0000
3	09:29:41	0.0000	0.1911	1.2640	1.8460	93.8%	94.7%	0.0000
x		0.0000	0.2117	82.362%	151.073%	91.0%	92.0%	0.0000
σ		0.0000	0.0313	n/a	n/a	3.2%	2.8%	0.0000
%RSD		0.0000	14.7600	7.6890	2.9970	3.5	3.0	0.0000

SEQ-IFB@ICSAB01 10/25/2016 09:33:05 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:33:05	79.1%	81.6%	2764.0000	43.1100	779.2000	1.4930	16.1600	1.7160	11.9500	0.0000	822.6000	T2133.0000	T1647.0000	857.1000	T2348.0000	77.2%	1.0580	1.6940	17.4400
2	09:33:16	79.2%	83.1%	2818.0000	42.4600	858.9000	1.2950	16.0100	1.0400	14.4000	0.0000	831.9000	T2174.0000	T1665.0000	875.2000	T2378.0000	79.2%	0.9915	1.7400	18.1600
3	09:33:28	81.9%	85.0%	2841.0000	41.9500	950.2000	1.1160	17.6800	0.9019	14.6600	0.0000	832.0000	T2128.0000	T1636.0000	871.8000	T2328.0000	80.4%	1.0840	1.7880	17.9100
x		80.0%	83.2%	2808.0000	106.268%	862.7000	1.3010	87.459%	1.2190	13.6700	0.0000	828.9000	T2145.0000	T1649.0000	868.0000	T2351.0000	78.9%	1.0440	1.7410	89.171%
σ		1.6%	1.7%	39.4600	n/a	85.5700	0.1882	n/a	0.4354	1.4980	0.0000	5.3930	T25.2700	T14.4700	9.6540	T25.1500	1.6%	0.0477	0.0469	n/a
%RSD		2.0	2.0	1.4050	1.3570	9.9180	14.4600	5.5820	35.7100	10.9600	0.0000	0.6507	T1.1780	T0.8774	1.1120	T1.0700	2.0	4.5620	2.6930	2.0630

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:33:05	0.0000	0.1744	20.7500	21.4000	94.4%	94.5%	0.0000
2	09:33:16	0.0000	0.1648	20.5600	21.3100	96.1%	96.7%	0.0000
3	09:33:28	0.0000	0.1594	20.7600	21.4200	99.7%	100.5%	0.0000
x		0.0000	0.1662	94.045%	97.184%	96.7%	97.2%	0.0000
σ		0.0000	0.0076	n/a	n/a	2.7%	3.0%	0.0000
%RSD		0.0000	4.5630	0.5307	0.2733	2.8	3.1	0.0000

SEQ-CCV@CCV01 10/25/2016 09:36:58 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:37:09	86.1%	90.9%	1634.0000	505.7000	8023.0000	39.1100	504.9000	50.0800	-1.7260	0.0000	506.1000	1244.0000	955.4000	530.2000	T1438.0000	91.6%	27.7900	20.0200	505.2000
2	09:37:21	87.7%	90.2%	1634.0000	510.7000	8568.0000	38.1500	525.1000	49.4500	1.7930	0.0000	508.6000	T1284.0000	T1007.0000	532.1000	T1429.0000	91.5%	27.5200	20.3300	512.3000
3	09:37:32	86.6%	91.2%	1639.0000	508.3000	8395.0000	37.2100	497.4000	50.2000	2.6250	0.0000	508.5000	1238.0000	T1007.0000	528.2000	T1426.0000	91.8%	27.3600	20.0800	507.8000
x		86.8%	90.8%	1636.0000	101.647%	8329.0000	38.1500	101.827%	49.9100	0.8973	0.0000	507.8000	T1256.0000	T989.7000	530.2000	T1431.0000	91.6%	27.5600	20.1400	101.686%
σ		0.8%	0.5%	2.6170	n/a	278.9000	0.9504	n/a	0.4020	2.3100	0.0000	1.4140	T25.1000	T29.7000	1.9410	T6.1670	0.1%	0.2138	0.1611	n/a
%RSD		0.9	0.5	0.1600	0.4933	3.3480	2.4910	2.8140	0.8055	257.4000	0.0000	0.2785	T1.9990	T3.0010	0.3661	T0.4309	0.2	0.7758	0.7995	0.7097

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:37:09	0.0000	559.6000	511.3000	482.4000	105.0%	106.4%	0.0000
2	09:37:21	0.0000	568.6000	523.0000	485.5000	107.6%	108.2%	0.0000
3	09:37:32	0.0000	569.2000	515.5000	482.5000	108.4%	108.5%	0.0000
x		0.0000	565.8000	103.320%	96.696%	107.0%	107.7%	0.0000
σ		0.0000	5.3670	n/a	n/a	1.8%	1.1%	0.0000
%RSD		0.0000	0.9486	1.1460	0.3657	1.6	1.0	0.0000

SEQ-CCB@CCB01 10/25/2016 09:40:59 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:40:59	83.8%	81.8%	0.2996	0.1192	26.2200	-0.0427	-0.3877	0.3175	-5.9780	0.0000	0.2457	0.5040	0.4247	0.2334	0.6159	94.0%	0.0157	0.0074	0.1166
2	09:41:10	85.2%	83.5%	0.2891	0.1134	89.0700	-0.0217	-0.3543	0.0682	-0.8528	0.0000	0.2259	0.5228	0.4093	0.2579	0.5999	94.0%	0.0187	0.0030	0.0642
3	09:41:22	86.1%	85.3%	0.2658	0.1099	50.6000	-0.0014	-0.3608	0.0796	-0.9994	0.0000	0.2315	0.4834	0.4166	0.2157	0.5375	95.3%	0.0086	0.0029	0.0804
x		85.0%	83.6%	0.2848	0.1142	55.2900	-0.0219	-0.3676	0.1551	-2.6100	0.0000	0.2344	0.5034	0.4169	0.2357	0.5844	94.4%	0.0143	0.0044	0.0871
σ		1.1%	1.7%	0.0173	0.0047	31.6900	0.0207	0.0177	0.1407	2.9180	0.0000	0.0102	0.0197	0.0077	0.0212	0.0414	0.7%	0.0052	0.0026	0.0268
%RSD		1.3	2.1	6.0640	4.1410	57.3100	94.2400	4.8080	90.7600	111.8000	0.0000	4.3500	3.9160	1.8420	8.9870	7.0820	0.8	36.4200	58.1100	30.8000

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:40:59	0.0000	0.1289	0.1771	0.0499	96.5%	96.9%	0.0000
2	09:41:10	0.0000	0.1419	0.1325	0.0429	97.7%	98.4%	0.0000
3	09:41:22	0.0000	0.1643	0.1812	0.0196	99.1%	99.6%	0.0000
x		0.0000	0.1450	0.1636	0.0375	97.8%	98.3%	0.0000
σ		0.0000	0.0179	0.0270	0.0158	1.3%	1.4%	0.0000
%RSD		0.0000	12.3400	16.5100	42.2600	1.3	1.4	0.0000

SEQIBL1

~~QJ[illegible]A~~ 10/25/2016 09:44:48

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:48	86.3%	88.3%	84.0100	63.8800	1418.0000	1.2220	9.6830	0.9900	1.4130	0.0000	7.2430	16.4300	12.9200	7.2300	18.0400	94.1%	0.1736	0.0955	1.6320
2	09:45:00	88.1%	91.1%	85.6600	61.8700	1402.0000	1.2460	12.0500	1.2040	-0.8752	0.0000	7.2770	16.7200	13.1200	7.2040	18.4100	96.6%	0.2007	0.0992	1.8510
3	09:45:11	89.4%	94.2%	85.1300	64.8700	1379.0000	1.4120	11.8700	1.0010	-0.7109	0.0000	7.2160	17.2900	12.9200	7.2180	18.4300	92.8%	0.1683	0.0882	1.7290
x		87.9%	91.2%	84.9400	63.5400	1400.0000	1.2930	11.2000	1.0650	-0.0578	0.0000	7.2450	16.8200	12.9900	7.2180	18.3000	94.5%	0.1809	0.0943	1.7370
σ		1.5%	2.9%	0.8426	1.5260	19.6600	0.1036	1.3180	0.1206	1.2760	0.0000	0.0308	0.4377	0.1126	0.0132	0.2206	1.9%	0.0174	0.0056	0.1099
%RSD		1.8	3.2	0.9920	2.4020	1.4050	8.0120	11.7700	11.3200	2207.0000	0.0000	0.4251	2.6030	0.8669	0.1833	1.2060	2.0	9.6250	5.9180	6.3280

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:44:48	0.0000	2.1870	4.4820	483.2000	100.3%	100.3%	0.0000
2	09:45:00	0.0000	2.0810	4.6220	490.8000	102.2%	102.0%	0.0000
3	09:45:11	0.0000	2.1010	4.5740	491.5000	105.4%	103.9%	0.0000
x		0.0000	2.1230	4.5590	488.5000	102.6%	102.1%	0.0000
σ		0.0000	0.0563	0.0710	4.5890	2.6%	1.8%	0.0000
%RSD		0.0000	2.6530	1.5580	0.9394	2.5	1.8	0.0000

OXM10/25

SEQ 13L2 X 111025

QJ19009-PS1@MH1H74A 10/25/2016 09:48:34

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:48:34	90.4%	103.8%	25.7500	4.8520	167.3000	1.0350	13.2800	1.1410	2.0040	0.0000	4.2010	9.5160	6.9260	3.6830	9.7510	95.9%	0.1744	0.0886	1.5610
2	09:48:46	91.8%	106.5%	27.1800	4.8620	132.3000	1.2480	11.6000	1.7560	-0.6556	0.0000	4.2360	9.8370	7.1940	3.9110	10.0400	97.1%	0.1885	0.0534	1.6400
3	09:48:58	93.0%	107.9%	27.7200	4.8680	139.9000	1.3170	11.3600	1.1240	2.2770	0.0000	4.3590	10.0900	7.3060	4.0890	10.1300	97.8%	0.2394	0.0835	1.6750
x		91.7%	106.1%	26.8800	4.8600	146.5000	1.2000	12.0800	1.3400	1.2080	0.0000	4.2650	9.8140	7.1420	3.8940	9.9730	96.9%	0.2008	0.0752	1.6250
σ		1.3%	2.1%	1.0190	0.0079	18.3600	0.1473	1.0440	0.3601	1.6200	0.0000	0.0829	0.2865	0.1954	0.2035	0.1980	1.0%	0.0342	0.0190	0.0584
%RSD		1.4	2.0	3.7890	0.1631	12.5300	12.2700	8.6420	26.8600	134.1000	0.0000	1.9440	2.9200	2.7350	5.2260	1.9850	1.0	17.0300	25.3100	3.5950

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:48:34	0.0000	3.4830	12.7400	384.4000	104.0%	102.1%	0.0000
2	09:48:46	0.0000	3.4710	12.8000	387.5000	107.0%	105.2%	0.0000
3	09:48:58	0.0000	3.5790	13.0700	396.8000	107.8%	107.7%	0.0000
x		0.0000	3.5110	12.8700	389.6000	106.3%	105.0%	0.0000
σ		0.0000	0.0589	0.1748	6.4750	2.0%	2.8%	0.0000
%RSD		0.0000	1.6770	1.3580	1.6620	1.9	2.7	0.0000

QJ24005-PS1@MH1H52A 10/25/2016 09:52:20

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:20	91.2%	100.0%	17.9100	3.8610	136.8000	0.4375	3.6050	0.5164	-1.0310	0.0000	4.3420	10.9400	7.8090	4.1570	10.9100	95.5%	0.4455	0.3006	6.8180
2	09:52:31	93.0%	101.6%	18.7000	3.8680	134.3000	0.3562	2.0940	0.4414	2.1850	0.0000	4.2080	10.8200	7.6110	4.3650	10.7200	94.6%	0.4567	0.2673	7.0570
3	09:52:43	94.1%	105.8%	19.4700	3.7920	118.1000	0.4113	2.9880	0.3088	1.8900	0.0000	4.1150	10.6200	7.7840	4.2770	10.6700	98.6%	0.3682	0.3049	7.2020
x		92.8%	102.5%	18.6900	3.8400	129.7000	0.4017	2.8960	0.4222	1.0150	0.0000	4.2220	10.8000	7.7350	4.2660	10.7600	96.2%	0.4235	0.2909	7.0260
σ		1.5%	3.0%	0.7788	0.0417	10.1300	0.0415	0.7597	0.1051	1.7780	0.0000	0.1141	0.1641	0.1077	0.1041	0.1276	2.1%	0.0482	0.0206	0.1938
%RSD		1.6	2.9	4.1660	1.0850	7.8090	10.3300	26.2400	24.8900	175.2000	0.0000	2.7030	1.5200	1.3920	2.4400	1.1860	2.1	11.3900	7.0720	2.7590

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:52:20	0.0000	0.8891	4.2750	70.6800	97.6%	98.0%	0.0000
2	09:52:31	0.0000	0.8956	4.2980	70.2900	100.1%	98.7%	0.0000
3	09:52:43	0.0000	0.8995	4.4140	69.5100	103.1%	102.5%	0.0000
x		0.0000	0.8947	4.3290	70.1600	100.2%	99.7%	0.0000
σ		0.0000	0.0053	0.0745	0.5985	2.8%	2.4%	0.0000
%RSD		0.0000	0.5883	1.7210	0.8531	2.7	2.4	0.0000

SEQ-CCV@CCV02 10/25/2016 09:56:13 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:24	87.0%	86.3%	1628.0000	510.6000	9706.0000	39.2700	526.0000	53.6500	2.4350	0.0000	506.1000	1258.0000	964.4000	531.5000	r1441.0000	89.3%	27.4500	20.0400	506.5000
2	09:56:36	88.7%	86.2%	1657.0000	514.3000	10240.0000	37.5200	521.9000	51.2600	-1.1250	0.0000	516.4000	1256.0000	982.8000	540.1000	r1447.0000	89.0%	27.7900	20.7800	513.0000
3	09:56:47	89.5%	86.0%	1673.0000	512.7000	9661.0000	39.4400	516.7000	51.4200	1.8050	0.0000	513.5000	r1291.0000	r1019.0000	545.3000	r1459.0000	89.5%	28.1700	20.7600	516.7000
x		88.4%	86.2%	1653.0000	102.503%	9868.0000	38.7400	104.304%	52.1100	1.0380	0.0000	512.0000	r1268.0000	r988.8000	539.0000	r1449.0000	89.2%	27.8000	20.5300	102.410%
σ		1.3%	0.2%	22.6400	n/a	320.6000	1.0620	n/a	1.3370	1.9000	0.0000	5.3020	r19.4100	r27.9000	6.9560	r9.2490	0.3%	0.3577	0.4237	n/a
%RSD		1.5	0.2	1.3700	0.3629	3.2490	2.7420	0.8953	2.5660	183.0000	0.0000	1.0360	r1.5300	r2.8220	1.2910	r0.6383	0.3	1.2860	2.0640	1.0010

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:24	0.0000	558.7000	512.0000	485.3000	99.1%	99.8%	0.0000
2	09:56:36	0.0000	566.3000	515.4000	490.1000	102.2%	102.8%	0.0000
3	09:56:47	0.0000	567.7000	515.8000	487.0000	103.6%	103.4%	0.0000
x		0.0000	564.2000	102.876%	97.497%	101.6%	102.0%	0.0000
σ		0.0000	4.8100	n/a	n/a	2.3%	1.9%	0.0000
%RSD		0.0000	0.8525	0.4009	0.5006	2.3	1.9	0.0000

SEQ-CCB@CCB02 10/25/2016 10:00:12 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:00:12	84.7%	80.5%	0.2836	0.1207	18.9200	-0.0211	-0.6905	0.0899	-1.7220	0.0000	0.1976	0.5016	0.4213	0.2230	0.5989	94.1%	0.0070	0.0074	0.0803
2	10:00:24	86.2%	81.5%	0.1805	0.1510	22.6900	0.0002	-0.4198	0.2081	-2.6120	0.0000	0.2096	0.4537	0.4323	0.2238	0.5572	94.5%	0.0131	0.0074	0.1051
3	10:00:35	87.0%	82.7%	0.3296	0.1037	14.7000	-0.0216	-0.7765	0.0472	-1.8230	0.0000	0.2015	0.4435	0.3796	0.2042	0.5891	95.1%	-0.0078	0.0094	0.0783
x		86.0%	81.6%	0.2646	0.1252	18.7700	-0.0141	-0.6290	0.1151	-2.0520	0.0000	0.2029	0.4663	0.4110	0.2170	0.5817	94.6%	0.0041	0.0081	0.0879
σ		1.1%	1.1%	0.0764	0.0240	3.9970	0.0124	0.1862	0.0833	0.4872	0.0000	0.0061	0.0310	0.0278	0.0111	0.0218	0.5%	0.0108	0.0011	0.0149
%RSD		1.3	1.3	28.8600	19.1500	21.2900	87.8700	29.6000	72.4200	23.7400	0.0000	3.0090	6.6530	6.7600	5.1200	3.7470	0.5	265.1000	14.1600	16.9700

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:00:12	0.0000	0.1724	0.1770	0.1053	97.5%	97.0%	0.0000
2	10:00:24	0.0000	0.1607	0.1725	0.0572	97.8%	97.5%	0.0000
3	10:00:35	0.0000	0.1678	0.1580	0.0666	99.2%	99.5%	0.0000
x		0.0000	0.1670	0.1692	0.0764	98.2%	98.0%	0.0000
σ		0.0000	0.0059	0.0099	0.0255	0.9%	1.3%	0.0000
%RSD		0.0000	3.5310	5.8790	33.3800	0.9	1.4	0.0000

Mass Uncorrected ICPS

SEQ-CAL1@S01 10/25/2016 08:50:43

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	08:50:43	102032.7300	130476.3200	93.3338	500.6805	264.0038	3.3333	20.0000	6.6667	166.6682	92393.8070	80.0004	136.6677	180.0018	86.6671	240.0032	37299.6960	116.6674	3.3333	23.3334
2	08:50:54	104318.4500	131314.9300	70.0003	460.6783	251.3368	13.3333	0.0000	20.0000	126.6676	95131.8290	70.0003	90.0004	113.3340	100.0006	210.0024	37487.1320	123.3342	3.3333	16.6667
3	08:51:06	103957.6800	130571.0000	83.3337	514.6812	242.0032	6.6667	3.3333	13.3333	153.3346	95185.7220	63.3336	93.3338	110.0007	53.3335	120.0008	37741.5140	96.6672	0.0000	13.3333
x		103436.2900	130787.4200	82.2226	492.0133	252.4480	7.7778	7.7778	13.3333	148.8901	94237.1200	71.1114	106.6673	134.4455	80.0004	190.0021	37509.4470	112.2229	2.2222	17.7778
σ		1228.8301	459.2879	11.7064	28.0253	11.0423	5.0918	10.7152	6.6667	20.3673	1596.5832	8.3888	26.0345	39.4881	24.0372	62.4512	221.7527	13.8779	1.9245	5.0918
%RSD		1.1880	0.3512	14.2374	5.6960	4.3741	65.4654	137.7665	50.0000	13.6794	1.6942	11.7967	24.4072	29.3711	30.0464	32.8687	0.5912	12.3664	86.6025	28.6411

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	08:50:43	158693.1100	140.0011	136.6677	83.3337	121057.3500	118618.8600	75982.8820
2	08:50:54	159625.8900	140.0011	143.3345	80.0004	122982.9400	121685.6600	75572.8190
3	08:51:06	160518.0600	166.6682	93.3338	60.0002	124158.7600	120543.9300	77004.7600
x		159612.3600	148.8901	124.4453	74.4448	122733.0200	120282.8200	76186.8200
σ		912.5535	15.3963	27.1488	12.6199	1565.7363	1549.9852	737.4327
%RSD		0.5717	10.3407	21.8158	16.9520	1.2757	1.2886	0.9679

SEQ-CAL2@S02 10/25/2016 08:54:38

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	08:54:50	102609.1600	127643.1900	73.3336	1066.0625	322.0057	26.6667	56.6668	43.3334	123.3342	92043.6140	1916.8687	3143.8769	3734.1001	2023.5585	5828.5345	37025.2450	120.0008	16.6667	170.0016
2	08:55:02	104284.7300	128326.0400	83.3337	1060.0618	348.6734	26.6667	66.6669	70.0003	150.0012	93171.6850	2070.2357	3507.3431	3787.4555	2150.2543	5201.4876	36499.7930	140.0011	16.6667	186.6686
3	08:55:13	103961.0500	130300.4900	60.0002	1059.3951	354.6736	3.3333	40.0001	66.6669	130.0009	93663.3660	2073.5698	3470.6624	3890.8324	2273.6176	5905.2507	36764.1880	143.3345	36.6667	176.6684
x		103618.3100	128756.5700	72.2225	1061.8398	341.7842	18.8889	54.4446	60.0002	134.4455	92959.5550	2020.2247	3373.9608	3804.1293	2149.1435	5645.0909	36763.0750	134.4454	23.3334	177.7795
σ		888.8129	1379.9761	11.7064	3.6721	17.3894	13.4715	13.4716	14.5298	13.8780	830.4505	89.5244	200.1008	79.6855	125.0333	386.0819	262.7277	12.6200	11.5470	8.3889
%RSD		0.8578	1.0718	16.2088	0.3458	5.0878	71.3198	24.7436	24.2162	10.3224	0.8933	4.4314	5.9307	2.0947	5.8178	6.8393	0.7147	9.3867	49.4872	4.7187

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	08:54:50	154739.1500	156.6680	1440.1141	2710.4040	117744.2600	116731.3300	74830.0450
2	08:55:02	157339.8900	140.0011	1503.4576	2757.0847	119348.3100	119358.4400	75448.4590
3	08:55:13	158822.0000	106.6673	1466.7850	2673.7265	121898.4800	118777.5800	75529.1240
x		156967.0100	134.4455	1470.1189	2713.7384	119663.6900	118289.1200	75269.2100
σ		2066.8053	25.4591	31.8031	41.7790	2094.9884	1379.9932	382.4598
%RSD		1.3167	18.9364	2.1633	1.5395	1.7507	1.1666	0.5081

SEQ-CAL3@S03 10/25/2016 08:58:40

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	08:58:40	101847.3300	123594.4900	63.3336	1909.5339	466.0119	20.0000	153.3346	73.3336	113.3340	90895.4820	4080.9158	6692.4625	7026.0474	3990.8758	10649.5670	37246.1440	183.3352	36.6667	456.6781
2	08:58:51	103657.6200	126264.1300	60.0002	1870.8592	458.0115	50.0001	140.0011	70.0003	113.3340	91717.0050	4110.9293	6765.8501	7416.3572	4301.0172	10702.9630	36861.2470	216.6693	56.6668	436.6772
3	08:59:03	104783.7500	130658.9100	80.0004	1886.8625	452.0112	36.6667	130.0009	63.3336	110.0007	92882.0780	4070.9113	7012.7037	7719.9431	4240.9890	10809.7560	37627.7110	166.6682	50.0001	503.3473
x		103429.5700	126839.1800	67.7780	1889.0852	458.6782	35.5556	141.1122	68.8892	112.2229	91831.5220	4087.5854	6823.6721	7387.4492	4177.6273	10720.7620	37245.0340	188.8909	47.7779	465.5675
σ		1481.4352	3567.1481	10.7153	19.4329	7.0241	15.0309	11.7065	5.0918	1.9245	998.2364	20.8260	167.7682	347.8500	164.4930	81.5642	383.2331	25.4593	10.1836	34.2125
%RSD		1.4323	2.8123	15.8093	1.0287	1.5314	42.2743	8.2959	7.3913	1.7149	1.0870	0.5095	2.4586	4.7087	3.9375	0.7608	1.0290	13.4783	21.3144	7.3485

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	08:58:40	153244.1500	86.6671	3010.4984	5671.7687	114300.7300	112832.5600	72034.2650
2	08:58:51	155583.3800	113.3340	3207.2323	5961.9543	117906.3500	116545.6300	74097.4140
3	08:59:03	159666.6000	130.0009	3390.6322	6205.4505	121628.2300	118331.8200	75142.6080
x		156164.7100	110.0007	3202.7876	5946.3912	117945.1000	115903.3400	73758.0960
σ		3250.4516	21.8584	190.1059	267.1811	3663.9027	2805.3275	1581.7083
%RSD		2.0814	19.8711	5.9356	4.4932	3.1064	2.4204	2.1445

SEQ-CAL4@S04 10/25/2016 09:02:28

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	1
1	09:02:28	102652.9800	123635.0300	53.3335	3231.2408	616.6876	66.6669	240.0032	116.6674	126.6676	89545.5170	9244.6982	16371.3950	17991.1180	10152.3320	26264.5520	37309.7370	230.0029	96.6672	893
2	09:02:39	103961.0500	127859.5300	73.3336	3191.2267	635.3555	83.3337	200.0022	123.3342	123.3342	92467.8880	9531.6609	17182.8900	18174.8160	10265.7930	27000.0360	37192.5920	213.3358	80.0004	1026
3	09:02:51	105124.3200	128687.7600	76.6670	3202.5640	644.6895	100.0006	273.3374	150.0012	156.6680	94111.2900	9918.7414	17533.5590	19110.0650	10863.1530	28049.8740	37293.0020	250.0034	60.0002	1056
x		103912.7900	126727.4400	67.7780	3208.3438	632.2442	83.3337	237.7809	130.0009	135.5566	92041.5650	9565.0335	17029.2810	18425.3330	10427.0930	27104.8210	37265.1110	231.1141	78.8892	992
σ		1236.3743	2709.9340	12.6199	20.6237	14.2579	16.6668	36.7181	17.6386	18.3589	2312.5489	338.2586	596.1151	600.0660	381.8767	897.2614	63.3578	18.3590	18.3587	86
%RSD		1.1898	2.1384	18.6194	0.6428	2.2551	20.0001	15.4420	13.5681	13.5433	2.5125	3.5364	3.5005	3.2567	3.6624	3.3103	0.1700	7.9437	23.2715	8

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:02:28	152972.9700	103.3339	6021.9939	11387.1270	116386.9500	115485.5700	72366.8910
2	09:02:39	157499.2800	110.0007	6255.4848	11347.0770	120935.7500	116095.6100	74305.7710
3	09:02:51	158944.1000	113.3340	6478.9746	12104.7200	122594.4100	119111.9100	75398.0430
x		156472.1200	108.8895	6252.1511	11612.9750	119972.3700	116898.0300	74023.5690
σ		3115.2704	5.0918	228.5086	426.3345	3213.9094	1941.4664	1535.1544
%RSD		1.9909	4.6761	3.6549	3.6712	2.6789	1.6608	2.0739

SEQ-CAL5@S05 10/25/2016 09:06:16

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd
1	09:06:16	100826.0400	121493.1100	10292.4900	14193.7380	2022.2249	166.6682	510.0143	186.6686	156.6680	88700.6280	22858.7030	40111.6300	43416.7620	24479.5810	63088.1490	36620.2760	1006.7224	790.0343
2	09:06:27	103054.1500	126308.0700	10479.3700	14359.9990	2010.8890	136.6677	510.0143	230.0029	123.3342	92723.8080	23607.2790	40707.6040	44562.2850	25522.4430	66781.0530	38056.1550	930.0476	706.6941
3	09:06:39	105252.4500	126061.3500	10816.4310	14390.0470	2019.5576	173.3350	543.3496	223.3361	130.0009	93909.2160	23797.7740	41772.4180	46304.2920	26368.1850	67257.8820	37222.7150	1076.7304	766.6990
x		103044.2100	124620.8400	10529.4300	14314.5950	2017.5572	158.8903	521.1261	213.3359	136.6677	91777.8840	23421.2520	40863.8840	44761.1130	25456.7360	65709.0280	37299.7150	1004.5001	754.4758
σ		2213.2236	2711.5026	265.5336	105.7374	5.9268	19.5319	19.2461	23.3339	17.6386	2730.0962	496.4055	841.3510	1453.9967	946.0150	2282.2349	721.0299	73.3667	42.9936
%RSD		2.1478	2.1758	2.5218	0.7387	0.2938	12.2927	3.6932	10.9376	12.9062	2.9747	2.1195	2.0589	3.2483	3.7162	3.4732	1.9331	7.3038	5.6985

