SDG COVER PAGE

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 SOW No.: ISM02.4 SDG No.: MF9L61

MA No.(s):

EPA Sample No.	Lab Sample ID	Analysis Method ICP-AES	ICP-MS	Mercury	Cyanide
MF9L61	1914095001	X	X	X	X
MF9L62	1914424001	X	X	X	X
MF9L63	1914424002	X	X	X	X
MF9L64	1914424003	X	X	X	X
MF9L65	1914424004	X	X	X	X
MF9L66	1914424005	X	X	X	X
MF9L67	1914424006	X	X	X	X
MF9L69	1914095002	X	X	X	X
MF9L70	1914095003	X	X	X	X
MF9L71	1914424007	X	X	X	X
MF9L72	1914424008	X	X	X	X
MF9L73	1914424009	X	X	X	X
MF9L74	1914095004	X	X	X	X
MF9L75	1914095005	X	X	X	X
MF9L76	1914095006	X	X	X	X
MF9L77	1914095007	X	X	X	X
MF9L78	1914095008	X	X	X	X
MF9L79	1914095009	X	X	X	X
MF9L79D	1914095011	X	X	X	X
MF9L79S	1914095010	X	X	X	X
MF9M24	1914095012	X	X	X	X
MF9M33	1914424010	X	X	X	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: /S/ Roxanne Olson Name: Roxanne Olson

Date: 06/06/2019 Title: Project Manager

(/S/ is an electronic signature that complies with 21 CFR Part 11)

9989223

1914095

USEPA CLP COC (LAB COPY)

DateShipped: 5/14/2019
CarrierName: FedEx
AirbillNo: 7752 0180 4338

CHAIN OF CUSTODY RECORD MF9L61

Case #: 48266
Cooler #:

No: 6-051419-115042-0009

Lab: ALS Laboratory Group - Salt Lake City
Lab Contact: Meredith Edwards
Lab Phone: 801-266-7700

EPA 14027

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
LSED-2-0.0-0.5	MF9L61	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	223 (Ice to 6C) (1)	LSED-2-0.0-0.5	05/14/2019 16:10	
LSED-10-0.0-0.5	MF9L69	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	239 (Ice to 6C) (1)	LSED-10-0.0-0.5	05/14/2019 15:15	
LSED-11-0.0-0.5	MF9L70	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	241 (Ice to 6C) (1)	LSED-11-0.0-0.5	05/14/2019 14:35	
LSED-15-0.0-0.5	MF9L74	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	249 (Ice to 6C) (1)	LSED-15-0.0-0.5	05/14/2019 13:40	
LSED-16-0.0-0.5	MF9L75	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	251 (Ice to 6C) (1)	LSED-16-0.0-0.5	05/14/2019 12:20	
LSED-17-0.0-0.5	MF9L76	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	253 (Ice to 6C) (1)	LSED-17-0.0-0.5	05/13/2019 16:45	
LSED-18-0.0-0.5	MF9L77	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	255 (Ice to 6C) (1)	LSED-18-0.0-0.5	05/13/2019 16:05	
LSED-19-0.0-0.5	MF9L78	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	257 (Ice to 6C) (1)	LSED-19-0.0-0.5	05/13/2019 14:40	
LSED-20-0.0-0.5	MF9L79	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	259 (Ice to 6C) (1)	LSED-20-0.0-0.5	05/13/2019 13:00	
LSED-16-0.0-0.5-D	MF9M24	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	502 (Ice to 6C) (1)	LSED-16-0.0-0.5-D	05/14/2019 12:20	

Sample(s) to be used for Lab QC: LSED-20-0.0-0.5 Tag 259 - Special Instructions: Case: 48266 - ICP-AES 5-10 Metals: Al, Ca, Fe, K, Mg, Mn, Na ICP-MS 11+ Metals: Ag, As, Ba, Be, Cd, Co, Cr, Cu, Ni, Pb, Sb, Se, Tl, V, Zn + Mercury + Cyanide	**Shipment for Case Complete? N** **Samples Transferred From Chain of Custody #**
Analysis Key: ICPAES+MS+Hg+CN=ICPAES+MS+Hg+CN(ISM02.4)	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
		5/14/19 2000	FedEx (courier)	5/14/19 2000	
	FedEx	5/15/2019 951		5/15/2019 951	good

1914424

USEPA CLP COC (LAB COPY)

DateShipped: 5/17/2019
CarrierName: FedEx
AirbillNo: 7752 4387 7936

CHAIN OF CUSTODY RECORD MF9L61

Case #: 48266
Cooler #:

No: 6-051619-085628-0031

Lab: ALS Laboratory Group - Salt Lake City
Lab Contact: Meredith Edwards
Lab Phone: 801-266-7700

EFW14027

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
LSED-3-0.0-0.5	MF9L62	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	225 (Ice to 6C) (1)	LSED-3-0.0-0.5	05/16/2019 10:30	
LSED-4-0.0-0.5	MF9L63	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	227 (Ice to 6C) (1)	LSED-4-0.0-0.5	05/16/2019 16:50	
LSED-5-0.0-0.5	MF9L64	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	229 (Ice to 6C) (1)	LSED-5-0.0-0.5	05/16/2019 15:50	
LSED-6-0.0-0.5	MF9L65	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	231 (Ice to 6C) (1)	LSED-6-0.0-0.5	05/16/2019 14:25	
LSED-7-0.0-0.5	MF9L66	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	233 (Ice to 6C) (1)	LSED-7-0.0-0.5	05/16/2019 15:05	
LSED-8-0.0-0.5	MF9L67	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	235 (Ice to 6C) (1)	LSED-8-0.0-0.5	05/16/2019 13:35	
LSED-12-0.0-0.5	MF9L71	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	243 (Ice to 6C) (1)	LSED-12-0.0-0.5	05/17/2019 10:35	
LSED-13-0.0-0.5	MF9L72	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	245 (Ice to 6C) (1)	LSED-13-0.0-0.5	05/17/2019 11:55	
LSED-14-0.0-0.5	MF9L73	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	247 (Ice to 6C) (1)	LSED-14-0.0-0.5	05/17/2019 12:35	
LSED-3-0.0-0.5-D	MF9M33	Sediment/ Brian Taylor	Grab	ICPAES+MS+Hg+CN(21)	581 (Ice to 6C) (1)	LSED-3-0.0-0.5-D	05/16/2019 10:30	

Sample(s) to be used for Lab QC: LSED-13-0.0-0.5 Tag 245, LSED-14-0.0-0.5 Tag 247 - Special Instructions: Case: 48266 - ICP-AES 5-10 Metals: Al, Ca, Fe, K, Mg, Mn, Na ICP-MS 11+ Metals: Ag, As, Ba, Be, Cd, Co, Cr, Cu, Ni, Pb, Sb, Se, Tl, V, Zn + Mercury + Cyanide	**Shipment for Case Complete? Y** **Samples Transferred From Chain of Custody #**
Analysis Key: ICPAES+MS+Hg+CN=ICPAES+MS+Hg+CN(ISM02.4)	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Carson Bright EA	5/17/19 2000	FedEx (courier)	5/17/19 2000	
	FedEx	5/18/2019 851	Meredith Edwards ALS	5/18/2019 851	good

25000

FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name: ALS Environmental

Page 1 of 1

Received By (Print Name): Meredith Edwards

Log-In Date: 5/15/2019

Received By (Signature): Meredith Edwards

Case Number: 48266

SDG No.: MF9L96

MA No.: n/a

Remarks:

1. Custody Seal (s) — Present/Absent* / Intact/Broken*
2. Custody Seal Nos. — n/a / 1
3. Traffic Report/ Chain-of Custody Records or Packing Lists — Present/Absent*
4. Airbill — Airbill/Sticker Present/Absent*
5. Airbill No. — 775201804738 / n/a
6. Sample Tags — Present/Absent* / Sample Tag Numbers — Listed/Not Listed on Chain-of-Custody
7. Sample Condition — Intact/Broken*/Leaking*
8. Shipping Container Temperature Indicator Bottle — Present/Absent*
9. Shipping Container Temperature — 2°
10. Does information on TR/CoCs and sample tags agree? — Yes/No*
11. Date Received at Laboratory — 5/15/2019
12. Time Received — 951

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MF9L61	n/a	n/a	191495001	MS/MSD/Hybrid Soil
2	69			02	
3	70			03	
4	74			04	
5	75			05	
6	76			06	
7	77			07	
8	78			08	
9	79			09,010,011	MS/MSD
10	MF9M24			012	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

* Contact SMO and attach record of resolution

Reviewed By: Roberta Allsa

Date: 5/16/19

Logbook No.: Not Applicable

Logbook Page No.: Not Applicable

ISM02.4 (10/2016)

FORM DC-1
SAMPLE LOG-IN SHEET

Lab Name ALS Environmental		Page 1 of 1	
Received By (Print Name) Meredith Edwards		Log-In Date 5/18/2019	
Received By (Signature) Meredith Edwards			
Case Number 48266	SDG No. MF9L61	MA No. n/a	

Remarks:

			EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1. Custody Seal (s)	Present/Absent* Intact/Broken*	1	MF9L62	n/a	n/a	1914424 001	tm AES/MS/Hg/CN 601
		2	63			002	
2. Custody Seal Nos.	n/a	3	64			003	
		4	65			004	
3. Traffic Report/ Chain-of Custody Records or Packing Lists	Present/Absent*	5	66			005	
		6	67			006	
4. Airbill	Airbill/Sticker Present/Absent*	7	71			007	
5. Airbill No.	7752 4387 7936	8	72			008	
	n/a	9	73			009	
6. Sample Tags	Present/Absent*	10	MF9M33			010	
Sample Tag Numbers	Listed/Not Listed on Chain-of-Custody	11					
7. Sample Condition	Intact/Broken*/Leaking*	12					
8. Shipping Container Temperature Indicator Bottle	Present/Absent*	13					
9. Shipping Container Temperature	3°	14					
10. Does information on TR/CoCs and sample tags agree?	Yes/No*	15					
11. Date Received at Laboratory	5/18/2019	16					
12. Time Received	851	17					
		18					
		19					
		20					
		21					
		22					

MF 5/18

* Contact SMO and attach record of resolution

Reviewed By Roxanne Olsa		Logbook No. Not Applicable	
Date 5/18/19		Logbook Page No. Not Applicable	

ISM02.4 (10/2016)

FORM DC-2

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LAB NAME	ALS Environmental		
LAB CODE	ALS		
CONTRACT NO.	EPW14027		
CASE NO.	48266	SDG NO.	MF9L61
MA No.	N/A		
SOW NO.	ISM02.4		

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	1	✓	
2.	Traffic Report/Chain of Custody Record(s)	2	3	✓	
3.	Sample Log-In Sheet (DC-1)	4	5	✓	
4.	CSF Inventory Sheet (DC-2)	6	8	✓	
5.	SDG Narrative	9	11	✓	
Inorganic Analysis					
ICP-AES					
6.	Inorganic Analysis Data Sheet (Form 1-IN)	12	31	✓	
7.	Initial and Continuing Calibration Verification (Form 2-IN)	32	33	✓	
8.	Blanks (Form 3-IN)	34	36	✓	
9.	ICP Interference Check Sample(Form 4-IN)	37	38	✓	
10.	Matrix Spike Sample Recovery(Form 5-IN)	39	39	✓	
11.	Post-Digestion/Distillation Spike Sample Recovery(Form 5B-IN)	NA 40	NA	✓	
12.	Duplicates (Form 6-IN)	40	40	✓	
13.	Laboratory Control Sample(Form 7-IN)	41	42	✓	
14.	ICP-AES and ICP-MS Serial Dilutions(Form 8-IN)	43	43	✓	
15.	Method Detection Limit(Form 9-IN)	44	44	✓	
16.	ICP-AES Interelement Correction Factors (Form 10A-IN)	45	45	✓	
17.	ICP-AES Interelement Correction Factors (Form 10B-IN)	46	48	✓	
18.	Analysis Log (Form 12-IN)	49	52	✓	
19.	Initial Calibration (Form 15-IN)	53	58	✓	
20.	Initial Calibration Summary (Form 16-IN)	59	60	✓	
21.	ICP-AES Raw Data	61	256	✓	
22.	ICP-AES Preparation Log Books, Preparation Records, Analysis Records, and PE Instructions	257	310	✓	

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

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK REGION
ICP-MS				
23. Inorganic Analysis Data Sheet (Form 1-IN)	311	330	✓	
24. Initial and Continuing Calibration Verification (Form 2-IN)	331	332	✓	
25. Blanks (Form 3-IN)	333	333	✓	
26. ICP Interference Check Sample(Form 4-IN)	334	334	✓	
27. Matrix Spike Sample Recovery(Form 5A-IN)	335	335	✓	
28. Post-Digestion/Distillation Spike Sample Recovery (Form 5B-IN)	336	336	✓	
29. Duplicates (Form 6-IN)	337	337	✓	
30. Laboratory Control Sample(Form 7-IN)	338	338	✓	
31. ICP-AES and ICP-MS Serial Dilutions(Form 8-IN)	339	339	✓	
32. Method Detection Limit(Form 9-IN)	346	340	✓	
33. ICP-MS Internal Standard Association (Form 11-IN)	341	341	✓	
34. Analysis Log (Form 12-IN)	342	343	✓	
35. ICP-MS Tune (Form 13-N)	344	344	✓	
36. ICP-MS Internal Standards Relative Intensity Summary (Form 14-IN)	345	348	✓	
37. Initial Calibration (Form 15-IN)	349	351	✓	
38. Initial Calibration Summary (Form 16-IN)	352	352	✓	
39. ICP-MS Raw Data	353	502	✓	
40. ICP-MS Preparation Log Books, Preparation Records, Analysis Records, and PE Instructions	503	546	✓	
Mercury				
41. Inorganic Analysis Data Sheet (Form 1-IN)	547	566	✓	
42. Initial and Continuing Calibration Verification (Form 2-IN)	567	567	✓	
43. Blanks (Form 3-IN)	568	568	✓	
44. Matrix Spike Sample Recovery(Form 5A-IN)	569	569	✓	
45. Duplicates (Form 6-IN)	570	570	✓	
46. Method Detection Limit(Form 9-IN)	571	571	✓	
47. Analysis Log (Form 12-IN)	572	573	✓	
48. Initial Calibration (Form 15-IN)	574	575	✓	
49. Initial Calibration Summary (Form 16-IN)	576	576	✓	
50. Mercury Raw Data	577	581	✓	
51. Mercury Preparation Log Books, Preparation Records, Analysis Records, and PE Instructions	582	598	✓	

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

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK REGION
Cyanide				
52. Inorganic Analysis Data Sheet (Form 1-IN)	599	617	✓	
53. Initial and Continuing Calibration Verification (Form 2-IN)	618	620	✓	
54. Blanks (Form 3-IN)	621	623	✓	
55. Matrix Spike Sample Recovery(Form 5A-IN)	624	624	✓	
56. Post-Digestion/Distillation Spike Sample Recovery (Form 5B-IN)	625	625	✓	
57. Duplicates (Form 6-IN)	626	626	✓	
58. Method Detection Limit(Form 9-IN)	627	627	✓	
59. Analysis Log (Form 12-IN)	628	630	✓	
60. Initial Calibration (Form 15-IN)	631	636	✓	
61. Initial Calibration Summary (Form 16-IN)	637	638	✓	
62. Cyanide Raw Data	639	644	✓	
63. Cyanide Preparation Log Books, Preparation Records, Analysis Records, and PE Instructions	645	667	✓	
Additional				
64. Percent Solids Determination Log	668	671	✓	
65. EPA Shipping/Receiving Documents				
Airbill (No. of Shipments 2)	672	673	✓	
Sample Tags	674	674	✓	
Sample Log-In Sheet (Lab)	NA	NA	✓	
66. Misc. Shipping/Receiving Records (list all individual records)				
Communication Logs	675	676	✓	
ALS SDG TR Cover Sheet			✓	
			✓	
67. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)				
ALS CoC	677	693	✓	
68. Other Records (describe or list)				
Communication Logs	NA	NA	✓	
E-mail Communications	↓	↓	✓	
	↓	↓		

69. Comments: _____

Completed by:
(CLP Lab) Julie Warath — Julie Warath(Document Control) — 06/07/2019
(Signature) (Print Name & Title) (Date)

Completed by:
(USEPA) _____ _____ _____
(Signature) (Print Name & Title) (Date)

960 W. LeVoy Drive
Salt Lake City, UT 84123
T: +1 801 266 7700
F: +1 801 268 9992
www.alsglobal.com

SDG Administrative Narrative

Contract: EPW14027

Case: 48266

SDG: MF9L61

WO No(s): 1914095, 1914424

Cooler # and Temperatures of each (upon receipt)

Cooler Number	N/A	Arrival temperature was	2	°C
Cooler Number	1	Arrival temperature was	3	°C
Cooler Number		Arrival temperature was		°C
Cooler Number		Arrival temperature was		°C
Cooler Number		Arrival temperature was		°C
Cooler Number	06/07/2019	Arrival temperature was		°C
Cooler Number		Arrival temperature was		°C
Cooler Number		Arrival temperature was		°C

Communications:

The sample receipt for this Case/SDG is compliant with EPA CLP SOW requirements.