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:06:16	154783.2300	32233.7110	31009.4640	11387.1270	118743.8100	114310.6600	72460.9700
2	09:06:27	156481.9400	33254.0430	32625.1040	12218.2050	119979.8800	118450.0100	74083.9720
3	09:06:39	161630.8600	34826.5810	33374.4830	12301.6510	123401.9000	119344.9300	76366.0730
x		157632.0100	33438.1120	32336.3500	11968.9940	120708.5300	117368.6000	74303.6720
σ		3565.7401	1306.1987	1208.6616	505.6361	2413.0158	2685.6213	1961.7999
%RSD		2.2621	3.9063	3.7378	4.2245	1.9990	2.2882	2.6402

SEQ-CAL6@S06 10/25/2016 09:10:03

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd
1	09:10:03	99653.2150	119611.7400	49296.6310	68428.5700	8582.0489	726.6957	2296.9568	1113.4015	110.0007	89326.7140	111216.1600	196368.1600	212569.8400	121868.0800	315615.2300	37242.7970	4427.7447
2	09:10:15	102315.8800	123479.6100	51602.7080	68129.6710	8601.4005	716.6949	2196.9321	1096.7328	133.3343	90538.6140	117491.0200	206526.2400	223466.5400	127778.4000	330711.2200	38036.0710	4614.5042
3	09:10:26	101749.5800	124358.1300	52440.8170	68154.5230	8742.2014	700.0270	2113.5790	996.7213	126.6676	94646.8060	119584.7200	207709.4100	227795.3400	130212.5800	336743.3800	37530.6440	4804.6026
x		101239.5600	122483.1600	51113.3850	68237.5880	8641.8836	714.4725	2202.4893	1068.9519	123.3342	91504.0450	116097.3000	203534.6000	221277.2400	126619.6900	327689.9400	37603.1710	4615.6172
σ		1402.6898	2525.2186	1628.2061	165.8614	87.4149	13.4726	91.8151	63.1063	12.0187	2788.3486	4354.8872	6234.4494	7845.3007	4291.2276	10883.2760	401.5795	188.4314
%RSD		1.3855	2.0617	3.1855	0.2431	1.0115	1.8857	4.1687	5.9036	9.7448	3.0472	3.7511	3.0631	3.5455	3.3891	3.3212	1.0679	4.0825

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:10:03	156498.8900	159235.8100	154237.4000	56679.4750	118497.2900	117872.5800	74594.7910
2	09:10:15	158866.0900	165655.6700	159832.8200	58796.1880	120746.6000	118395.9800	75283.7680
3	09:10:26	163890.7800	169271.3700	164674.7600	59930.2240	124723.0800	121594.4500	76833.3180
x		159751.9200	164720.9500	159581.6600	58468.6290	121322.3200	119287.6700	75570.6260
σ		3774.7213	5082.6562	5223.2100	1649.9434	3152.5709	2014.7995	1146.5021
%RSD		2.3629	3.0856	3.2731	2.8219	2.5985	1.6890	1.5171

SEQ-CAL7@S07 10/25/2016 09:13:50

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh
1	09:13:50	96637.5860	116930.5300	474592.9800	638953.4000	78363.6310	6352.2185	20546.5260	9458.2510	140.0011	85907.3280	1122072.4000	2012688.2000	2193768.8000	1246965.2000	r3431415.7000	34070.3910
2	09:14:01	97749.3780	116451.1000	490712.5500	642911.0000	78629.9160	6529.0104	21298.2530	9321.4431	163.3348	87438.4890	1168551.1000	2076847.9000	2296643.4000	1280808.2000	r3503156.2000	33772.6160
3	09:14:13	97436.0410	119344.9300	493968.6500	644664.1900	78747.5940	6362.2255	20957.4620	9671.8088	153.3346	90407.3170	1195799.9000	2148249.1000	r2432904.4000	1311136.4000	r3572895.1000	34609.0870
x		97274.3350	117575.5200	486424.7300	642176.2000	78580.3800	6414.4848	20934.0800	9483.8343	152.2235	87917.7120	1162141.1000	2079261.7000	r2307772.2000	1279636.6000	r3502489.0000	34150.6980
σ		573.2643	1550.9934	10375.1240	2925.4455	196.7161	99.3082	376.4086	176.5784	11.7065	2287.9501	37279.3680	67812.6770	r119955.5800	32101.6320	r70742.0730	423.9783
%RSD		0.5893	1.3191	2.1329	0.4556	0.2503	1.5482	1.7981	1.8619	7.6903	2.6024	3.2078	3.2614	r5.1929	2.5087	r2.0198	1.2415

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:13:50	172681.2700	1666987.4000	1606266.1000	587311.0800	122523.4700	120608.1100	77545.9980
2	09:14:01	174264.3900	1711735.9000	1651292.2000	601573.1700	124310.8200	123145.1200	79465.8030
3	09:14:13	178835.2100	1770646.2000	1695555.5000	621388.3100	127781.7800	125912.6400	79909.6690
x		175260.2900	1716456.5000	1651037.9000	603424.1900	124872.0200	123221.9500	78973.8230
σ		3195.5612	51990.3930	44645.2790	17113.8580	2673.7022	2653.1000	1256.2914
%RSD		1.8233	3.0289	2.7041	2.8361	2.1412	2.1531	1.5908

SEQ-CAL8@S08 10/25/2016 09:17:36

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	10
1	09:17:36	87098.5830	104574.7000	845223.3600	m1191051.7000	144815.6600	11457.2150	36600.1950	17296.4390	183.3352	80057.6290	2110864.1000	r3920481.0000	r4288931.9000	2342550.5000	r6355269.7000	31310.
2	09:17:48	88545.7960	108149.4900	870964.6200	m1209365.6000	146554.5200	11313.7020	38256.9960	17015.9100	150.0012	80723.4780	r2276932.8000	r4009247.8000	r4353011.9000	2378578.1000	r6413806.0000	31491.
3	09:17:59	88528.9670	108230.4500	897120.6400	m1217531.4000	147168.3200	11640.7810	37329.8200	17586.9950	143.3345	81500.3630	2222841.8000	r4092786.0000	r4489480.8000	r2569714.0000	r6651770.0000	31879.
x		88057.7820	106984.8800	871102.8800	m1205982.9000	146179.5000	11470.5660	37395.6700	17299.7810	158.8903	80760.4900	r2203546.2000	r4007504.9000	r4377141.5000	r2430280.9000	r6473648.6000	31560.
σ		830.7334	2087.6702	25948.9150	m13560.0810	1220.3442	163.9478	830.3608	285.5573	21.4307	722.0792	r84699.1520	r86165.6960	r102428.7200	r122088.8800	r157000.4700	290.
%RSD		0.9434	1.9514	2.9789	m1.1245	0.8348	1.4293	2.2205	1.6506	13.4877	0.8941	r3.8438	r2.1501	r2.3401	r5.0237	r2.4252	0.

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:17:36	178893.0000	r3256847.9000	m3202479.2000	m1208339.4000	120104.8400	118362.2100	75697.1800
2	09:17:48	183687.1900	r3356234.3000	m3265601.6000	m1239079.1000	123503.2600	120334.5200	78208.3020
3	09:17:59	186391.4100	r3457498.3000	m3335682.7000	m1257562.5000	125260.3900	123192.4200	79143.0060
x		182990.5300	r3360193.5000	m3267921.1000	m1234993.2000	122956.1600	120629.7200	77682.8290
σ		3797.4374	r100461.4800	m66632.0480	m24864.5900	2620.9522	2428.5952	1781.9988
%RSD		2.0752	r2.9898	m2.0390	m2.0133	2.1316	2.0133	2.2939

SEQ-ICV@ICV01 10/25/2016 09:21:29 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108
1	09:21:41	88579.4550	104588.1900	223.3361	123742.4800	15283.5030	2627.0462	8750.8764	3940.8540	106.6673	81621.4420	9872.0239	17099.4000	18642.4280	10199.0510	26879.6800	33946.5960	8590.7238	6178.76
2	09:21:52	90245.7240	107383.8300	240.0032	124149.9800	15408.3800	2577.0319	8243.7361	3800.7944	126.6676	84013.0820	10165.6810	17560.2770	18939.7090	10989.9720	27742.2650	34050.3160	8924.3783	6308.85
3	09:22:04	91279.2990	107447.9100	180.0018	124740.6500	15449.7840	2663.7235	8780.9054	4110.9293	106.6673	84618.6600	9948.7742	17737.2870	18989.8130	11190.2160	28855.7230	33491.5790	9127.9136	6692.46
x		90034.8260	105473.3100	214.4470	124211.0300	15380.5560	2622.6005	8591.8393	3950.8592	113.3340	83417.7280	9995.4929	17465.6540	18857.3170	10793.0800	27825.8890	33829.4970	8881.0052	6393.36
σ		1362.2216	1632.8793	30.9726	501.8781	86.5620	43.5165	301.8399	155.3094	11.5472	1584.8226	152.3008	329.3024	187.7774	524.0963	990.6724	297.2048	271.2087	267.07
%RSD		1.5130	1.5336	14.4430	0.4041	0.5628	1.6593	3.5131	3.9310	10.1886	1.8999	1.5237	1.8854	0.9958	4.8559	3.5603	0.8785	3.0538	4.17

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:21:41	148323.5400	916.7129	614403.3700	117805.0400	123631.6500	123020.1100	79802.0630
2	09:21:52	152156.1000	1146.7390	636948.4400	120209.5500	126818.4300	124114.8400	81268.3000
3	09:22:04	154430.6400	1083.3979	641316.7600	123040.3800	128123.2000	126923.2100	82714.5900
x		151636.7600	1048.9499	630889.5200	120351.6600	126191.1000	124686.0500	81261.6510
σ		3086.4967	118.8192	14443.5260	2620.5582	2310.5571	2013.2753	1456.2747
%RSD		2.0355	11.3274	2.2894	2.1774	1.8310	1.6147	1.7921

SEQ-ICB@ICB01 10/25/2016 09:25:29 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	09:25:29	89619.5750	104396.0000	70.0003	444.6775	262.6705	13.3333	6.6667	16.6667	126.6676	80340.1040	166.6682	356.6737	403.3423	210.0024	620.0211	34237.6840	133.3343	6.6667	63.3336
2	09:25:41	89518.5870	104898.4000	73.3336	430.6769	238.6698	3.3333	6.6667	20.0000	110.0007	82213.4070	206.6690	383.3414	413.3427	230.0029	573.3514	34267.7970	106.6673	13.3333	40.0001
3	09:25:52	90706.9470	107947.1100	106.6673	506.6808	228.0029	13.3333	10.0000	13.3333	120.0008	84144.2870	230.0029	403.3423	433.3437	193.3354	593.3527	34388.2510	123.3342	0.0000	76.6670
x		89948.3700	105747.1700	83.3337	460.6784	243.1144	10.0000	7.7778	16.6667	118.8897	82232.6000	201.1134	381.1191	416.6762	211.1136	595.5751	34297.9110	121.1119	6.6667	60.0002
σ		658.8845	1921.6942	20.2761	40.4496	17.7560	5.7735	1.9245	3.3333	8.3888	1902.1641	32.0308	23.4135	15.2760	18.3590	23.4141	79.6724	13.4717	6.6667	18.5593
%RSD		0.7325	1.8173	24.3312	8.7804	7.3036	57.7350	24.7436	20.0000	7.0560	2.3132	15.9267	6.1434	3.6661	8.6963	3.9313	0.2323	11.1233	100.0000	30.9321

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:25:29	144733.0200	300.0050	1386.7724	83.3337	117575.4300	117666.6000	76003.0500
2	09:25:41	148093.1600	353.3402	1606.8087	110.0007	120675.6600	119425.9900	77492.2090
3	09:25:52	149492.4500	363.3406	1643.4819	90.0004	123510.0200	121357.9900	78423.4770
x		147439.5400	338.8953	1545.6877	94.4449	120587.0400	119483.5300	77306.2450
σ		2446.1085	34.0491	138.8408	13.8779	2968.2833	1846.3661	1220.8826
%RSD		1.6591	10.0471	8.9825	14.6942	2.4615	1.5453	1.5793

SEQ-IFA@ICSA01 10/25/2016 09:29:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd
1	09:29:18	79200.1670	95074.5680	677179.1300	22674.9100	2947.8112	0.0000	16.6667	10.0000	190.0020	71987.2280	1584066.0000	T3015307.3000	T3312936.5000	1738700.4000	T4848721.7000	28354.1490	80.0004
2	09:29:29	82021.6870	101163.0900	711626.9600	23051.8560	2861.1168	0.0000	16.6667	3.3333	206.6690	75962.7150	1662344.5000	T3165542.9000	T3444486.7000	1836490.7000	T5084743.1000	28728.6550	126.6676
3	09:29:41	82707.8620	103280.0200	749463.5700	23297.8150	2968.4846	0.0000	0.0000	20.0000	233.3363	79122.8310	1733771.9000	T3271933.7000	T3589989.5000	1935886.5000	T5260307.1000	28414.3360	123.3342
x		81309.9050	99839.2270	712756.5600	23008.1940	2925.8042	0.0000	11.1111	11.1111	210.0024	75690.9250	1660060.8000	T3150928.0000	T3449137.6000	1837025.8000	T5064590.6000	28499.0470	110.0007
σ		1859.0202	4259.9101	36155.4570	313.7397	56.9666	0.0000	9.6225	8.3887	21.8586	3575.5574	74879.1180	T128935.9700	T138585.0200	98594.1430	T206531.4400	201.1110	26.0345
%RSD		2.2863	4.2668	5.0726	1.3636	1.9470	0.0000	86.6025	75.4984	10.4088	4.7239	4.5106	T4.0920	T4.0180	5.3671	T4.0779	0.7057	23.6675

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:29:18	131024.1100	770.0326	3200.5633	2030.2267	107454.6600	107235.4300	69155.3720
2	09:29:29	137285.5000	670.0247	3907.5063	2030.2267	112535.5800	110905.7400	71906.5940
3	09:29:41	141699.1200	670.0247	3850.8154	2186.9297	115131.1100	113905.8200	73670.6340
x		136669.5800	703.3607	3652.9617	2082.4610	111707.1200	110682.3300	71577.5330
σ		5364.0892	57.7396	392.8125	90.4725	3904.7088	3340.8052	2275.5454
%RSD		3.9249	8.2091	10.7533	4.3445	3.4955	3.0184	3.1791

SEQ-IFB@ICSAB01 10/25/2016 09:33:05 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd
1	09:33:05	81769.4300	106719.4100	758842.4100	47387.1840	5951.9478	236.6698	643.3561	410.0093	230.0029	81251.4840	1760134.6000	T3308807.3000	T3639862.1000	1923989.4000	T5352043.1000	28972.7610	1656.81
2	09:33:16	81910.6930	108652.1000	787539.1100	47860.3190	6061.3534	210.0024	650.0232	323.3391	260.0037	82247.0430	1812134.6000	T3433311.8000	T3746035.1000	2000223.7000	T5518286.3000	29701.7750	1586.80
3	09:33:28	84652.3040	111104.8100	812193.1000	48025.8560	6138.0715	186.6686	733.3629	306.6718	266.6706	84928.1930	1863859.5000	T3486673.6000	T3787089.4000	2049811.0000	T5558493.2000	30163.2910	1776.84
x		82777.4760	108825.4400	786191.5400	47757.7860	6050.4575	211.1136	675.5808	346.6734	252.2257	82808.9070	1812042.9000	T3409597.6000	T3724328.9000	1991341.4000	T5476274.2000	29612.6090	1673.48
σ		1625.1846	2197.8344	26700.8600	331.4516	93.5390	25.0191	50.1517	55.4799	19.5321	1901.6612	51862.5040	T91273.6590	T75975.8870	63379.3410	T109449.4100	600.2524	96.10
%RSD		1.9633	2.0196	3.3962	0.6940	1.5460	11.8510	7.4235	16.0035	7.7439	2.2964	2.8621	T2.6770	T2.0400	3.1827	T1.9986	2.0270	5.74

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:33:05	144160.7000	633.3554	63094.8620	25027.7370	115860.2900	113625.6800	70922.2400
2	09:33:16	149048.5800	616.6876	63655.4160	25372.0230	117943.4900	116258.6600	74144.4620
3	09:33:28	149207.8300	620.0211	66307.6060	26374.8710	122364.6800	120861.4400	75996.3270
x		147472.3700	623.3547	64352.6280	25591.5440	118722.8200	116915.2600	73687.6760
σ		2869.0953	8.8198	1716.1030	699.8817	3321.4905	3662.2923	2567.6995
%RSD		1.9455	1.4149	2.6667	2.7348	2.7977	3.1324	3.4846

SEQ-CCV@CCV01 10/25/2016 09:36:58 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	(cut off)
1	09:37:09	88990.1030	118841.7400	499593.8900	654879.6500	79697.1490	6719.1488	21274.8650	9668.4720	116.6674	91218.6960	1205622.5000	2148061.5000	2350662.4000	1325039.0000	T3649600.2000	34348.1000	45…
2	09:37:21	90626.1470	118027.9100	496360.4600	660721.8300	80687.8300	6559.0320	22146.9440	9605.0715	156.6680	90794.4810	1217739.3000	T2270806.5000	T2491556.2000	1337709.0000	T3648658.3000	34314.6400	45…
3	09:37:32	89471.4600	119304.4100	503113.5900	659695.8600	80482.6900	6462.2961	21191.3370	9855.3391	166.6682	90865.1820	1229331.7000	2206331.1000	T2514797.5000	1340679.2000	T3677052.3000	34421.7110	45…
x		89695.9030	118724.6900	499689.3100	658432.4500	80289.2230	6580.1589	21537.7150	9709.6275	146.6679	90959.4530	1217564.5000	T2208399.7000	T2452338.7000	1334475.7000	T3658436.9000	34361.4830	45…
σ		840.7976	646.2507	3377.5763	3119.2826	522.9098	129.7232	529.2579	130.1108	26.4579	227.2770	11855.5660	T61398.6460	T88817.7270	8306.2655	T16128.2600	54.7755	
%RSD		0.9374	0.5443	0.6759	0.4737	0.6513	1.9714	2.4574	1.3400	18.0393	0.2499	0.9737	T2.7802	T3.6218	0.6224	T0.4409	0.1594	

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:37:09	181279.5800	1787612.5000	1728638.1000	626412.8400	128927.7900	128018.4100	81540.7230
2	09:37:21	182626.1300	1837420.1000	1790282.8000	641273.8800	132035.2500	130199.0500	83804.5030
3	09:37:32	184071.5200	1856111.4000	1780473.7000	642674.4500	133070.1800	130452.6500	84191.3870
x		182659.0800	1827048.0000	1766464.9000	636787.0600	131344.4100	129556.7000	83178.8710
σ		1396.2587	35407.7640	33124.0750	9011.5902	2155.8731	1338.2224	1431.8054
%RSD		0.7644	1.9380	1.8752	1.4152	1.6414	1.0329	1.7214

SEQ-CCB@CCB01 10/25/2016 09:40:59 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	09:40:59	86640.9070	107046.5500	150.0012	558.6838	264.6705	0.0000	13.3333	10.0000	70.0003	82970.2370	593.3527	993.3876	1066.7292	600.0198	1586.8051	35274.9720	123.3342	13.3333	123.3342
2	09:41:10	88057.7570	109164.8500	150.0012	550.6834	302.6717	3.3333	16.6667	23.3334	130.0009	85924.1530	560.0172	1036.7258	1050.0606	666.6911	1576.8034	35261.5870	130.0009	6.6667	76.6670
3	09:41:22	88946.3450	111607.5800	146.6679	553.3502	282.0044	6.6667	16.6667	23.3334	130.0009	86829.3590	583.3521	986.7202	1086.7316	580.0185	1456.7834	35733.4240	116.6674	6.6667	93.3338
x		87881.6700	109273.0000	148.8901	554.2391	283.1155	3.3333	15.5556	18.8889	110.0007	85241.2500	578.9073	1005.6112	1067.8405	615.5765	1540.1306	35423.3280	123.3342	8.8889	97.7783
σ		1162.7620	2282.4355	1.9245	4.0736	19.0249	3.3333	1.9245	7.6980	34.6414	2018.1612	17.1064	27.1515	18.3607	45.3822	72.3539	268.6347	6.6668	3.8490	23.6489
%RSD		1.3231	2.0887	1.2926	0.7350	6.7199	100.0000	12.3718	40.7542	31.4920	2.3676	2.9549	2.7000	1.7194	7.3723	4.6979	0.7584	5.4054	43.3013	24.1863

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:40:59	144868.4900	510.0143	620.0211	120.0008	118402.7300	116538.8800	73781.5280
2	09:41:10	148032.1800	556.6837	490.0132	113.3340	119956.2400	118358.8300	75088.8330
3	09:41:22	150159.9800	633.3554	653.3568	86.6671	121594.4500	119854.9100	75730.7920
x		147686.8800	566.6845	587.7971	106.6673	119984.4700	118250.8800	74867.0510
σ		2662.5932	62.2757	86.3080	17.6385	1596.0457	1660.6492	993.3772
%RSD		1.8029	10.9895	14.6833	16.5360	1.3302	1.4043	1.3269

SEQIBLI

~~Q317020-FS1@MH1359A~~ 10/25/2016 09:44:48

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd
1	09:44:48	90767.5470	115509.2000	25027.7370	85352.1350	10797.0750	210.0024	426.6767	216.6693	156.6680	155786.8200	16718.6930	27294.2460	30798.7490	17506.8410	44341.2080	35291.7030	380.0079	156.6680
2	09:45:00	92733.9100	119091.6500	26304.6680	84897.9120	10763.7020	220.0027	536.6825	236.6698	133.3343	162105.8700	17232.9850	28277.2430	32066.4550	17890.9210	46408.1530	36238.7520	433.3437	166.6682
3	09:45:11	94037.1950	123172.1400	27036.8110	85494.8000	10775.0480	256.6703	546.6831	196.6688	130.0009	163632.8600	17653.7910	30159.9460	32635.1400	18518.8430	47993.0160	34816.5430	393.3418	153.3346
x		92512.8840	119257.6600	26123.0720	85248.2820	10778.6080	228.8918	503.3474	216.6693	140.0011	160508.5200	17201.8230	28577.1450	31833.4480	17972.2010	46247.4590	35448.9990	402.2312	158.8903
σ		1645.9920	3834.1698	1016.7731	311.7017	16.9688	24.5710	66.5868	20.0005	14.5299	4159.7781	468.3275	1456.1992	940.1071	510.8738	1831.1998	724.0344	27.7568	6.9390
%RSD		1.7792	3.2150	3.8922	0.3656	0.1574	10.7348	13.2288	9.2309	10.3784	2.5916	2.7225	5.0957	2.9532	2.8426	3.9596	2.0425	6.9007	4.3672

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:44:48	148181.2400	6859.2534	14641.7820	601437.9800	123124.8400	120608.1100	77784.6910
2	09:45:00	153481.4300	6685.7909	15443.1060	623809.3100	125402.3200	122651.8500	79327.9410
3	09:45:11	157512.8500	6969.3371	15780.3510	644650.6100	129340.2600	125017.0700	81271.6630
x		153058.5100	6838.1271	15288.4130	623299.3000	125955.8100	122759.0100	79461.4310
σ		4680.1554	142.9488	584.8355	21610.8270	3144.4556	2206.4347	1747.3146
%RSD		3.0578	2.0905	3.8254	3.4672	2.4965	1.7974	2.1989

Q M10725

SEQ1B12

Q[illegible]71A 10/25/2016 09:48:34

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd
1	09:48:34	94279.6880	135735.8200	9054.5069	6981.3463	1090.0653	203.3356	650.0232	266.6706	166.6682	203662.7100	10849.8040	16474.9150	18445.3600	9958.7851	26715.8650	35954.2920	420.0097	160.0014
2	09:48:46	95845.9380	139228.0400	9798.6112	7085.4268	1083.3979	250.0034	586.6856	373.3410	136.6677	211433.8000	11236.9400	17510.1800	19671.2600	10856.4790	28237.1190	36422.8180	456.6781	100.0006
3	09:48:58	96998.0620	141143.9100	10128.9730	7142.8050	1096.7328	266.6706	583.3521	273.3374	173.3350	217422.6000	11687.5080	18087.9770	20195.7410	11470.5650	28812.2520	36673.8240	553.3502	156.6680
x		95707.8960	138702.5900	9660.6970	7069.8593	1090.0654	240.0032	606.6870	304.4497	158.8903	210839.7100	11258.0840	17357.6910	19437.4540	10761.9430	27921.7450	36350.3120	476.6793	138.8900
σ		1364.4343	2742.0680	550.3495	81.8473	6.6675	32.8304	37.5673	59.7547	19.5319	6899.1555	419.2521	817.2711	898.3079	760.3109	1083.1924	365.2049	68.8836	33.7205
%RSD		1.4256	1.9769	5.6968	1.1577	0.6117	13.6791	6.1922	19.6271	12.2927	3.2722	3.7240	4.7084	4.6215	7.0648	3.8794	1.0047	14.4507	24.2785

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:48:34	156254.7500	11780.9620	44934.1090	508888.7600	127660.0900	122749.8200	91370.2060
2	09:48:46	162913.4500	12064.6670	46367.9480	527386.2800	131314.9300	126541.2800	94680.4880
3	09:48:58	166158.0500	12555.3310	47812.0670	544845.4100	132312.5700	129587.0700	96378.1880
x		161775.4100	12133.6530	46371.3750	527040.1500	130429.2000	126292.7200	94142.9600
σ		5048.7813	391.7666	1438.9820	17980.8230	2449.4473	3425.3928	2546.8947
%RSD		3.1209	3.2288	3.1032	3.4117	1.8780	2.7123	2.7053

Q124005-PS2MH1H52A 10/25/2016 09:52:20

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd
1	09:52:20	94528.9220	130777.2600	6092.0405	5620.4035	914.7127	86.6671	193.3354	100.0006	130.0009	128691.1400	10679.6030	17743.9660	19781.4990	10689.6140	28417.6800	35837.1640	846.7061	510.0143
2	09:52:31	96381.5560	132840.1900	6455.6246	5575.0423	905.3784	73.3336	130.0009	120.0008	166.6682	131331.8400	10559.4620	18004.4780	19674.6000	11447.2030	28487.8990	35492.4830	883.3763	463.3451
3	09:52:43	97580.9160	136388.7100	6999.3601	5703.1217	920.7133	86.6671	176.6684	93.3338	170.0016	133506.5100	10706.3010	18194.8560	20850.5500	11624.0930	29387.4220	36975.0410	760.0318	546.6831
x		96163.7980	134002.0500	6515.6751	5632.8558	913.6015	82.2226	166.6682	104.4451	155.5569	131176.5000	10648.4550	17981.1000	20102.2160	11253.6370	28764.3340	36101.5630	830.0380	506.6809
σ		1537.6054	3936.4909	456.6309	64.9413	7.7276	7.6981	32.8301	13.8779	22.1948	2411.4378	78.2176	226.3522	650.2765	496.4006	540.7515	775.8379	63.3390	41.7689
%RSD		1.5989	2.9376	7.0082	1.1529	0.8458	9.3625	19.6979	13.2873	14.2680	1.8383	0.7345	1.2588	3.2348	4.4110	1.8799	2.1490	7.6309	8.2436

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:52:20	177224.1200	2957.1475	14317.9330	88289.9930	119756.9700	117923.2300	128559.3000
2	09:52:31	180827.3800	3043.8428	14718.5720	89892.2470	122834.2900	118693.1500	132346.3900
3	09:52:43	186299.5500	3160.5493	15623.4130	91747.3080	126507.4800	123287.0200	135350.1400
x		181450.3500	3053.8466	14886.6390	89976.5160	123032.9100	119967.8000	132085.2800
σ		4569.6766	102.0692	668.7712	1730.1974	3379.6363	2900.1911	3402.9418
%RSD		2.5184	3.3423	4.4924	1.9229	2.7469	2.4175	2.5763

SEQ-CCV@CCV02 10/25/2016 09:56:13 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	
1	09:56:24	89912.4460	112906.8100	472876.9300	644517.6600	79380.3950	6398.9179	21017.6010	9868.6869	160.0014	84864.2670	1142176.9000	2049088.8000	2247557.1000	1258310.6000	+3464205.2000	33481.5420	42
2	09:56:36	91646.2970	112680.7000	480469.9400	646988.9400	79954.0560	6152.0809	20987.5320	9461.5878	120.0008	86714.9420	1178149.5000	2110133.3000	2317045.7000	1293665.5000	+3519541.1000	33367.7920	43
3	09:56:47	92518.3980	112481.5900	484354.8400	648619.1900	79834.3450	6478.9746	20823.8220	9548.3451	153.3346	87182.7170	1176384.8000	+2197686.1000	+2413308.0000	1312094.3000	+3566576.6000	33555.1460	44
x		91359.0470	112689.7000	479233.9000	646708.6000	79722.9320	6343.3245	20942.9850	9626.2066	144.4456	86253.9750	1165570.4000	+2118969.4000	+2325970.3000	1288023.5000	+3516774.3000	33468.1600	43
σ		1326.5108	212.7542	5837.9272	2065.0832	302.6240	170.3903	104.2872	214.4277	21.4307	1226.0386	20278.5530	+74691.7000	+83235.0750	27332.1410	+51241.7790	94.3913	1
%RSD		1.4520	0.1888	1.2182	0.3193	0.3796	2.6861	0.4980	2.2275	14.8365	1.4214	1.7398	+3.5249	+3.5785	2.1220	+1.4571	0.2820	

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:56:24	170157.6900	1688490.4000	1637233.7000	595367.2800	121628.2300	120020.4100	74420.0340
2	09:56:36	173068.5300	1742030.0000	1679230.5000	615718.0000	125449.6400	123692.4700	77058.5460
3	09:56:47	175891.9500	1759420.8000	1693615.5000	618055.5600	127156.4400	124368.2600	78104.0780
x		173039.3900	1729980.4000	1670026.6000	609713.6100	124744.7700	122693.7100	76527.5530
σ		2867.2445	36968.5900	29296.0930	12479.1430	2830.7063	2339.6799	1898.5552
%RSD		1.6570	2.1369	1.7542	2.0467	2.2692	1.9069	2.4809

SEQ-CCB@CCB02 10/25/2016 10:00:12 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	10:00:12	87576.4750	105336.7600	143.3345	561.3507	260.6704	3.3333	3.3333	20.0000	120.0008	82939.9620	486.6797	1000.0550	1053.3944	573.3514	1540.1304	35315.1270	110.0007	13.3333	90.0004
2	10:00:24	89148.3090	106527.1700	116.6674	604.0201	268.6706	6.6667	13.3333	30.0000	110.0007	83417.6360	516.6814	926.7139	1086.7316	580.0185	1456.7834	35455.6730	120.0008	13.3333	113.3340
3	10:00:35	89902.3470	108193.3400	160.0014	544.0163	258.0037	3.3333	0.0000	10.0000	120.0008	85469.9010	506.6808	923.3802	983.3865	543.3496	1553.4661	35666.4950	90.0004	16.6667	90.0004
x		88875.7100	106685.7600	140.0011	569.7957	262.4482	4.4444	5.5556	20.0000	116.6674	83942.5000	503.3473	950.0497	1041.1708	565.5732	1516.7933	35479.0980	106.6673	14.4445	97.7783
σ		1186.6560	1434.8819	21.8585	30.8805	5.5513	1.9245	6.9389	10.0000	5.7736	1344.1572	15.2761	43.3379	52.7457	19.5328	52.3961	176.8513	15.2754	1.9245	13.4717
%RSD		1.3352	1.3450	15.6131	5.4196	2.1152	43.3013	124.9000	50.0000	4.9487	1.6013	3.0349	4.5616	5.0660	3.4536	3.4544	0.4985	14.3206	13.3235	13.7778

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	10:00:12	147141.2200	636.6890	620.0211	186.6686	119638.7600	116653.6700	72161.9380
2	10:00:24	149709.3100	606.6869	610.0205	130.0009	120081.2000	117227.6500	74947.6750
3	10:00:35	153328.8900	636.6890	573.3514	143.3345	121800.5200	119699.5500	75404.7650
x		150059.8100	626.6883	601.1310	153.3347	120506.8300	117860.2900	74171.4600
σ		3108.6894	17.3217	24.5720	29.6278	1142.0000	1618.4928	1755.2391
%RSD		2.0716	2.7640	4.0876	19.3223	0.9477	1.3732	2.3665

OM10/25

Analyte ICPS

SEQ-CAL1@S01 10/25/2016 08:50:43

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	08:50:43	98.6%	99.8%	11.3244	77.9280	11.6797	-4.4122	-15.3435	-24.9612	18.6920	-1213.5597	9.4362	-63.0358	46.7290	7.2866	51.6278	99.4%	5.4006	1.1337	5.7887
2	08:50:54	100.9%	100.4%	-12.5283	35.3846	2.5284	5.5231	-34.1889	28.8788	-22.1704	587.0647	-1.3695	-111.7777	-21.6437	19.6499	19.1284	99.9%	10.7102	1.0949	-1.0927
3	08:51:06	100.5%	99.8%	1.2039	85.9486	-14.2081	-1.1109	-31.6834	-3.9175	3.4784	626.4950	-8.0667	-109.3332	-25.0854	-26.9365	-70.7561	100.6%	-16.1108	-2.2287	-4.4602
x		100.0%	100.0%	-0.0000	66.4204	0.0000	0.0000	-27.0719	0.0000	0.0000	0.0000	0.0000	-94.7156	0.0000	0.0000	0.0000	100.0%	-0.0000	0.0000	0.0786
σ		1.2%	0.4%	11.9719	27.1753	13.1278	5.0599	10.2341	27.1330	20.6521	1051.1584	8.8314	27.4627	40.5051	24.1329	63.3946	0.6%	14.2027	1.9302	5.2239
%RSD		1.2	0.4	0.0000	40.9141	0.0000	0.0000	37.8032	0.0000	0.0000	0.0000	0.0000	28.9949	0.0000	0.0000	0.0000	0.6	0.0000	0.0000	6644.2026

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	08:50:43	570.3553	-7.4792	56.7284	19.0923	98.6%	98.6%	852.6553
2	08:50:54	-439.1936	-9.2238	61.6400	14.5968	100.2%	101.2%	-1494.5139
3	08:51:06	-131.1617	16.7031	11.3634	-5.7466	101.2%	100.2%	641.8586
x		0.0000	0.0000	43.2440	9.3142	100.0%	100.0%	0.0000
σ		517.3971	14.4916	27.7184	13.2353	1.3%	1.3%	1298.5714
%RSD		0.0000	0.0000	64.0977	142.0978	1.3	1.3	0.0000

SEQ-CAL2@S02 10/25/2016 08:54:38

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	08:54:50	99.2%	97.6%	-7.0880	654.4361	6.6745	19.6918	24.1402	52.7724	-23.9663	704.2665	1907.5238	3075.4858	3721.0342	2009.7082	5829.8645	98.7%	11.8348	15.0117	155.3739
2	08:55:02	100.8%	98.1%	2.6951	663.8172	37.7065	19.4826	33.1044	53.9549	5.2372	1052.8049	2046.9483	3405.2158	3741.0034	2120.4458	5133.1917	97.3%	31.1138	14.8421	170.3752
3	08:55:13	100.5%	99.6%	-22.0222	655.3025	42.2223	-4.4154	5.8626	71.6394	-16.2772	-109.7962	2012.9362	3292.8279	3776.1515	2205.2936	5745.6160	98.0%	31.8489	34.6380	156.8746
x		100.2%	98.4%	-8.8050	657.8519	28.8678	11.5863	21.0357	59.4556	-11.6688	549.0917	1989.1361	3257.8431	3746.0630	2111.8159	5569.5574	98.0%	24.9325	21.4973	160.8746
σ		0.9%	1.1%	12.4478	5.1842	19.3521	13.8583	13.8837	10.5681	15.1373	596.6320	72.6955	167.6258	27.9049	98.0779	380.2443	0.7%	11.3489	11.3805	8.2619
%RSD		0.9	1.1	141.3716	0.7881	67.0369	119.6093	66.0008	17.7748	129.7251	108.6580	3.6546	5.1453	0.7449	4.6442	6.8272	0.7	45.5185	52.9393	5.1356

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	08:54:50	618.7220	13.4646	1411.2939	2750.7358	95.9%	97.0%	910.6129
2	08:55:02	1626.7747	-5.3318	1460.1793	2765.1712	97.2%	99.2%	-163.3276
3	08:55:13	100.8322	-41.5622	1393.9959	2625.2134	99.3%	98.7%	290.1893
x		782.1096	-11.1431	1421.8231	2713.7068	97.5%	98.3%	345.8249
σ		775.9812	27.9699	34.3250	76.9767	1.7%	1.1%	539.1276
%RSD		99.2164	251.0056	2.4142	2.8366	1.8	1.2	155.8961

SEQ-CAL3@S03 10/25/2016 08:58:40

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	08:58:40	98.5%	94.5%	-15.2139	1497.4649	53.6419	13.4870	128.9362	92.5415	-34.7782	2495.2490	4274.5349	6984.5890	7349.1918	4171.4002	11156.1080	99.3%	83.2715	36.8872	463.3102
2	08:58:51	100.2%	96.5%	-20.0950	1478.1900	52.5990	44.0988	111.2999	90.0553	-33.5864	947.9222	4196.0672	6841.2252	7564.3495	4385.0702	10921.5590	98.3%	112.7638	56.6281	429.6555
3	08:59:03	101.3%	99.9%	-2.1599	1455.3641	39.7265	29.0218	96.7300	88.0341	-39.2585	-972.1819	4017.9123	6874.8071	7620.8358	4180.7624	10670.8010	100.3%	55.2942	48.0442	482.2220
x		100.0%	97.0%	-12.4896	1477.0064	48.6558	28.8692	112.3220	90.2103	-35.8743	823.6631	4162.8381	6900.2071	7511.4590	4245.7443	10916.1560	99.3%	83.7765	47.1865	458.3959
σ		1.4%	2.7%	9.2727	21.0753	7.7505	15.3064	16.1274	2.2577	2.9907	1737.0519	131.4987	74.9811	143.3376	120.7505	242.6985	1.0%	28.7381	9.8984	26.6256
%RSD		1.4	2.8	74.2435	1.4269	15.9293	53.0200	14.3582	2.5027	8.3366	210.8935	3.1589	1.0866	1.9083	2.8440	2.2233	1.0	34.3034	20.9771	5.8084

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	08:58:40	4011.5335	-56.2658	3135.6269	6007.8985	93.1%	93.8%	594.5384
2	08:58:51	2027.5552	-31.0755	3251.7420	6134.9115	96.1%	96.9%	277.3439
3	08:59:03	999.9959	-18.0379	3330.9520	6186.8867	99.1%	98.4%	185.4244
x		2346.3616	-35.1264	3239.4403	6109.8989	96.1%	96.4%	352.4355
σ		1530.8716	19.4333	98.2419	92.0784	3.0%	2.3%	214.6454
%RSD		65.2445	55.3238	3.0327	1.5070	3.1	2.4	60.9034

SEQ-CAL4@S04 10/25/2016 09:02:28

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	09:02:28	99.2%	94.5%	-25.8338	2822.9689	53.1902	62.6975	219.2341	124.7708	-21.5678	375.8105	9695.1756	17062.4590	18870.5810	10644.2420	27553.2190	99.5%	130.6407	99.8534	910.1529
2	09:02:39	100.5%	97.8%	-7.2466	2792.8458	77.4046	77.2904	169.9403	135.1783	-24.5285	63.7919	9645.9135	17236.6560	18391.1470	10383.2590	27327.3660	99.2%	105.0454	79.2487	1012.0859
3	09:02:51	101.6%	98.4%	-4.3512	2795.5834	84.7554	93.4431	241.4203	129.0878	8.6639	861.1418	9944.8118	17351.7870	19157.6530	10885.2420	28119.6170	99.4%	139.7944	58.2476	1031.1602
x		100.5%	96.9%	-12.4772	2803.7994	71.7834	77.8103	210.1982	129.6790	-12.4775	433.5814	9761.9670	17216.9670	18806.4600	10637.5810	27666.7340	99.3%	125.1602	79.1166	984.4663
σ		1.2%	2.1%	11.6574	16.6576	16.5163	15.3794	36.5866	5.2289	18.3687	401.8020	160.2525	145.6653	387.2551	251.0575	408.1416	0.2%	18.0111	20.8032	65.0602
%RSD		1.2	2.1	93.4294	0.5941	23.0085	19.7652	17.4058	4.0321	147.2151	92.6705	1.6416	0.8461	2.0592	2.3601	1.4752	0.2	14.3905	26.2944	6.6087

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:02:28	1891.7645	-39.7482	6275.7247	11950.1290	94.8%	96.0%	-823.0990
2	09:02:39	709.6194	-36.8863	6283.9306	11468.1370	98.5%	96.5%	788.9883
3	09:02:51	435.7804	-34.7581	6437.8428	12088.7410	99.9%	99.0%	-56.8678
x		1012.3881	-37.1309	6332.4994	11835.6690	97.8%	97.2%	-30.3262
σ		773.7727	2.5040	91.3223	325.7500	2.6%	1.6%	806.3713
%RSD		76.4304	6.7438	1.4421	2.7523	2.7	1.7	2658.9932

SEQ-CAL5@S05 10/25/2016 09:06:16

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	09:06:16	97.4%	92.9%	10990.2700	14112.8070	217.2606	169.6533	507.2861	167.8700	11.5587	-214.5905	24115.5190	41257.5900	45771.7030	25793.9910	66467.9070	97.6%	948.3956	829.5351	10014.3700
2	09:06:27	99.6%	96.6%	10766.5730	13728.1380	171.7952	133.2716	492.0385	245.2251	-27.3510	1329.8685	24246.5670	41440.1140	45758.9240	26202.0570	68571.1710	101.5%	844.5501	724.6452	10376.7220
3	09:06:39	101.8%	96.4%	11131.9640	14075.3270	185.3223	169.9879	522.5868	230.8607	-17.9110	1642.7784	24180.7340	41344.4040	47018.3530	26761.4830	68249.6780	99.2%	980.1476	775.0558	10492.2940
x		99.6%	95.3%	10962.9360	13972.0910	191.4594	157.6376	507.3038	214.6520	-11.2345	919.3521	24180.9400	41347.3690	46182.9930	26252.5100	67762.9190	99.4%	924.3544	776.4120	10294.4620
σ		2.2%	2.1%	184.2228	212.0986	23.3457	21.1022	15.2742	41.1460	20.2959	994.4082	65.5242	91.2979	723.4707	485.7151	1132.9742	1.9%	70.9210	52.4581	249.3548
%RSD		2.2	2.2	1.6804	1.5180	12.1936	13.3865	3.0109	19.1687	180.6573	108.1640	0.2710	0.2208	1.5665	1.8502	1.6720	1.9	7.6724	6.7565	2.4222

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:06:16	2492.6465	33666.0220	32414.1760	11798.9470	96.7%	95.0%	50.4594
2	09:06:27	773.3099	34018.2320	33428.7900	12462.9360	97.8%	98.5%	-965.8062
3	09:06:39	3360.3095	35027.3680	33590.4660	12271.8390	100.5%	99.2%	770.1041
x		2208.7553	34237.2070	33144.4770	12177.9070	98.4%	97.6%	-48.4142
σ		1316.6577	706.5964	637.6049	341.8157	2.0%	2.2%	872.1686
%RSD		59.6108	2.0638	1.9237	2.8069	2.0	2.3	1801.4721

SEQ-CAL6@S06 10/25/2016 09:10:03

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111
1	09:10:03	96.3%	91.5%	53772.9620	68492.9360	589.0066	775.0981	2439.3783	1213.4399	-38.1251	1453.0660	118783.9400	203185.8300	226820.3200	129973.3200	336462.9200	99.3%	4592.6859	3579.5439	51019.2
2	09:10:15	98.9%	94.4%	54537.7140	66760.8220	625.3185	742.7766	2265.2616	1142.5376	-17.4251	171.7349	122219.4900	209722.2400	232293.0500	132774.3400	343534.4100	101.4%	4669.9695	3571.2612	51489.8
3	09:10:26	98.4%	95.1%	55010.6760	67690.4630	774.2740	715.2012	2147.2566	1031.2508	-22.3174	2838.8258	122225.2800	204193.6400	232555.5800	132853.0700	343388.2000	100.1%	4767.0327	3538.5620	51606.8
x		97.9%	93.7%	54440.4510	67648.0730	662.8664	744.3586	2283.9655	1129.0761	-25.9559	1487.8756	121076.2400	205700.5700	230556.3200	131866.9100	341128.5100	100.2%	4676.5627	3563.1224	51372.0
σ		1.4%	1.9%	624.5631	866.8347	98.1753	29.9798	146.9563	91.8375	10.8190	1333.8862	1985.1913	3519.1354	3238.1287	1640.3702	4041.1799	1.1%	87.3602	21.6693	311.0
%RSD		1.4	2.1	1.1472	1.2814	14.8107	4.0276	6.4343	8.1339	41.6824	89.6504	1.6396	1.7108	1.4045	1.2440	1.1847	1.1	1.8680	0.6082	0.6

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:10:03	3799.3117	168088.3300	162640.3100	59272.5740	96.5%	98.0%	-76.0055
2	09:10:15	2288.9985	170782.2900	164661.4600	60184.0870	98.4%	98.4%	287.4423
3	09:10:26	3743.8478	170547.5400	165686.0200	59692.8420	101.6%	101.1%	-191.5771
x		3277.3860	169806.0500	164329.2600	59716.5010	98.9%	99.2%	6.6199
σ		856.4178	1492.2165	1549.7918	456.2165	2.6%	1.7%	249.9703
%RSD		26.1311	0.8788	0.9431	0.7640	2.6	1.7	3776.0372

SEQ-CAL7@S07 10/25/2016 09:13:50

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd
1	09:13:50	93.4%	89.4%	529829.6300	703023.6300	5869.9588	6889.6186	22253.8890	10205.8970	5.2194	-2011.3359	1198752.2000	2015928.9000	2339191.0000	1328340.8000	r3651853.1000	90.8%	44402.8630
2	09:14:01	94.5%	89.0%	549932.4900	713621.4600	5718.0200	7076.9215	23049.8380	10019.1540	32.4939	-604.9632	1244262.6000	2050286.1000	2439973.5000	1359207.0000	r3713431.1000	90.0%	46695.1130
3	09:14:13	94.2%	91.3%	540133.3500	698263.7100	5485.9631	6723.4184	22112.6840	10149.8060	17.2712	126.4819	1240926.2000	2063168.4000	r2518941.6000	1355935.0000	r3690747.5000	92.3%	45680.1750
x		94.0%	89.9%	539965.1600	704969.6000	5691.3140	6896.6528	22472.1370	10124.9520	18.3281	-829.9391	1227980.3000	2043127.8000	r2432702.0000	1347827.6000	r3685343.9000	91.0%	45592.7170
σ		0.6%	1.2%	10052.4850	7861.6336	193.3858	176.8565	505.2609	95.8201	13.6679	1086.5205	25367.1960	24419.7420	r90095.6600	16955.1860	r31142.6340	1.1%	1148.6246
%RSD		0.6	1.3	1.8617	1.1152	3.3979	2.5644	2.2484	0.9464	74.5735	130.9157	2.0658	1.1952	r3.7035	1.2580	r0.8450	1.2	2.5193

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:13:50	-1201.5409	1739832.7000	1671573.8000	601514.9300	99.8%	100.3%	1140.7511
2	09:14:01	-1222.2090	1773608.7000	1705130.1000	609670.4000	101.3%	102.4%	1422.6584
3	09:14:13	-1467.3123	1786903.3000	1705132.0000	613039.9500	104.1%	104.7%	140.6393
x		-1297.0207	1766781.6000	1693945.3000	608075.0900	101.7%	102.4%	901.3496
σ		147.8384	24266.6160	19374.3040	5925.8107	2.2%	2.2%	673.7047
%RSD		11.3983	1.3735	1.1437	0.9745	2.1	2.2	74.7440

SEQ-CAL8@S08 10/25/2016 09:17:36

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	
1	09:17:36	84.2%	80.0%	1053785.5000	µ1426434.4000	10599.7600	13587.8430	43320.9900	20272.2920	70.7191	-1163.5090	2432733.8000	r4006068.7000	r4925698.2000	2685623.5000	r7273387.6000	83.5%	871
2	09:17:48	85.6%	82.7%	1050067.5000	µ1440064.3000	10121.8010	12991.6960	43849.5160	19355.4980	29.7549	-3315.5183	r2542917.0000	r3984042.2000	r4845041.3000	2642918.2000	r7114474.5000	84.0%	869
3	09:17:59	85.6%	82.8%	1080598.4000	µ1432139.5000	9622.9106	13314.5180	42611.9950	19924.3160	19.7360	-2923.3518	2468064.2000	r4010004.6000	r4966744.8000	r2837724.4000	r7332179.5000	85.0%	889
x		85.1%	81.8%	1061483.8000	µ1432879.4000	10114.8240	13298.0190	43260.8340	19850.7020	40.0700	-2467.4597	r2481238.3000	r4000038.5000	r4912494.7000	r2722088.7000	r7240013.9000	84.1%	876
σ		0.8%	1.6%	16657.7930	µ6845.0249	488.4621	298.4155	620.9501	462.8090	27.0115	1146.1519	r56260.6090	r13992.3190	r61916.7040	r102394.5800	r112624.2500	0.8%	10
%RSD		0.9	2.0	1.5693	µ0.4777	4.8292	2.2441	1.4354	2.3314	67.4107	46.4507	r2.2674	r0.3498	r1.2604	r3.7616	r1.5556	0.9	

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:17:36	-7311.2480	r3596401.8000	TM3517112.9000	TM1288172.4000	97.9%	98.4%	729.3830
2	09:17:48	-8213.5730	r3606509.4000	TM3480197.6000	TM1282935.4000	100.6%	100.0%	1978.6019
3	09:17:59	-7826.8190	r3672330.8000	TM3522904.5000	TM1287713.2000	102.1%	102.4%	1077.6822
x		-7783.8800	r3625080.7000	TM3506738.3000	TM1286273.2000	100.2%	100.3%	1261.8890
σ		452.6924	r41230.7010	TM23166.6580	TM2900.1207	2.1%	2.0%	644.6597
%RSD		5.8158	r1.1374	TM0.6606	TM0.2255	2.1	2.0	51.0869

SEQ-ICV@ICV01 10/25/2016 09:21:29 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	09:21:41	85.7%	80.0%	196.0733	136304.2500	1101.2428	3087.8631	10257.8300	4609.8646	-31.0509	-269.8368	11182.1540	16773.5150	21031.8410	11476.7630	30207.0090	90.5%	9447.0756	6845.2560	106312.9100
2	09:21:52	87.3%	82.1%	209.0609	136336.6600	1183.6701	2950.5185	9410.4976	4312.8932	-9.3778	-5.4062	11219.1340	16792.9830	20817.1350	12053.2700	30376.6530	90.8%	9564.1020	6810.5330	104650.2600
3	09:22:04	88.3%	82.2%	136.0744	139279.7800	1177.6365	3041.2957	9997.1604	4673.0403	-29.4496	314.8648	10932.0420	16789.4780	20781.3530	12219.7010	31459.6490	89.3%	9733.6258	7186.1974	106132.2500
x		87.1%	81.4%	180.4029	99.131%	1154.1831	3026.5591	110.565%	4531.9327	-23.2928	13.2073	11111.1100	16785.3260	20876.7760	11916.5780	30681.1040	90.2%	9581.6011	6947.3288	104.719%
σ		1.3%	1.2%	38.9349	n/a	45.9469	69.8482	n/a	192.3058	12.0773	292.7949	156.1760	10.3771	135.4767	389.8752	679.5545	0.8%	144.0743	207.5935	n/a
%RSD		1.5	1.5	21.5822	1.2444	3.9809	2.3078	4.3889	4.2433	51.8498	2216.9230	1.4056	0.0618	0.6489	3.2717	2.2149	0.9	1.5037	2.9881	0.8631

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:21:41	2351.1741	846.3407	662737.7600	122755.6500	100.7%	102.3%	1830.3095
2	09:21:52	2291.8851	1064.3061	669551.6600	122086.8900	103.3%	103.2%	2563.0604
3	09:22:04	3734.7476	990.1826	669778.4500	123968.0300	104.4%	105.5%	2191.0115
x		2792.6023	966.9431	99.543%	96.556%	102.8%	103.7%	2194.7938
σ		816.4602	110.8254	n/a	n/a	1.9%	1.7%	366.3901
%RSD		29.2365	11.4614	0.5995	0.7757	1.8	1.6	16.6936

SEQ-ICB@ICB01 10/25/2016 09:25:29 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	09:25:29	86.7%	79.8%	5.2032	61.6031	35.8239	8.1604	-26.9996	5.2946	-10.1415	-49.2123	122.7152	170.7243	333.0527	163.0728	526.4148	91.3%	39.8949	5.3546	53.6981
2	09:25:41	86.6%	80.2%	8.9022	45.8499	11.0962	-3.8224	-26.4300	29.7217	-28.5069	994.5781	166.1572	188.2816	338.3256	182.6663	463.4927	91.4%	7.6372	12.7046	26.5426
3	09:25:52	87.7%	82.5%	46.6001	127.1009	-10.7183	7.5775	-23.0578	13.6863	-18.0209	652.9299	186.0226	199.2096	348.2491	135.0226	468.0332	91.7%	22.8108	-2.2287	65.2043
x		87.0%	80.9%	20.2352	78.1846	12.0673	3.9718	-25.4958	16.2342	-18.8898	532.7652	158.2983	186.0718	339.8758	160.2539	485.9802	91.4%	23.4476	5.2768	48.4817
σ		0.6%	1.5%	22.9075	43.0888	23.2863	6.7563	2.1305	12.4112	9.2135	532.1694	32.3771	14.3706	7.7159	23.9466	35.0909	0.2%	16.1383	7.4669	19.8517
%RSD		0.7	1.8	113.2064	55.1116	192.9708	170.1062	8.3563	76.4511	48.7752	99.8882	20.4532	7.7232	2.2702	14.9429	7.2206	0.2	68.8268	141.5038	40.9468

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:25:29	3115.4899	186.9070	1463.0439	25.1459	95.8%	97.8%	1496.8136
2	09:25:41	4109.6052	239.7709	1676.1613	51.5529	98.3%	99.3%	1852.0830
3	09:25:52	1483.4590	240.7351	1671.3992	28.0160	100.6%	100.9%	1532.5856
x		2902.8514	222.4710	1603.5348	34.9049	98.3%	99.3%	1627.1607
σ		1325.9232	30.8031	121.6920	14.4888	2.4%	1.5%	195.6078
%RSD		45.6766	13.8459	7.5890	41.5094	2.5	1.5	12.0214

SEQ-IFA@ICSA01 10/25/2016 09:29:18 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	:
1	09:29:18	76.6%	72.7%	928833.5800	29570.8650	283.0393	-7.7641	-16.1343	-96.4117	102.4385	-1679.0135	2020378.6000	T3443834.9000	T4211879.8000	2206906.4000	T6144505.7000	75.6%	-12.1886	1768.3423	-120
2	09:29:29	79.3%	77.3%	917539.7000	29671.9910	107.4813	-7.7641	-17.5649	-111.8346	120.9231	-1943.3831	2004858.5000	T3452187.7000	T4141979.1000	2205097.3000	T6096316.7000	76.6%	37.8128	1600.4186	-138
3	09:29:41	79.9%	79.0%	946492.4300	30329.6170	215.5569	-7.7641	-38.9630	-118.0540	159.1113	-142.3920	2046484.6000	T3487772.2000	T4224884.6000	2274833.5000	T6172087.6000	75.8%	30.7213	1538.9250	-136
x		78.6%	76.3%	930955.2300	100.595%	202.0258	-7.7641	-181.446%	-108.7668	127.4910	-1254.9295	2023907.2000	T3461264.9000	T4192914.5000	2228945.7000	T6137636.7000	76.0%	18.7818	1635.8953	-18
σ		1.8%	3.3%	14592.5080	n/a	88.5577	0.0000	n/a	11.1425	28.9016	972.5110	21036.1950	T23332.7980	T44587.9930	39750.2300	T38349.6190	0.5%	27.0545	118.7520	
%RSD		2.3	4.3	1.5675	1.3798	43.8348	0.0000	52.7944	10.2444	22.6695	77.4953	1.0394	T0.6741	T1.0634	1.7834	T0.6248	0.7	144.0462	7.2591	