Comments:

None

Signature: _____ Date: 06/07/2019

Document Control Officer

SDG Narrative

Case:	48266	Contract #:	EPW14027
SDG:	MF9L61	EPA Lab ID:	ALS

General Information: The twenty samples in this SDG were analyzed by methodologies contained in ISM02.4. All concentration, analytical, and method qualifiers are defined in the SOW.

Target Analytes: Target analytes for this SDG are aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, cyanide, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium and zinc.

Holding Times: All samples were prepared and analyzed within method required holding times.

Initial and Continuing Calibration: All initial and continuing calibration verification and blank analyses were performed within the designated frequency and recoveries of the verifications and concentrations of the blanks met method acceptance criteria.

Interference Check Sample Analysis: Results for the interference check samples met method acceptance criteria.

Preparation Blanks: The absolute values of all analyte concentrations in the preparation blanks were lower than the Contract Required Quantitation Limits.

Laboratory Control Sample Analysis: Results for the analysis of the LCSs met method criteria.

Matrix Spike Analysis: All matrix spike recoveries met method acceptance criteria, with the exceptions of antimony and cyanide.

Matrix Duplicate Analysis: All matrix duplicate results met method criteria.

Serial Dilution: All serial dilution results met method acceptance criteria with the exceptions of copper, nickel and zinc.

Miscellaneous Comments: All calibration data is linear, please see raw data. ICP-AES raw data was generated with IEC and background corrections. No background corrections were used for ICP-MS.

Samples MF9L63 and MF9L71 were diluted 5x for Ca. Sample MF9L61 was diluted 4x for Ca. Samples MF9L74, MF9L75, MF9L77, MF9L79, MF9L79D, MF9L79L, MF9L72, MF9M33 and MF9L66 were diluted 3x for Ca. Samples MF9L69, MF9L70, MF9L76, MF9L78, MF9M24, MF9L62, MF9L65, MF9L67 and MF9L73 were diluted 2x for Ca.
Issue: Samples MF9L67 and MF9L71 had high %RSDs on the analysis for ICP-AES. They were reanalyzed and the %RSDs were fine.
Issue: Sample MF9L66 has less than 30% solids requiring additional weight for all sample preps.

Example Equations:

Method 3050B: $C \times \frac{Vf}{W \times S} \times DF \div 1000 = Concentration\,(mg/Kg)$

3050B Example: $2254\mu g/L \times \frac{100mL}{1.01g \times 1} \times 1 \div 1000 = 223\ mg/Kg$

Method 200.8: $C \times \frac{Vf}{W \times S} \times DF \div 1000 = Concentration\,(mg/Kg)$

200.8 Example: $0.1999\mu g/L \times \frac{500mL}{1.04g \times 1} \times 1 \div 1000 = 0.096\ mg/Kg$

Method 7471B: $C \times \frac{1}{W \times S} \times DF \times 0.1 = Concentration\,(mg/Kg)$

7471B Example: $8.7830\mu g/L \times \frac{1}{0.56g \times 1} \times 1 \times 0.1 = 1.6\ mg/Kg$

Method Micro-distillation_Soil: $C \times \frac{Vf}{W \times S} \times (1/1000) \times DF = Concentration\,(mg/Kg)$

Micro-distillation_Soil Example: $10\mu g/L \times \frac{6mL}{0.5g \times 1} \times (1/1000) \times 1 = 0.12\,mg/Kg$

Where,
C = Instrument value in µg/L (The average of all replicate integrations).
Vf = Final digestion volume (mL)
W = Initial digestion Weight (g)
DF = Dilution Factor
S = % Solids/100

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L61

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095001

% Solids: 59.7 Date Received: 05/15/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	10400		06/05/2019	14:46
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	160000	D	06/06/2019	08:59
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	12800		06/05/2019	14:46
7439-92-1	Lead				
7439-95-4	Magnesium	2780		06/05/2019	14:46
7439-96-5	Manganese	736		06/05/2019	14:46
7440-02-0	Nickel				
7440-09-7	Potassium	1470		06/05/2019	14:46
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	167	J	06/05/2019	14:46
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L62

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424001

% Solids: 51.7 Date Received: 05/18/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	12000		06/05/2019	15:27
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	131000	D	06/06/2019	09:37
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	12700		06/05/2019	15:27
7439-92-1	Lead				
7439-95-4	Magnesium	2420		06/05/2019	15:27
7439-96-5	Manganese	611		06/05/2019	15:27
7440-02-0	Nickel				
7440-09-7	Potassium	1530		06/05/2019	15:27
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	119	J	06/05/2019	15:27
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L63

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424002

% Solids: 70.8 Date Received: 05/18/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	4520		06/05/2019	15:30
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	175000	D	06/06/2019	09:40
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	15500		06/05/2019	15:30
7439-92-1	Lead				
7439-95-4	Magnesium	23900		06/05/2019	15:30
7439-96-5	Manganese	645		06/05/2019	15:30
7440-02-0	Nickel				
7440-09-7	Potassium	686		06/05/2019	15:30
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	164	J	06/05/2019	15:30
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L64

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424003

% Solids: 39.8 Date Received: 05/18/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7980		06/05/2019	15:33
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	105000		06/05/2019	15:33
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	9230		06/05/2019	15:33
7439-92-1	Lead				
7439-95-4	Magnesium	1960		06/05/2019	15:33
7439-96-5	Manganese	438		06/05/2019	15:33
7440-02-0	Nickel				
7440-09-7	Potassium	1250		06/05/2019	15:33
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	166	J	06/05/2019	15:33
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L65

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424004

% Solids: 46.4 Date Received: 05/18/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	13700		06/05/2019	15:36
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	184000	D	06/06/2019	09:43
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	13200		06/05/2019	15:36
7439-92-1	Lead				
7439-95-4	Magnesium	2990		06/05/2019	15:36
7439-96-5	Manganese	653		06/05/2019	15:36
7440-02-0	Nickel				
7440-09-7	Potassium	2060		06/05/2019	15:36
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	99.7	J	06/05/2019	15:36
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L66

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424005

% Solids: 24.1 Date Received: 05/18/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7980		06/05/2019	16:01
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	108000	D	06/06/2019	10:03
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	9590		06/05/2019	16:01
7439-92-1	Lead				
7439-95-4	Magnesium	2030		06/05/2019	16:01
7439-96-5	Manganese	787		06/05/2019	16:01
7440-02-0	Nickel				
7440-09-7	Potassium	1560		06/05/2019	16:01
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	159	J	06/05/2019	16:01
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L67

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424006

% Solids: 40.3 Date Received: 05/18/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	12300		06/06/2019	10:06
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	140000	D	06/06/2019	09:47
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	12500		06/06/2019	10:06
7439-92-1	Lead				
7439-95-4	Magnesium	2680		06/06/2019	10:06
7439-96-5	Manganese	611		06/06/2019	10:06
7440-02-0	Nickel				
7440-09-7	Potassium	2270		06/06/2019	10:06
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	91.7	J	06/06/2019	10:06
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L69

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095002

% Solids: 54.0 Date Received: 05/15/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	12300		06/05/2019	14:49
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	143000	D	06/06/2019	09:02
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	12500		06/05/2019	14:49
7439-92-1	Lead				
7439-95-4	Magnesium	2490		06/05/2019	14:49
7439-96-5	Manganese	505		06/05/2019	14:49
7440-02-0	Nickel				
7440-09-7	Potassium	1650		06/05/2019	14:49
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	152	J	06/05/2019	14:49
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L70

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095003

% Solids: 51.0 Date Received: 05/15/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	8300		06/05/2019	14:52
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	119000	D	06/06/2019	09:05
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	10600		06/05/2019	14:52
7439-92-1	Lead				
7439-95-4	Magnesium	2030		06/05/2019	14:52
7439-96-5	Manganese	487		06/05/2019	14:52
7440-02-0	Nickel				
7440-09-7	Potassium	1240		06/05/2019	14:52
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	130	J	06/05/2019	14:52
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L71

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424007

% Solids: 62.5 Date Received: 05/18/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7370		06/06/2019	10:09
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	225000	D	06/06/2019	09:50
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	15400		06/06/2019	10:09
7439-92-1	Lead				
7439-95-4	Magnesium	2760		06/06/2019	10:09
7439-96-5	Manganese	746		06/06/2019	10:09
7440-02-0	Nickel				
7440-09-7	Potassium	958		06/06/2019	10:09
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	241	J	06/06/2019	10:09
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L72

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424008

% Solids: 65.1 Date Received: 05/18/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7340		06/05/2019	15:46
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	168000	D	06/06/2019	09:53
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	11400		06/05/2019	15:46
7439-92-1	Lead				
7439-95-4	Magnesium	2580		06/05/2019	15:46
7439-96-5	Manganese	515		06/05/2019	15:46
7440-02-0	Nickel				
7440-09-7	Potassium	975		06/05/2019	15:46
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	162	J	06/05/2019	15:46
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L73

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424009

% Solids: 55.6 Date Received: 05/18/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	7240		06/05/2019	15:49
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	111000	D	06/06/2019	09:56
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	9230		06/05/2019	15:49
7439-92-1	Lead				
7439-95-4	Magnesium	2010		06/05/2019	15:49
7439-96-5	Manganese	377		06/05/2019	15:49
7440-02-0	Nickel				
7440-09-7	Potassium	972		06/05/2019	15:49
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	126	J	06/05/2019	15:49
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L74

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095004

% Solids: 58.5 Date Received: 05/15/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	10300		06/05/2019	14:55
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	198000	D	06/06/2019	09:08
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	13700		06/05/2019	14:55
7439-92-1	Lead				
7439-95-4	Magnesium	2450		06/05/2019	14:55
7439-96-5	Manganese	790		06/05/2019	14:55
7440-02-0	Nickel				
7440-09-7	Potassium	1440		06/05/2019	14:55
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	194	J	06/05/2019	14:55
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L75

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095005

% Solids: 52.9 Date Received: 05/15/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	11900		06/05/2019	14:58
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	169000	D	06/06/2019	09:12
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	12400		06/05/2019	14:58
7439-92-1	Lead				
7439-95-4	Magnesium	2630		06/05/2019	14:58
7439-96-5	Manganese	488		06/05/2019	14:58
7440-02-0	Nickel				
7440-09-7	Potassium	1690		06/05/2019	14:58
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	191	J	06/05/2019	14:58
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L76

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095006

% Solids: 39.6 Date Received: 05/15/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	11900		06/05/2019	15:02
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	169000	D	06/06/2019	09:15
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	13700		06/05/2019	15:02
7439-92-1	Lead				
7439-95-4	Magnesium	2720		06/05/2019	15:02
7439-96-5	Manganese	636		06/05/2019	15:02
7440-02-0	Nickel				
7440-09-7	Potassium	1730		06/05/2019	15:02
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	178	J	06/05/2019	15:02
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L77

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095007

% Solids: 52.3 Date Received: 05/15/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	10500		06/05/2019	15:05
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	168000	D	06/06/2019	09:18
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	13600		06/05/2019	15:05
7439-92-1	Lead				
7439-95-4	Magnesium	2390		06/05/2019	15:05
7439-96-5	Manganese	751		06/05/2019	15:05
7440-02-0	Nickel				
7440-09-7	Potassium	1510		06/05/2019	15:05
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	176	J	06/05/2019	15:05
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

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EPA SAMPLE NO.
MF9L78

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095008

% Solids: 43.8 Date Received: 05/15/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	10900		06/05/2019	15:08
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	119000	D	06/06/2019	09:21
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	12300		06/05/2019	15:08
7439-92-1	Lead				
7439-95-4	Magnesium	2400		06/05/2019	15:08
7439-96-5	Manganese	722		06/05/2019	15:08
7440-02-0	Nickel				
7440-09-7	Potassium	1580		06/05/2019	15:08
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	132	J	06/05/2019	15:08
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L79

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095009

% Solids: 52.8 Date Received: 05/15/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	14400		06/05/2019	15:11
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	150000	D	06/06/2019	09:24
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	15400		06/05/2019	15:11
7439-92-1	Lead				
7439-95-4	Magnesium	2900		06/05/2019	15:11
7439-96-5	Manganese	786		06/05/2019	15:11
7440-02-0	Nickel				
7440-09-7	Potassium	1950		06/05/2019	15:11
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	166	J	06/05/2019	15:11
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9M24

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095012

% Solids: 53.5 Date Received: 05/15/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	10400		06/05/2019	15:24
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	149000	D	06/06/2019	09:34
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	11100		06/05/2019	15:24
7439-92-1	Lead				
7439-95-4	Magnesium	2300		06/05/2019	15:24
7439-96-5	Manganese	427		06/05/2019	15:24
7440-02-0	Nickel				
7440-09-7	Potassium	1460		06/05/2019	15:24
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	158	J	06/05/2019	15:24
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9M33

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424010

% Solids: 49.3 Date Received: 05/18/2019

Analytical Method: ICP-AES

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum	18100		06/05/2019	15:52
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	147000	D	06/06/2019	09:59
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	16300		06/05/2019	15:52
7439-92-1	Lead				
7439-95-4	Magnesium	3370		06/05/2019	15:52
7439-96-5	Manganese	670		06/05/2019	15:52
7440-02-0	Nickel				
7440-09-7	Potassium	2210		06/05/2019	15:52
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	138	J	06/05/2019	15:52
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				

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

Comments:

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Initial Calibration Verification Source: EPA ICV-1 (0307)

Continuing Calibration Verification Source: 47892

Run Batch: K19119 Analytical Method: ICP-AES

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV				ID: CCV1				ID: CCV2		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Aluminum	2521	2470	98	2	250000	247000	99	1	239000	96	4
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium	10026	10300	103	1	250000	257000	103	1	254000	102	3
Chromium											
Cobalt											
Copper											
Iron	5082	5410	106	1	250000	255000	102	1	248000	99	3
Lead											
Magnesium	6074	5820	96	0	250000	250000	100	1	245000	98	3
Manganese	499	529	106	1	25000	24800	99	1	24300	97	3
Nickel											
Potassium	10021	9790	98	0	250000	250000	100	1	244000	98	3
Selenium											
Silver											
Sodium	10097	10000	99	1	250000	252000	101	2	251000	100	1
Thallium											
Vanadium											
Zinc											