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:29:18	1813.2594	795.4412	3823.8042	2345.3325	87.6%	89.2%	1373.4441
2	09:29:29	798.6395	630.7132	4444.1238	2228.3774	91.7%	92.2%	1790.1988
3	09:29:41	2368.0131	613.7777	4281.3291	2350.8292	93.8%	94.7%	1598.9706
x		1659.9707	679.9774	82.362%	151.073%	91.0%	92.0%	1587.5378
σ		795.8370	100.3525	n/a	n/a	3.2%	2.8%	208.6124
%RSD		47.9428	14.7582	7.6885	2.9965	3.5	3.0	13.1406

SEQ-IFB@ICSAB01 10/25/2016 09:33:05 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	
1	09:33:05	79.1%	81.6%	927799.0000	60924.0240	514.1802	271.2734	718.9696	348.9691	148.8588	140.0209	2031519.3000	T3504881.2000	T4190459.8000	2212208.1000	T6146012.4000	77.2%	1771.0567	2900.6850	177
2	09:33:16	79.2%	83.1%	945760.6600	60015.7400	566.7764	235.4358	712.3137	211.5406	179.4372	-398.7226	2054436.7000	T3572532.5000	T4236203.0000	2259075.2000	T6224540.2000	79.2%	1659.5009	2979.2044	185
3	09:33:28	81.9%	85.0%	953638.8300	59296.8050	627.0307	202.8770	786.8945	183.4718	182.7038	42.8427	2054735.6000	T3496967.5000	T4163350.6000	2250321.1000	T6093745.1000	80.4%	1814.0012	3061.1899	182
x		80.0%	83.2%	942399.5000	106.268%	569.3291	236.5287	87.459%	247.9938	170.3333	-71.9530	2046897.2000	T3524793.7000	T4196671.2000	2240534.8000	T6154765.9000	78.9%	1748.1863	2980.3598	(
σ		1.6%	1.7%	13243.7640	n/a	56.4685	34.2113	n/a	88.5662	18.6690	287.1318	13318.5110	T41531.8960	T36821.2310	24919.0850	T65835.4510	1.6%	79.7488	80.2587	
%RSD		2.0	2.0	1.4053	1.3573	9.9184	14.4639	5.5819	35.7131	10.9603	399.0548	0.6507	T1.1783	T0.8774	1.1122	T1.0697	2.0	4.5618	2.6929	

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:33:05	2320.8920	560.0101	70257.8780	27251.5500	94.4%	94.5%	-1118.6462
2	09:33:16	4846.0068	529.1307	69626.1150	27137.4460	96.1%	96.7%	514.7873
3	09:33:28	45.9864	511.9465	70281.5000	27277.2280	99.7%	100.5%	-563.6024
x		2404.2951	533.6958	94.045%	97.184%	96.7%	97.2%	-389.1538
σ		2401.0968	24.3548	n/a	n/a	2.7%	3.0%	830.5724
%RSD		99.8670	4.5634	0.5307	0.2733	2.8	3.1	213.4304

SEQ-CCV@CCV01 10/25/2016 09:36:58 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	
1	09:37:09	86.1%	90.9%	548493.8100	714728.2300	5294.1193	7107.4411	22467.1130	10187.6760	-21.5081	933.7179	1249898.8000	2044649.0000	2430861.5000	1368511.0000	T3764603.2000	91.6%	46506.5640	3-
2	09:37:21	87.7%	90.2%	548462.0500	721811.6600	5654.2464	6932.6098	23364.5350	10059.6530	22.3409	131.4505	1256033.7000	T2110620.6000	T2562107.0000	1373479.3000	T3740524.5000	91.5%	46070.3820	3-
3	09:37:32	86.6%	91.2%	549998.9000	718447.1100	5539.9812	6761.9982	22131.6400	10211.8230	32.7055	-710.4843	1255856.2000	2034737.3000	T2561387.5000	1363458.3000	T3733935.9000	91.8%	45797.0620	3-
x		86.8%	90.8%	548984.9200	101.647%	5496.1156	6934.0164	101.827%	10153.0510	11.1794	118.2280	1253929.6000	T2063335.6000	T2518118.7000	1368482.8000	T3746354.5000	91.6%	46124.6690	3-
σ		0.8%	0.5%	878.2741	n/a	184.0272	172.7257	n/a	81.7808	28.7787	822.1809	3491.8998	T41248.7940	T75567.7910	5010.5528	T16143.5220	0.1%	357.8531	
%RSD		0.9	0.5	0.1600	0.4933	3.3483	2.4910	2.8137	0.8055	257.4249	695.4196	0.2785	T1.9991	T3.0010	0.3661	T0.4309	0.2	0.7758	

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:37:09	240.2435	1797251.6000	1731250.8000	614245.7000	105.0%	106.4%	417.4753
2	09:37:21	-769.6995	1826020.0000	1770810.7000	618171.6600	107.6%	108.2%	1225.6768
3	09:37:32	-1010.3765	1828084.4000	1745485.5000	614300.7700	108.4%	108.5%	1431.8935
x		-513.2775	1817118.7000	103.320%	96.696%	107.0%	107.7%	1025.0152
σ		663.5712	17236.3110	n/a	n/a	1.8%	1.1%	536.1529
%RSD		129.2812	0.9486	1.1455	0.3657	1.6	1.0	52.3068

SEQ-CCB@CCB01 10/25/2016 09:40:59 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	09:40:59	83.8%	81.8%	100.5564	168.5054	17.2995	-7.7641	-17.2488	64.5782	-74.4790	1218.5286	606.6551	828.1230	1080.4622	602.4513	1612.1030	94.0%	26.2212	12.6988	118.8506
2	09:41:10	85.2%	83.5%	97.0258	160.2204	58.7747	-3.9337	-15.7660	13.8739	-10.6251	2920.0648	557.7687	859.1290	1041.4026	665.6023	1570.2418	94.0%	31.3390	5.1149	65.4431
3	09:41:22	86.1%	85.3%	89.2263	155.2848	33.3916	-0.2549	-16.0530	16.1837	-12.4512	2082.6261	571.7903	794.3643	1060.0120	556.7414	1407.0467	95.3%	14.3271	4.9858	82.0154
x		85.0%	83.6%	95.6028	161.3369	36.4886	-3.9842	-16.3559	31.5453	-32.5184	2073.7398	578.7380	827.2054	1060.6256	608.2650	1529.7972	94.4%	23.9624	7.5998	88.7697
σ		1.1%	1.7%	5.7975	6.6806	20.9103	3.7549	0.7865	28.6306	36.3504	850.8029	25.1728	32.3921	19.5370	54.6628	108.3460	0.7%	8.7280	4.4163	27.3369
%RSD		1.3	2.1	6.0642	4.1408	57.3064	94.2428	4.8084	90.7605	111.7839	41.0275	4.3496	3.9158	1.8420	8.9867	7.0824	0.8	36.4238	58.1108	30.7953

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:40:59	883.5203	413.8572	599.7320	63.4771	96.5%	96.9%	-44.2603
2	09:41:10	1814.2589	455.8119	448.6687	54.5809	97.7%	98.4%	113.3415
3	09:41:22	1344.1661	527.5217	613.6145	24.9915	99.1%	99.6%	-194.9327
x		1347.3151	465.7303	554.0051	47.6832	97.8%	98.3%	-41.9505
σ		465.3773	57.4777	91.4876	20.1487	1.3%	1.4%	154.1501
%RSD		34.5411	12.3414	16.5139	42.2553	1.3	1.4	367.4570

SEQ1BL1

~~QJ17026-PS10MH1J59A~~ 10/25/2016 09:44:48

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	09:44:48	86.3%	88.3%	28199.4250	90290.1280	935.7630	222.0553	430.8647	201.3786	17.5997	74031.2230	17887.4190	27005.7910	32874.9360	18662.6320	47228.3760	94.1%	290.5054	163.4491	1664.0145
2	09:45:00	88.1%	91.1%	28753.4180	87449.2520	925.2391	226.4882	536.2148	244.9736	-10.9038	76331.2100	17970.8570	27473.7410	33369.9380	18594.4480	48200.5880	96.6%	335.9705	169.8155	1887.6696
3	09:45:11	89.4%	94.2%	28575.3200	91681.8730	909.9598	256.6655	528.2481	203.6802	-8.8575	72399.4850	17819.0010	28417.6560	32872.7450	18631.6370	48254.3940	92.8%	281.6679	151.0304	1762.5454
x		87.9%	91.2%	28509.3880	89807.0840	923.6540	235.0696	498.4425	216.6775	-0.7205	74253.9730	17892.4260	27632.3960	33039.2060	18629.5730	47894.4530	94.5%	302.7146	161.4317	1771.4098
σ		1.5%	2.9%	282.8205	2157.2598	12.9744	18.8334	58.6595	24.5322	15.8987	1975.3043	76.0520	719.1795	286.4241	34.1391	577.4663	1.9%	29.1375	9.5537	112.0907
%RSD		1.8	3.2	0.9920	2.4021	1.4047	8.0119	11.7686	11.3220	2206.5747	2.6602	0.4251	2.6027	0.8669	0.1833	1.2057	2.0	9.6254	5.9181	6.3278

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:44:48	-4263.5627	7023.3083	15176.0910	615212.1700	100.3%	100.3%	1378.8002
2	09:45:00	-2421.5988	6682.4616	15649.2510	624880.2300	102.2%	102.0%	1599.6172
3	09:45:11	-3384.4459	6747.9744	15487.8570	625729.3300	105.4%	103.9%	1997.8986
x		-3356.5358	6817.9148	15437.7330	621940.5700	102.6%	102.1%	1658.7720
σ		921.2991	180.8670	240.5291	5842.4175	2.6%	1.8%	313.7597
%RSD		27.4479	2.6528	1.5581	0.9394	2.5	1.8	18.9152

OLW10725

SEQ1312 K 11/10/25

QJ49869-PS1QMRTR71A 10/25/2016 09:48:34

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	09:48:34	90.4%	103.8%	8641.8421	6857.7472	110.3709	188.0369	590.6857	232.1585	24.9638	101834.8700	10373.1570	15637.4660	17620.6710	9505.9867	25525.1590	95.9%	291.9583	151.7508	1591.3422
2	09:48:46	91.8%	106.5%	9121.5543	6871.2436	87.3371	226.7521	516.0683	357.1878	-8.1684	103995.3600	10461.7610	16164.2310	18302.5350	10094.8920	26271.9750	97.1%	315.5788	91.4484	1672.4653
3	09:48:58	93.0%	107.9%	9303.6696	6879.9878	92.3425	239.4121	505.4681	228.5712	28.3711	107315.3900	10763.6700	16576.7950	18588.0350	10553.9580	26520.9480	97.8%	400.7767	143.0280	1707.4780
x		91.7%	106.1%	9022.3554	6869.6595	96.6835	218.0671	537.4074	272.6392	15.0555	104381.8700	10532.8630	16126.1640	18170.4140	10051.6120	26106.0280	96.9%	336.1046	128.7424	1657.0952
σ		1.3%	2.1%	341.8834	11.2046	12.1150	26.7661	46.4438	73.2432	20.1845	2760.6303	204.7353	470.8199	497.0314	525.3246	518.2207	1.0%	57.2393	32.5907	59.5740
%RSD		1.4	2.0	3.7893	0.1631	12.5305	12.2743	8.6422	26.8645	134.0673	2.6447	1.9438	2.9196	2.7354	5.2263	1.9851	1.0	17.0302	25.3147	3.5951

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:48:34	-9409.0164	11186.5120	43150.6520	489393.3700	104.0%	102.1%	13337.7640
2	09:48:46	-7198.0152	11147.9120	43329.5450	493336.7500	107.0%	105.2%	13801.6950
3	09:48:58	-5700.1613	11493.0650	44253.5620	505230.2100	107.8%	107.7%	13262.2100
x		-7435.7310	11275.8290	43577.9200	495986.7700	106.3%	105.0%	13467.2230
σ		1865.8197	189.1186	591.9208	8244.2911	2.0%	2.8%	292.1142
%RSD		25.0926	1.6772	1.3583	1.6622	1.9	2.7	2.1691

QJ2400S-PS2QMH1H52A 10/25/2016 09:52:20

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	09:52:20	91.2%	100.0%	6012.7764	5457.1026	90.2540	79.5105	160.3994	105.0393	-12.8462	35693.5080	10722.7810	17983.3220	19867.2450	10730.9880	28555.8200	95.5%	745.7216	514.7987	6951.2909
2	09:52:31	93.0%	101.6%	6275.1890	5466.2925	88.6391	64.7365	93.1699	89.7919	27.2262	35806.8860	10391.4060	17788.0400	19364.4700	11266.5210	28049.1560	94.6%	764.3718	457.6975	7194.9484
3	09:52:43	94.1%	105.8%	6535.5799	5359.9819	77.9520	74.7511	132.9618	62.8231	23.5453	33228.0500	10162.3290	17450.4020	19804.2890	11038.3840	27925.2620	98.6%	616.2170	521.9976	7342.5659
x		92.8%	102.5%	6274.5151	5427.7923	85.6150	72.9994	128.8437	85.8848	12.6418	34909.4810	10425.5050	17740.5880	19678.6680	11011.9640	28176.7460	96.2%	708.7701	498.1646	7162.9350
σ		1.5%	3.0%	261.4024	58.9050	6.6854	7.5412	33.8034	21.3776	22.1498	1457.2656	281.7779	269.6104	273.9181	268.7424	334.0810	2.1%	80.6940	35.2299	197.5922
%RSD		1.6	2.9	4.1661	1.0852	7.8086	10.3305	26.2360	24.8910	175.2114	4.1744	2.7028	1.5197	1.3920	2.4405	1.1857	2.1	11.3851	7.0719	2.7585

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:52:20	20280.9510	2855.4021	14474.0000	89995.9030	97.6%	98.0%	54935.6090
2	09:52:31	20003.2990	2876.4515	14553.2360	89498.6420	100.1%	98.7%	57922.8210
3	09:52:43	19283.9050	2888.8412	14945.0730	88499.5780	103.1%	102.5%	55855.8870
x		19856.0520	2873.5649	14657.4370	89331.3740	100.2%	99.7%	56238.1060
σ		514.5740	16.9054	252.2313	762.0569	2.8%	2.4%	1529.8452
%RSD		2.5915	0.5883	1.7208	0.8531	2.7	2.4	2.7203

SEQ-CCV@CCV02 10/25/2016 09:56:13 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd
1	09:56:24	87.0%	86.3%	546507.0200	721629.0200	6404.9714	7137.2189	23404.8210	10913.2580	30.3365	-810.0497	1249841.4000	2067499.7000	2453531.1000	1371970.0000	r3772602.1000	89.3%	45950.8520
2	09:56:36	88.7%	86.2%	556135.9700	726868.5200	6755.5902	6818.9842	23221.2110	10426.5890	-14.0179	324.8167	1275235.2000	2064236.7000	2500568.3000	1394051.5000	r3787037.8000	89.0%	46506.3180
3	09:56:47	89.5%	86.0%	561506.0200	724630.0500	6375.1694	7167.5045	22990.2080	10459.2850	22.4909	504.1698	1268077.7000	r2121033.1000	r2593052.7000	1407533.9000	r3819845.8000	89.5%	47147.1000
x		88.4%	86.2%	554716.3400	102.503%	6511.9104	7041.2359	104.304%	10599.7110	12.9365	6.3123	1264384.8000	r2084256.5000	r2515717.4000	1391185.2000	r3793161.9000	89.2%	46534.7570
σ		1.3%	0.2%	7599.6093	n/a	211.5584	193.0704	n/a	272.0320	23.6706	712.6549	13093.4630	r31691.2440	r70983.7740	17954.3630	r24209.9010	0.3%	598.6309
%RSD		1.5	0.2	1.3700	0.3629	3.2488	2.7420	0.8953	2.5664	182.9748	11290.0130	1.0356	r1.5301	r2.8216	1.2906	r0.6383	0.3	1.2864

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	09:56:24	-1175.9716	1794489.2000	1733633.8000	617896.8100	99.1%	99.8%	-1613.3540
2	09:56:36	-1515.3827	1818597.8000	1745027.0000	624030.3000	102.2%	102.8%	-1261.7150
3	09:56:47	95.4951	1823275.8000	1746323.8000	620098.3300	103.6%	103.4%	-657.7070
x		-865.2864	1812120.9000	102.876%	97.497%	101.6%	102.0%	-1177.5920
σ		849.1913	15447.6150	n/a	n/a	2.3%	1.9%	483.3454
%RSD		98.1399	0.8525	0.4009	0.5006	2.3	1.9	41.0452

SEQ-CCB@CCB02 10/25/2016 10:00:12 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	45Sc	47Ti	52Cr	53Cl O	77Se	78Se	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	106Cd	108Cd	111Cd
1	10:00:12	84.7%	80.5%	95.2013	170.6625	12.4849	-3.8267	-30.7264	18.2957	-21.4563	1853.0816	488.0748	824.3245	1071.7970	575.5145	1567.8013	94.1%	11.6364	12.7385	81.8809
2	10:00:24	86.2%	81.5%	60.5878	213.4401	14.9736	0.0371	-18.6806	42.3222	-32.5409	1573.3646	517.6172	745.5838	1099.7979	577.7560	1458.6225	94.5%	21.8821	12.6278	107.1106
3	10:00:35	87.0%	82.7%	110.6290	146.5586	9.7011	-3.9223	-34.5525	9.5977	-22.7119	2461.9286	497.6153	728.8544	965.7821	527.0052	1541.9631	95.1%	-13.1396	16.0680	79.7864
x		86.0%	81.6%	88.8060	176.8871	12.3865	-2.5706	-27.9865	23.4052	-25.5697	1962.7916	501.1024	766.2542	1045.7923	560.0919	1522.7956	94.6%	6.7930	13.8114	89.5926
σ		1.1%	1.1%	25.6262	33.8724	2.6376	2.2589	8.2831	16.9500	6.0698	454.3278	15.0767	50.9813	70.6911	28.6759	57.0574	0.5%	18.0062	1.9550	15.2071
%RSD		1.3	1.3	28.8564	19.1492	21.2940	87.8737	29.5966	72.4200	23.7382	23.1470	3.0087	6.6533	6.7596	5.1198	3.7469	0.5	265.0709	14.1551	16.9736

Run	Time	115In	118Sn	121Sb	137Ba	159Tb	165Ho	209Bi
1	10:00:12	3555.9955	553.8041	599.4149	134.0741	97.5%	97.0%	-1789.1717
2	10:00:24	5256.1829	516.1945	584.0731	72.8315	97.8%	97.5%	704.8492
3	10:00:35	6765.4241	538.8686	534.9466	84.7976	99.2%	99.5%	-423.9047
x		5192.5342	536.2890	572.8116	97.2344	98.2%	98.0%	-502.7424
σ		1605.6607	18.9370	33.6772	32.4603	0.9%	1.3%	1248.8782
%RSD		30.9225	3.5311	5.8793	33.3835	0.9	1.4	248.4131

PREPARATION BENCH SHEET

QJ14032

Bonner Analytical Testing Co.

Matrix: Soil
Analysis: ISM023 - ICPMS (2658.0)
Prepared: 10/17/2016 17:00 using METALS - 200.8

Case: 46282
SDG: MH1H50
Work Order: 6100167

Lab Number	Sample ID	Initial (g)	Final (mL)	Spike ID	Spike Amount (uL)	Spike ID	Spike Amount (uL)
6100167-01	MH1H50	1	500				
6100167-02	MH1H51	1	500				
6100167-04	MH1H53	1	500				
6100167-05	MH1H54	1	500				
6100167-06	MH1H55	1	500				
6100167-07	MH1H56	1	500				
6100167-08	MH1H57	1	500				
6100167-09	MH1H58	1	500				
6100167-10	MH1H59	1	500				
6100167-11	MH1H60	1	500				
6100167-12	MH1H61	1	500				
6100167-12RE1	MH1H61	1	500				
6100167-13	MH1H62	1	500				
6100167-14	MH1H63	1	500				
6100167-15	MH1H64	1	500				
6100167-16	MH1H65	1	500				
6100167-17	MH1H66	1	500				
6100167-18	MH1H67	1	500				
QJ14032-BS1	LCS01	1	500	B6A0009	1000	B6H0062	40
QJ14032-BLK1	PBS01	1	500				

Table 1: Quality Controls (QC), Reagents (R) and Standards (Std)

LIMS ID	Description	Vendor	LotNum	Expiration
B3E0023	R - Distilled Water	In-House	NA	04/25/20
B6A0009	QC - BAT-11	Inorganic Ventures	J2-MEB613056	02/01/17
B6D0003	R - Hydrochloric Acid - 1:4	In House	NA	09/28/18
B6H0062	Std - Molybdenum - 100ppm	Inorganic Ventures	H2-MO02073	02/10/17
B6H0063	R - Nitric Acid - 1:1	In House	NA	08/15/17

Table 2: Metals Apparatus

Balance ID		Satorius BP601	
Dig. Block ID		1	
Start Temp	Stop Temp	95.6	96.5
Start Time	Stop Time	1700	1730

Comments:

LEM — 10/17/2016
Perpared By — Date

10/26/16
Preparation Reviewed By — Date

PREPARATION BENCH SHEET

QJ24005

Bonner Analytical Testing Co.

Matrix: Soil

Analysis: ISM023 - ICPMS (2658.0)

Prepared: 10/24/2016 15:00 using METALS - 200.8

Case: 46282

SDG: MH1H50

Work Order: 6100167

Lab Number	Sample ID	Initial (g)	Final (mL)	Spike ID	Spike Amount (uL)	Spike ID	Spike Amount (uL)
6100167-03	MH1H52	1	500				
QJ24005-PS1	MH1H52A	1	500	B6J0164	500000		
QJ24005-PS2	MH1H52A	1	500	B6J0165	500000		
QJ24005-MS1	MH1H52S	1	500	B6B0062	1000	B6H0062	1000
QJ24005-BS1	LCS01	1	500	B6A0009	1000	B6H0062	40
QJ24005-DUP1	MH1H52D	1	500				
QJ24005-BLK1	PBS01	1	500				

Table 1: Quality Controls (QC), Reagents (R) and Standards (Std)

LIMS ID	Description	Vendor	LotNum	Expiration
B3E0023	R - Distilled Water	In-House	NA	04/25/20
B6A0009	QC - BAT-11	Inorganic Ventures	J2-MEB613056	02/01/17
B6B0062	QC - CLP-MS-SPK-REV1	Inorganic Ventures	K2-MEB619110	09/10/17
B6D0003	R - Hydrochloric Acid - 1:4	In House	NA	09/28/18
B6H0062	Std - Molybdenum - 100ppm	Inorganic Ventures	H2-MO02073	02/10/17
B6H0063	R - Nitric Acid - 1:1	In House	NA	08/15/17
B6J0164	PS-MH1H52 1	In House	NA	02/19/17
B6J0165	PS-MH1H52 2	In House	NA	02/10/17

Table 2: Metals Apparatus

Balance ID		Satorius BP601	
Dig. Block ID		2	
Start Temp	Stop Temp	95.0	95.0
Start Time	Stop Time	1500	1530

Comments:

LEM — 10/24/2016

Perpared By — Date

10/26/16

Preparation Reviewed By — Date

Bonner Analytical Testing Company
Analytical Run Log

Instrument ID: ICPMS01 **Case:** 46282 **FileID:** M101816B **Std. Prep Date:** 10/14/16

Analyst: LEM **SDG:** MH1H50 **Calibration ID:** B643008 **Std. Log Page No.:** 4

Lab Number	EPA ID	Analyzed Date/Time	STD ID	ISTD ID	DF	Elements list are used per QC/sample
BJ61904-TUN1	TUNE01	10/18/16 17:36	B6G0089	B6G0072	1	
BJ61904-CAL1	S01	10/18/16 17:47	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CAL2	S02	10/18/16 17:51	B6A0044	B6G0072	1	MO
BJ61904-CAL3	S03	10/18/16 17:56	B6A0043	B6G0072	1	BA MO
BJ61904-CAL4	S04	10/18/16 18:00	B6A0042	B6G0072	1	AG BE CD CO CR MO NI SB SE TL V
BJ61904-CAL5	S05	10/18/16 18:04	B6A0041	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CAL6	S06	10/18/16 18:08	B6A0040	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CAL7	S07	10/18/16 18:11	B6A0039	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CAL8	S08	10/18/16 18:15	B6A0038	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-ICV1	ICV01	10/18/16 18:20	B6J0139	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-ICB1	ICB01	10/18/16 18:23	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-IFA1	ICSA01	10/18/16 18:27	B6A0093	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-IFB1	ICSAB01	10/18/16 18:31	B6A0095	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCV1	CCV01	10/18/16 18:35	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCB1	CCB01	10/18/16 18:39	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCV2	CCV02	10/18/16 19:10	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCB2	CCB02	10/18/16 19:14	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCV3	CCV03	10/18/16 19:45	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCB3	CCB03	10/18/16 19:49	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCV4	CCV04	10/18/16 20:06	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCB4	CCB04	10/18/16 20:10	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCV5	CCV05	10/18/16 21:08	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCB5	CCB05	10/18/16 21:12	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCV6	CCV06	10/18/16 22:50	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCB6	CCB06	10/18/16 22:54	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCV7	CCV07	10/18/16 23:59	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCB7	CCB07	10/19/16 0:04	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCV8	CCV08	10/19/16 0:45	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCB8	CCB08	10/19/16 0:49	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
QJ14032-BLK1	PBS01	10/19/16 0:53		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
QJ14032-BS1	LCS01	10/19/16 0:57		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-01	MH1H50	10/19/16 1:01		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-02	MH1H51	10/19/16 1:05		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V

Bonner Analytical Testing Company
Analytical Run Log

Instrument ID: ICPMS01 **Case:** 46282 **FileID:** M101816B **Std. Prep Date:** 10/14/16

Analyst: LEM **SDG:** MH1H50 **Calibration ID:** B643008 **Std. Log Page No.:** 4

Lab Number	EPA ID	Analyzed Date/Time	STD ID	ISTD ID	DF	Elements list are used per QC/sample
BJ61904-IBL2	ZZZZZZ	10/19/16 1:13		B6G0072	1	non-report
BJ61904-IBL3	ZZZZZZ	10/19/16 1:17		B6G0072	1	non-report
BJ61904-IBL4	ZZZZZZ	10/19/16 1:21		B6G0072	1	non-report
6100167-04	MH1H53	10/19/16 1:25		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-05	MH1H54	10/19/16 1:29		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-06	MH1H55	10/19/16 1:33		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-07	MH1H56	10/19/16 1:38		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-08	MH1H57	10/19/16 1:42		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-09	MH1H58	10/19/16 1:46		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-10	MH1H59	10/19/16 1:50		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCV9	CCV09	10/19/16 1:54	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCB9	CCB09	10/19/16 1:58	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-11	MH1H60	10/19/16 2:02		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-12	MH1H61	10/19/16 2:06		B6G0072	1	BE CR SE V
6100167-13	MH1H62	10/19/16 2:10		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-14	MH1H63	10/19/16 2:15		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-15	MH1H64	10/19/16 2:19		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-16	MH1H65	10/19/16 2:23		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-17	MH1H66	10/19/16 2:27		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-18	MH1H67	10/19/16 2:31		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCVA 10	CCVA 10	10/19/16 2:39	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ61904-CCBA 10	CCBA 10	10/19/16 2:43	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V

Bonner Analytical Testing Company
Analytical Run Log

Instrument ID: ICPMS01 **Case:** 46282 **FileID:** M101916A **Std. Prep Date:** 10/18/16

Analyst: LEM **SDG:** MH1H50 **Calibration ID:** B643020 **Std. Log Page No.:** 5