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Initial Calibration Verification Source: EPA ICV-1 (0307)

Continuing Calibration Verification Source: 47892

Run Batch: K19120 Analytical Method: ICP-AES

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV				ID: CCV3				ID: CCV4		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Aluminum	2521	2410	96	2	250000	242000	97	1	249000	100	0
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium	10026	10100	101	0	250000	246000	98	1	259000	104	1
Chromium											
Cobalt											
Copper											
Iron	5082	5340	105	0	250000	246000	99	1	255000	102	0
Lead											
Magnesium	6074	5720	94	1	250000	241000	96	0	249000	99	0
Manganese	499	512	103	0	25000	23600	94	0	24300	97	0
Nickel											
Potassium	10021	9720	97	0	250000	247000	99	0	255000	102	1
Selenium											
Silver											
Sodium	10097	9930	98	0	250000	248000	99	0	258000	103	1
Thallium											
Vanadium											
Zinc											

FORM 3-IN
BLANKS

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Preparation Blank Matrix: Soil

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

Analytical Method: ICP-AES Preparation Batch: 239930

Run Batch: K19119 Preparation Method: 3050B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB	Q	ID: CCB1	Q	ID: CCB2	Q	ID:	Q	ID: PBS1	Q
Aluminum	200	U	200	U	200	U			20.0	U
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium	5000	U	24.9	J	20.6	J			1.4	J
Chromium										
Cobalt										
Copper										
Iron	100	U	21.3	J	17.8	J			2.0	J
Lead										
Magnesium	5000	U	42.2	J	5000	U			500	U
Manganese	15.0	U	1.7	J	1.5	J			1.5	U
Nickel										
Potassium	5000	U	5000	U	5000	U			500	U
Selenium										
Silver										
Sodium	33.7	J	49.7	J	32.7	J			4.7	J
Thallium										
Vanadium										
Zinc										

FORM 3-IN
BLANKS

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Preparation Blank Matrix: Soil

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

Analytical Method: ICP-AES Preparation Batch: 240293

Run Batch: K19119 Preparation Method: 3050B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID:	Q	ID:	Q	ID:	Q	ID:	Q	ID: PBS2	Q
Aluminum									20.0	U
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium									8.7	J
Chromium										
Cobalt										
Copper										
Iron									2.1	J
Lead										
Magnesium									500	U
Manganese									1.5	U
Nickel										
Potassium									500	U
Selenium										
Silver										
Sodium									500	U
Thallium										
Vanadium										
Zinc										

FORM 3-IN
BLANKS

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Preparation Blank Matrix:

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

Analytical Method: ICP-AES Preparation Batch:

Run Batch: K19120 Preparation Method: Not-Prepared

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB	Q	ID: CCB3	Q	ID: CCB4	Q	ID:	Q	ID:	Q
Aluminum	200	U	200	U	200	U				
Antimony										
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium	5000	U	5000	U	16.5	J				
Chromium										
Cobalt										
Copper										
Iron	100	U	15.8	J	100	U				
Lead										
Magnesium	5000	U	5000	U	5000	U				
Manganese	15.0	U	15.0	U	0.78	J				
Nickel										
Potassium	5000	U	5000	U	5000	U				
Selenium										
Silver										
Sodium	5000	U	33.5	J	37.7	J				
Thallium										
Vanadium										
Zinc										

FORM 4-IN
ICP INTERFERENCE CHECK SAMPLE

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Analytical Method: ICP-AES ICSA Source: EPA ICSA (1211)

Instrument ID: ICP08 ICSAB Source: EPA ICSAB (1211/0710)

Run Batch: K19119

Concentration Units: ug/L

Analyte	True		Found			
	ICSA	ICSAB	ICSA	%R	ICSAB	%R
Aluminum	254900	246800	259000	102	255000	103
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium	244500	234900	259000	106	256000	109
Chromium						
Cobalt						
Copper						
Iron	100700	99320	105000	105	104000	105
Lead						
Magnesium	255400	248000	264000	103	260000	105
Manganese	7	507	17.4	248	557	110
Nickel						
Potassium	0	0	67.3		58.0	
Selenium						
Silver						
Sodium	0	0	48.5		42.8	
Thallium						
Vanadium						
Zinc						

FORM 4-IN
ICP INTERFERENCE CHECK SAMPLE

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Analytical Method: ICP-AES ICSA Source: EPA ICSA (1211)

Instrument ID: ICP08 ICSAB Source: EPA ICSAB (1211/0710)

Run Batch: K19120

Concentration Units: ug/L

Analyte	True		Found			
	ICSA	ICSAB	ICSA	%R	ICSAB	%R
Aluminum	254900	246800	254000	100	251000	102
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium	244500	234900	253000	103	250000	106
Chromium						
Cobalt						
Copper						
Iron	100700	99320	103000	102	102000	103
Lead						
Magnesium	255400	248000	257000	101	254000	103
Manganese	7	507	16.6	238	536	106
Nickel						
Potassium	0	0	65.5		63.0	
Selenium						
Silver						
Sodium	0	0	42.1		41.8	
Thallium						
Vanadium						
Zinc						

FORM 5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MF9L79S

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Analytical Method: ICP-AES

% Solids: 52.8

Concentration Units (ug/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
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese		938		786		157	97	
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

FORM 6-IN
DUPLICATES

EPA SAMPLE NO.
MF9L79D

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Analytical Method: ICP-AES

% Solids: 52.8

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

Analyte	Control Limit	Sample (S)	Q	Duplicate (D)	Q	RPD	Q
Aluminum		14400		16500		13	
Antimony							
Arsenic							
Barium							
Beryllium							
Cadmium							
Calcium		150000	D	150000	D	0	
Chromium							
Cobalt							
Copper							
Iron		15400		16400		6	
Lead							
Magnesium	788	2900		3170		9	
Manganese		786		811		3	
Nickel							
Potassium	788	1950		2150		10	
Selenium							
Silver							
Sodium		166	J	155	J		
Thallium							
Vanadium							
Zinc							

FORM 7-IN
LABORATORY CONTROL SAMPLE

EPA SAMPLE NO.
LCS1

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Preparation Method: 3050B

Analytical Method: ICP-AES Preparation Batch: 239930

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

Analyte	True	Found	%R
Aluminum	40.0	42.7	107
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium	1000	1080	108
Chromium			
Cobalt			
Copper			
Iron	20.0	23.4	117
Lead			
Magnesium	1000	999	100
Manganese	3.0	3.3	111
Nickel			
Potassium	1000	983	98
Selenium			
Silver			
Sodium	1000	1030	103
Thallium			
Vanadium			
Zinc			

FORM 7-IN
LABORATORY CONTROL SAMPLE

EPA SAMPLE NO.
LCS2

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Preparation Method: 3050B

Analytical Method: ICP-AES Preparation Batch: 240293

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

Analyte	True	Found	%R
Aluminum	40.0	38.8	97
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium	1000	1050	105
Chromium			
Cobalt			
Copper			
Iron	20.0	22.4	112
Lead			
Magnesium	1000	970	97
Manganese	3.0	3.2	108
Nickel			
Potassium	1000	947	95
Selenium			
Silver			
Sodium	1000	1000	100
Thallium			
Vanadium			
Zinc			

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

EPA SAMPLE NO.
MF9L79L

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Analytical Method: ICP-AES

% Solids: 52.8

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

Analyte	Initial Sample Result (I)	Q	Serial Dilution Result (S)	Q	% Difference	Q
Aluminum	14400		14300		1	
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium	150000	D	152000	D	1	
Chromium						
Cobalt						
Copper						
Iron	15400		16100		4	
Lead						
Magnesium	2900		2950	J	2	
Manganese	786		820		4	
Nickel						
Potassium	1950		1950	J	0	
Selenium						
Silver						
Sodium	166	J	165	J	0	
Thallium						
Vanadium						
Zinc						

FORM 9-IN
METHOD DETECTION LIMIT

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Analytical Method: ICP-AES Instrument ID: ICP08

Preparation Method: 3050B

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

Analyte	Wavelength/Mass	MDL	Date Analyzed
Aluminum	308.22	4.9	03/04/2019
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium	317.93	0.84	03/04/2019
Chromium			
Cobalt			
Copper			
Iron	259.84	1.3	02/28/2019
Lead			
Magnesium	279.08	4.0	02/28/2019
Manganese	257.61	0.073	02/28/2019
Nickel			
Potassium	766.49	10.6	02/28/2019
Selenium			
Silver			
Sodium	589.59	3.2	02/28/2019
Thallium			
Vanadium			
Zinc			

FORM 10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Date: 05/31/2019

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Ba
Aluminum	308.22	0	0	0	0	0
Antimony	206.83	0	0	0.000028	0	0
Arsenic	189.04	0	0	0	0	0
Barium	455.40	0	0	0	0	0
Beryllium	313.11	0	0	0	0	0
Cadmium	214.44	0.000010	0	0.000060	0	0
Calcium	317.93	0	0	0	0	0
Chromium	205.55	0	0	-0.000010	0	0
Cobalt	228.62	0	0	0	0	0.000011
Copper	224.70	0	0	0.000063	0	0
Iron	259.84	0	0	0	0	0
Lead	220.35	-0.000067	0	0.000044	0	0
Magnesium	279.08	0	0	0.000205	0	0
Manganese	257.61	0	0	0	0	0
Nickel	231.60	0	0	-0.000011	0	0
Potassium	766.49	0	0	0	0	0
Selenium	196.09	0.000035	0	0	0	0
Silver	328.07	0	0	0	0	0
Sodium	589.59	0	0	0	0	0
Thallium	190.86	0	0	-0.000042	0	0
Vanadium	292.40	0	0	0.000015	0	0
Zinc	206.20	0	0	0	0	0

FORM 10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Date: 05/31/2019

Analyte	Wave-length (nm)	Interelement Correction Factors for: Be	Co	Cr	Cu	Mn
Aluminum	308.22	0	0	0	0	0
Antimony	206.83	0	0	0.015626	0	0
Arsenic	189.04	0	0	0.000373	0	-0.000164
Barium	455.40	0	0	0	0	0
Beryllium	313.11	0	0	0	0	0
Cadmium	214.44	0	0	-0.000006	0	0
Calcium	317.93	0	0	0	0	0
Chromium	205.55	0.000217	0	0	0	0
Cobalt	228.62	0	0	-0.000092	0	0
Copper	224.70	0	0.000140	0	0	0
Iron	259.84	0	0	0	0	0.001329
Lead	220.35	0	0.000002	0	0.000434	0.000141
Magnesium	279.08	0	0	0	0	-0.006028
Manganese	257.61	0	0	0	0	0
Nickel	231.60	-0.000086	0	0	0	0
Potassium	766.49	0	0	0	0	0
Selenium	196.09	0	0.000109	0	0	0.000525
Silver	328.07	0	0	0	0	0.000159
Sodium	589.59	0	0	0	0	0
Thallium	190.86	0	0.005438	0.000251	0	0.000650
Vanadium	292.40	0	0	0	0	0
Zinc	206.20	0	0	-0.000240	0	0

FORM 10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Date: 05/31/2019

Analyte	Wave-length (nm)	Interelement Correction Factors for: Mo	Ni	Pb	Ti	Tl
Aluminum	308.22	0.008706	0	0	0	0
Antimony	206.83	-0.004707	0	0	0.000533	0
Arsenic	189.04	0.001045	0	0	0	0
Barium	455.40	0	0	0	0	0
Beryllium	313.11	0	0	0	0	0
Cadmium	214.44	0	0	0	0	0
Calcium	317.93	0	0	0	0	0
Chromium	205.55	0.000244	-0.000159	0	0	0
Cobalt	228.62	0	0.000133	0	0.002287	0
Copper	224.70	0.001875	0	0.000772	0.000351	0
Iron	259.84	0	0	0	0	0
Lead	220.35	-0.000441	0.000123	0	0	0
Magnesium	279.08	0	0	0	0	0
Manganese	257.61	0	0	0	0	0
Nickel	231.60	0	0	0	0	0.000134
Potassium	766.49	0	0	0	0	0
Selenium	196.09	0	0	0	0	0
Silver	328.07	0.000125	0	0	0	0
Sodium	589.59	0	0	0	0	0
Thallium	190.86	-0.000301	0	0	0.000065	0
Vanadium	292.40	-0.007103	0	0	0.000397	0
Zinc	206.20	0.000268	0	0	0	0

FORM 10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Date: 05/31/2019

Analyte	Wave-length (nm)	Interelement Correction Factors for: V				
Aluminum	308.22	0.136295				
Antimony	206.83	0				
Arsenic	189.04	0.000046				
Barium	455.40	0				
Beryllium	313.11	0.000212				
Cadmium	214.44	0				
Calcium	317.93	0				
Chromium	205.55	0.000027				
Cobalt	228.62	0				
Copper	224.70	0				
Iron	259.84	0				
Lead	220.35	-0.000010				
Magnesium	279.08	0				
Manganese	257.61	-0.000014				
Nickel	231.60	0				
Potassium	766.49	0				
Selenium	196.09	0.000224				
Silver	328.07	0.000103				
Sodium	589.59	0				
Thallium	190.86	0.003323				
Vanadium	292.40	0				
Zinc	206.20	0				

FORM 12-IN
ANALYSIS LOG

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Analytical Method: ICP-AES

Start Date: 06/05/2019 End Date: 06/05/2019

Run Batch: K19119

EPA Sample No.	D/F	Time	Analytes																										
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn					
S0	1.0	1354	X						X				X		X	X		X			X								
S01	1.0	1357	X						X				X		X	X		X			X								
S02	1.0	1400	X						X				X		X	X		X			X								
S03	1.0	1403	X						X				X		X	X		X			X								
S04	1.0	1405	X						X				X		X	X		X			X								
S05	1.0	1408														X													
S06	1.0	1411	X						X				X		X			X			X								
S07	1.0	1415														X													
S08	1.0	1418	X						X				X		X			X			X								
ICV	1.0	1421	X						X				X		X	X		X			X								
ICB	1.0	1424	X						X				X		X	X		X			X								
ICSA	1.0	1427	X						X				X		X	X		X			X								
ICSAB	1.0	1431	X						X				X		X	X		X			X								
CCV1	1.0	1433	X						X				X		X	X		X			X								
CCB1	1.0	1436	X						X				X		X	X		X			X								
PBS1	1.0	1440	X						X				X		X	X		X			X								
LCS1	1.0	1443	X						X				X		X	X		X			X								
MF9L61	1.0	1446	X										X		X	X		X			X								
MF9L69	1.0	1449	X										X		X	X		X			X								
MF9L70	1.0	1452	X										X		X	X		X			X								
MF9L74	1.0	1455	X										X		X	X		X			X								
MF9L75	1.0	1458	X										X		X	X		X			X								
MF9L76	1.0	1502	X										X		X	X		X			X								
MF9L77	1.0	1505	X										X		X	X		X			X								
MF9L78	1.0	1508	X										X		X	X		X			X								
MF9L79	1.0	1511	X										X		X	X		X			X								
MF9L79S	1.0	1514														X													
MF9L79D	1.0	1518	X										X		X	X		X			X								
MF9L79L	5.0	1521	X										X		X	X		X			X								
MF9M24	1.0	1524	X										X		X	X		X			X								
MF9L62	1.0	1527	X										X		X	X		X			X								
MF9L63	1.0	1530	X										X		X	X		X			X								