Lab Number	EPA ID	Analyzed Date/Time	STD ID	ISTD ID	DF	Elements list are used per QC/sample
BJ62102-TUN1	TUNE01	10/19/16 7:39	B6G0089	B6G0072	1	
BJ62102-CAL1	S01	10/19/16 7:51	B6I0135	B6G0072	1	AG BA CD CO MO NI SB TL
BJ62102-CAL2	S02	10/19/16 7:55	B6A0044	B6G0072	1	MO
BJ62102-CAL3	S03	10/19/16 7:59	B6A0043	B6G0072	1	BA MO
BJ62102-CAL4	S04	10/19/16 8:03	B6A0042	B6G0072	1	AG CD CO MO NI SB TL
BJ62102-CAL5	S05	10/19/16 8:07	B6A0041	B6G0072	1	AG BA CD CO MO NI SB TL
BJ62102-CAL6	S06	10/19/16 8:11	B6A0040	B6G0072	1	AG BA CD CO MO NI SB TL
BJ62102-CAL7	S07	10/19/16 8:15	B6A0039	B6G0072	1	AG BA CD CO MO NI SB TL
BJ62102-CAL8	S08	10/19/16 8:19	B6A0038	B6G0072	1	AG BA CD CO MO NI SB TL
BJ62102-ICV1	ICV01	10/19/16 8:23	B6J0139	B6G0072	1	AG BA CD CO MO NI SB TL
BJ62102-ICB1	ICB01	10/19/16 8:28	B6I0135	B6G0072	1	AG BA CD CO MO NI SB TL
BJ62102-IFA1	ICSA01	10/19/16 8:32	B6A0093	B6G0072	1	AG BA CD CO MO NI SB TL
BJ62102-IFB1	ICSAB01	10/19/16 8:36	B6A0095	B6G0072	1	AG BA CD CO MO NI SB TL
BJ62102-CCV1	CCV01	10/19/16 8:40	B6A0045	B6G0072	1	AG BA CD CO MO NI SB TL
BJ62102-CCB1	CCB01	10/19/16 8:45	B6I0135	B6G0072	1	AG BA CD CO MO NI SB TL
BJ62102-IBL1	ZZZZZZ	10/19/16 8:49		B6G0072	1	non-report
BJ62102-IBL2	ZZZZZZ	10/19/16 8:53		B6G0072	1	non-report
BJ62102-IBL3	ZZZZZZ	10/19/16 8:57		B6G0072	1	non-report
BJ62102-IBL4	ZZZZZZ	10/19/16 9:01		B6G0072	1	non-report
BJ62102-IBL5	ZZZZZZ	10/19/16 9:05		B6G0072	1	non-report
6100167-12RE1	MH1H61	10/19/16 9:09		B6G0072	2	AG BA CD CO MO NI SB TL
BJ62102-CCV2	CCV02	10/19/16 9:14	B6A0045	B6G0072	1	AG BA CD CO MO NI SB TL
BJ62102-CCB2	CCB02	10/19/16 9:18	B6I0135	B6G0072	1	AG BA CD CO MO NI SB TL

Bonner Analytical Testing Company
Analytical Run Log

Instrument ID: ICPMS01 **Case:** 46282 **FileID:** M102416A **Std. Prep Date:** 10/24/16

Analyst: LEM **SDG:** MH1H50 **Calibration ID:** B644022 **Std. Log Page No.:** 6

Lab Number	EPA ID	Analyzed Date/Time	STD ID	ISTD ID	DF	Elements list are used per QC/sample
BJ62507-TUN1	TUNE01	10/24/16 14:21	B6G0089	B6G0072	1	
BJ62507-CAL1	S01	10/24/16 14:33	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-CAL2	S02	10/24/16 14:37	B6A0044	B6G0072	1	MO
BJ62507-CAL3	S03	10/24/16 14:41	B6A0043	B6G0072	1	BA MO
BJ62507-CAL4	S04	10/24/16 14:45	B6A0042	B6G0072	1	AG BE CD CO CR MO NI SB SE TL V
BJ62507-CAL5	S05	10/24/16 14:49	B6A0041	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-CAL6	S06	10/24/16 14:53	B6A0040	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-CAL7	S07	10/24/16 14:57	B6A0039	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-CAL8	S08	10/24/16 15:01	B6A0038	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-ICV1	ICV01	10/24/16 15:05	B6J0139	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-ICB1	ICB01	10/24/16 15:09	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-IFA1	ICSA01	10/24/16 15:13	B6A0093	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-IFB1	ICSAB01	10/24/16 15:27	B6A0095	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-CCV1	CCV01	10/24/16 15:31	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-CCB1	CCB01	10/24/16 15:35	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-CCV2	CCV02	10/24/16 15:55	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-CCB2	CCB02	10/24/16 15:59	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-CCV3	CCV03	10/24/16 16:31	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-CCB3	CCB03	10/24/16 16:36	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
QJ24005-BLK1	PBS0~~1~~ 2	10/24/16 16:40		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
QJ24005-BS1	LCS0~~1~~ 2	10/24/16 16:44		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
6100167-03	MH1H52	10/24/16 16:48		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
QJ24005-MS1	MH1H52S	10/24/16 16:52		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
QJ24005-DUP1	MH1H52D	10/24/16 16:56		B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-SRD1	MH1H52L	10/24/16 17:00		B6G0072	5	AG BA BE CD CO CR MO NI SB SE TL V
QJ24005-PS1	MH1H52A	10/24/16 17:04		B6G0072	1	SB
BJ62507-CCV4	CCV04	10/24/16 17:08	B6A0045	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V
BJ62507-CCB4	CCB04	10/24/16 17:12	B6I0135	B6G0072	1	AG BA BE CD CO CR MO NI SB SE TL V

File Name: ~~M102416A~~ M102516A SDG No.: MH1H50 Standards Prep Date: 10/23/16

Instrument: ICPMS01 Case No.: 46267 Standards Log Page No.: 6

Analyst: LEM

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~~ MO
~~QJ24005-BS1~~	~~LCS01~~	~~10/24/16 16:44~~	
6100167-03	~~MH1H52~~	10/24/16 16:48	VG 10/26/16
~~QJ24005-MS1~~	~~MH1H52S~~	~~10/24/16 16:52~~	
BJ62515-TUN1	TUNE01	10/25/16 8:31	
BJ62515-CAL1	S01	10/25/16 8:50	
BJ62515-CAL2	S02	10/25/16 8:54	
BJ62515-CAL3	S03	10/25/16 8:58	
BJ62515-CAL4	S04	10/25/16 9:02	
BJ62515-CAL5	S05	10/25/16 9:06	
BJ62515-CAL6	S06	10/25/16 9:10	
BJ62515-CAL7	S07	10/25/16 9:13	
BJ62515-CAL8	S08	10/25/16 9:17	
BJ62515-ICV1	ICV01	10/25/16 9:21	
BJ62515-ICB1	ICB01	10/25/16 9:25	
BJ62515-IFA1	ICSA01	10/25/16 9:29	
BJ62515-IFB1	ICSAB01	10/25/16 9:33	
BJ62515-CCV1	CCV01	10/25/16 9:36	
BJ62515-CCB1	CCB01	10/25/16 9:40	
BJ62515-IBL1	ZZZZZZ	10/25/16 9:44	
BJ62515-IBL2	ZZZZZZ	10/25/16 9:48	
QJ24005-PS2	MH1H52A	10/25/16 9:52	
BJ62515-CCV2	CCV02	10/25/16 9:56	
BJ62515-CCB2	CCB02	10/25/16 10:00	

XMO 10/25

Bonner Analytical Testing Company
Instrument: ICPMS01
Serial No: X0494

ISM02.3 Calibration & QC Preparation Log
Standards & QC for ICPMS01 MA 2658.0 Prepared On: 10/14/2016

Description	EPA ID	Amount Spiked	Volume Made	Manufacturer	Lot Number	Date Lot Expires	LIMS ID
Initial Calibration High - CAL8	S08	NA	100 mL	In House	NA	2 Weeks	B6A0038
BONNER-16		2.5 mL	Composite	Inorganic Ventures	K2-MEB624149	Apr-17	B6F0009
BAISM-MIX1		2.0 mL			J2-MEB613059	Feb-17	B6A0011
BONNER-1		0.25 mL			J2-MEB613058	Feb-17	B6A0010
Initial Calibration Mid - CAL7	S07	NA	50 mL	In House	NA	2 Weeks	B6A0039
CAL8		25 mL		Inorganic Ventures			B6A0038
Initial Calibration Mid - CAL6	S06	NA	50 mL	In House	NA	2 Weeks	B6A0040
CAL8		2.5 mL		Inorganic Ventures			B6A0038
Initial Calibration Mid - CAL5	S05	NA	50 mL	In House	NA	2 Weeks	B6A0041
CAL8		0.5 mL		Inorganic Ventures			B6A0038
Initial Calibration Low - CAL4	S04	NA	50 mL	In House	NA	2 Weeks	B6A0042
BAT- 11		0.05 mL		Inorganic Ventures	J2-MEB613056	Feb-17	B6A0009
Molybdenum - 1 PPM		0.5 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0092
Initial Calibration Low - CAL3	S03	NA	50 mL	In House	NA	2 Weeks	B6A0043
BAT- 11		0.025 mL		Inorganic Ventures	J2-MEB613056	Feb-17	B6A0009
Molybdenum - 1 PPM		0.2 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0092
Initial Calibration Low - CAL2	S02	NA	50 mL	In House	NA	2 Weeks	B6A0044
BAT- 11		0.01 mL		Inorganic Ventures	J2-MEB613056	Feb-17	B6A0009
Molybdenum - 1 PPM		0.1 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0092
Initial Calibration Low - CAL1	S01	NA	50 mL	In-House	NA	1 Year	B6I0135
Initial Calibration Blank	ICB						
Continuing Calibration Blank	CCB						
Initial Calibration Verification	ICV		50 mL	NA	NA	2 Weeks	B6A0064
ICV-1 (0307)		1.0 mL	Composite	EPA	ICV-1 (0307)	2 Weeks	B6J0139
Molybdenum - 10 PPM		0.5 mL		In House	From Mo-1000 mg/L Lot No. K2-MO02086	Oct-17	B6J0148
Interelement Check Standard A	ICSA	5.0 mL	50 mL	EPA	NA	2 Weeks	B4J0066
Interelement Check Standard AB	ICSAB		50 mL	EPA	ICSA-0803	2 Weeks	B4J0067
ICS PART A		5.0 mL	Composite	EPA	ICSB-0803	2 Weeks	B4J0066
ICS PART B		5.0 mL					B4J0067
Continuing Calibration Verificatic	CCV		50 mL	NA	NA	2 Weeks	B6A0045
Initial Calibration High - CAL8		25 mL	Composite	In-House	From S08		B6A0038
BONNER-1		0.2375 mL		Inorganic Ventures	J2-MEB613058	Feb-17	B6A0010
BAT-15		1.0 mL		Inorganic Ventures	K2-MEB650369	Jul-17	B6G0108
ISM TUNE	TUNE		50 mL	In-House	NA	2 Weeks	B6G0089
ISM Stock TUNE		0.5 mL				Jul-16	B6G0088
CLP-MS-SPK-REV1	Matrix Spike	1.0 mL	500 mL	Inorganic Ventures	K2-MEB619110	Sep-17	B6B0062
Molybdenum - 100 PPM		1.0 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0062
BAT-11	LCS	1.0 mL	500 mL	Inorganic Ventures	J2-MEB613056	Feb-17	B6A0009
Molybdenum - 100 PPM		0.04 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0062

* Dilutions of calibration standards, CCV, & ISM TUNE are made with the same acid water as the S0, ICB & CCB.
* Dilutions of ICV, ICSA, and ICSAB are made with 1% HNO3.
**Date Lot Expires reflects the date that the standard being used will expire.

Lauren Meadows Digitally signed by Lauren Meadows Reason: I am the author of this document Date: 2016.10.21 10:27:34-05'00'

Prepared By: _____ Analyst/Date

Maxwell S. Bonner Digitally signed by Maxwell S. Bonner Reason: I have reviewed this document Date: 2016.10.21 10:29:19-05'00'

Reviewed By: _____ Name/Date

Bonner Analytical Testing Company
Instrument: ICPMS01
Serial No: X0494

ISM02.3 Calibration & QC Preparation Log
Standards & QC for ICPMS01 MA 2658.0 Prepared On: 10/18/2016

Description	EPA ID	Amount Spiked	Volume Made	Manufacturer	Lot Number	Date Lot Expires	LIMS ID
Initial Calibration High - CAL8	S08	NA	100 mL	In House	NA	2 Weeks	B6A0038
BONNER-16		2.5 mL	Composite	Inorganic Ventures	K2-MEB624149	Apr-17	B6F0009
BAISM-MIX1		2.0 mL			J2-MEB613059	Feb-17	B6A0011
BONNER-1		0.25 mL			J2-MEB613058	Feb-17	B6A0010
Initial Calibration Mid - CAL7	S07	NA	50 mL	In House	NA	2 Weeks	B6A0039
CAL8		25 mL		Inorganic Ventures			B6A0038
Initial Calibration Mid - CAL6	S06	NA	50 mL	In House	NA	2 Weeks	B6A0040
CAL8		2.5 mL		Inorganic Ventures			B6A0038
Initial Calibration Mid - CAL5	S05	NA	50 mL	In House	NA	2 Weeks	B6A0041
CAL8		0.5 mL		Inorganic Ventures			B6A0038
Initial Calibration Low - CAL4	S04	NA	50 mL	In House	NA	2 Weeks	B6A0042
BAT- 11		0.05 mL		Inorganic Ventures	J2-MEB613056	Feb-17	B6A0009
Molybdenum - 1 PPM		0.5 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0092
Initial Calibration Low - CAL3	S03	NA	50 mL	In House	NA	2 Weeks	B6A0043
BAT- 11		0.025 mL		Inorganic Ventures	J2-MEB613056	Feb-17	B6A0009
Molybdenum - 1 PPM		0.2 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0092
Initial Calibration Low - CAL2	S02	NA	50 mL	In House	NA	2 Weeks	B6A0044
BAT- 11		0.01 mL		Inorganic Ventures	J2-MEB613056	Feb-17	B6A0009
Molybdenum - 1 PPM		0.1 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0092
Initial Calibration Low - CAL1	S01	NA	50 mL	In-House	NA	1 Year	B6I0135
Initial Calibration Blank	ICB						
Continuing Calibration Blank	CCB						
Initial Calibration Verification	ICV		50 mL	NA	NA	2 Weeks	B6A0064
ICV-1 (0307)		1.0 mL	Composite	EPA	ICV-1 (0307)	2 Weeks	B6J0139
Molybdenum - 10 PPM		0.05 mL		In House	From Mo-1000 mg/L Lot No. K2-MO02086	Oct-17	B6J0148
Interelement Check Standard A	ICSA	5.0 mL	50 mL	EPA	NA	2 Weeks	B4J0066
Interelement Check Standard AB	ICSAB		50 mL	EPA	ICSA-0803	2 Weeks	B4J0067
ICS PART A		5.0 mL	Composite	EPA	ICSB-0803	2 Weeks	B4J0066
ICS PART B		5.0 mL					B4J0067
Continuing Calibration Verificatio	CCV		50 mL	NA	NA	2 Weeks	B6A0045
Initial Calibration High - CAL8		25 mL	Composite	In-House	From S08		B6A0038
BONNER-1		0.2375 mL		Inorganic Ventures	J2-MEB613058	Feb-17	B6A0010
BAT-15		1.0 mL		Inorganic Ventures	K2-MEB650369	Jul-17	B6G0108
ISM TUNE	TUNE		50 mL	In-House	NA	2 Weeks	B6G0089
ISM Stock TUNE		0.5 mL				Jul-16	B6G0088
CLP-MS-SPK-REV1	Matrix Spike	1.0 mL	500 mL	Inorganic Ventures	K2-MEB619110	Sep-17	B6B0062
Molybdenum - 100 PPM		1.0 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0062
BAT-11	LCS	1.0 mL	500 mL	Inorganic Ventures	J2-MEB613056	Feb-17	B6A0009
Molybdenum - 100 PPM		0.04 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0062

* Dilutions of calibration standards, CCV, & ISM TUNE are made with the same acid water as the S0, ICB & CCB.
* Dilutions of ICV, ICSA, and ICSAB are made with 1% HNO3.
**Date Lot Expires reflects the date that the standard being used will expire.

Lauren Meadows Digitally signed by Lauren Meadows Reason: I am the author of this document Date: 2016.10.21 10:27:54-05'00'
Prepared By: _____
Analyst/Date

Maxwell S. Bonner Digitally signed by Maxwell S. Bonner Reason: I have reviewed this document Date: 2016.10.21 10:29:35-05'00'
Reviewed By: _____
Name/Date

Bonner Analytical Testing Company
Instrument: ICPMS01
Serial No: X0494

ISM02.3 Calibration & QC Preparation Log

Standards & QC for ICPMS01 MA 2658.0 Prepared On: 10/24/2016

Description	EPA ID	Amount Spiked	Volume Made	Manufacturer	Lot Number	Date Lot Expires	LIMS ID
Initial Calibration High - CAL8	S08	NA	100 mL	In House	NA	2 Weeks	B6A0038
BONNER-16		2.5 mL	Composite	Inorganic Ventures	K2-MEB624149	Apr-17	B6F0009
BAISM-MIX1		2.0 mL			J2-MEB613059	Feb-17	B6A0011
BONNER-1		0.25 mL			J2-MEB613058	Feb-17	B6A0010
Initial Calibration Mid - CAL7	S07	NA	50 mL	In House	NA	2 Weeks	B6A0039
CAL8		25 mL		Inorganic Ventures			B6A0038
Initial Calibration Mid - CAL6	S06	NA	50 mL	In House	NA	2 Weeks	B6A0040
CAL8		2.5 mL		Inorganic Ventures			B6A0038
Initial Calibration Mid - CAL5	S05	NA	50 mL	In House	NA	2 Weeks	B6A0041
CAL8		0.5 mL		Inorganic Ventures			B6A0038
Initial Calibration Low - CAL4	S04	NA	50 mL	In House	NA	2 Weeks	B6A0042
BAT- 11		0.05 mL		Inorganic Ventures	J2-MEB613056	Feb-17	B6A0009
Molybdenum - 1 PPM		0.5 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0092
Initial Calibration Low - CAL3	S03	NA	50 mL	In House	NA	2 Weeks	B6A0043
BAT- 11		0.025 mL		Inorganic Ventures	J2-MEB613056	Feb-17	B6A0009
Molybdenum - 1 PPM		0.2 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0092
Initial Calibration Low - CAL2	S02	NA	50 mL	In House	NA	2 Weeks	B6A0044
BAT- 11		0.01 mL		Inorganic Ventures	J2-MEB613056	Feb-17	B6A0009
Molybdenum - 1 PPM		0.1 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0092
Initial Calibration Low - CAL1	S01	NA	50 mL	In-House	NA	1 Year	B6I0135
Initial Calibration Blank	ICB						
Continuing Calibration Blank	CCB						
Initial Calibration Verification	ICV		50 mL	NA	NA	2 Weeks	B6A0064
ICV-1 (0307)		1.0 mL	Composite	EPA	ICV-1 (0307)	2 Weeks	B6J0139
Molybdenum - 10 PPM		0.05 mL		In House	From Mo-1000 mg/L Lot No. K2-MO02086	Oct-17	B6J0148
Interelement Check Standard A	ICSA	5.0 mL	50 mL	EPA	NA	2 Weeks	B4J0066
Interelement Check Standard AB	ICSAB		50 mL	EPA	ICSA-0803	2 Weeks	B4J0067
ICS PART A		5.0 mL	Composite	EPA	ICSB-0803	2 Weeks	B4J0066
ICS PART B		5.0 mL					B4J0067
Continuing Calibration Verificatio	CCV		50 mL	NA	NA	2 Weeks	B6A0045
Initial Calibration High - CAL8		25 mL	Composite	In-House	From S08		B6A0038
BONNER-1		0.2375 mL		Inorganic Ventures	J2-MEB613058	Feb-17	B6A0010
BAT-15		1.0 mL		Inorganic Ventures	K2-MEB650369	Jul-17	B6G0108
ISM TUNE	TUNE		50 mL	In-House	NA	2 Weeks	B6G0089
ISM Stock TUNE		0.5 mL				Jul-16	B6G0088
CLP-MS-SPK-REV1	Matrix Spike	1.0 mL	500 mL	Inorganic Ventures	K2-MEB619110	Sep-17	B6B0062
Molybdenum - 100 PPM		1.0 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0062
BAT-11	LCS	1.0 mL	500 mL	Inorganic Ventures	J2-MEB613056	Feb-17	B6A0009
Molybdenum - 100 PPM		0.04 mL		In House	From Mo-1000 mg/L Lot No. H2-MO02073	Feb-17	B6H0062

* Dilutions of calibration standards, CCV, & ISM TUNE are made with the same acid water as the S0, ICB & CCB.
* Dilutions of ICV, ICSA, and ICSAB are made with 1% HNO3.
**Date Lot Expires reflects the date that the standard being used will expire.

Prepared By: Lauren Meadows Digitally signed by Lauren Meadows Reason: I am the author of this document Date: 2016.10.25 08:37:50-05'00' — Analyst/Date

Reviewed By: Maxwell S. Bonner Digitally signed by Maxwell S. Bonner Reason: I have reviewed this document Date: 2016.10.21 10:29:35-05'00' — Name/Date

REAGENTS PREPARATION LOG

1% HNO_3

LIMS ID: B6G0132

Preparation Date: 07/29/2017

Prepared By: LEM

Reagents	Concentration (mg/L)	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled Water	Neat	19800	BATCO	NA	NA	NA
Nitric Acid	Neat	200 mL	Fisher Scientific	1115060	12/1/2015	7/3/2017

Balance ID: N/A

Instrument: ICPMS01

Final Volume: 20 Liters

Concentration: 1% HNO_3

Used For: Preparation of Tunes, ICV, ICSA, ICSAB, Dilutions

Expiration Date: 12 Months After Preparation Date

Comments:

Reviewed By: Maxwell S. Bonner Digitally signed by Maxwell S. Bonner Reason: I have reviewed this document Date: 2016.10.17 15:56:33-05'00'

Supervisor/Date

Bonner Analytical Testing Company

REAGENTS PREPARATION LOG

Acidified Water

LIMS ID: B6I0135

Preparation Date: 09/27/2016

Prepared By: LEM

Reagents	Concentration (mg/L)	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled Water	Neat	19700	BATCO	NA	NA	NA
Nitric Acid	Neat	200 mL	Fisher Scientific	1116020	08/2016	02/2017
Hydrochloric Acid	Neat	100 mL	Fisher Scientific	4116040	09/2016	05/2019

Balance ID: N/A

Instrument: ICPMS01

Final Volume: 20 Liters

Concentration: 1% HNO_3 / 0.5% HCl

Used For: Preparation of Standards and Controls

Expiration Date: 12 Months After Preparation Date

Comments:

Reviewed By: Maxwell S. Bonner Digitally signed by Maxwell S. Bonner Reason: I have reviewed this document Date: 2016.10.17 15:56:08-05'00'

Supervisor/Date

Bonner Analytical Testing Company

TUNE PREPARATION LOG

200.8 Tune Standard

LIMS ID: B6G0073

Preparation Date: 7/18/2016 Prepared By: LEM

Reagents	Concentration (mg/L)	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled Water	Neat	46.95 mL	BATCO	NA	NA	NA
Nitric Acid	Neat	0.5 mL	Fisher Scientific	1115060	12/1/2015	7/3/2017
Hydrochloric Acid	Neat	0.25 mL	Fisher Scientific	4115100	12/1/2015	11/16/2018
Beryllium	1000	0.5 mL	High Purity Standards	1525435	1/4/2016	6/29/2017
Cobalt	1000	0.5 mL	High Purity Standards	1519648	1/4/2016	6/29/2017
Indium (IS_Sc_In)	667	0.75 mL	BATCO	See Below	See Below	See Below
Lead	1000	0.5 mL	High Purity Standards	1528221	1/4/2016	6/29/2017
Magnesium	10000	0.05 mL	High Purity Standards	1510445	1/4/2016	6/29/2017

IS_Sc_In
LIMS ID: B6C0054

Reagents	Concentration (mg/L)	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled Water	Neat	95 mL	BATCO	NA	NA	NA
Nitric Acid	Neat	5 mL	Fisher Scientific	1115060	12/1/2015	7/3/2017
Scandium(III) Ox	Neat	100 mg	Aldrich Chemistry	751863-10	1/27/2016	1/27/2019
Indium(III) Chlori	Neat	66.7 mg	Aldrich Chemistry	MKBS6036V	8/4/2015	8/4/2018

Balance ID: N/A

Instrument: ICPMS01

Final Volume: 50 mL

Concentration: 10 mg/L

Expiration Date: 12 Months After Preparation Date

Comments: Daily 200.8TS - 0.5 mL to 50 mL

Reviewed By: Maxwell S. Bonner Digitally signed by Maxwell S. Bonner Reason: I have reviewed this document Date: 2016.10.17 15:56:21-05'00'

Supervisor/Date

Bonner Analytical Testing Company

REAGENTS PREPARATION LOG

ICP-MS Internal Standard

LIMS ID: B6G0072

Preparation Date: 7/18/2016 Prepared By: LEM

Reagents	Concentration (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 Scientific	1115060	12/1/2015	7/3/2017
6020ISS	10	20 mL	Inorganic Ventures	J2-MEB562038	1/14/2016	3/29/2017
^{6}Lithium	1000	1.2 mL	Inorganic Ventures	J2-LI03018	4/8/2016	4/8/2017
IS_Sc_In	1000/667	0.3 mL	BATCO	See Below	See Below	See Below

IS_Sc_In

LIMS ID: B6C0054

Reagents	Concentration (mg/L)	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled Water	Neat	95 mL	BATCO	NA	NA	NA
Nitric Acid	Neat	5 mL	Fisher Scientific	1115060	12/1/2015	7/3/2017
Scandium(III) Oxide	Neat	100 mg	Aldrich Chemistry	751863-10	1/27/2016	1/27/2019
Indium(III) Chloride	Neat	66.7 mg	Aldrich Chemistry	MKBS6036V	8/4/2015	8/4/2018

Balance ID: Mettler IV

Instrument: ICPMS01

Final Volume: 20 Liters

Concentration: B, Ho, Rh, Tb, Y @ 10 ug/L; ^{6}Li @ 70 ug/L; Sc @ 25 ug/L; In @ 20 ug/L

Expiration Date: 12 Months After Preparation Date

Comments: 5% HNO_3 should be warm when adding Sc & In.