FORM 12-IN
ANALYSIS LOG

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Analytical Method: ICP-AES

Start Date: 06/05/2019 End Date: 06/05/2019

Run Batch: K19119

EPA Sample No.	D/F	Time	Analytes																												
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn							
MF9L64	1.0	1533	X						X				X		X	X		X			X										
MF9L65	1.0	1536	X										X		X	X		X			X										
MF9L67	1.0	1539																													
MF9L71	1.0	1543																													
MF9L72	1.0	1546	X										X		X	X		X			X										
MF9L73	1.0	1549	X										X		X	X		X			X										
MF9M33	1.0	1552	X										X		X	X		X			X										
PBS2	1.0	1555	X						X				X		X	X		X			X										
LCS2	1.0	1558	X						X				X		X	X		X			X										
MF9L66	1.0	1601	X										X		X	X		X			X										
CCV2	1.0	1605	X						X				X		X	X		X			X										
CCB2	1.0	1608	X						X				X		X	X		X			X										

FORM 12-IN
ANALYSIS LOG

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Analytical Method: ICP-AES

Start Date: 06/06/2019 End Date: 06/06/2019

Run Batch: K19120

EPA Sample No.	D/F	Time	Analytes																										
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn					
S0	1.0	0813	X						X				X		X	X		X			X								
S01	1.0	0816	X						X				X		X	X		X			X								
S02	1.0	0819	X						X				X		X	X		X			X								
S03	1.0	0822	X						X				X		X	X		X			X								
S04	1.0	0825	X						X				X		X	X		X			X								
S05	1.0	0828														X													
S06	1.0	0831	X						X				X		X			X			X								
S07	1.0	0834														X													
S08	1.0	0837	X						X				X		X			X			X								
ICV	1.0	0841	X						X				X		X	X		X			X								
ICB	1.0	0844	X						X				X		X	X		X			X								
ICSA	1.0	0847	X						X				X		X	X		X			X								
ICSAB	1.0	0850	X						X				X		X	X		X			X								
CCV3	1.0	0853	X						X				X		X	X		X			X								
CCB3	1.0	0856	X						X				X		X	X		X			X								
MF9L61	4.0	0859							X																				
MF9L69	2.0	0902							X																				
MF9L70	2.0	0905							X																				
MF9L74	3.0	0908							X																				
MF9L75	3.0	0912							X																				
MF9L76	2.0	0915							X																				
MF9L77	3.0	0918							X																				
MF9L78	2.0	0921							X																				
MF9L79	3.0	0924							X																				
MF9L79D	3.0	0928							X																				
MF9L79L	15	0931							X																				
MF9M24	2.0	0934							X																				
MF9L62	2.0	0937							X																				
MF9L63	5.0	0940							X																				
MF9L65	2.0	0943							X																				
MF9L67	2.0	0947							X																				
MF9L71	5.0	0950							X																				

FORM 12-IN
ANALYSIS LOG

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Analytical Method: ICP-AES

Start Date: 06/06/2019 End Date: 06/06/2019

Run Batch: K19120

EPA Sample No.	D/F	Time	Analytes																										
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn				
MF9L72	3.0	0953							X																				
MF9L73	2.0	0956							X																				
MF9M33	3.0	0959							X																				
MF9L66	3.0	1003							X																				
MF9L67	1.0	1006	X										X		X	X		X			X								
MF9L71	1.0	1009	X										X		X	X		X			X								
CCV4	1.0	1012	X						X				X		X	X		X			X								
CCB4	1.0	1015	X						X				X		X	X		X			X								

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Start Date: 06/05/2019

Analytical Method: ICP-AES Run Batch: K19119

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	0.0	0.024		200	191	-5	20000	19100	-4
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	0.0	-0.27		5000	5110	2	20000	20200	1
Chromium									
Cobalt									
Copper									
Iron	0.0	-0.013		100	106	6	20000	21100	6
Lead									
Magnesium	0.0	0.46		5000	4850	-3	20000	19100	-5
Manganese	0.0	-0.00096		15.0	16.0	7	2000	2060	3
Nickel									
Potassium	0.0	0.52		5000	4700	-6	20000	19200	-4
Selenium									
Silver									
Sodium	0.0	0.17		5000	4890	-2	20000	19700	-2
Thallium									
Vanadium									
Zinc									

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Start Date: 06/05/2019

Analytical Method: ICP-AES Run Batch: K19119

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	125000	120000	-4	250000	248000	-1			
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	125000	128000	3	250000	254000	2			
Chromium									
Cobalt									
Copper									
Iron	125000	128000	2	250000	254000	2			
Lead									
Magnesium	125000	123000	-2	250000	249000	0			
Manganese	12500	12200	-3	25000	24600	-1	37500	37400	0
Nickel									
Potassium	125000	124000	-1	250000	251000	0			
Selenium									
Silver									
Sodium	125000	126000	1	250000	249000	0			
Thallium									
Vanadium									
Zinc									

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Start Date: 06/05/2019

Analytical Method: ICP-AES Run Batch: K19119

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	375000	373000	-1				500000	509000	2
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	375000	368000	-2				500000	499000	0
Chromium									
Cobalt									
Copper									
Iron	375000	369000	-2				500000	497000	-1
Lead									
Magnesium	375000	372000	-1				500000	507000	1
Manganese				50000	50800	2			
Nickel									
Potassium	375000	372000	-1				500000	504000	1
Selenium									
Silver									
Sodium	375000	373000	-1				500000	503000	1
Thallium									
Vanadium									
Zinc									

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Start Date: 06/06/2019

Analytical Method: ICP-AES Run Batch: K19120

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	0.0	0.022		200	186	-7	20000	19500	-2
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	0.0	-0.62		5000	5280	6	20000	20500	3
Chromium									
Cobalt									
Copper									
Iron	0.0	-0.014		100	104	4	20000	21300	7
Lead									
Magnesium	0.0	0.090		5000	5030	1	20000	19500	-3
Manganese	0.0	-0.0020		15.0	16.4	9	2000	2090	5
Nickel									
Potassium	0.0	0.54		5000	4800	-4	20000	18900	-5
Selenium									
Silver									
Sodium	0.0	0.37		5000	4880	-2	20000	19100	-4
Thallium									
Vanadium									
Zinc									

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Start Date: 06/06/2019

Analytical Method: ICP-AES Run Batch: K19120

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	125000	123000	-1	250000	249000	-1			
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	125000	131000	5	250000	255000	2			
Chromium									
Cobalt									
Copper									
Iron	125000	130000	4	250000	255000	2			
Lead									
Magnesium	125000	126000	1	250000	251000	0			
Manganese	12500	12500	0	25000	24800	-1	37500	38000	1
Nickel									
Potassium	125000	124000	-1	250000	247000	-1			
Selenium									
Silver									
Sodium	125000	124000	0	250000	248000	-1			
Thallium									
Vanadium									
Zinc									

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Start Date: 06/06/2019

Analytical Method: ICP-AES Run Batch: K19120

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	375000	371000	-1				500000	507000	1
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	375000	370000	-1				500000	493000	-1
Chromium									
Cobalt									
Copper									
Iron	375000	368000	-2				500000	496000	-1
Lead									
Magnesium	375000	369000	-2				500000	505000	1
Manganese				50000	49600	-1			
Nickel									
Potassium	375000	372000	-1				500000	508000	2
Selenium									
Silver									
Sodium	375000	375000	0				500000	504000	1
Thallium									
Vanadium									
Zinc									

FORM 16-IN
INITIAL CALIBRATION SUMMARY

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICP08 Start Date: 06/05/2019

Analytical Method: ICP-AES Run Batch: K19119

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Aluminum	0.9999	0.00000311	0.000520	WLR Blank	Inverse Conc
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Calcium	0.9999	0.0000416	0.00235	WLR Blank	Inverse Conc
Chromium					
Cobalt					
Copper					
Iron	0.9999	0.00000785	0.0000200	WLR Blank	Inverse Conc
Lead					
Magnesium	0.9999	0.00000276	-0.0000867	WLR Blank	Inverse Conc
Manganese	0.9999	0.000149	0.0000433	WLR Blank	Inverse Conc
Nickel					
Potassium	1.000	0.0000159	0.00121	WLR Blank	Inverse Conc
Selenium					
Silver					
Sodium	1.000	0.0000722	-0.000537	WLR Blank	Inverse Conc
Thallium					
Vanadium					
Zinc					

FORM 16-IN
INITIAL CALIBRATION SUMMARY

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

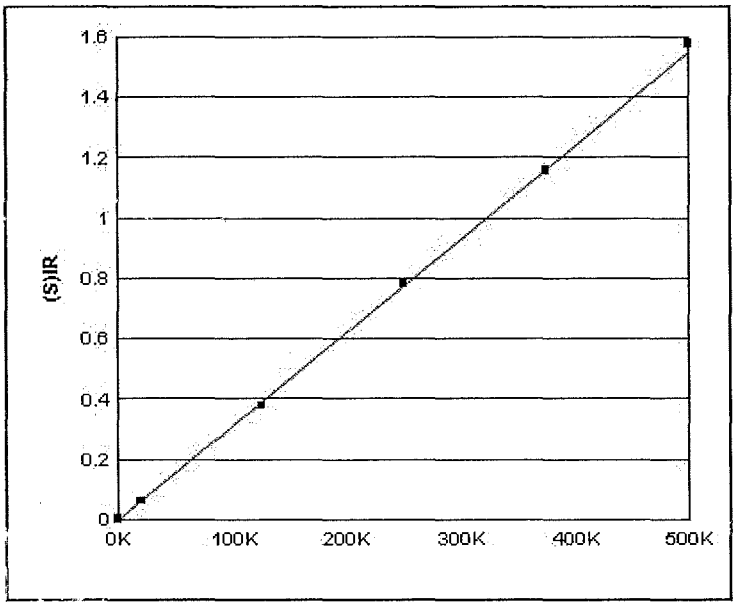
Instrument ID: ICP08 Start Date: 06/06/2019

Analytical Method: ICP-AES Run Batch: K19120

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Aluminum	0.9999	0.00000285	0.000623	WLR Blank	Inverse Conc
Antimony					
Arsenic					
Barium					
Beryllium					
Cadmium					
Calcium	0.9998	0.0000392	0.00217	WLR Blank	Inverse Conc
Chromium					
Cobalt					
Copper					
Iron	0.9998	0.00000738	0.00000333	WLR Blank	Inverse Conc
Lead					
Magnesium	0.9999	0.00000251	-0.0000567	WLR Blank	Inverse Conc
Manganese	0.9999	0.000144	0.0000567	WLR Blank	Inverse Conc
Nickel					
Potassium	0.9999	0.0000148	0.00160	WLR Blank	Inverse Conc
Selenium					
Silver					
Sodium	1.000	0.0000684	-0.00158	WLR Blank	Inverse Conc
Thallium					
Vanadium					
Zinc					

Calibration curves for k19119

Author: Joanna Sanchez
Published: 06/06/2019 12:44:12
Method Name: ICP08 ISM02.4 2018 (94)



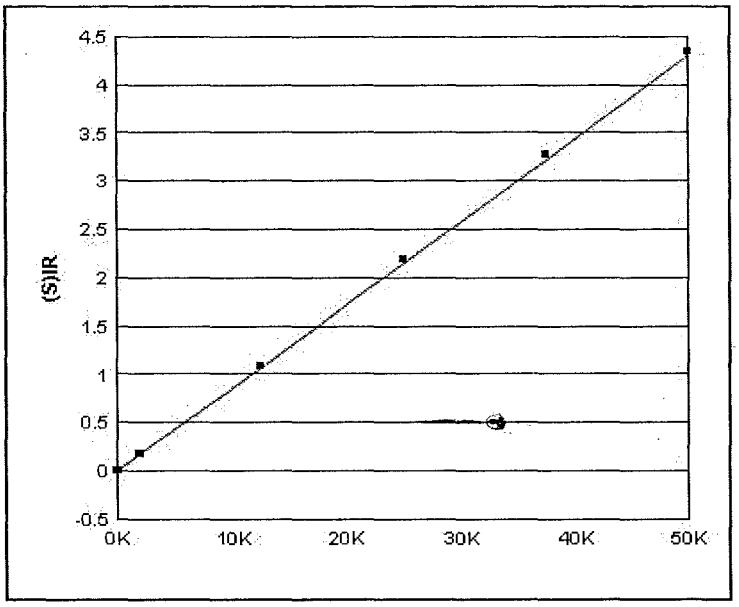
Element Name:	Al
Element Wavelength:	Al 308.215 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:21:38
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99984
A0 (Offset):	0.00052141
A1 (Gain):	0.0000030957
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope **QC Normalize**

Slope: 1.0000 **Slope factor:** 1.0000
Y Int: 0.00000 **Offset:** 0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.024112	0.024112	0.00000	0.00052149	0.000059142	1
S01	200.00	190.99	-9.0136	-4.5068	0.0011340	0.000041649	1
S02	20,000	19,101	-898.93	-4.4947	0.060519	0.00047266	1
S03	125,000	120,440	-4,559.3	-3.6475	0.37878	0.0012148	1
S04	250,000	248,020	-1,981.2	-0.79249	0.77914	0.0077072	1
S06	375,000	373,120	-1,878.2	-0.50085	1.1556	0.0096604	1
S08	500,000	509,430	9,431.0	1.8862	1.5776	0.010133	1

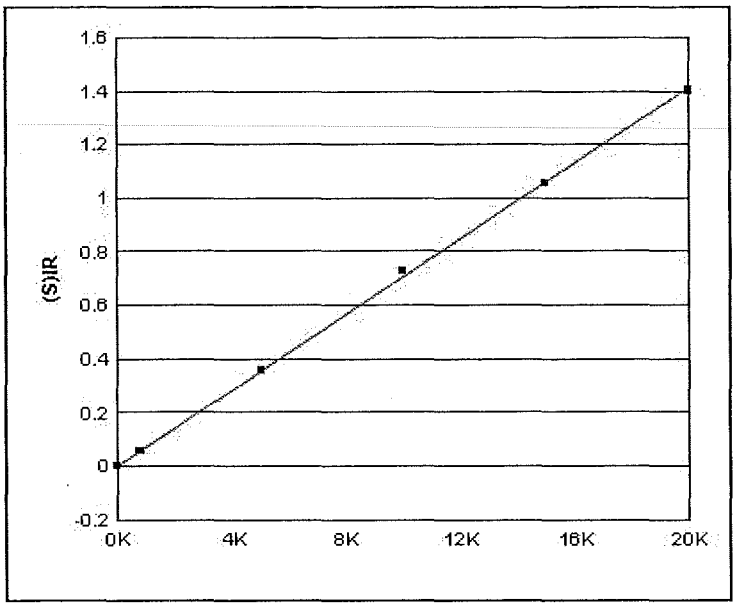


Element Name:	Sb
Element Wavelength:	Sb 206.833 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	-0.00060756
A1 (Gain):	0.000086008
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

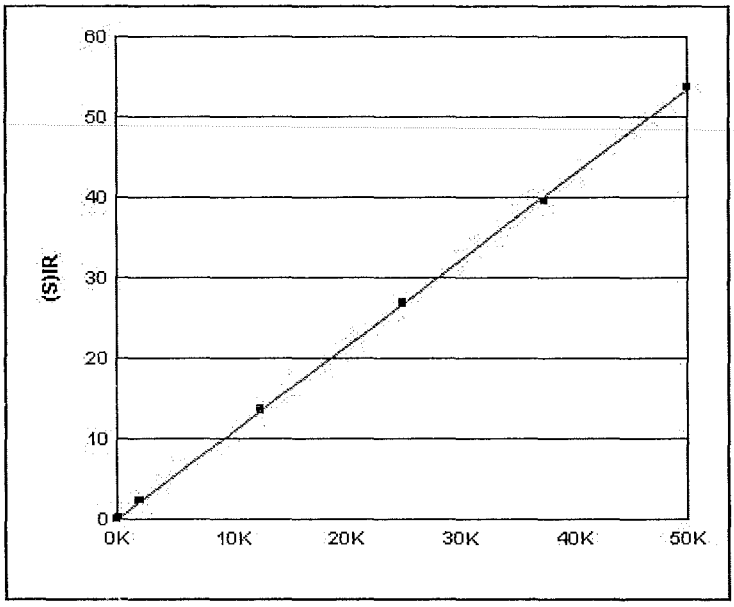
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0034649	-0.0034649	0.00000	-0.00060786	0.00014395	1
S01	60.000	62.638	2.6376	4.3960	0.0047905	0.00022717	1
S02	2,000.0	2,021.0	20.957	1.0478	0.17566	0.013316	1
S03	12,500	12,516	16.314	0.13051	1.0912	0.0017957	1
S04	25,000	25,095	95.103	0.38041	2.1884	0.021890	1
S05	37,500	37,635	135.29	0.36078	3.2813	0.029802	1
S07	50,000	49,730	-270.31	-0.54062	4.3366	0.24618	1