Reviewed By: Maxwell S. Bonner Digitally signed by Maxwell S. Bonner Reason: I have reviewed this document Date: 2016.10.17 15:55:55-05'00'

Supervisor/Date

Analytical Standard Record

B6J0165

Description:	PS-MH1H52 2	Expires:	02/10/2017
Standard Type:	Analyte Spike	Prepared:	10/25/2016
Solvent:	NA	Prepared By:	Lauren Meadows
Final Volume (mls):	10	Department:	METALS
Vials:	1	Last Edit:	10/25/2016 09:36 by LEM

Analyte	Parent	CAS Number	Concentration	Units
Molybdenum	B6H0092	7439-98-7	0.008	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mls)
B6H0092	Std - Molybdenum - 1ppm	08/23/2016	Inorganic Ventures	H2-MO02073	02/10/2017	08/29/2016 09:38 by MSB2	0.08

Reviewed By

10/26/16
Date

Analytical Standard Record

B6J0164

Description:	PS-MH1H52 1	Expires:	02/19/2017
Standard Type:	Analyte Spike	Prepared:	10/25/2016
Solvent:	NA	Prepared By:	Lauren Meadows
Final Volume (mls):	10	Department:	METALS
Vials:	1	Last Edit:	10/25/2016 09:35 by LEM

Analyte	Parent	CAS Number	Concentration	Units
Antimony	B6H0091	7440-36-0	0.008	ug/mL

Parent Standards used:

Standard	Description	Prepared	Prepared By	Lot Nbr	Expires	Last Edit	(mls)
B6H0091	Std - Antimony - 1ppm	08/23/2016	Inorganic Ventures	G2-SB03022	02/19/2017	08/23/2016 09:10 by LEM	0.08

Reviewed By

10/26/16
Date

Bonner Analytical Testing Company

ICP-MS ISM02.3 CLP Standard Concentration Page

Element	S02	S03	S04	S05	S06	S07	S08	S09	S10	ICV	LCS (ug/L)	LCS (mg/kg)	ICSA	ICSAB	CCV	MS (ug/L)	MS (mg/kg)	TUNE
Al	4	10	20	260	1300	13000	26000		125000	504	40		(100000)	(100000)	62500			
Ag	0.2	0.5	1	1.3	6.5	65	130			100	2	1	(0)	18	65	50	5	
As	0.2	0.5	1	10	50	500	1000			200	2	1	(0.1)	19	500	40	4	
B	0.5	1	2	12.5	62.5	625	1250			100					625			
Ba	2	5		10	50	500	1000	5000		99	20	10	(1.2)	22	2500	2000	200	
Be	0.2	0.5	1	10	50	500	1000			99	2	1	(0)	19	500	50	5	100
Ca	100	250	500	250	1250	12500	25000		125000	2005	1000		(100000)	(100000)	62500			
Cd	0.2	0.5	1	10	50	500	1000			99	2	1	(0.7)	20	500	50	5	
Co	0.2	0.5	1	10	50	500	1000			100	2	1	(1)	20	500	500	50	100
Cr	0.4	1	2	10	50	500	1000			98	4	2	21	40	500	200	20	
Cu	0.4	1	2	10	50	500	1000			98	4	2	8	25	500	250	25	
Fe	40	100	200	250	1250	12500	25000		125000	1016	400		(100000)	(100000)	62500			
Mg	100	250	500	250	1250	12500	25000		125000	1215	1000		(100000)	(100000)	62500			100
Mn	0.2	0.5	1	10	50	500	1000	5000		100	2	1	7	27	500	500	50	
Mo	0.5	1	2	25	125	1250	2500			100			2000	2000	1250			
Na	100	250	500	250	1250	12500	25000		125000	2019	1000		(100000)	(100000)	62500			
Ni	0.2	0.5	1	10	50	500	1000			101	2	1	6	24	500	500	50	
Pb	0.2	0.5	1	10	50	500	1000			200	2	1	4	25	500	20	2	100
K	100	250	500	250	1250	12500	25000		125000	2004	1000		(100000)	(100000)	62500			
Sb	0.4	1	2	10	50	500	1000			199	4	2	(1.5)	22	500	100	10	
Se	1	2.5	5	10	50	500	1000			206	10	5	(0.3)	19	500	100	10	
Sn	0.5	1	2	12.5	62.5	625	1250			100					625			
Sr	0.5	1	2	6.25	31.25	312.5	625			100					312.5			
Tl	0.2	0.5	1	10	50	500	1000			206	2	1	(0)	21	500	50	5	
U	0.2	0.5	1	2	10	100	200			50	2	NA	(0)	(0)	100	100	NA	
V	1	2.5	5	10	50	500	1000			100	10	5	(0.5)	19	500	500	50	
Zn	0.4	1	2	10	50	500	1000	5000		205	4	2	11	29	2500	500	50	

Units are in ug/L unless otherwise noted.

( ) Indicated analyte values that are less than the CRQL and the value is to be used as a set point for the ±CRQL acceptance criteria calculatio

In is also in the TUNE at 100 ug/L.

EPA SAMPLE NO.

MH1H50

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-01

% Solids: 82.5 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.038	J	10/18/2016	1457

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H51

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-02

% Solids: 71.2 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.089	J	10/18/2016	1459

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H52

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-03

% Solids: 92.4 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.096	J	10/18/2016	1502

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H53

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-04

% Solids: 68.9 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.041	J	10/18/2016	1509

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H54

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-05

% Solids: 85.7 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.045	J	10/18/2016	1512

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H55

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-06

% Solids: 79.6 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.14		10/18/2016	1514

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H56

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-07

% Solids: 83.4 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.025	J	10/18/2016	1517

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H57

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-08

% Solids: 58.9 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.35		10/18/2016	1519

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H58

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-09

% Solids: 79.8 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.081	J	10/18/2016	1527

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H59

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-10

% Solids: 76.7 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.045	J	10/18/2016	1530

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H60

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-11

% Solids: 84.1 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.028	J	10/18/2016	1532

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H61

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-12

% Solids: 63.8 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.025	J	10/18/2016	1535

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H62

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-13

% Solids: 81.5 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.073	J	10/18/2016	1537

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H63

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-14

% Solids: 79.1 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.026	J	10/18/2016	1540

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H64

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-15

% Solids: 67.9 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.041	J	10/18/2016	1542

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H65

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-16

% Solids: 77.3 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.063	J	10/18/2016	1545

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H66

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-17

% Solids: 67.5 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.030	J	10/18/2016	1547

NOTE: Hardness (total) is reported in mg/L

Comments:

EPA SAMPLE NO.

MH1H67

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Lab Sample ID: 6100167-18

% Solids: 74.0 Date Received: 10/13/2016

Analytical method: CVAA

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

CAS NO.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.073	J	10/18/2016	1550

NOTE: Hardness (total) is reported in mg/L

Comments:

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

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

Continuing Calibration Verification Source: In House, Lot: B6G0099

Run Batch: BJ62524H101816B Analytical method: CVAA

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV01				ID: CCV01				ID: CCV02		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Mercury	4.0000	4.0	99		3.0000	3.0	101		3.1	102	

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

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

Continuing Calibration Verification Source: In House, Lot: B6G0099

Run Batch: BJ62524H101816B Analytical method: CVAA

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID: CCV03				ID: CCV04		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Mercury					3.0000	3.1	102		3.1	103	

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

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

Continuing Calibration Verification Source: In House, Lot: B6G0099

Run Batch: BJ62524H101816B Analytical method: CVAA

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID: CCV05				ID:		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Mercury					3.0000	3.1	103				

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: CVAA Preparation Batch: QJ14044

Run Batch: BJ62524H101816B Preparation Method: 7471B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB01	Q	ID: CCB01	Q	ID: CCB02	Q	ID: CCB03	Q	ID: PBS01	Q
Mercury	0.20	U	0.20	U	0.20	U	0.20	U	0.10	U

NOTE: Hardness (total) is reported in mg/L

FORM 3-IN
BLANKS

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Preparation Blank Matrix: Soil

Preparation Blank Concentration Units (µg/L, mg/L, mg/kg dry weight, or µg): mg/kg

Analytical method: CVAA Preparation Batch: QJ14044

Run Batch: BJ62524H101816B Preparation Method: 7471B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID:	Q	ID: CCB04	Q	ID: CCB05	Q	ID:	Q	ID:	Q
Mercury			0.20	U	0.20	U				

NOTE: Hardness (total) is reported in mg/L

EPA SAMPLE NO.

MH1H52S

FORM 5A-IN
MATRIX SPIKE SAMPLE RECOVERY

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Matrix: Soil Analytical Method: CVAA

% Solids: 92.4

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	Q	Sample Result (SR)	Q	Spike Added (SA)	%R	Q
Mercury	75-125	0.70		0.096	J	0.541	112	

EPA SAMPLE NO.

FORM 6-IN
DUPLICATES

MH1H52D

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.:46282 MA No.: SDG No.: MH1H50

Matrix: Soil Analytical Method: CVAA

% Solids: 92.4

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

Analyte	Control Limit	Sample (S)	Q	Duplicate (D)	Q	RPD	Q
Mercury		0.096	J	0.10	J	5	

NOTE: Hardness (total) is reported in mg/L

FORM 9-IN
METHOD DETECTION LIMIT

Lab Name: Bonner Analytical Testing Co. Contract: EPW14029

Lab Code: BON Case No.: 46282 MA No.: SDG No.: MH1H50

Analytical Method: CVAA Instrument ID: CETAC01

Preparation Method: 7471B

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

Analyte	Wavelength/Mass	MDL	Date Analyzed
Mercury	257.00 nm	0.0032	01/14/2016

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: CETAC01
Analytical Method: CVAA
Start Date: 10/18/2016
End Date: 10/18/2016
Run Batch: BJ62524H101816B

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	
S01	1.0	1323															X										
S02	1.0	1326															X										
S03	1.0	1328															X										
S04	1.0	1331															X										
S05	1.0	1333															X										
S06	1.0	1336															X										
S07	1.0	1338															X										
ICV01	1.0	1341															X										
ICB01	1.0	1343															X										
CCV01	1.0	1346															X										
CCB01	1.0	1348															X										
CCV02	1.0	1419															X										
CCB02	1.0	1421															X										
CCV03	1.0	1449															X										
CCB03	1.0	1452															X										
PBS01	1.0	1454															X										
MH1H50	1.0	1457															X										
MH1H51	1.0	1459															X										
MH1H52	1.0	1502															X										
MH1H52S	1.0	1504															X										
MH1H52D	1.0	1507															X										
MH1H53	1.0	1509															X										
MH1H54	1.0	1512															X										
MH1H55	1.0	1514															X										
MH1H56	1.0	1517															X										
MH1H57	1.0	1519															X										
CCV04	1.0	1522															X										
CCB04	1.0	1524															X										
MH1H58	1.0	1527															X										
MH1H59	1.0	1530															X										

FORM 12-IN
ANALYSIS LOG

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: CETAC01
Analytical Method: CVAA
Start Date: 10/18/2016
End Date: 10/18/2016
Run Batch: BJ62524H101816B

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	
MH1H60	1.0	1532															X										
MH1H61	1.0	1535															X										
MH1H62	1.0	1537															X										
MH1H63	1.0	1540															X										
MH1H64	1.0	1542															X										
MH1H65	1.0	1545															X										
MH1H66	1.0	1547															X										
MH1H67	1.0	1550															X										
CCV05	1.0	1552															X										
CCB05	1.0	1555															X										

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: CETAC01
Start Date: 10/18/2016
Analytical method: CVAA
Run Batch: BJ62524H101816B
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Mercury	0.0	-0.0065		0.10	0.091	9	0.20	0.19	5

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: CETAC01
Start Date: 10/18/2016
Analytical method: CVAA
Run Batch: BJ62524H101816B
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Mercury	0.50	0.50	1	1.0	1.0	-1	3.0	3.0	-1

FORM 15-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: CETAC01
Start Date: 10/18/2016
Analytical method: CVAA
Run Batch: BJ62524H101816B
Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Mercury	6.0	6.0	0						

FORM 16-IN
INITIAL CALIBRATION SUMMARY

Lab Name: Bonner Analytical Testing Co.
Contract: EPW14029
Lab Code: BON
Case No.: 46282
MA No.:
SDG No.: MH1H50
Instrument ID: CETAC01
Start Date: 10/18/2016
Analytical method: CVAA
Run Batch: BJ62524H101816B

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Mercury	0.9999373	20215.86	0.0531536	Lin. Reg	None

Bonner Analytical Testing Company

Instrument ID: CETAC01 Calibration ID: B644038 Calibration Date: 10/18/2016

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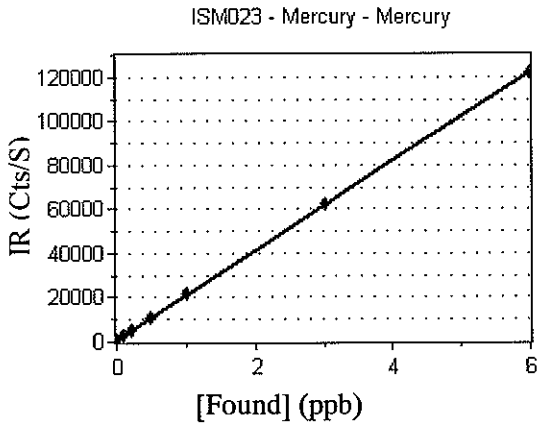

Calibration Plot: Mercury
Calibration Type: Linear Regression
Corr. Coeff.: 0.9999373
Fit: [Y] = 20215.86 * [X] + 1074.545
[y-intercept] = -0.05

Sequence Std. Name	LIMS ID	True Conc. (ppb)	Found Conc. (ppb)	IR (Cts/S)	Difference (%)
BJ62524-CAL1	B6G0104	0	-0.01	944.1	0
BJ62524-CAL2	B6G0103	0.1	0.09	2924	9
BJ62524-CAL3	B6G0102	0.2	0.19	4935	5
BJ62524-CAL4	B6G0101	0.5	0.50	11100	1
BJ62524-CAL5	B6G0100	1	1.01	21540	-1
BJ62524-CAL6	B6G0099	3	3.03	62410	-1
BJ62524-CAL7	B6G0098	6	5.98	122000	0

Bonner Analytical Testing Company

Report Generated By Teledyne Leeman QuickTrace
Analyst: caultman
Worksheet file: X:\2016\Worksheets\Hg 10-16 Worksheets\H101816B.wszf
Creation Date: 8/3/2016 10:18:10 AM
Comment:

Results

Sample Name		Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags	% Recovery
SEQ-CAL1@S01		STD	10/18/16 01:23:33 pm	0.0000	944	0.00	-6.60		N/A
Replicates	944.1								
SEQ-CAL2@S02		STD	10/18/16 01:26:05 pm	0.1000	2924	0.00	-8.61		N/A
Replicates	2924.4								
SEQ-CAL3@S03		STD	10/18/16 01:28:36 pm	0.2000	4935	0.00	-9.14		N/A
Replicates	4934.7								
SEQ-CAL4@S04		STD	10/18/16 01:31:08 pm	0.5000	11098	0.00	-4.18		N/A
Replicates	11097.8								
SEQ-CAL5@S05		STD	10/18/16 01:33:40 pm	1.0000	21539	0.00	12.44		N/A
Replicates	21538.6								
SEQ-CAL6@S06		STD	10/18/16 01:36:13 pm	3.0000	62409	0.00	34.76		N/A
Replicates	62409.0								
SEQ-CAL7@S07		STD	10/18/16 01:38:46 pm	6.0000	121959	0.00	-18.65		N/A
Replicates	121958.6								
SEQ-ICV@ICV01		ICV	10/18/16 01:41:19 pm	3.9720	81353	0.00			99.30
Replicates	81353.4								
SEQ-ICB@ICB01		ICB	10/18/16 01:43:50 pm	-0.0206	661	0.00			N/A
Replicates	661.2								
SEQ-CCV@CCV01		CCV	10/18/16 01:46:23 pm	3.0360	62435	0.00			101.20
Replicates	62435.4								
SEQ-CCB@CCB01		CCB	10/18/16 01:48:54 pm	-0.0159	756	0.00			N/A
Replicates	755.6								
~~QJ14038-BLK1@PBS01~~		~~UNK~~	~~10/18/16 01:51:25 pm~~	0.0020	1119	0.00			~~N/A~~
Replicates	1118.9								
6100162-01@MH1G59		UNK	10/18/16 01:53:56 pm	0.1426	3959	0.00			N/A
Replicates	3958.7								
QJ14038-MS1@MH1G59S		UNK	10/18/16 01:56:27 pm	2.6910	55465	0.00			N/A
Replicates	55464.6								
QJ14038-DUP1@MH1G59D		UNK	10/18/16 01:58:59 pm	0.0762	2618	0.00			N/A
Replicates	2617.8								
~~6100162-02@MH1G60~~		UNK	10/18/16 02:01:31 pm	0.0972	3042	0.00			N/A
Replicates	3041.5								

10/25

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags	% Recovery
6100162-03@MH1G61	UNK	10/18/16 02:04:03 pm	0.1014	3128	0.00			N/A
Replicates 3127.6								
6100162-04@MH1G62	UNK	10/18/16 02:06:35 pm	0.3160	7463	0.00			N/A
Replicates 7463.0								
6100162-05@MH1G63	UNK	10/18/16 02:09:06 pm	0.0204	1491	0.00			N/A
Replicates 1490.8								
6100162-06@MH1G64	UNK	10/18/16 02:11:37 pm	0.0469	2025	0.00			N/A
Replicates 2025.0								
6100162-07@MH1G65	UNK	10/18/16 02:14:09 pm	0.0860	2815	0.00			N/A
Replicates 2815.2								
6100162-08@MH1G66	UNK	10/18/16 02:16:40 pm	0.2340	5806	0.00			N/A
Replicates 5805.9								
SEQ-CCV@CCV~~2~~ 02 VCT 10/26/16	CCV	10/18/16 02:19:13 pm	3.0510	62745	0.00			101.71
Replicates 62745.5								
SEQ-CCB@CCB~~2~~ 02 VCT 10/26/16	CCB	10/18/16 02:21:44 pm	-0.0146	783	0.00			N/A
Replicates 782.8								
6100162-09@MH1G67	UNK	10/18/16 02:24:16 pm	0.1148	3397	0.00			N/A
Replicates 3397.1								
6100162-10@MH1G68	UNK	10/18/16 02:26:48 pm	0.1579	4268	0.00			N/A
Replicates 4267.7								
6100162-11@MH1G69	UNK	10/18/16 02:29:20 pm	0.0224	1530	0.00			N/A
Replicates 1529.7								
6100162-12@MH1G70	UNK	10/18/16 02:31:51 pm	1.2080	25485	0.00			N/A
Replicates 25485.3								
6100162-13@MH1G71	UNK	10/18/16 02:34:22 pm	0.1203	3509	0.00			N/A
Replicates 3508.7								
6100162-14@MH1G72	UNK	10/18/16 02:36:54 pm	0.8044	17335	0.00			N/A
Replicates 17335.0								
6100162-15@MH1G73	UNK	10/18/16 02:39:25 pm	0.0683	2458	0.00			N/A
Replicates 2458.4								
6100162-16@MH1G74	UNK	10/18/16 02:41:57 pm	0.0322	1729	0.00			N/A
Replicates 1728.8								
6100162-17@MH1G75	UNK	10/18/16 02:44:30 pm	0.0110	1299	0.00			N/A
Replicates 1299.4								
6100162-18@MH1G76	UNK	10/18/16 02:47:02 pm	0.0617	2324	0.00			N/A
Replicates 2324.0								
SEQ-CCV@CCV~~3~~ 03 VCT 10/26/16	CCV	10/18/16 02:49:34 pm	3.0500	62710	0.00			101.65
Replicates 62709.6								
SEQ-CCB@CCB~~3~~ 03 VCT 10/26/16	CCB	10/18/16 02:52:06 pm	-0.0139	797	0.00			N/A
Replicates 796.8								

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual	Flags	% Recovery
QJ14044-BLK1@PBS01	UNK	10/18/16 02:54:37 pm	0.0022	1121	0.00			N/A
Replicates 1121.4								
6100167-01@MH1H50	UNK	10/18/16 02:57:09 pm	0.1564	4238	0.00			N/A
Replicates 4238.2								
6100167-02@MH1H51	UNK	10/18/16 02:59:40 pm	0.3155	7455	0.00			N/A
Replicates 7454.6								
6100167-03@MH1H52	UNK	10/18/16 03:02:11 pm	0.4423	10017	0.00			N/A
Replicates 10016.9								
QJ14044-MS1@MH1H52S	UNK	10/18/16 03:04:43 pm	3.2380	66507	0.00			N/A
Replicates 66506.5								
QJ14044-DUP1@MH1H52D	UNK	10/18/16 03:07:16 pm	0.4653	10481	0.00			N/A
Replicates 10480.9								
6100167-04@MH1H53	UNK	10/18/16 03:09:48 pm	0.1404	3916	0.00			N/A
Replicates 3915.7								
6100167-05@MH1H54	UNK	10/18/16 03:12:20 pm	0.1926	4970	0.00			N/A
Replicates 4969.6								
6100167-06@MH1H55	UNK	10/18/16 03:14:52 pm	0.5708	12614	0.00			N/A
Replicates 12614.0								
6100167-07@MH1H56	UNK	10/18/16 03:17:23 pm	0.1032	3163	0.00			N/A
Replicates 3162.9								
6100167-08@MH1H57	UNK	10/18/16 03:19:55 pm	1.0430	22154	0.00			N/A
Replicates 22154.2								
SEQ-CCV@CCV~~+04~~ VCT 10/26/16	CCV	10/18/16 03:22:27 pm	3.1040	63799	0.00			103.45
Replicates 63799.0								
SEQ-CCB@CCB~~+04~~ VCT 10/26/16	CCB	10/18/16 03:24:59 pm	-0.0112	852	0.00			N/A
Replicates 852.0								
6100167-09@MH1H58	UNK	10/18/16 03:27:30 pm	0.3244	7633	0.00			N/A
Replicates 7632.9								
6100167-10@MH1H59	UNK	10/18/16 03:30:03 pm	0.1710	4534	0.00			N/A
Replicates 4533.7								
6100167-11@MH1H60	UNK	10/18/16 03:32:35 pm	0.1168	3437	0.00			N/A
Replicates 3437.5								
6100167-12@MH1H61	UNK	10/18/16 03:35:07 pm	0.0811	2717	0.00			N/A
Replicates 2717.1								
6100167-13@MH1H62	UNK	10/18/16 03:37:39 pm	0.2963	7065	0.00			N/A
Replicates 7065.4								
6100167-14@MH1H63	UNK	10/18/16 03:40:11 pm	0.1047	3193	0.00			N/A
Replicates 3193.1								
6100167-15@MH1H64	UNK	10/18/16 03:42:43 pm	0.1409	3925	0.00			N/A
Replicates 3925.1								

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Residual Flags	% Recovery
6100167-16@MH1H65	UNK	10/18/16 03:45:15 pm	0.2419	5965	0.00		N/A
Replicates 5965.4							
6100167-17@MH1H66	UNK	10/18/16 03:47:47 pm	0.1028	3156	0.00		N/A
Replicates 3155.6							
6100167-18@MH1H67	UNK	10/18/16 03:50:20 pm	0.2713	6560	0.00		N/A
Replicates 6560.5							
SEQ-CCV@CCV~~6~~5 VCT 10/26/16	CCV	10/18/16 03:52:52 pm	3.0880	63490	0.00		102.94
Replicates 63490.3							
SEQ-CCB@CCB~~5~~5 VCT 10/26/16	CCB	10/18/16 03:55:23 pm	-0.0211	651	0.00		N/A
Replicates 651.5							
QJ1404049-BLK1@PBS01	UNK	10/18/16 04:26:04 pm	-0.0502	64	0.00		N/A
Replicates 63.6							
6100171-01@MH1J23	UNK	10/18/16 04:31:12 pm	0.1845	4807	0.00		N/A
Replicates 4806.9							
QJ1404049-MS1@MH1J23S	UNK	10/18/16 04:33:44 pm	3.0800	63325	0.00		N/A
Replicates 63324.8							
QJ1404049-DUP1@MH1J23D	UNK	10/18/16 04:36:16 pm	0.2528	6186	0.00		N/A
Replicates 6186.2							
6100171-02@MH1J24	UNK	10/18/16 04:38:48 pm	0.0888	2872	0.00		N/A
Replicates 2872.0							
6100171-03@MH1J25	UNK	10/18/16 04:41:21 pm	0.1963	5044	0.00		N/A
Replicates 5044.4							
6100171-04@MH1J26	UNK	10/18/16 04:43:53 pm	0.0907	2910	0.00		N/A
Replicates 2909.7							
6100171-05@MH1J27	UNK	10/18/16 04:46:25 pm	0.0360	1806	0.00		N/A
Replicates 1806.0							
SEQ-CCV@CCV6	CCV	10/18/16 04:48:58 pm	3.1460	64659	0.00		104.87
Replicates 64659.3							
SEQ-CCB@CCB6	CCB	10/18/16 04:51:29 pm	-0.0184	706	0.00		N/A
Replicates 705.6							
6100171-06@MH1J28	UNK	10/18/16 04:54:02 pm	0.0201	1484	0.00		N/A
Replicates 1484.4							
6100171-07@MH1J29	UNK	10/18/16 04:56:34 pm	0.0679	2450	0.00		N/A
Replicates 2449.7							
6100171-08@MH1J30	UNK	10/18/16 04:59:07 pm	0.0430	1946	0.00		N/A
Replicates 1946.4							
6100171-09@MH1J31	UNK	10/18/16 05:01:39 pm	0.2999	7139	0.00		N/A
Replicates 7138.7							
6100171-10@MH1J32	UNK	10/18/16 05:04:12 pm	0.0829	2753	0.00		N/A
Replicates 2753.4							

10/25

PREPARATION BENCH SHEET

QJ14044

Bonner Analytical Testing Co.

Matrix: Soil
Analysis: ISM023 - Mercury
Prepared: 10/18/2016 10:52 using METALS - 7471B

Case: 46282
SDG: MH1H50
Work Order: 6100167

Lab Number	Sample ID	Initial (g)	Final (mL)	Spike ID	Spike Amount (uL)	Spike ID	Spike Amount (uL)
6100167-01	MH1H50	0.5	100				
6100167-02	MH1H51	0.5	100				
6100167-03	MH1H52	0.5	100				
6100167-04	MH1H53	0.5	100				
6100167-05	MH1H54	0.5	100				
6100167-06	MH1H55	0.5	100				
6100167-07	MH1H56	0.5	100				
6100167-08	MH1H57	0.5	100				
6100167-09	MH1H58	0.5	100				
6100167-10	MH1H59	0.5	100				
6100167-11	MH1H60	0.5	100				
6100167-12	MH1H61	0.5	100				
6100167-13	MH1H62	0.5	100				
6100167-14	MH1H63	0.5	100				
6100167-15	MH1H64	0.5	100				
6100167-16	MH1H65	0.5	100				
6100167-17	MH1H66	0.5	100				
6100167-18	MH1H67	0.5	100				
QJ14044-MS1	MH1H52S	0.5	100	B5I0091	2500		
QJ14044-DUP1	MH1H52D	0.5	100				
QJ14044-BLK1	PBS01	0.5	100				

Table 1: Quality Controls (QC), Reagents (R) and Standards (Std)

LIMS ID	Description	Vendor	LotNum
B3E0023	R - Distilled Water	In-House	NA
B5I0091	HG - S-WS (100ppb)	Inorganic Ventures	H2-HG02129
B6H0098	R - Aqua Regia	na	na
B6J0126	R - Sodium Chloride Hydroxylan	In-House	NA
B6J0127	R - Stannous Chloride	In House	010SC505
B6J0128	R - Potassium Permanganate	In House	NA

Table 2: Hg Digestion Apparatus

Balance ID		FisherS-300D					
Dig. Block ID		1					
Start Temp	Stop Temp	95	94				
Start Time	Stop Time	1052	1122				

VCT
10/26/16

Table 3: Hg Calibration Curve Procedure

EPA ID	Std. Discription	WATER Spike V. (uL)	WATER F.V. (mL)	SOIL Spike V. (uL)	SOIL F.V. (mL)
S01/ICB/CCB	Cal Blank/ICB/CCB	0	50	0	100
S02	Cal Std 0.1 ppb	50	50	100	100
S03	Cal Std 0.2 ppb	100	50	200	100
S04	Cal Std 0.5 ppb	250	50	500	100
S05	Cal Std 1 ppb	500	50	1000	100
S06/CCV	Cal Std/CCV 3 ppb	1500	50	3000	100
S07	Cal Std 6 ppb	3000	50	6000	100
ICV	ICV 4.0 ppb	500	50	1000	100

These are the spike values used for Water and Soil calibration curves. These standards are associated to this batch only and were digested under the same conditions as the samples. See Matrix type to determine which spike volume (Spike V.) and final volume (F.V.) were used.

Comments:

PREPARATION BENCH SHEET

QJ14044

Bonner Analytical Testing Co.