Element Name:	As
Element Wavelength:	As 189.042 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99990
A0 (Offset):	-0.00018058
A1 (Gain):	0.000070695
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.00033906	-0.00033906	0.00000	-0.00018061	0.000026054	1
S01	10.000	10.140	0.13960	1.3960	0.00053723	0.00011345	1
S02	800.00	800.70	0.70160	0.087701	0.056520	0.0045196	1
S03	5,000.0	5,051.2	51.185	1.0237	0.35751	0.00082392	1
S04	10,000	10,253	253.06	2.5306	0.72585	0.0067311	1
S05	15,000	14,927	-73.137	-0.48758	1.0569	0.0082830	1
S07	20,000	19,768	-231.95	-1.1597	1.3997	0.079906	1



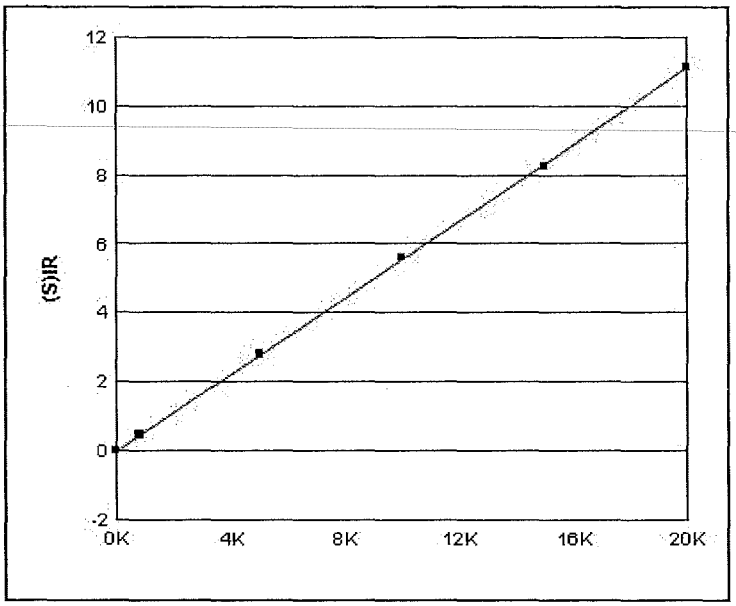
Element Name:	Ba
Element Wavelength:	Ba 455.403 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99994
A0 (Offset):	0.0013943
A1 (Gain):	0.0010695
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope **QC Normalize**

Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.023546	-0.023546	0.00000	0.0013692	0.00020927	1
S01	200.00	212.57	12.566	6.2828	0.22873	0.00047253	1
S02	2,000.0	2,101.1	101.13	5.0565	2.2486	0.018267	1
S03	12,500	12,635	134.99	1.0799	13.515	0.13423	1
S04	25,000	25,106	106.49	0.42598	26.853	0.21303	1
S05	37,500	36,957	-542.56	-1.4468	39.527	0.45949	1
S07	50,000	50,187	187.38	0.37475	53.677	0.34454	1

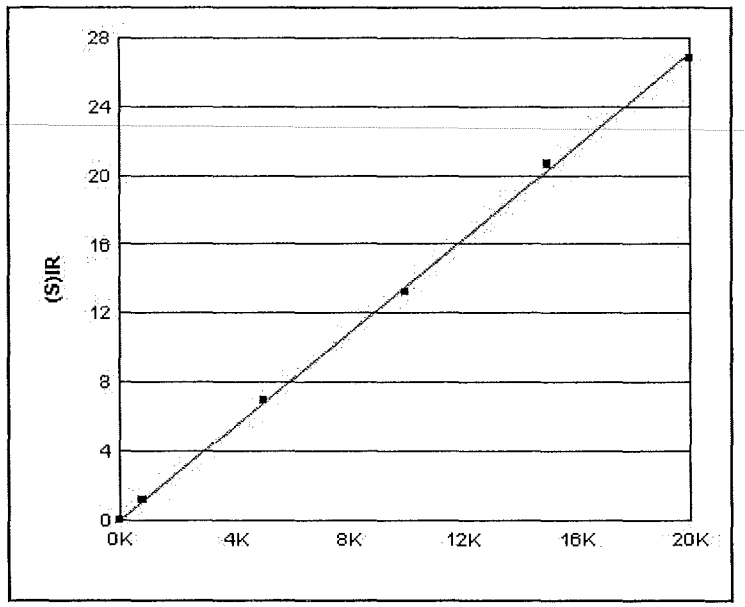


Element Name:	Be
Element Wavelength:	Be 313.107 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	-0.000037895
A1 (Gain):	0.00055522
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

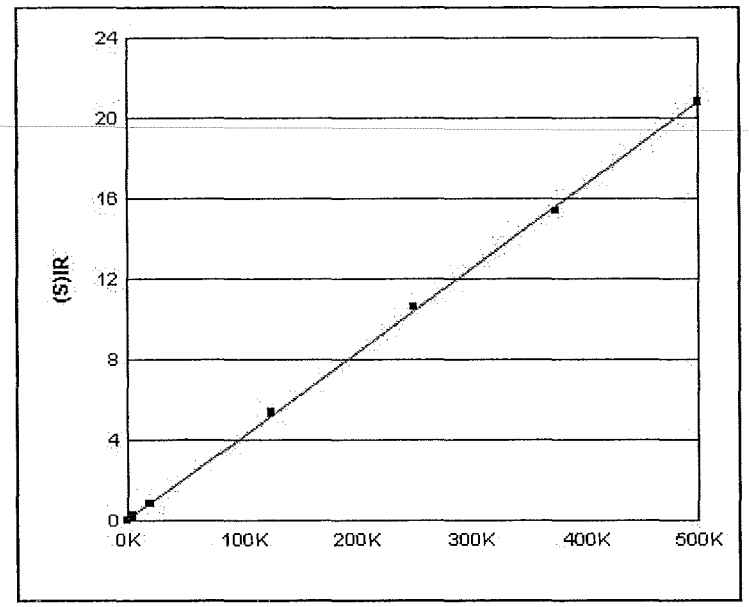
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.00027234	-0.00027234	0.00000	-0.000038046	0.000084643	1
S01	5.0000	5.1138	0.11379	2.2759	0.0028073	0.000031350	1
S02	800.00	821.84	21.843	2.7303	0.45650	0.0029858	1
S03	5,000.0	5,032.5	32.534	0.65069	2.7956	0.012027	1
S04	10,000	10,072	72.230	0.72230	5.5952	0.064544	1
S05	15,000	14,821	-179.24	-1.1950	8.2331	0.069222	1
S07	20,000	20,053	52.522	0.26261	11.139	0.15977	1



Element Name:	Cd
Element Wavelength:	Cd 214.438 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99978
A0 (Offset):	0.000033127
A1 (Gain):	0.0013537
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0013076	-0.0013076	0.00000	0.000031357	0.00038846	1
S01	5.0000	5.8278	0.82782	16.556	0.0079328	0.00021587	1
S02	800.00	873.35	73.348	9.1685	1.1841	0.092595	1
S03	5,000.0	5,106.4	106.37	2.1273	6.9241	0.021230	1
S04	10,000	9,750.6	-249.37	-2.4937	13.223	0.12515	1
S05	15,000	15,270	269.59	1.7973	20.670	0.16529	1
S07	20,000	19,799	-200.64	-1.0032	26.802	1.6048	1

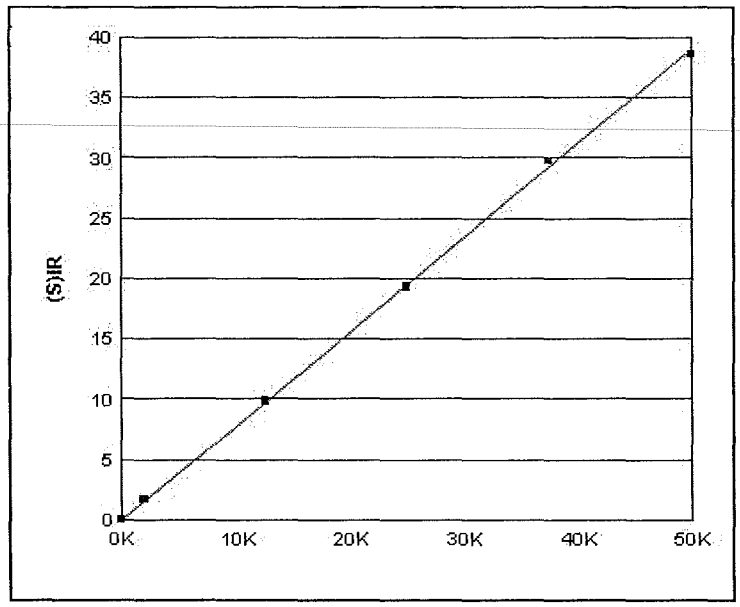


Element Name:	Ca
Element Wavelength:	Ca 317.933 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:21:38
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99989
A0 (Offset):	0.0023605
A1 (Gain):	0.000041635
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.27048	-0.27048	0.00000	0.0023492	0.000033856	1
S01	5,000.0	5,109.6	109.58	2.1916	0.21510	0.0016738	1
S02	20,000	20,191	191.09	0.95544	0.84302	0.0075702	1
S03	125,000	128,280	3,281.2	2.6249	5.3434	0.010256	1
S04	250,000	254,110	4,114.0	1.6456	10.582	0.092809	1
S06	375,000	367,970	-7,031.2	-1.8750	15.323	0.082432	1
S08	500,000	499,340	-664.66	-0.13293	20.792	0.082682	1

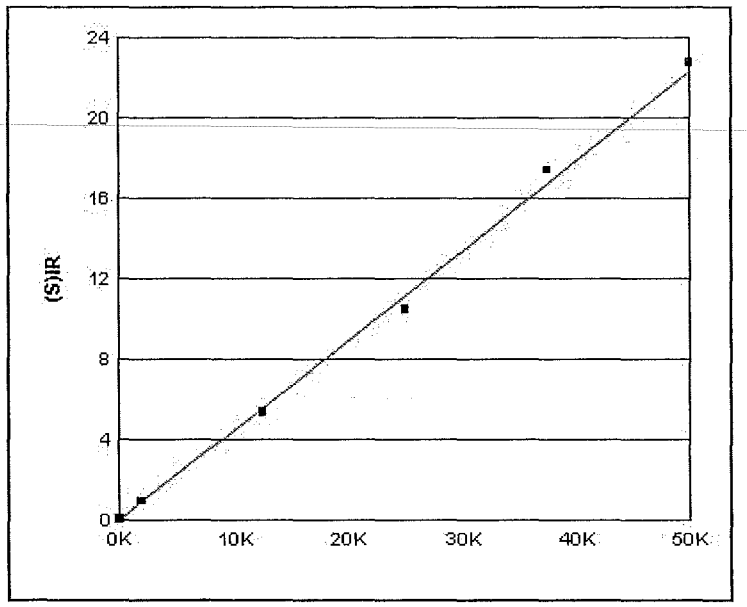


Element Name:	Cr
Element Wavelength:	Cr 205.552 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99988
A0 (Offset):	0.00048489
A1 (Gain):	0.00077968
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0014796	-0.0014796	0.00000	0.00048374	0.00029145	1
S01	10.000	10.819	0.81940	8.1940	0.0089186	0.00019893	1
S02	2,000.0	2,134.1	134.12	6.7060	1.6643	0.13053	1
S03	12,500	12,561	60.614	0.48491	9.7932	0.025398	1
S04	25,000	24,688	-312.08	-1.2483	19.248	0.20454	1
S05	37,500	38,139	639.49	1.7053	29.739	0.30390	1
S07	50,000	49,477	-522.98	-1.0460	38.579	2.2803	1



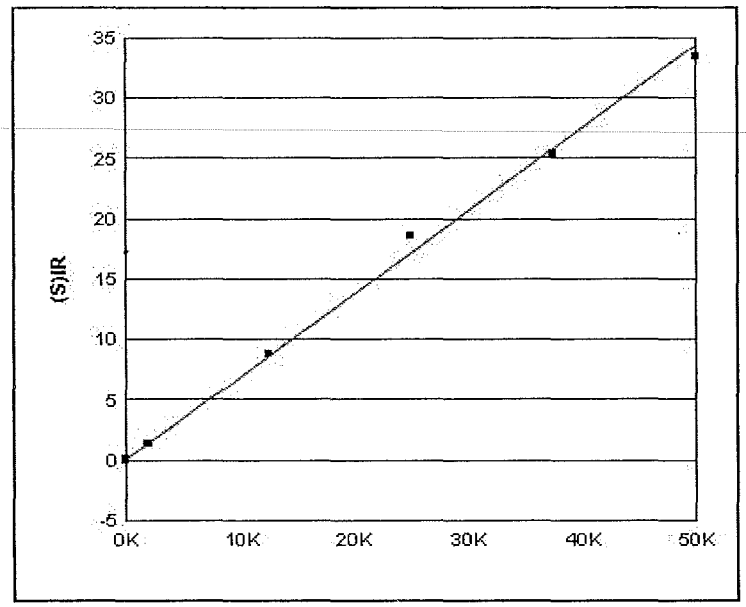
Element Name:	Co
Element Wavelength:	Co 228.616 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99918
A0 (Offset):	0.00012805
A1 (Gain):	0.00044704
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope **QC Normalize**

Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0019936	-0.0019936	0.00000	0.00012716	0.000056157	1
S01	50.000	53.166	3.1664	6.3329	0.023924	0.00068652	1
S02	2,000.0	2,074.6	74.593	3.7297	0.92843	0.070781	1
S03	12,500	11,920	-579.88	-4.6391	5.3344	0.010073	1
S04	25,000	23,314	-1,685.6	-6.7425	10.433	0.091344	1
S05	37,500	38,896	1,396.0	3.7227	17.405	0.15661	1
S07	50,000	50,792	791.75	1.5835	22.728	1.3212	1

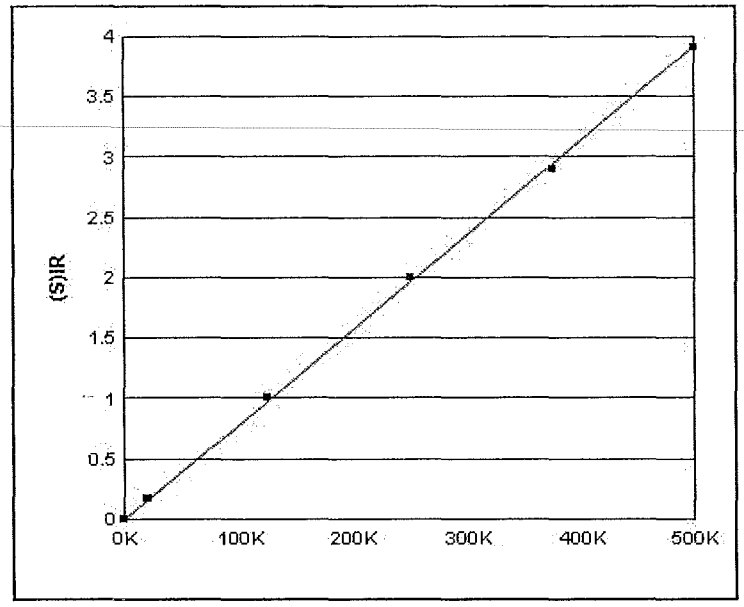


Element Name:	Cu
Element Wavelength:	Cu 224.700 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99916
A0 (Offset):	-0.0012288
A1 (Gain):	0.00068713
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.00035906	-0.00035906	0.00000	-0.0012290	0.00061891	1
S01	25.000	24.757	-0.24259	-0.97034	0.015816	0.000096489	1
S02	2,000.0	1,946.8	-53.179	-2.6589	1.3398	0.10824	1
S03	12,500	12,747	247.40	1.9792	8.7788	0.011955	1
S04	25,000	26,956	1,956.1	7.8244	18.563	0.15297	1
S05	37,500	36,847	-652.81	-1.7408	25.364	0.16723	1
S07	50,000	48,501	-1,498.6	-2.9972	33.388	1.6779	1

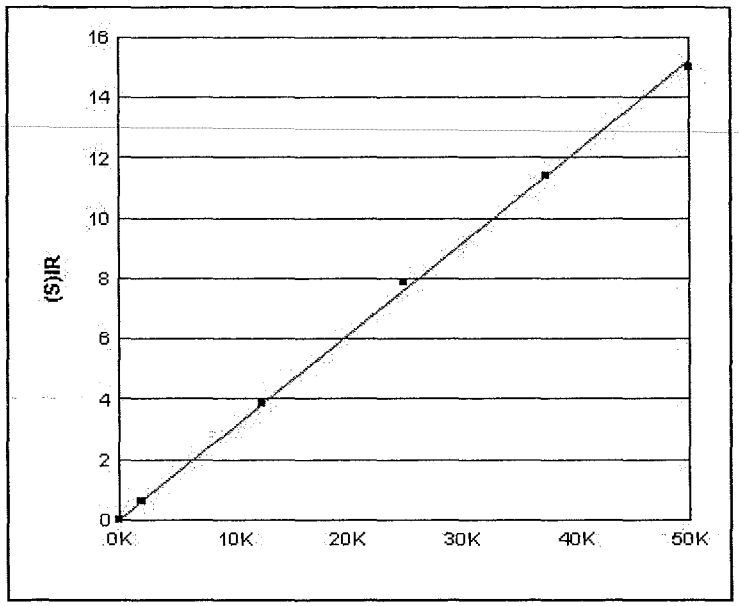


Element Name:	Fe
Element Wavelength:	Fe 259.837 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:21:38
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99988
A0 (Offset):	0.000021682
A1 (Gain):	0.0000078470
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.013197	-0.013197	0.00000	0.000021578	0.000053729	1
S01	100.00	105.53	5.5318	5.5318	0.00084995	0.000041379	1
S02	20,000	21,129	1,129.0	5.6448	0.16584	0.0012060	1
S03	125,000	127,930	2,933.6	2.3468	1.0040	0.0037016	1
S04	250,000	254,320	4,321.0	1.7284	1.9959	0.021271	1
S06	375,000	369,340	-5,656.1	-1.5083	2.8983	0.020347	1
S08	500,000	497,270	-2,734.1	-0.54682	3.9021	0.026155	1

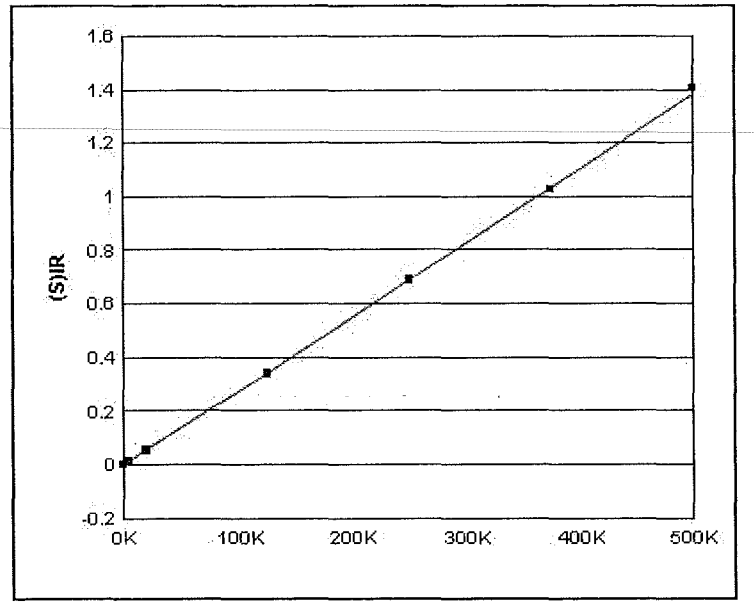


Element Name:	Pb
Element Wavelength:	Pb 220.353 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99987
A0 (Offset):	0.000081656
A1 (Gain):	0.00030477
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

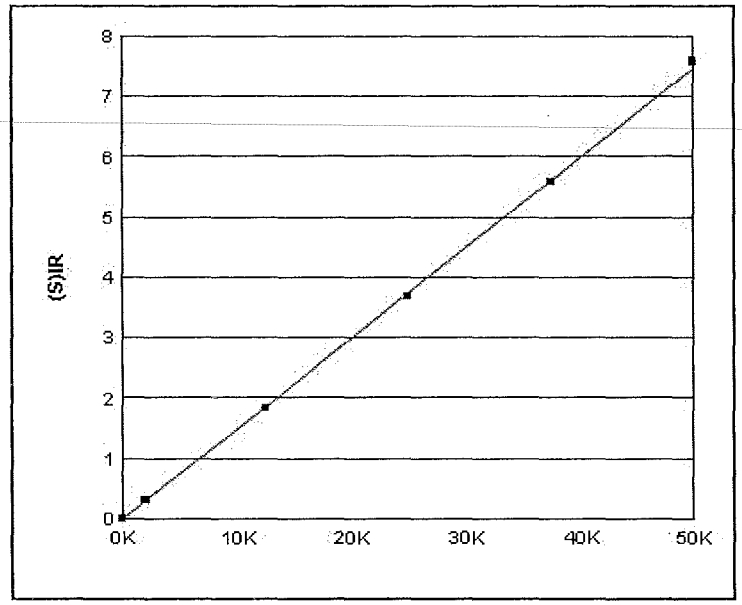
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.00066458	0.00066458	0.00000	0.000081858	0.00079724	1
S01	10.000	9.2071	-0.79295	-7.9295	0.0028889	0.00056014	1
S02	2,000.0	1,986.7	-13.301	-0.66505	0.60573	0.046566	1
S03	12,500	12,580	79.956	0.63965	3.8351	0.010199	1
S04	25,000	25,741	740.97	2.9639	7.8472	0.064377	1
S05	37,500	37,438	-62.248	-0.16599	11.416	0.062556	1
S07	50,000	49,256	-744.40	-1.4888	15.019	0.80388	1



Element Name:	Mg
Element Wavelength:	Mg 279.079 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:21:38
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99991
A0 (Offset):	-0.000089425
A1 (Gain):	0.0000027638
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

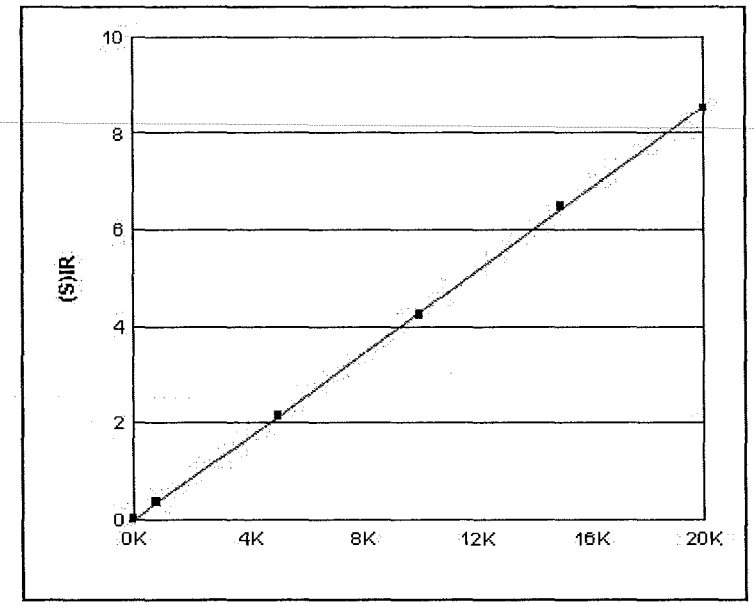
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.46049	0.46049	0.00000	-0.000088153	0.000022988	1
S01	5,000.0	4,849.3	-150.66	-3.0132	0.013313	0.00011650	1
S02	20,000	19,058	-941.59	-4.7080	0.052563	0.00041270	1
S03	125,000	122,860	-2,144.8	-1.7158	0.33932	0.00068759	1
S04	250,000	248,960	-1,041.5	-0.41660	0.68771	0.0077896	1
S06	375,000	371,830	-3,171.6	-0.84575	1.0278	0.0073941	1
S08	500,000	507,450	7,447.5	1.4895	1.4027	0.0087317	1



Element Name:	Mn
Element Wavelength:	Mn 257.610 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99989
A0 (Offset):	0.000043208
A1 (Gain):	0.00014923
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.00096371	-0.00096371	0.00000	0.000043064	0.000011736	1
S01	15.000	15.990	0.98995	6.5997	0.0024293	0.000017756	1
S02	2,000.0	2,055.1	55.124	2.7562	0.30673	0.0022503	1
S03	12,500	12,165	-334.84	-2.6787	1.8155	0.0061548	1
S04	25,000	24,633	-366.81	-1.4672	3.6761	0.030709	1
S05	37,500	37,386	-114.35	-0.30493	5.5792	0.043579	1
S07	50,000	50,760	759.88	1.5198	7.5750	0.11622	1



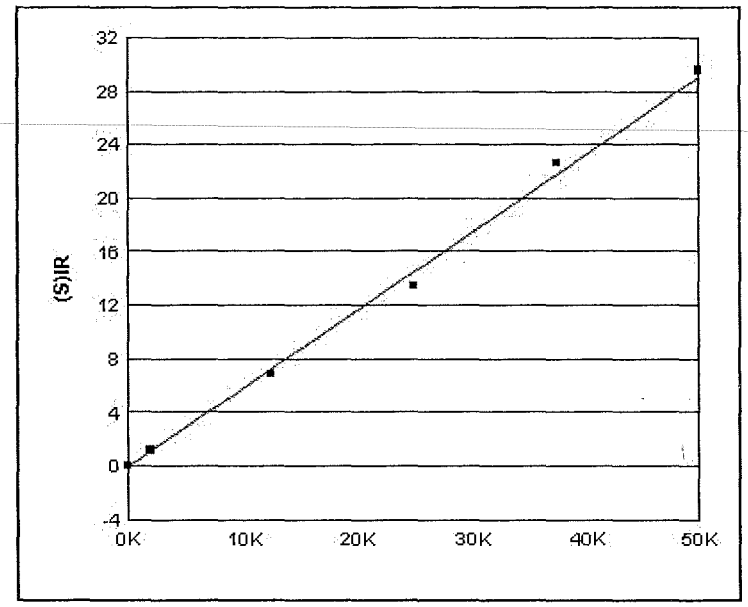
Element Name:	Mo
Element Wavelength:	Mo 202.030 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	0.00015767
A1 (Gain):	0.00042802
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope **QC Normalize**

Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.00025782	-0.00025782	0.00000	0.00015756	0.00024364	1
S01	10.000	9.9873	-0.012660	-0.12660	0.0044314	0.00032805	1
S02	800.00	824.57	24.571	3.0713	0.35291	0.027093	1
S03	5,000.0	5,001.8	1.7745	0.035491	2.1399	0.0065474	1
S04	10,000	9,899.0	-101.01	-1.0101	4.2349	0.037832	1
S05	15,000	15,141	140.93	0.93953	6.4795	0.057458	1
S07	20,000	19,934	-66.271	-0.33135	8.5305	0.48704	1

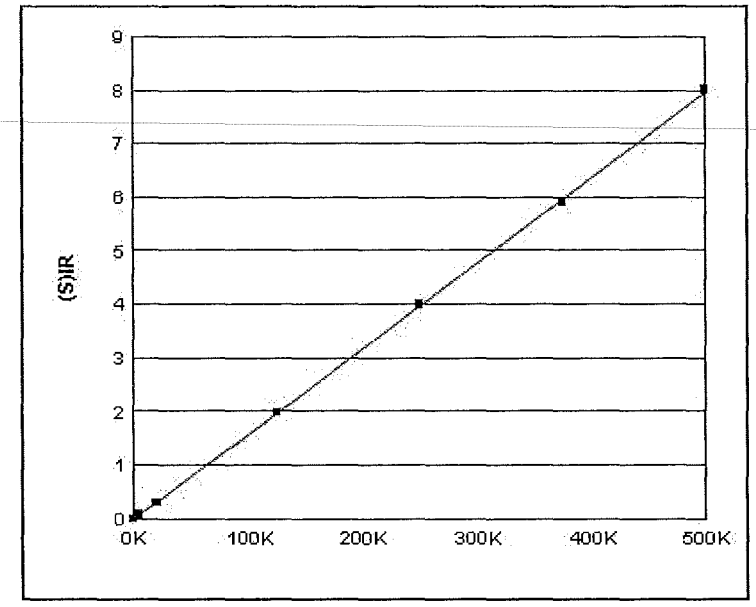


Element Name:	Ni
Element Wavelength:	Ni 231.604 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99898
A0 (Offset):	-0.0010440
A1 (Gain):	0.00058040
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0024290	-0.0024290	0.00000	-0.0010454	0.00021121	1
S01	40.000	43.323	3.3234	8.3084	0.024102	0.00040558	1
S02	2,000.0	2,089.3	89.291	4.4645	1.2115	0.091459	1
S03	12,500	11,882	-618.04	-4.9443	6.8946	0.015550	1
S04	25,000	23,090	-1,910.4	-7.6416	13.399	0.12089	1
S05	37,500	39,022	1,521.7	4.0580	22.648	0.20448	1
S07	50,000	50,914	913.82	1.8276	29.550	1.7173	1

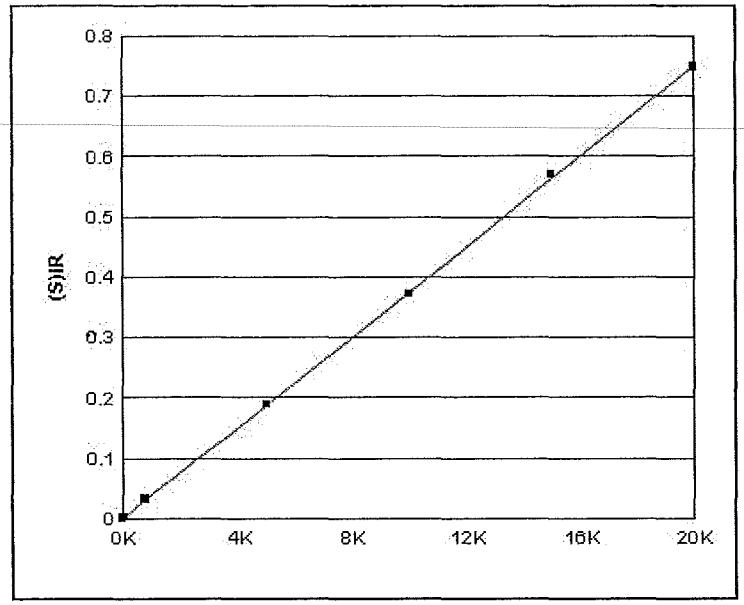


Element Name:	K
Element Wavelength:	K 766.490 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:21:38
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99995
A0 (Offset):	0.0012053
A1 (Gain):	0.000015878
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.52192	0.52192	0.00000	0.0012136	0.00029714	1
S01	5,000.0	4,700.8	-299.19	-5.9838	0.075844	0.00026984	1
S02	20,000	19,187	-813.50	-4.0675	0.30584	0.0019709	1
S03	125,000	124,050	-948.55	-0.75884	1.9709	0.0071508	1
S04	250,000	250,730	729.62	0.29185	3.9822	0.042777	1
S06	375,000	372,200	-2,797.6	-0.74604	5.9110	0.059543	1
S08	500,000	504,130	4,129.3	0.82585	8.0057	0.092929	1