Matrix: Soil
Analysis: QC
Prepared: 10/18/2016 10:52 using METALS - 7471B

Case:
SDG: MH1H50
Work Order: 6100167

Lab Number	Sample ID	Initial (g)	Final (mL)	Spike ID	Spike Amount (uL)	Spike ID	Spike Amount (uL)

NDP 10/18/2016

Perpared By Date

N Chha 10/26/16

Preparation Reviewed By Date

Bonner Analytical Testing Company
Analytical Run Log

Instrument ID: CETAC01 **Case:** 46282 **FileID:** H101816B **Std. Prep Date:** 101816
Analyst: NDP **SDG:** MH1H50 **Calibration ID:** B644038 **Std. Log Page No.:** 30

Lab Number	EPA ID	Analyzed Date/Time	STD ID	DF	Elements list are used per QC/sample
BJ62524-CAL1	S01	10/18/16 13:23	B6G0104	1	HG
BJ62524-CAL2	S02	10/18/16 13:26	B6G0103	1	HG
BJ62524-CAL3	S03	10/18/16 13:28	B6G0102	1	HG
BJ62524-CAL4	S04	10/18/16 13:31	B6G0101	1	HG
BJ62524-CAL5	S05	10/18/16 13:33	B6G0100	1	HG
BJ62524-CAL6	S06	10/18/16 13:36	B6G0099	1	HG
BJ62524-CAL7	S07	10/18/16 13:38	B6G0098	1	HG
BJ62524-ICV1	ICV01	10/18/16 13:41	B6G0105	1	HG
BJ62524-ICB1	ICB01	10/18/16 13:43	B6G0104	1	HG
BJ62524-CCV1	CCV01	10/18/16 13:46	B6G0099	1	HG
BJ62524-CCB1	CCB01	10/18/16 13:48	B6G0104	1	HG
BJ62524-CCV2	CCV02	10/18/16 14:19	B6G0099	1	HG
BJ62524-CCB2	CCB02	10/18/16 14:21	B6G0104	1	HG
BJ62524-CCV3	CCV03	10/18/16 14:49	B6G0099	1	HG
BJ62524-CCB3	CCB03	10/18/16 14:52	B6G0104	1	HG
QJ14044-BLK1	PBS01	10/18/16 14:54		1	HG
6100167-01	MH1H50	10/18/16 14:57		1	HG
6100167-02	MH1H51	10/18/16 14:59		1	HG
6100167-03	MH1H52	10/18/16 15:02		1	HG
QJ14044-MS1	MH1H52S	10/18/16 15:04		1	HG
QJ14044-DUP1	MH1H52D	10/18/16 15:07		1	HG
6100167-04	MH1H53	10/18/16 15:09		1	HG
6100167-05	MH1H54	10/18/16 15:12		1	HG
6100167-06	MH1H55	10/18/16 15:14		1	HG
6100167-07	MH1H56	10/18/16 15:17		1	HG
6100167-08	MH1H57	10/18/16 15:19		1	HG
BJ62524-CCV4	CCV04	10/18/16 15:22	B6G0099	1	HG
BJ62524-CCB4	CCB04	10/18/16 15:24	B6G0104	1	HG
6100167-09	MH1H58	10/18/16 15:27		1	HG
6100167-10	MH1H59	10/18/16 15:30		1	HG
6100167-11	MH1H60	10/18/16 15:32		1	HG
6100167-12	MH1H61	10/18/16 15:35		1	HG
6100167-13	MH1H62	10/18/16 15:37		1	HG

Bonner Analytical Testing Company
Analytical Run Log

Instrument ID: CETAC01 **Case:** 46282 **FileID:** H101816B **Std. Prep Date:** 101816
Analyst: NDP **SDG:** MH1H50 **Calibration ID:** B644038 **Std. Log Page No.:** 30

Lab Number	EPA ID	Analyzed Date/Time	STD ID	DF	Elements list are used per QC/sample
6100167-14	MH1H63	10/18/16 15:40		1	HG
6100167-15	MH1H64	10/18/16 15:42		1	HG
6100167-16	MH1H65	10/18/16 15:45		1	HG
6100167-17	MH1H66	10/18/16 15:47		1	HG
6100167-18	MH1H67	10/18/16 15:50		1	HG
BJ62524-CCV5	CCV05	10/18/16 15:52	B6G0099	1	HG
BJ62524-CCB5	CCB05	10/18/16 15:55	B6G0104	1	HG

Bonner Analytical Testing Company
Instrument: CETAC01

Bonner Analytical Testing Company

ISM02.3 Hg Standard and Quality Control Log

Analyst: LEM Date: 10/18/16

Description	EPA ID	Amount Spiked	Volume Made	Vendor	Lot Number	Date Lot Expires	Final Conc.	LIMS ID
Mercury Working Standard	S-WS		50 mL	In House	NA	1 Day	100 ug/L	B6G0097
MSHG-10 PPM		0.5 mL		Inorganic Ventures	J2-HG02138	Jul-17		B6G0096
Initial Calibration High	S07		100 mL (Soil) 50 mL (Water)	In House	NA	1 Day	6.0 ug/L	B6G0098
Mercury Working Standard	S-WS	6.0 mL (Soil) 3.0 mL (Water)			From S-WS			B6G0097
Initial Calibration Mid/ Continuing Calibration Verification	S06/ CCV		100 mL (Soil) 50 mL (Water)	In House	NA	1 Day	3.0 ug/L	B6G0099
Mercury Working Standard	S-WS	3.0 mL (Soil) 1.5 mL (Water)			From S-WS			B6G0097
Initial Calibration Mid	S05		100 mL (Soil) 50 mL (Water)	In House	NA	1 Day	1.0 ug/L	B6G0100
Mercury Working Standard	S-WS	1.5 mL (Soil) 0.5 mL (Water)			From S-WS			B6G0097
Initial Calibration Low	S04		100 mL (Soil) 50 mL (Water)	In House	NA	1 Day	0.5 ug/L	B6G0101
Mercury Working Standard	S-WS	0.5 mL (Soil) 0.25 mL (Water)			From S-WS			B6G0097
Initial Calibration Low	S03		100 mL (Soil) 50 mL (Water)	In House	NA	1 Day	0.2 ug/L	B6G0102
Mercury Working Standard	S-WS	0.2 mL (Soil) 0.1 mL (Water)			From S-WS			B6G0097
Initial Calibration Low	S02		100 mL (Soil) 50 mL (Water)	In House	NA	1 Day	0.1 ug/L	B6G0103
Mercury Working Standard	S-WS	0.1 mL (Soil) 0.05 mL (Water)			From S-WS			B6G0097
Initial Calibration Blank	S01		100 mL (Soil) 50 mL (Water)	In House	NA	1 Day	NA	B6G0104
Initial Calibration Blank	ICB							
Continuing Calibration Blank	CCB							
Initial Calibration Verification	ICV		100 mL (Soil) 50 mL (Water)	In House	NA	1 Day	4.0 ug/L	B6G0105
ICV5 (0508)				USEPA (0508)	0508	NA		B6G0106
Matrix Spike	MS		100 mL (Soil) 50 mL (Water)	In House	NA	1 Day	1.0 ug/L	NA
Mercury Working Standard	S-WS	1.0 mL (Soil) 0.5 mL (Water)			From S-WS			B6G0097

Note: All standards and quality control are brought to final volume with the same water used for S01, ICB & CCB.

10/18/16

REAGENTS PREPARATION LOG

Sodium Chloride Hydroxylamine Sulfate Solution

LIMS ID: B6J0126

Preparation Date: 10/11/2016 Prepared By: LEM

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled H2O	Neat	1000 mL	BATCO	NA	NA	NA
Hydroxylamine Sulfate	Neat	120g	ALFA AESAR	Z16A019	04/26/16	04/26/19
Sodium Chloride	Neat	120g	FISHER	140290	09/22/16	09/22/19

Balance ID MIV

Instrument Cetac M-7600

Final Volume 1 Liter

Concentration 24%

Used For Mercury Digestion

Expiration Date 6 months after preparation date

Comments: 120 g Hydroxylamine Sulfate and 120 g NaCl to 1 L of Distilled Water

Reviewed By: 10/11/16

Supervisor/Date

REAGENTS PREPARATION LOG

Potassium Persulfate Solution

Lims ID: B610024

Preparation Date: 09/06/2016

Prepared By: LEM

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled H2O	Neat	1000 mL	BATCO	NA	NA	NA
Potassium Persulfate	Neat	50 g	ARCOS	A0367996	04/12/16	04/12/19

Balance ID _____

Instrument Cetac M-7600

Final Volume 1 Liter

Concentration 5%

Used For Mercury Digestion

Expiration Date 6 months after preparation date

Comments: 50 grams to 1000 mL of Distilled Water

Reviewed By: [signature] 9/9/16

Supervisor/Date

Bonner Analytical Testing Company

Reagents Preparation Log

Stannous Chloride

LIMS ID: B6J0127

Preparation Date: 10/11/2016

Prepared By: LEM

Reagents	Concentration (mg/L)	Amount	Vendor	Lot Number	Date Received	Expiration Date
Distilled Water	Neat	900 mL	BATCO	NA	NA	NA
Stannous Chloride	Neat	100 g	BDH	01D6505	06/09/16	11/2018
Hydrochloric Acid	Neat	100 mL	Fisher Scientific	4115100	02/10/16	11/16/2010

Balance ID: MIV

Instrument: CETAC01

Final Volume: 1 Liter

Concentration 10%

Used For: Mercury Analysis

Expiration Date: Six Months After Preparation Date

Reviewed By: 10/11/16
Supervisor/Date

Percent Solids/Moisture

Analyst: MSB2

Reviewer: VCT

Batch ID: QJ18004

SDG MH1H50
Case 46282

Oven	Date In	Time In	Date Out	Date Out
Dry Cycle #1	10/17/16	18:45 Temp In @ 104C	10/18/16	10:30 **Temp Out @ 105C**

Volume

INST

A	B	C	D	E	F	G	H
SampID	**Client ID**	**Pan #**	**PAN Weight (g)**	**Pan + Sample (g)**	**Pan + Dry Sample (g)**	**Value % Solids**	**Value % Moisture**
QJ18004-DUP1	Duplicate	1	1.0300	7.3600	6.8700	92.2591	7.7409
6100167-01	MH1H50	2	1.0200	7.4900	6.3600	82.5348	17.4652
6100167-02	MH1H51	3	1.0200	7.9300	5.9400	71.2012	28.7988
6100167-03	MH1H52	4	0.9900	7.1400	6.6700	92.3577	7.6423
6100167-04	MH1H53	5	1.0000	8.0500	5.8600	68.9362	31.0638
6100167-05	MH1H54	6	1.0400	7.7400	6.7800	85.6716	14.3284
6100167-06	MH1H55	7	1.0500	8.3900	6.8900	79.5640	20.4360
6100167-07	MH1H56	8	1.0300	8.4200	7.1900	83.3559	16.6441
6100167-08	MH1H57	9	1.0200	8.7800	5.5900	58.8918	41.1082
6100167-09	MH1H58	10	1.0200	8.1500	6.7100	79.8036	20.1964
6100167-10	MH1H59	11	1.0000	8.0400	6.4000	76.7045	23.2955
6100167-11	MH1H60	12	1.0100	9.1900	7.8900	84.1076	15.8924
6100167-12	MH1H61	13	1.0200	8.1000	5.5400	63.8418	36.1582
6100167-13	MH1H62	14	1.0200	8.3800	7.0200	81.5217	18.4783
6100167-14	MH1H63	15	0.9800	8.1000	6.6100	79.0730	20.9270
6100167-15	MH1H64	16	1.0300	9.1400	6.5400	67.9408	32.0592
6100167-16	MH1H65	17	1.0200	8.2100	6.5800	77.3296	22.6704
6100167-17	MH1H66	18	1.0300	8.0100	5.7400	67.4785	32.5215
6100167-18	MH1H67	19	1.0300	8.5800	6.6200	74.0397	25.9603

ORIGIN ID:WHHA (303) 312-7726
SCOTT WALKER
TECHLAW
16194 WEST 45TH DRIVE

GOLDEN, CO 80403
UNITED STATES US

SHIP DATE: 12OCT16
ACTWGT: 50.00 LB
CAD: 102215893/INET3790
DIMS: 20x11x14 IN

BILL SENDER

TO CHADWELL SHANNON
BONNER ANALYTICAL TESTING COMPANY
2703 OAK GROVE ROAD

HATTIESBURG MS 39402
(601) 264-2854 REF: 030724020281AA8M500A119
INV:
PO: DEPT:

5443JFB42114EB

FedEx Express

J1C3016373690uv

THU - 13 OCT 10:30A
PRIORITY OVERNIGHT

4 of 10
MPS# 0263 7774 5569 7132
Mstr# 7774 5569 7187 0201

39402
XH HBGA MS-US MSY

COPY
ORIGINAL IN CSF: MH1E8G
Signature: P. Ack

CUSTODY SEAL
OEC
Quality Environmental Containers
800-255-3956 • 304-255-3956
DATE 10/12/16
SIGNATURE

CUSTODY SEAL
OEC
Quality Environmental Containers
800-255-3956 • 304-255-3956
DATE 10/12/16
SIGNATURE

P. Ack
10-28-16
0855
0°C

P. Ash
10-13-16
0855
0°C

CHADWELL SHANNON
BONNER ANALYTICAL TESTING COMPANY
2703 OAK GROVE ROAD

ORIGIN ID:WHHA (303) 312-7726
SCOTT WALKER
TECHLAW
16194 WEST 45TH DRIVE

GOLDEN, CO 80403
UNITED STATES US

SHIP DATE: 12OCT16
ACTWGT: 50.0 LB
CAD: 1022158/INET3790
DIMS: 20x11x IN

BILL SENDER

TO CHADWELL SHANNON
BONNER ANALYTICAL TESTING COMPANY
2703 OAK GROVE ROAD

HATTIESBURG MS 39402
(601) 264-2854 REF: 030724020281AA8M500A119
INV:
PO: DEPT:

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3 of 10
MPS# 0263 7774 5569 7235
Mstr# 7774 5569 7187 0201

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PRIORITY OVERNIGHT

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MSY
MS-US

CUSTODY SEAL
DATE 10/12/16
SIGNATURE
QEC
Quality Environmental Containers
800-255-3900 · 304-255-3900

CUSTODY SEAL
DATE 10/12/16
SIGNATURE
QEC
Quality Environmental Containers
800-255-3900 · 304-255-3900

COPY
ORIGINAL IN CSF: MHF86
Signature: P. Ash

ORIGIN ID:WHHA (303) 312-7726
SCOTT WALKER
TECHLAW
16194 WEST 45TH DRIVE

GOLDEN, CO 80403
UNITED STATES US

SHIP DATE: 12OCT16
ACTWGT: 25.00 LB
CAD: 102215893/INET3790
DIMS: 15x11x14 IN

BILL SENDER

TO CHADWELL SHANNON
BONNER ANALYTICAL TESTING COMPANY
2703 OAK GROVE ROAD

HATTIESBURG MS 39402
(601) 264-2854 REF: 0307240202B1AA8M500A119
INV:
PO: DEPT:

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PRIORITY OVERNIGHT

7 of 10
MPS# 0263 7774 5569 7338
Mstr# 7774 5569 7187
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XH HBGA

CUSTODY SEAL QEC Quality Environmental Containers 800-255-3950 • 304-255-3900
DATE 10/12/16
SIGNATURE

CUSTODY SEAL QEC Quality Environmental Containers 800-255-3950 • 304-255-3900
DATE 10/12/16
SIGNATURE

After printing this label:

P. Ack
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0°C

COPY
ORIGINAL IN CSF: M1H1F86
Signature: P. Ack

ORIGIN ID:WHHA (303) 312-7726
SCOTT WALKER
TECHLAW
16194 WEST 45TH DRIVE

GOLDEN, CO 80403
UNITED STATES US

SHIP DATE: 12OCT16
ACTWGT: 25.00 LB
CAD: 102215893/INET3790
DIMS: 15x11x14 IN

BILL SENDER

TO CHADWELL SHANNON
BONNER ANALYTICAL TESTING COMPANY
2703 OAK GROVE ROAD

HATTIESBURG MS 39402
(601) 264-2854 REF: 0307240202B1AA8M500A119
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PRIORITY OVERNIGHT

8 of 10

MPS# 0263 7774 5569 7420
Mstr# 7774 5569 7187 0201

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MS-US MSY

XH HBGA

CUSTODY SEAL QEC Quality Environmental Containers 800-255-3950 • 304-255-3900
DATE 10/12/16
SIGNATURE

CUSTODY SEAL QEC Quality Environmental Containers 800-255-3950 • 304-255-3900
DATE 10/12/16
SIGNATURE

P. Ash
10-13-16
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ORIGINAL IN CSF: MHIG05

Signature: P. Ash

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ORIGIN ID: (303) 312-7726
SCOTT W. ...KER
TECHLAW
16194 WE ... 45TH DRIVE

GOLDEN, CO 80403
UNITED STATES US

SHIP DATE: 12OCT16
ACTWGT: 25.00 LB
CAD: 102215893/INET3790
DIMS: 15x11x14 IN

BILL SENDER

TO CHADWELL SHANNON
BONNER ANALYTICAL TESTING COMPANY
2703 OAK GROVE ROAD

HATTIESBURG MS 39402
(601) 264-2854 REF: 0307240202B1AA
INV.
PO. DEPT.

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PRIORITY OVERNIGHT

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Mstr# 7774 5569 7187

XH HBGA

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AS-US

CUSTODY SEAL QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900
DATE 10/13/16
SIGNATURE

P. Ash
10-13-16
0855
0 °C

COPY
ORIGINAL IN CSF: MH1F86
Signature: P. Ash

ORIGIN ID:WHHA (303) 312-7726
SCOTT WALKER
TECHLAW
16194 WEST 45TH DRIVE

GOLDEN, CO 80403
UNITED STATES US

SHIP DATE: 12OCT16
ACTWGT: 50.00 LB
CAD: 102215893/INET3790
DIMS: 20x11x14 IN

BILL SENDER

TO CHADWELL SHANNON
BONNER ANALYTICAL TESTING COMPANY
2703 OAK GROVE ROAD

HATTIESBURG MS 39402
(601) 264-2854 REF: 0307240202B1AA8M500A119
INV:
PO: DEPT:

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THU - 13 OCT 10:30A
PRIORITY OVERNIGHT

2 of 10
MPS# 0263 7774 5569 6548
Mstr# 7774 5569 7187 0201

39402
MS-US MSY

XH HBGA

CUSTODY SEAL
QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900
DATE
SIGNATURE

CUSTODY SEAL
QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900
DATE
SIGNATURE

COPY
ORIGINAL IN CSF: MH1F86
Signature: P. Ash

P. Ash
10-13-16
0855
OOC

ORIGIN ID:WHHA (303) 312-7726
SCOTT WALKER
TECHLAW
16194 WEST 45TH DRIVE

GOLDEN, CO 80403
UNITED STATES US

SHIP DATE: 12OCT16
ACTWGT: 25.00 LB
CAD: 102215893/INET3790
DIMS: 15x11x14 IN

BILL SENDER

TO CHADWELL SHANNON
BONNER ANALYTICAL TESTING COMPANY
2703 OAK GROVE ROAD

HATTIESBURG MS 39402
(601) 264-2854 REF: 030724020281AA9M500A119
INV:
PO: DEPT:

544J3/FB42/14E8

FedEx Express

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PRIORITY OVERNIGHT

10 of 10
MPS# 7774 5569 7740
0263
Mstr# 7774 5569 7187
0201

39402
MS-US MSY

XH HBGA

After printing this label:

CUSTODY SEAL QEC Quality Environmental Containers 800-255-3950 • 304-255-3900
DATE 10/12/16
SIGNATURE

CUSTODY SEAL QEC Quality Environmental Containers 800-255-3950 • 304-255-3900
DATE 10/12/16
SIGNATURE

P. Ash
10-13-16
0855
0°C

COPY
ORIGINAL IN CSF: MHIG05
Signature: P. Ash

SHIP DATE
BILL SENDER

CHADWELL SHANNON
BONNER ANALYTICAL TESTING COMPANY
2703 OAK GROVE ROAD

HATTIESBURG MS 39402
(601) 264-3654

FedEx

THU - 13 OCT 10:30A
PRIORITY OVERNIGHT

5 of 10

7774 5569 6905

Mstr# 7774 5569 7187

39402

MSY

XH HBGA

CUSTODY SEAL
DATE 10/13
SIGNATURE
Quality Environmental Containers
800-255-3950 • 304-255-3950

CUSTODY SEAL
DATE 10/
SIGNATURE
Quality Environmental Containers
800-255-3950 • 304-255-3950

COPY
ORIGINAL IN CSF MH1F88
Signature: D. Nelson

10-13-16
0855
0°C

Bonner Analytical Testing Company

SAMPLE RECEIPT FORM

28[illegible]

Client: CLP Date: 10-13-16

Sample Type: Grab Composite SDG#: MH1H50 Case#: 46282

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:	NA	YES	NO
If YES, enter airbill number here: See below			
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 0°C All Coolers			
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

No temp blanks 7774 5569 7187 / 7774 5569 6905 / 7774 5569 7132
7774 5569 7235 / 7774 5569 7740 / 7774 5569 7739 / 7774 5569 7522
7774 5569 7420 / 7774 5569 6548 / 7774 5569 7338

15) Is there a Corrective Action and/or Client Contact form attached? YES NO

Signature: P. Aick

COPY

ORIGINAL IN CSF: MH1F86 Rev No. 1.4

Signature: P. Aick Date: 07/15/05

WORK ORDER

6100167

Bonner Analytical Testing Co.

Client: Environmental Protection Agency, Region 8
Case: 46282 SDG: MH1H50

Report To:
Environmental Protection Agency, Region 8
Don Goodrich
1595 Wynkoop Street
Denver, CO 80202-1129
Phone: (303)-312-6687
Fax: (303) 312-7517

Date Due: 11/03/2016 16:00 (15 day TAT)

Cooler ID: Cooler-132	**Temp Received: 0.0°C**	**Airbill No.: 777455697132**	**TR/COC No.: 2016_OCT_Sed&Soil_4628**
Cooler ID: Cooler-235	**Temp Received: 0.0°C**	**Airbill No.: 777455697235**	**TR/COC No.: 2016_OCT_Sed&Soil_4628**
Cooler ID: Cooler-338	**Temp Received: 0.0°C**	**Airbill No.: 777455697338**	**TR/COC No.: 2016_OCT_Sed&Soil_4628**
Cooler ID: Cooler-420	**Temp Received: 0.0°C**	**Airbill No.: 777455697420**	**TR/COC No.: 2016_OCT_Sed&Soil_4628**
Cooler ID: Cooler-522	**Temp Received: 0.0°C**	**Airbill No.: 777455697522**	**TR/COC No.: 2016_OCT_Sed&Soil_4628**
Cooler ID: Cooler-548	**Temp Received: 0.0°C**	**Airbill No.: 777455696548**	**TR/COC No.: 2016_OCT_Sed&Soil_4628**
Cooler ID: Cooler-740	**Temp Received: 0.0°C**	**Airbill No.: 777455697740**	**TR/COC No.: 2016_OCT_Sed&Soil_4628**
Cooler ID: Cooler-905	**Temp Received: 0.0°C**	**Airbill No.: 777455696905**	**TR/COC No.: 2016_OCT_Sed&Soil_4628**

LAB ID	EPA ID	Matrix	Sampled Date/Time	Received Date/Time	Cooler ID	QC Source
6100167-01	**MH1H50**	**[Soil]**	**09/29/2016 15:15**	**10/13/2016 08:55**	**Cooler-740**	
Analysis: ISM023 - ICPAES (1-4) Analysis: ISM023 - ICPMS (2658.0) Analysis: ISM023 - Mercury Analysis: Solids, Dry Weight						
6100167-02	**MH1H51**	**[Soil]**	**09/29/2016 16:00**	**10/13/2016 08:55**	**Cooler-740**	
Analysis: ISM023 - ICPMS (2658.0) Analysis: ISM023 - Mercury Analysis: Solids, Dry Weight Analysis: ISM023 - ICPAES (1-4)						
6100167-03	**MH1H52**	**[Soil]**	**09/29/2016 16:00**	**10/13/2016 08:55**	**Cooler-905**	**QC**
Analysis: ISM023 - ICPMS (2658.0) Analysis: ISM023 - ICPAES (1-4) Analysis: ISM023 - Mercury Analysis: Solids, Dry Weight						

WORK ORDER

6100167

Bonner Analytical Testing Co.

Client: Environmental Protection Agency, Region 8
Case: 46282 SDG: MH1H50

LAB ID	EPA ID	Matrix	Sampled Date/Time	Received Date/Time	Cooler ID	QC Source
6100167-04	MH1H53	[Soil]	09/29/2016 17:30	10/13/2016 08:55	Cooler-740	

Analysis: ISM023 - ICPAES (1-4)
Analysis: ISM023 - ICPMS (2658.0)
Analysis: ISM023 - Mercury
Analysis: Solids, Dry Weight

6100167-05	MH1H54	[Soil]	09/29/2016 17:30	10/13/2016 08:55	Cooler-235	

Analysis: ISM023 - ICPMS (2658.0)
Analysis: ISM023 - Mercury
Analysis: ISM023 - ICPAES (1-4)
Analysis: Solids, Dry Weight

6100167-06	MH1H55	[Soil]	09/30/2016 08:42	10/13/2016 08:55	Cooler-905	

Analysis: ISM023 - ICPAES (1-4)
Analysis: ISM023 - ICPMS (2658.0)
Analysis: ISM023 - Mercury
Analysis: Solids, Dry Weight

6100167-07	MH1H56	[Soil]	09/30/2016 08:42	10/13/2016 08:55	Cooler-905	

Analysis: ISM023 - Mercury
Analysis: ISM023 - ICPAES (1-4)
Analysis: Solids, Dry Weight
Analysis: ISM023 - ICPMS (2658.0)

6100167-08	MH1H57	[Soil]	09/30/2016 09:30	10/13/2016 08:55	Cooler-338	

Analysis: Solids, Dry Weight
Analysis: ISM023 - Mercury
Analysis: ISM023 - ICPMS (2658.0)
Analysis: ISM023 - ICPAES (1-4)

6100167-09	MH1H58	[Soil]	09/30/2016 09:30	10/13/2016 08:55	Cooler-522	

Analysis: ISM023 - ICPMS (2658.0)
Analysis: ISM023 - ICPAES (1-4)
Analysis: ISM023 - Mercury
Analysis: Solids, Dry Weight

6100167-10	MH1H59	[Soil]	09/30/2016 09:50	10/13/2016 08:55	Cooler-905	

Analysis: Solids, Dry Weight
Analysis: ISM023 - ICPAES (1-4)
Analysis: ISM023 - Mercury
Analysis: ISM023 - ICPMS (2658.0)

6100167-11	MH1H60	[Soil]	09/30/2016 09:50	10/13/2016 08:55	Cooler-548	

Analysis: ISM023 - ICPMS (2658.0)
Analysis: ISM023 - Mercury
Analysis: Solids, Dry Weight
Analysis: ISM023 - ICPAES (1-4)

WORK ORDER

6100167

Bonner Analytical Testing Co.

Client: Environmental Protection Agency, Region 8
Case: 46282 SDG: MH1H50

LAB ID	EPA ID	Matrix	Sampled Date/Time	Received Date/Time	Cooler ID	QC Source
6100167-12	MH1H61	[Soil]	09/30/2016 11:30	10/13/2016 08:55	Cooler-548	

Analysis: ISM023 - ICPMS (2658.0)
Analysis: ISM023 - Mercury
Analysis: Solids, Dry Weight
Analysis: ISM023 - ICPAES (1-4)

6100167-13	MH1H62	[Soil]	09/30/2016 11:30	10/13/2016 08:55	Cooler-905	

Analysis: Solids, Dry Weight
Analysis: ISM023 - Mercury
Analysis: ISM023 - ICPMS (2658.0)
Analysis: ISM023 - ICPAES (1-4)

6100167-14	MH1H63	[Soil]	09/30/2016 11:15	10/13/2016 08:55	Cooler-740	

Analysis: ISM023 - ICPMS (2658.0)
Analysis: ISM023 - Mercury
Analysis: ISM023 - ICPAES (1-4)
Analysis: Solids, Dry Weight

6100167-15	MH1H64	[Soil]	09/30/2016 11:50	10/13/2016 08:55	Cooler-905	

Analysis: ISM023 - ICPMS (2658.0)
Analysis: ISM023 - ICPAES (1-4)
Analysis: Solids, Dry Weight
Analysis: ISM023 - Mercury

6100167-16	MH1H65	[Soil]	09/30/2016 11:50	10/13/2016 08:55	Cooler-132	

Analysis: ISM023 - ICPAES (1-4)
Analysis: ISM023 - ICPMS (2658.0)
Analysis: ISM023 - Mercury
Analysis: Solids, Dry Weight

6100167-17	MH1H66	[Soil]	09/30/2016 12:40	10/13/2016 08:55	Cooler-548	

Analysis: ISM023 - Mercury
Analysis: ISM023 - ICPMS (2658.0)
Analysis: ISM023 - ICPAES (1-4)
Analysis: Solids, Dry Weight

6100167-18	MH1H67	[Soil]	09/30/2016 12:40	10/13/2016 08:55	Cooler-420	

Analysis: ISM023 - ICPMS (2658.0)
Analysis: Solids, Dry Weight
Analysis: ISM023 - ICPAES (1-4)
Analysis: ISM023 - Mercury

P. Ach
Reviewed By

10-14-16
Date

Bonner Analytical Testing Co.
In-House Chain of Custody
for Samples

SDG Number: MH1H50 **Case No.:** 46282

Work Order No.: 6100167

1) MH1H50	7) MH1H56	13) MH1H62	19)
2) MH1H51	8) MH1H57	14) MH1H63	20)
3) MH1H52	9) MH1H58	15) MH1H64	21)
4) MH1H53	10) MH1H59	16) MH1H65	22)
5) MH1H54	11) MH1H60	17) MH1H66	23)
6) MH1H55	12) MH1H61	18) MH1H67	24)

Sample to be used for QC: MH1H52

Name: P. Adk	Signature: P. Adk	Date &Time: 10-13-16 ~~1601~~ 1516 P.A.	Purpose: S
Name: Brandon Johnson	Signature: Brandon Johnson	Date &Time: 10/17/16 1130	Purpose: W
Name: Brandon Johnson	Signature: Brandon Johnson	Date &Time: 10/17/16 ~~1455~~ 1455 BJ 10/17/16	Purpose: S
Name:	Signature:	Date &Time:	Purpose:
Name:	Signature:	Date &Time:	Purpose:
Name:	Signature:	Date &Time:	Purpose:
Name:	Signature:	Date &Time:	Purpose:
Name:	Signature:	Date &Time:	Purpose:
Name:	Signature:	Date &Time:	Purpose:
Name:	Signature:	Date &Time:	Purpose:
Name:	Signature:	Date &Time:	Purpose:
Name:	Signature:	Date &Time:	Purpose:
Name:	Signature:	Date &Time:	Purpose:
Name:	Signature:	Date &Time:	Purpose:
Name:	Signature:	Date &Time:	Purpose:

Purpose: S - Storage; A - Analyze; DP - Disposal; D - Digest; W - Weigh; P-Pour; T-TCLP;

Bonner Analytical Testing Co.
Digestate Chain of Custody
for Samples

SDG Number: MH1H50 **Case No.:** 46282

Work Order No.: 6100167 **Fraction:** AES

1) MH1H50	7) MH1H56	13) MH1H62	19)
2) MH1H51	8) MH1H57	14) MH1H63	20)
3) MH1H52	9) MH1H58	15) MH1H64	21)
4) MH1H53	10) MH1H59	16) MH1H65	22)
5) MH1H54	11) MH1H60	17) MH1H66	23)
6) MH1H55	12) MH1H61	18) MH1H67	24)

Sample to be used for QC: MH1H52

Name	Signature	Date &Time	Purpose
Brandon Johnson	Brandon Johnson	10/17/16 1115	W
Brandon Johnson	Brandon Johnson	10/17/16 1455	S
M.D.	[illegible]	10/17/16 1500	D
M.D.	[illegible]	10/17/16 2200	S/A
M.D.	[illegible]	10/18/16 1200	S

Purpose: S - Storage; A - Analyze; DP - Disposal; D - Digest; W - Weigh; P-Pour; T-TCLP;

Bonner Analytical Testing Co.
Digestate Chain of Custody
for Samples

SDG Number: MH1H50 **Case No.:** 46282

Work Order No.: 6100167 **Fraction:** ms

1) MH1H50	7) MH1H56	13) MH1H62	19)
2) MH1H51	8) MH1H57	14) MH1H63	20)
3) MH1H52	9) MH1H58	15) MH1H64	21)
4) MH1H53	10) MH1H59	16) MH1H65	22)
5) MH1H54	11) MH1H60	17) MH1H66	23)
6) MH1H55	12) MH1H61	18) MH1H67	24)

Sample to be used for QC: MH1H52

Name	Signature	Date &Time	Purpose
BRANDON JOHNSON	Brandon Johnson	10/17/16 1115	W
BRANDON JOHNSON	Brandon Johnson	10/17/16 1455	S
L MEADOWS		10/17/16 1700	D
L MEADOWS		10/17/16 1740	S
L MEADOWS		10/10/16 1600	A
L MEADOWS		10/10/16 2330	S
M. Bonner for Will Thompson		10/23/16 0900	W
M. Bonner for Will Thompson		10/23/16 1000	S
L MEADOWS		10/24/15 1500	D
L MEADOWS		10/24/15 1540	S
L MEADOWS		10/24/15 1630	A
L MEADOWS		10/24/15 1730	S

Purpose: S - Storage; A - Analyze; DP - Disposal; D - Digest; W - Weigh; P-Pour; T-TCLP;

Bonner Analytical Testing Co.
Digestate Chain of Custody
for Samples

SDG Number: MH1H50 **Case No.:** 46282

Work Order No.: 6100167 **Fraction:** Hg

1) MH1H50	7) MH1H56	13) MH1H62	19)
2) MH1H51	8) MH1H57	14) MH1H63	20)
3) MH1H52	9) MH1H58	15) MH1H64	21)
4) MH1H53	10) MH1H59	16) MH1H65	22)
5) MH1H54	11) MH1H60	17) MH1H66	23)
6) MH1H55	12) MH1H61	18) MH1H67	24)

Sample to be used for QC: MH1H52

Name	Signature	Date &Time	Purpose
Brandon Johnson	Brandon Johnson	10/17/16 1115	W
Brandon Johnson	Brandon Johnson	10/17/16 1455	S
Nathan Price	Nathan Price	10/18/16 1052	Dig
Nathan Price	Nathan Price	10/18/16 1323	A
M. R	[illegible]	10/19/16 1000	DP

Purpose: S - Storage; A - Analyze; DP - Disposal; D - Digest; W - Weigh; P-Pour; T-TCLP;

Tricia Aiken

From: Vanaman, Alexandra <Alexandra.Vanaman@csra.com>
Sent: Monday, October 17, 2016 8:44 AM
To: 'Chris Bonner'; 'Max Bonner'; Tricia Aiken
Cc: "Goodrich, Donald"
Subject: Region 08 | Case 46282 | Lab BON | Issue Multiple | FINAL

Good morning,

Discrepancies with tags, jars, and/or COC
Issue 1: There is no relinquished time on any of the 24 pages of the COC.
Resolution 1: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Issue 2: The COC lists the Case as 46382 in the instruction box; however, these samples are for Case 46282.
Resolution 2: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Insufficient/inappropriate designation of laboratory QC
Issue 3: The COC states "QC to be determined by lab." The laboratory has provided the list below of SDGs and the sample selected for QC.

SDG	QC
MH1F86	MH1F87
MH1G05	MH1G06
MH1G23	MH1G28
MH1G77	MH1G80
MH1G59	MH1G59
MH1H14	MH1H17
MH1G95	MH1G96
MH1H50	MH1H52
MH1H32	MH1H35
MH1H68	MH1H71
MH1H86	MH1H86
MH1J05	MH1J05
MH1J23	MH1J23
MH1J41	MH1J51
MH1J59	MH1J59
MH1J77	MH1J77
MH1J95	MH1J95
MH1K14	MH1K16
MH1K32	MH1K35
MH1K50	MH1K51
MH1K68	MH1K71
MH1K86	MH1K97
MH1L05	MH1L08

Resolution 3: Per Region 8, the samples selected for QC are acceptable to the Region. The laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Missing temperature blank
Issue 4: There were no temperature blanks in any of the coolers. A thermometer was inserted directly into the cooler, allowed to stabilize, and the temperature was then recorded. All coolers were received at 0°C.
Resolution 4: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Non-standard matrix
Issue 5: The laboratory is asking if they should decant or homogenize the sediment samples.
Resolution 5: Per Region 8, the laboratory shall decant the sediment samples. The laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Laboratory problems
Issue 6: Three of the 10 airbills were not removable. The laboratory took pictures of those labels and removed what parts of the label were possible.
Resolution 6: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Issue 7: The laboratory received 419 samples of the 500 that were scheduled and the shipping end date is tomorrow, 10/14/16. Please advise if this Case is complete.
Resolution 7: Per Region 8, shipping for this Case is complete. . The laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Please let me know if you have any questions. To waive any defect(s) associated with this issue, please contact your Regional CLP COR.

Thanks,

ALEXANDRA VANAMAN
Environmental Coordinator - Regions 1, 2, 7, and 8
CSRA, LLC
6361 Walker Lane, Alexandria, VA 22310
t: +1.703.461.2134 |Alexandra.Vanaman@csra.com
www.csra.com

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From: Goodrich, Donald [mailto:Goodrich.Donald@epa.gov]
Sent: Monday, October 17, 2016 9:06 AM
To: Vanaman, Alexandra <Alexandra.Vanaman@csra.com>
Cc: Walker, Scott <Walker.Scott@epa.gov>
Subject: RE: Region 08 | Case 46282 | Lab BON | Issue Multiple

Ali, resolve the issues as following:

Issue 1: The laboratory shall make note of the issue and continue with sample analysis.
Issue 2: The laboratory shall make note of the issue and continue with sample analysis.
Issue 3: The samples selected for QC are acceptable to the Region.
Issue 4: The laboratory shall make note of the issue and continue with sample analysis.
Issue 5: The laboratory shall decant the sediment samples.
Issue 6: The laboratory shall make note of the issue and continue with sample analysis.
Issue 7: The case is complete.

Thanks,
Don

Don Goodrich
US EPA Region 8
office: 303-312-6687
cell: 303-905-4024

From: Vanaman, Alexandra [mailto:Alexandra.Vanaman@csra.com]
Sent: Friday, October 14, 2016 8:50 AM
To: Goodrich, Donald <Goodrich.Donald@epa.gov>
Cc: Walker, Scott <Walker.Scott@epa.gov>
Subject: Region 08 | Case 46282 | Lab BON | Issue Multiple

Good morning,

BON is reporting the following issues regarding Case 46282. Please advise.

Discrepancies with tags, jars, and/or COC
Issue 1: There is no relinquished time on any of the 24 pages of the COC.

Issue 2: The COC lists the Case as 46382 in the instruction box; however, these samples are for Case 46282.

Insufficient/inappropriate designation of laboratory QC
Issue 3: The COC states "QC to be determined by lab." The laboratory has provided the list below of SDGs and the sample selected for QC.

SDG	QC
MH1F86	MH1F87
MH1G05	MH1G06
MH1G23	MH1G28
MH1G77	MH1G80
MH1G59	MH1G59
MH1H14	MH1H17
MH1G95	MH1G96
MH1H50	MH1H52
MH1H32	MH1H35
MH1H68	MH1H71
MH1H86	MH1H86

MH1J05	MH1J05
MH1J23	MH1J23
MH1J41	MH1J51
MH1J59	MH1J59
MH1J77	MH1J77
MH1J95	MH1J95
MH1K14	MH1K16
MH1K32	MH1K35
MH1K50	MH1K51
MH1K68	MH1K71
MH1K86	MH1K97
MH1L05	MH1L08

Missing temperature blank
Issue 4: There were no temperature blanks in any of the coolers. A thermometer was inserted directly into the cooler, allowed to stabilize, and the temperature was then recorded. All coolers were received at 0°C.

Non-standard matrix
Issue 5: The laboratory is asking if they should decant or homogenize the sediment samples.

Laboratory problems
Issue 6: Three of the 10 airbills were not removable. The laboratory took pictures of those labels and removed what parts of the label were possible.

Issue 7: The laboratory received 419 samples of the 500 that were scheduled and the shipping end date is tomorrow, 10/14/16. Please advise if this Case is complete.

Thanks,

ALEXANDRA VANAMAN
Environmental Coordinator - Regions 1, 2, 7, and 8
CSRA LLC
6361 Walker Lane, Alexandria, VA 22310
t: +1.703.461.2134 | Alexandra.Vanaman@csra.com
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From: Tricia Aiken [mailto:taiken@batco.com]
Sent: Thursday, October 13, 2016 4:44 PM
To: Vanaman, Alexandra <Alexandra.Vanaman@csra.com>
Cc: Max Bonner <maxbonner@batco.com>; Chris Bonner <cmbonner@batco.com>
Subject: Region 8 | Case 46282 | Sample Receipt

Alexandra;

On October 13, 2016 we received 419 soils in 10 coolers via FedEx air bills listed below

- 7774 5569 7187
- 7774 5569 6905
- 7774 5569 7132
- 7774 5569 7235
- 7774 5569 7740
- 7774 5569 7739
- 7774 5569 7522
- 7774 5569 7420
- 7774 5569 6548
- 7774 5569 7338

Custody seals were present and intact, Samples were in good condition except for the following discrepancies.

1. There is no relinquished time on any of the 24 pages of the TR/COC. Please advise.
2. There were no temp blanks in any of the cooler's a thermometer was inserted directly into the cooler, allowed to stabilize and the temp was then recorded; therefore the temp for all coolers was 0°C.
3. Please advise if the lab should decant or homogenize the sediment samples.
4. The TR/COC states "QC to be determined by lab" below is a list of SDG's and the sample selected for QC.

SDG	QC
MH1F86	MH1F87
MH1G05	MH1G06
MH1G23	MH1G28
MH1G77	MH1G80
MH1G59	MH1G59
MH1H14	MH1H17
MH1G95	MH1G96
MH1H50	MH1H52
MH1H32	MH1H35
MH1H68	MH1H71
MH1H86	MH1H86
MH1J05	MH1J05
MH1J23	MH1J23
MH1J41	MH1J51
MH1J59	MH1J59
MH1J77	MH1J77
MH1J95	MH1J95
MH1K14	MH1K16
MH1K32	MH1K35
MH1K50	MH1K51
MH1K68	MH1K71
MH1K86	MH1K97
MH1L05	MH1L08

5. 3 of the 10 air bills were not removable, the lab took pictures of those labels and removed what parts of the label were possible.
6. The TR/COC states Case# 46382 in the instruction box; however this is Case 46282.
7. The lab received 419 samples of the 500 that were scheduled, the shipping end date is tomorrow 10/14/16 please advise if this case is complete.

Thanks and have a blessed day;
Patricia Aiken
Bonner Analytical Testing
(601)264-2854

Tricia Aiken

From: Danganan, Eloise B <Eloise.Danganan@csra.com>
Sent: Monday, October 17, 2016 10:53 AM
To: Max Bonner; cmbonner@batco.com; ' (taiken@batco.com)'
Cc: goodrich.donald@epa.gov; Vanaman, Alexandra
Subject: REGION 8 | CASE 46282 | LAB BON | SOW ISM02.3 | CONTRACT EPW14029 | ISSUE DASS SUPPORT | FINAL

Good morning Max,

Regarding the lab's issue involving Case 46282, please see the Region's response below. In addition, as soon as the lab determines which samples will require an analysis change, please provide the information to SMO as soon as possible so that scheduling information may be updated accordingly.

ISSUE: The lab requests to move the following analytes from ICP-MS to ICP-AES due to elevated concentrations, As, Pb, Cu, Mn, & Zn. Bonner will keep the original MA prices for 1-4 and 11+.

REGION: what concentration levels are the labs finding for the metals in question? Is the lab seeing the elevated levels in all samples?

LAB: "All analytes are above the aes crql. If we identify a sample that's below CRQL we will analyze by icpms. In terms of concentrations all analytes we choosen to protect the icpms. For example, a large portion on the samples are over 10ppm for pb, zn &mn. They're actually high enough that we are having to do dilutions on the icp aes"

REGION: the Region approves reporting the metals in question from the ICP-AES as described below.

Thank you,

ELOISE DANGANAN
DASS Environmental Coordinator - Team Leader
CSRA Inc.
6361 Walker Lane, Alexandria, VA 22310
Office: 703-461-2019 | Eloise.Danganan@csra.com
www.csra.com

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LEAVE ALERT: Friday, October 14th

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From: Goodrich, Donald [mailto:Goodrich.Donald@epa.gov]
Sent: Monday, October 17, 2016 11:26 AM
To: Danganan, Eloise B <Eloise.Danganan@csra.com>
Subject: RE: REGION 8 | CASE 46282 | LAB BON | SOW ISM02.3 | CONTRACT EPW14029 | ISSUE DASS SUPPORT

Hi Eloise, the Region approves reporting the metals in question from the ICP-AES as described below.

Thanks,
Don

Don Goodrich
US EPA Region 8
office: 303-312-6687
cell: 303-905-4024

From: Danganan, Eloise B [mailto:Eloise.Danganan@csra.com]
Sent: Monday, October 17, 2016 9:16 AM
To: Goodrich, Donald <Goodrich.Donald@epa.gov>
Subject: REGION 8 | CASE 46282 | LAB BON | SOW ISM02.3 | CONTRACT EPW14029 | ISSUE DASS SUPPORT

Hi Don,

Regarding the issue involving Case 46282, the lab has provided the following additional information.

LAB: "All analytes are above the aes crql. If we identify a sample that's below CRQL we will analyze by icpms. In terms of concentrations all analytes we choosen to protect the icpms. For example, a large portion on the samples are over 10ppm for pb, zn &mn. They're actually high enough that we are having to do dilutions on the icp aes"

Thank you,

ELOISE DANGANAN
DASS Environmental Coordinator - Team Leader
CSRA Inc.
6361 Walker Lane, Alexandria, VA 22310
Office: 703-461-2019 | Eloise.Danganan@csra.com
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From: maxbonner@batco.com [mailto:maxbonner@batco.com]
Sent: Monday, October 17, 2016 11:14 AM
To: Danganan, Eloise B <Eloise.Danganan@csra.com>; ' (taiken@batco.com)' <taiken@batco.com>; 'Chris Bonner' <cmbonner@batco.com>
Cc: Brett Moody (moody.brett@epa.gov) <moody.brett@epa.gov>
Subject: Re: REGION 8 | CASE 46282 | LAB BON | SOW ISM02.3 | CONTRACT EPW14029 | ISSUE DASS SUPPORT

All analytes are above the aes crql. If we identify a sample that's below CRQL we will analyze by icpms. In terms of concentrations all analytes we choosen to protect the icpms. For example, a large portion on the

samples are over 10ppm for pb, zn &mn. They're actually high enough that we are having to do dilutions on the icp aes

Please give me a ring at the lab if you have any concerns.

Thanks,
Max

Maxwell S. Bonner, Ph.D., President
Bonner Analytical Testing Co.
2703 Oak Grove Rd.
Hattiesburg, MS 39402
(O) 601.264.2854
(C) 601.467.9172

sent from my droid

On Mon, Oct 17, 2016 at 10:07 AM -0500, "Danganan, Eloise B" <Eloise.Danganan@csra.com> wrote:

Hi Tricia,

Please see the Region's inquiry below requesting additional information in response to the lab's reported issue involving Case 46282.

REGION: what concentration levels are the labs finding for the metals in question? Is the lab seeing the elevated levels in all samples?

Please provide as much detailed information as possible.

Thank you,

ELOISE DANGANAN
DASS Environmental Coordinator - Team Leader
CSRA Inc.
6361 Walker Lane, Alexandria, VA 22310
Office: 703-461-2019 | Eloise.Danganan@csra.com
www.csra.com

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From: Goodrich, Donald [mailto:Goodrich.Donald@epa.gov]
Sent: Monday, October 17, 2016 11:04 AM

To: Danganan, Eloise B <Eloise.Danganan@csra.com>
Subject: RE: REGION 8 | CASE 46282 | LAB BON | SOW ISM02.3 | CONTRACT EPW14029 | ISSUE DASS SUPPORT

Eloise, what concentration levels are the labs finding for the metals in question? Is the lab seeing the elevated levels in all samples?
Thanks,
Don

Don Goodrich
US EPA Region 8
office: 303-312-6687
cell: 303-905-4024

From: Danganan, Eloise B [mailto:Eloise.Danganan@csra.com]
Sent: Monday, October 17, 2016 8:46 AM
To: Goodrich, Donald <Goodrich.Donald@epa.gov>
Subject: REGION 8 | CASE 46282 | LAB BON | SOW ISM02.3 | CONTRACT EPW14029 | ISSUE DASS SUPPORT

Good morning Don,

BON is reporting the following issue for Case 46282. Please advise.

LAB: The lab requests to move the following analytes from ICP-MS to ICP-AES due to elevated concentrations, As, Pb, Cu, Mn, & Zn. Bonner will keep the original MA prices for 1-4 and 11+.

Thank you,

ELOISE DANGANAN
DASS Environmental Coordinator - Team Leader
CSRA Inc.
6361 Walker Lane, Alexandria, VA 22310
Office: 703-461-2019 | Eloise.Danganan@csra.com
www.csra.com

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From: Jarosz, Margaret T
Sent: Monday, October 17, 2016 10:10 AM
To: DASSsupport <DASSsupport@csra.com>
Cc: Vanaman, Alexandra <Alexandra.Vanaman@csra.com>
Subject: FW: Region 8 | Case 46282 | Sample Receipt

From: Vanaman, Alexandra
Sent: Monday, October 17, 2016 9:49 AM
To: Baciocco, Kerrie <Kerrie.Baciocco@csra.com>; Jarosz, Margaret T <Margaret.Jarosz@csra.com>
Subject: FW: Region 8 | Case 46282 | Sample Receipt

From: Tricia Aiken [mailto:taiken@batco.com]
Sent: Monday, October 17, 2016 9:35 AM
To: Vanaman, Alexandra <Alexandra.Vanaman@csra.com>
Cc: Chris Bonner <cmbonner@batco.com>; Max Bonner <maxbonner@batco.com>; moody.brett@epa.gov
Subject: FW: Region 8 | Case 46282 | Sample Receipt

Alexandra;

The lab requests to move the following analytes from ICP-MS to ICP-AES due to elevated concentrations, As, Pb, Cu, Mn, & Zn. Bonner will keep the original MA prices for 1-4 and 11+.

By chance are there any resolutions from Thursday's email?

Thanks and have a blessed day;
Patricia Aiken
Bonner Analytical Testing
(601)264-2854

From: Tricia Aiken [mailto:taiken@batco.com]
Sent: Thursday, October 13, 2016 3:44 PM
To: Alexandra Vanaman (alexandra.vanaman@csra.com)
Cc: Max Bonner; Chris Bonner (cmbonner@batco.com)
Subject: Region 8 | Case 46282 | Sample Receipt

Alexandra;

On October 13, 2016 we received 419 soils in 10 coolers via FedEx air bills listed below

- 7774 5569 7187
- 7774 5569 6905
- 7774 5569 7132
- 7774 5569 7235
- 7774 5569 7740
- 7774 5569 7739
- 7774 5569 7522
- 7774 5569 7420
- 7774 5569 6548
- 7774 5569 7338

Custody seals were present and intact, Samples were in good condition except for the following discrepancies.

1. There is no relinquished time on any of the 24 pages of the TR/COC. Please advise.
2. There were no temp blanks in any of the cooler's a thermometer was inserted directly into the cooler, allowed to stabilize and the temp was then recorded; therefore the temp for all coolers was 0°C.
3. Please advise if the lab should decant or homogenize the sediment samples.
4. The TR/COC states "QC to be determined by lab" below is a list of SDG's and the sample selected for QC.

SDG	QC
MH1F86	MH1F87

MH1G05	MH1G06
MH1G23	MH1G28
MH1G77	MH1G80
MH1G59	MH1G59
MH1H14	MH1H17
MH1G95	MH1G96
MH1H50	MH1H52
MH1H32	MH1H35
MH1H68	MH1H71
MH1H86	MH1H86
MH1J05	MH1J05
MH1J23	MH1J23
MH1J41	MH1J51
MH1J59	MH1J59
MH1J77	MH1J77
MH1J95	MH1J95
MH1K14	MH1K16
MH1K32	MH1K35
MH1K50	MH1K51
MH1K68	MH1K71
MH1K86	MH1K97
MH1L05	MH1L08

5. 3 of the 10 air bills were not removable, the lab took pictures of those labels and removed what parts of the label were possible.
6. The TR/COC states Case# 46382 in the instruction box; however this is Case 46282.
7. The lab received 419 samples of the 500 that were scheduled, the shipping end date is tomorrow 10/14/16 please advise if this case is complete.

Thanks and have a blessed day;
Patricia Aiken
Bonner Analytical Testing
(601)264-2854

Tricia Aiken

From: Vanaman, Alexandra <Alexandra.Vanaman@csra.com>
Sent: Tuesday, October 18, 2016 3:25 PM
To: 'Chris Bonner'; 'Max Bonner'; Tricia Aiken
Cc: "Goodrich, Donald"
Subject: Region 08 | Case 46282 | Lab BON | Issue Discrepancies with tags, jars, and/or COC | FINAL

Good afternoon Tricia,

Issue: The COC received with the samples for Case 46282 does not list a station location.
Resolution: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.

Please let me know if you have any questions. To waive any defect(s) associated with this issue, please contact your Regional CLP COR.

Thanks,

ALEXANDRA VANAMAN
Environmental Coordinator - Regions 1, 2, 7, and 8
CSRA, LLC
6361 Walker Lane, Alexandria, VA 22310
t: +1.703.461.2134 | Alexandra.Vanaman@csra.com
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From: Goodrich, Donald [mailto:Goodrich.Donald@epa.gov]
Sent: Tuesday, October 18, 2016 4:20 PM
To: Vanaman, Alexandra <Alexandra.Vanaman@csra.com>
Cc: Walker, Scott <Walker.Scott@epa.gov>
Subject: RE: Region 08 | Case 46282 | Lab BON | Issue Discrepancies with tags, jars, and/or COC

Hi Ali, have the laboratory note the issue and continue with samples analysis.

Thanks,
Don

Don Goodrich
US EPA Region 8
office: 303-312-6687

cell: 303-905-4024

From: Vanaman, Alexandra [mailto:Alexandra.Vanaman@csra.com]
Sent: Tuesday, October 18, 2016 2:18 PM
To: Goodrich, Donald <Goodrich.Donald@epa.gov>
Cc: Walker, Scott <Walker.Scott@epa.gov>
Subject: Region 08 | Case 46282 | Lab BON | Issue Discrepancies with tags, jars, and/or COC

Good afternoon,

The following issue was noted during the SDG coversheet review process. Please advise.

Issue: The COC received with the samples for Case 46282 does not list a station location.

Thanks,

ALEXANDRA VANAMAN
Environmental Coordinator - Regions 1, 2, 7, and 8
CSRA, LLC
6361 Walker Lane, Alexandria, VA 22310
t: +1.703.461.2134 | Alexandra.Vanaman@csra.com
www.csra.com

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Bonner Analytical Testing Company

Corrective Action

Topic: MH1450 (46252) Date: 10/18/16

Nature of Problem: 1) 463 over LR for Fe
2) MS failed for Cu & Mn

Action Requested:

1 New Sample Requested: YES (NO)

2 Retest or Reanalysis Necessary: (YES) NO

3 Other Action: —

Submitter

Signature: [signature] Date: 10/18/16

Corrective Action Taken: 1) Dilution @ 2X
2) DS @ 2X parent

Was the problem resolved: (YES) NO

Responder

Signature: [signature] Date: 10/26/16

Bonner Analytical Testing Company

Corrective Action

8865

Topic: MH1H50 46202 Date: 10/25/16

Nature of Problem:
1. MH1H61 OUTSIDE RANGE FOR TD, HD
2. MS FAILED FOR Sb & MD
3. PARENT SAMPLE WAS REDIGESTED DUE TO QC FAILURE

Action Requested:

1 New Sample Requested: YES (NO)

2 Retest or Reanalysis Necessary: (YES) NO

3 Other Action:

Submitter

Signature: [signature] Date: 10/25/16

Corrective Action Taken:
1. Sb, Ba, Cd, Co, Ni, Mo, Tl, Ag REPORTED FROM 1x
2. PS1 FOR Sb @ 2x 4 ug/L
PS2 FOR Mo @ 2x CRQL
3. PARENT SAMPLE REDIGESTED ON 10/24 DUE TO INITIAL QC FAILURE; with QC

Was the problem resolved: (YES) NO

Responder

Signature: [signature] Date: 10/26/16