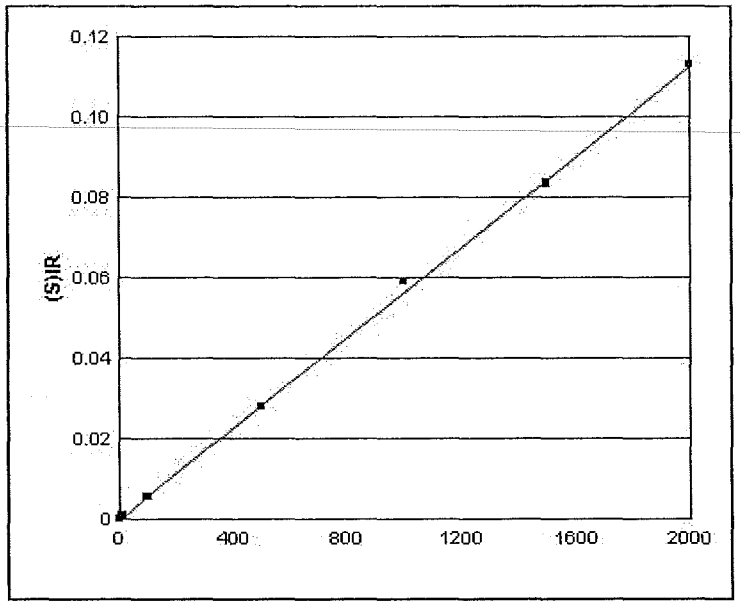


Element Name:	Se
Element Wavelength:	Se 196.090 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	0.00021200
A1 (Gain):	0.000037496
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

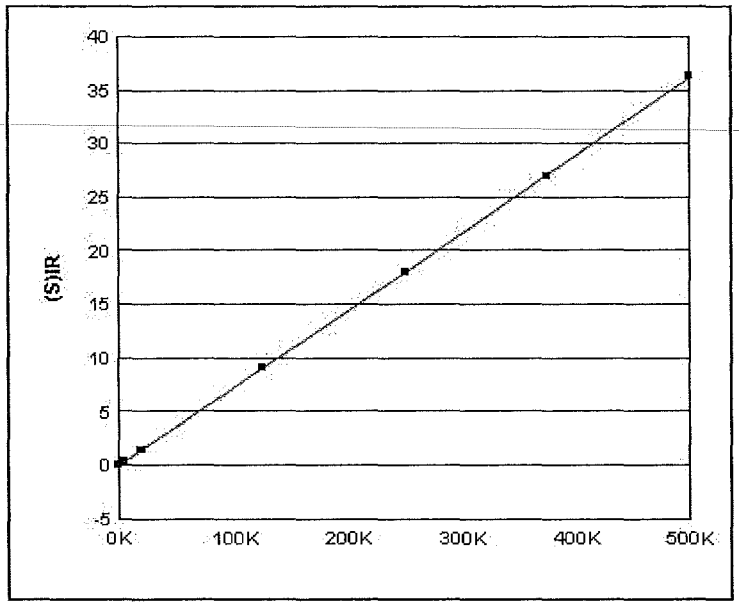
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0038401	-0.0038401	0.00000	0.00021186	0.000077716	1
S01	35.000	37.533	2.5325	7.2358	0.0016205	0.00035324	1
S02	800.00	832.28	32.276	4.0346	0.031510	0.0023468	1
S03	5,000.0	5,011.6	11.623	0.23245	0.18869	0.00041726	1
S04	10,000	9,892.8	-107.24	-1.0724	0.37228	0.0038840	1
S05	15,000	15,142	142.08	0.94719	0.56919	0.0045303	1
S07	20,000	19,919	-81.212	-0.40606	0.74870	0.041740	1



Element Name:	Ag
Element Wavelength:	Ag 328.068 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99978
A0 (Offset):	0.0000040287
A1 (Gain):	0.000056179
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.00027216	-0.00027216	0.00000	0.0000040134	0.000022877	1
S01	10.000	10.510	0.51001	5.1001	0.00059496	0.000029585	1
S02	100.00	97.097	-2.9032	-2.9032	0.0054939	0.000077750	1
S03	500.00	492.36	-7.6360	-1.5272	0.027884	0.00037748	1
S04	1,000.00	1,039.7	39.697	3.9697	0.058851	0.00014764	1
S05	1,500.0	1,473.9	-26.060	-1.7373	0.083466	0.0011581	1
S07	2,000.0	1,996.4	-3.6083	-0.18042	0.11304	0.0011583	1

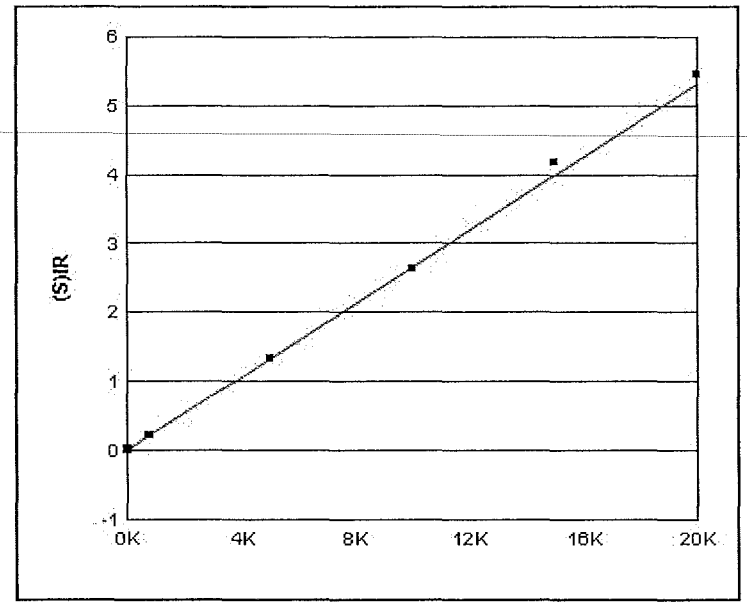


Element Name:	Na
Element Wavelength:	Na 589.592 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:21:38
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	-0.00054867
A1 (Gain):	0.000072205
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.17306	0.17306	0.00000	-0.00053618	0.00022117	1
S01	5,000.0	4,891.7	-108.32	-2.1665	0.35266	0.00068288	1
S02	20,000	19,697	-302.90	-1.5145	1.4217	0.010879	1
S03	125,000	125,820	821.78	0.65743	9.0845	0.044808	1
S04	250,000	248,980	-1,021.0	-0.40841	17.977	0.33881	1
S06	375,000	372,730	-2,270.1	-0.60536	26.913	0.18442	1
S08	500,000	502,880	2,880.5	0.57611	36.310	0.25048	1



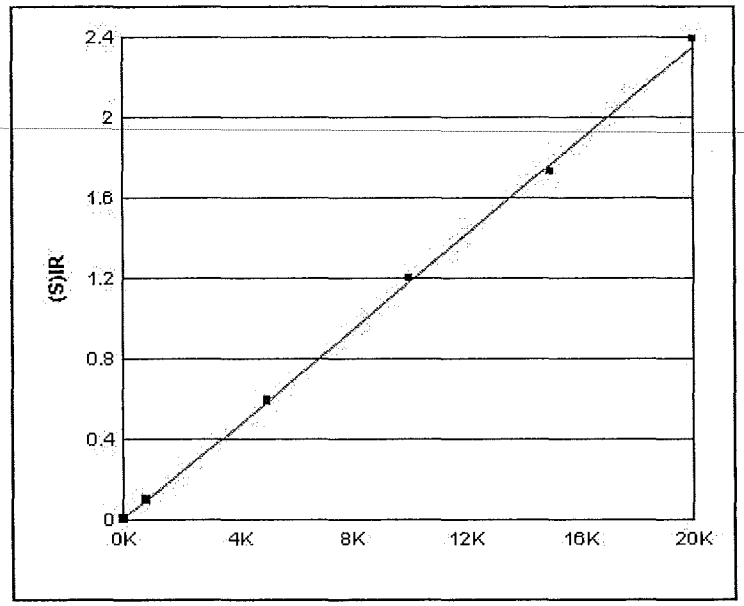
Element Name:	Tl
Element Wavelength:	Tl 190.856 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99978
A0 (Offset):	-0.00014465
A1 (Gain):	0.00026578
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope **QC Normalize**

Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.000094752	0.000094752	0.00000	-0.00014463	0.00034524	1
S01	25.000	25.024	0.023907	0.095626	0.0066244	0.00028187	1
S02	800.00	817.62	17.617	2.2021	0.22202	0.014732	1
S03	5,000.0	4,896.4	-103.60	-2.0720	1.3316	0.0010001	1
S04	10,000	9,665.1	-334.86	-3.3486	2.6294	0.015525	1
S05	15,000	15,385	385.15	2.5676	4.1843	0.020004	1
S07	20,000	20,035	35.242	0.17621	5.4520	0.25028	1

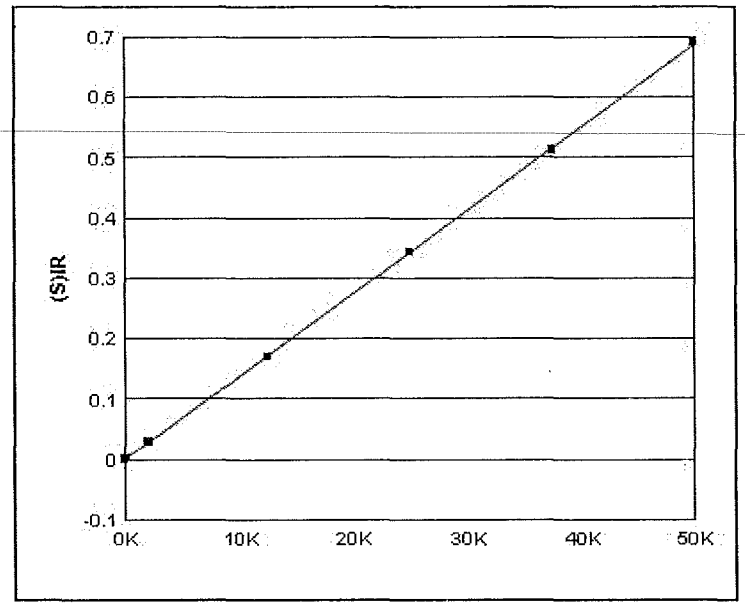


Element Name:	Ti
Element Wavelength:	Ti 334.941 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99988
A0 (Offset):	0.00010419
A1 (Gain):	0.00011771
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

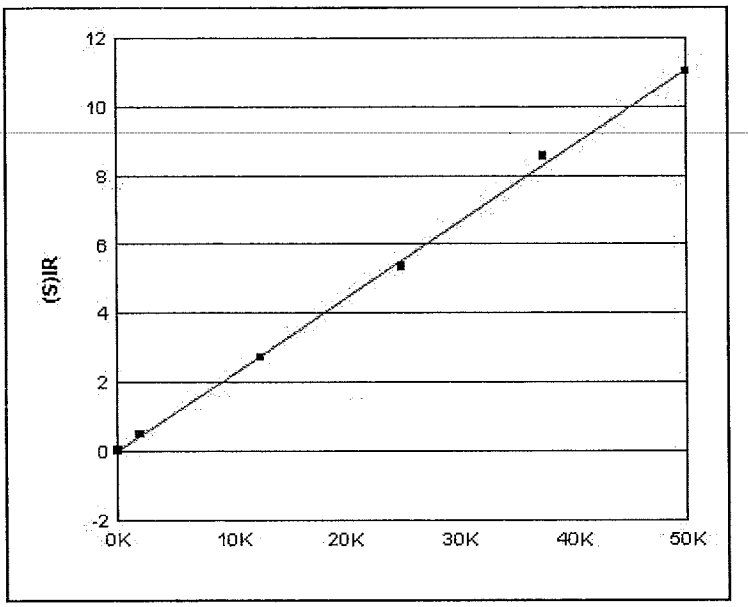
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.00013522	-0.00013522	0.00000	0.00010417	0.000012640	1
S01	25.000	25.105	0.10528	0.42113	0.0031572	0.000062599	1
S02	800.00	805.63	5.6333	0.70416	0.095508	0.00054364	1
S03	5,000.0	4,958.9	-41.077	-0.82154	0.58717	0.0020299	1
S04	10,000	10,122	121.88	1.2188	1.1982	0.010400	1
S05	15,000	14,672	-328.49	-2.1899	1.7312	0.012575	1
S07	20,000	20,242	241.65	1.2083	2.3882	0.014288	1



Element Name:	V
Element Wavelength:	V 292.402 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	-0.000014261
A1 (Gain):	0.000013766
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0031705	-0.0031705	0.00000	-0.000014304	0.0000057256	1
S01	50.000	52.677	2.6772	5.3545	0.00071008	0.000019864	1
S02	2,000.0	2,046.2	46.155	2.3078	0.028084	0.00022976	1
S03	12,500	12,348	-151.92	-1.2154	0.16953	0.00073563	1
S04	25,000	24,915	-85.330	-0.34132	0.34209	0.0012225	1
S05	37,500	37,288	-212.11	-0.56563	0.51191	0.0077520	1
S07	50,000	50,401	400.56	0.80111	0.69196	0.0027501	1



Element Name:	Zn
Element Wavelength:	Zn 206.200 nm
Concentration Units:	ug/L
Date of Calibration:	06/05/2019 14:18:09
Date of Fit:	06/06/2019 11:56:18
Type of Fit:	Linear
Correlation:	0.99972
A0 (Offset):	-0.000064653
A1 (Gain):	0.00022141
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0064265	-0.0064265	0.00000	-0.000066076	0.00019803	1
S01	60.000	63.932	3.9323	6.5538	0.014091	0.00047218	1
S02	2,000.0	2,131.6	131.65	6.5825	0.47185	0.036907	1
S03	12,500	12,298	-201.50	-1.6120	2.7226	0.0092129	1
S04	25,000	24,173	-827.34	-3.3094	5.3514	0.055463	1
S05	37,500	38,564	1,064.2	2.8380	8.5375	0.068333	1
S07	50,000	49,829	-170.99	-0.34198	11.031	0.67013	1

ample Name: S0 Acquired: 06/05/2019 13:54:08 Type: Cal
lethod: ICP08 ISM02.4 2018(v94) Mode: IR Corr. Factor: 1.000000
ser: sanchezjc SDG: Case: Prep:
omment:

K19119
Joanna C. Sanchez
06/06/2019

lem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
nits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
vg	**.00052**	**-.00061**	**-.00018**	**.00137**	**-.00004**	**.00003**	**.00235**
tddev	.00006	.00014	.00003	.00021	.00008	.00039	.00003
%RSD	11.341	23.682	14.426	15.284	222.48	1238.8	1.4412
1	.00045	-.00044	-.00017	.00157	-.00007	-.00027	.00238
2	.00057	-.00067	-.00021	.00138	.00006	.00047	.00231
3	.00054	-.00071	-.00016	.00116	-.00011	-.00011	.00236

lem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
nits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
vg	**.00048**	**.00013**	**-.00123**	**.00002**	**.00008**	**-.00009**	**.00004**
tddev	.00029	.00006	.00062	.00005	.00080	.00002	.00001
%RSD	60.250	44.163	50.357	249.00	973.93	26.077	27.252
1	.00075	.00011	-.00052	-.00003	-.00080	-.00008	.00006
2	.00018	.00019	-.00151	.00002	.00076	-.00007	.00004
3	.00052	.00008	-.00166	.00007	.00028	-.00011	.00003

lem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
nits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
vg	**.00016**	**-.00105**	**.00121**	**.00021**	**.00000**	**-.00054**	**-.00014**
tddev	.00024	.00021	.00030	.00008	.00002	.00022	.00035
%RSD	154.63	20.204	24.485	36.683	570.00	41.250	238.71
#1	.00016	-.00081	.00156	.00012	.00003	-.00077	-.00030
#2	.00040	-.00112	.00104	.00027	-.00002	-.00052	-.00038
#3	-.00009	-.00121	.00104	.00024	.00000	-.00032	.00025

Elem	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S
Avg	**.00010**	**-.00001**	**-.00007**
Stddev	.00001	.00001	.00020
%RSD	12.134	40.027	299.70
#1	.00009	-.00001	.00016
#2	.00011	-.00002	-.00021
#3	.00011	-.00002	-.00014

Sample Name: S0 Acquired: 06/05/2019 13:54:08 Type: Cal

Method: ICP08 ISM02.4 2018(v94) Mode: IR Corr. Factor: 1.000000

User: sanchezjc SDG: Case: Prep:

Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1536.5**	**32441.**	**317770.**	**2670.0**	**22468.**	**150920.**
Stddev	23.0	99.	1793.	35.8	78.	1151.
%RSD	1.4944	.30621	.56435	1.3408	.34680	.76264
#1	1558.5	32507.	316950.	2702.0	22519.	151810.
#2	1538.4	32327.	316530.	2676.6	22378.	151330.
#3	1512.7	32490.	319820.	2631.4	22506.	149620.

Sample Name: S01 Acquired: 06/05/2019 13:57:09 Type: Cal
Method: ICP08 ISM02.4 2018(v94) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: Case: Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00113**	**.00479**	**.00054**	**.22873**	**.00281**	**.00793**	**.21510**	**.00892**
Stddev	.00004	.00023	.00011	.00047	.00003	.00022	.00167	.00020
%RSD	3.6727	4.7421	21.117	.20659	1.1167	2.7212	.77813	2.2305
#1	.00109	.00492	.00058	.22821	.00284	.00800	.21317	.00903
#2	.00114	.00492	.00062	.22912	.00281	.00811	.21611	.00904
#3	.00117	.00453	.00041	.22887	.00278	.00769	.21602	.00869

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02392**	**.01582**	**.00085**	**.00289**	**.01331**	**.00243**	**.00443**	**.02410**
Stddev	.00069	.00010	.00004	.00056	.00012	.00002	.00033	.00041
%RSD	2.8695	.61006	4.8684	19.389	.87507	.73088	7.4028	1.6828
#1	.02417	.01573	.00090	.00224	.01318	.00243	.00441	.02442
#2	.02445	.01592	.00083	.00318	.01340	.00245	.00477	.02364
#3	.02315	.01581	.00082	.00324	.01336	.00241	.00411	.02424

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.07584**	**.00162**	**.00059**	**.35266**	**.00662**	**.00316**	**.00071**	**.01409**
Stddev	.00027	.00035	.00003	.00068	.00028	.00006	.00002	.00047
%RSD	.35579	21.798	4.9726	.19364	4.2550	1.9827	2.7975	3.3509
#1	.07605	.00198	.00057	.35344	.00694	.00317	.00069	.01459
#2	.07594	.00127	.00063	.35221	.00641	.00309	.00072	.01404
#3	.07554	.00162	.00059	.35232	.00652	.00321	.00072	.01365

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1520.1**	**32507.**	**307610.**	**2712.1**	**22390.**	**144070.**
Stddev	25.1	186.	5547.	42.6	146.	1194.
%RSD	1.6492	.57321	1.8031	1.5705	.65029	.82888
#1	1496.3	32722.	313330.	2673.0	22558.	145260.
#2	1517.8	32387.	307230.	2705.9	22294.	142880.
#3	1546.3	32413.	302250.	2757.5	22319.	144070.

Sample Name: S02 Acquired: 06/05/2019 14:00:13 Type: Cal

Method: ICP08 ISM02.4 2018(v94) Mode: IR Corr. Factor: 1.000000

User: sanchezjc SDG: Case: Prep:

Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.06052**	**.17566**	**.05652**	**2.2486**	**.45650**	**1.1841**	**.84302**	**1.6643**
Stddev	.00047	.01332	.00452	.0183	.00299	.0926	.00757	.1305
%RSD	.78102	7.5804	7.9964	.81237	.65407	7.8197	.89799	7.8427
#1	.06022	.18168	.05858	2.2361	.45370	1.2220	.83536	1.7198
#2	.06106	.18490	.05965	2.2695	.45964	1.2518	.85050	1.7580
#3	.06027	.16040	.05134	2.2401	.45616	1.0786	.84319	1.5152

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.92843**	**1.3398**	**.16584**	**.60573**	**.05256**	**.30673**	**.35291**	**1.2115**
Stddev	.07078	.1082	.00121	.04657	.00041	.00225	.02709	.0915
%RSD	7.6238	8.0782	.72720	7.6875	.78516	.73363	7.6770	7.5494
#1	.95870	1.3877	.16464	.62616	.05217	.30445	.36449	1.2513
#2	.97904	1.4159	.16705	.63860	.05299	.30895	.37229	1.2763
#3	.84754	1.2159	.16584	.55245	.05253	.30679	.32195	1.1069

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.30584**	**.03151**	**.00549**	**1.4217**	**.22202**	**.09551**	**.02808**	**.47185**
Stddev	.00197	.00235	.00008	.0109	.01473	.00054	.00023	.03691
%RSD	.64440	7.4480	1.4152	.76522	6.6355	.56921	.81813	7.8217
#1	.30473	.03282	.00551	1.4170	.22919	.09515	.02799	.48685
#2	.30812	.03291	.00541	1.4341	.23180	.09613	.02792	.49890
#3	.30468	.02880	.00556	1.4140	.20508	.09524	.02835	.42981

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1402.1**	**32687.**	**308710.**	**2666.7**	**22432.**	**144120.**
Stddev	68.9	186.	1227.	122.8	143.	1329.
%RSD	4.9177	.56884	.39757	4.6050	.63662	.92203
#1	1369.3	32899.	309750.	2608.0	22593.	143710.
#2	1355.6	32552.	309040.	2584.2	22322.	145610.
#3	1481.3	32610.	307360.	2807.8	22380.	143060.

Sample Name: S03 Acquired: 06/05/2019 14:03:00 Type: Cal
Method: ICP08 ISM02.4 2018(v94) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: Case: Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.37878**	**1.0912**	**.35751**	**13.515**	**2.7956**	**6.9241**	**5.3434**	**9.7932**
Stddev	.00121	.0018	.00082	.134	.0120	.0212	.0103	.0254
%RSD	.32070	.16457	.23046	.99323	.43020	.30661	.19194	.25934
#1	.37989	1.0914	.35754	13.463	2.8044	6.9148	5.3551	9.7819
#2	.37898	1.0929	.35832	13.667	2.8005	6.9484	5.3360	9.8223
#3	.37748	1.0893	.35667	13.414	2.7819	6.9091	5.3390	9.7754

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.3344**	**8.7788**	**1.0040**	**3.8351**	**.33932**	**1.8155**	**2.1399**	**6.8946**
Stddev	.0101	.0120	.0037	.0102	.00069	.0062	.0066	.0156
%RSD	.18883	.13618	.36867	.26594	.20263	.33902	.30597	.22554
#1	5.3278	8.7659	1.0067	3.8239	.33931	1.8215	2.1372	6.8830
#2	5.3460	8.7811	1.0056	3.8439	.34002	1.8157	2.1474	6.9122
#3	5.3293	8.7895	.99982	3.8376	.33864	1.8092	2.1351	6.8884

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.9709**	**.18869**	**.02788**	**9.0845**	**1.3316**	**.58717**	**.16953**	**2.7226**
Stddev	.0072	.00042	.00038	.0448	.0010	.00203	.00074	.0092
%RSD	.36282	.22113	1.3538	.49324	.07511	.34571	.43391	.33838
#1	1.9686	.18845	.02745	9.0809	1.3319	.58801	.17016	2.7192
#2	1.9789	.18918	.02812	9.1309	1.3324	.58864	.16873	2.7331
#3	1.9651	.18846	.02808	9.0415	1.3305	.58485	.16971	2.7156

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1155.4**	**31574.**	**290040.**	**2482.2**	**21613.**	**133990.**
Stddev	1.6	87.	2056.	1.1	58.	991.
%RSD	.13837	.27496	.70880	.04563	.26994	.73952
#1	1156.7	31478.	287670.	2481.2	21546.	135090.
#2	1155.9	31601.	291270.	2482.1	21645.	133160.
#3	1153.6	31645.	291190.	2483.4	21648.	133730.

Sample Name: S04 Acquired: 06/05/2019 14:05:48 Type: Cal

Method: ICP08 ISM02.4 2018(v94) Mode: IR Corr. Factor: 1.000000

User: sanchezjc SDG: Case: Prep:

Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.77914**	**2.1884**	**.72585**	**26.853**	**5.5952**	**13.223**	**10.582**	**19.248**
Stddev	.00771	.0219	.00673	.213	.0645	.125	.093	.205
%RSD	.98919	1.0003	.92735	.79331	1.1536	.94649	.87701	1.0627
#1	.78661	2.2068	.73124	26.995	5.6100	13.286	10.663	19.390
#2	.77960	2.1941	.72801	26.608	5.6511	13.303	10.603	19.341
#3	.77121	2.1642	.71830	26.955	5.5245	13.078	10.481	19.014

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**10.433**	**18.563**	**1.9959**	**7.8472**	**.68771**	**3.6761**	**4.2349**	**13.399**
Stddev	.091	.153	.0213	.0644	.00779	.0307	.0378	.121
%RSD	.87549	.82404	1.0657	.82038	1.1327	.83537	.89336	.90221
#1	10.494	18.700	2.0142	7.9003	.69553	3.7008	4.2626	13.478
#2	10.478	18.592	2.0011	7.8659	.68766	3.6858	4.2502	13.459
#3	10.328	18.398	1.9726	7.7756	.67995	3.6417	4.1918	13.260

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.9822**	**.37228**	**.05885**	**17.977**	**2.6294**	**1.1982**	**.34209**	**5.3514**
Stddev	.0428	.00388	.00015	.339	.0155	.0104	.00122	.0555
%RSD	1.0742	1.0433	.25087	1.8847	.59041	.86797	.35735	1.0364
#1	4.0258	.37537	.05900	18.357	2.6449	1.2075	.34240	5.3803
#2	3.9807	.37355	.05871	17.867	2.6296	1.2003	.34313	5.3864
#3	3.9402	.36792	.05884	17.707	2.6138	1.1870	.34074	5.2874

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1046.7**	**30665.**	**273520.**	**2383.3**	**21051.**	**127310.**
Stddev	4.8	105.	1241.	11.5	57.	228.
%RSD	.45483	.34338	.45353	.48450	.26893	.17877
#1	1041.6	30599.	272410.	2372.9	21003.	127070.
#2	1047.5	30609.	273300.	2381.3	21036.	127330.
#3	1051.0	30786.	274860.	2395.7	21114.	127530.

Sample Name: S05 Acquired: 06/05/2019 14:08:53 Type: Cal
Method: ICP08 ISM02.4 2018(v94) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: Case: Prep:
Comment:

Elem	Sb2068	As1890	Ba4554	Be3131	Cd2144	Cr2055	Co2286	Cu2247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.2813**	**1.0569**	**39.527**	**8.2331**	**20.670**	**29.739**	**17.405**	**25.364**
Stddev	.0298	.0083	.459	.0692	.165	.304	.157	.167
%RSD	.90824	.78374	1.1624	.84078	.79965	1.0219	.89981	.65930
#1	3.3157	1.0664	39.037	8.1651	20.861	30.082	17.585	25.546
#2	3.2656	1.0520	39.598	8.2309	20.567	29.627	17.321	25.331
#3	3.2627	1.0522	39.948	8.3034	20.582	29.506	17.308	25.216

Elem	Pb2203	Mn2576	Mo2020	Ni2316	Se1960	Ag3280	Tl1908	Ti3349
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11.416**	**5.5792**	**6.4795**	**22.648**	**.56919**	**.08347**	**4.1843**	**1.7312**
Stddev	.063	.0436	.0575	.204	.00453	.00116	.0200	.0126
%RSD	.54798	.78111	.88677	.90287	.79593	1.3876	.47807	.72637
#1	11.488	5.5288	6.5443	22.883	.57441	.08216	4.2063	1.7167
#2	11.380	5.6032	6.4593	22.548	.56678	.08387	4.1672	1.7390
#3	11.379	5.6054	6.4348	22.512	.56638	.08437	4.1793	1.7378

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.51191**	**8.5375**
Stddev	.00775	.0683
%RSD	1.5143	.80039
#1	.51744	8.6162
#2	.50305	8.4942
#3	.51523	8.5019

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1391.7**	**32384.**	**308900.**	**2615.2**	**22278.**	**144650.**
Stddev	3.1	43.	6405.	13.8	36.	447.
%RSD	.22300	.13421	2.0735	.52858	.16173	.30918
#1	1388.3	32431.	302400.	2599.8	22320.	144990.
#2	1394.4	32375.	315210.	2626.5	22260.	144810.
#3	1392.4	32345.	309080.	2619.4	22255.	144140.

Sample Name: S06 Acquired: 06/05/2019 14:11:54 Type: Cal
Method: ICP08 ISM02.4 2018(v94) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: Case: Prep:
Comment:

Elem	Al3082	Ca3179	Fe2598	Mg2790	K_7664	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.1556**	**15.323**	**2.8983**	**1.0278**	**5.9110**	**26.913**
Stddev	.0097	.082	.0204	.0074	.0595	.184
%RSD	.83595	.53797	.70205	.71941	1.0073	.68525
#1	1.1572	15.228	2.8994	1.0282	5.9141	27.118
#2	1.1644	15.370	2.9180	1.0350	5.9688	26.858
#3	1.1452	15.371	2.8773	1.0202	5.8499	26.762

Int. Std.	Sc3613	Y_3710
Units	Cts/S	Cts/S
Avg	**30319.**	**20853.**
Stddev	127.	101.
%RSD	.42023	.48551
#1	30292.	20826.
#2	30207.	20768.
#3	30457.	20965.

Sample Name: S07 Acquired: 06/05/2019 14:15:15 Type: Cal

Method: ICP08 ISM02.4 2018(v94) Mode: IR Corr. Factor: 1.000000

User: sanchezjc SDG: Case: Prep:

Comment:

Elem	Sb2068	As1890	Ba4554	Be3131	Cd2144	Cr2055	Co2286	Cu2247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4.3366**	**1.3997**	**53.677**	**11.139**	**26.802**	**38.579**	**22.728**	**33.388**
Stddev	.2462	.0799	.345	.160	1.605	2.280	1.321	1.678
%RSD	5.6768	5.7088	.64188	1.4343	5.9878	5.9109	5.8130	5.0256
#1	4.5026	1.4533	53.918	11.278	27.875	40.181	23.615	34.504
#2	4.4533	1.4379	53.831	11.175	27.574	39.587	23.359	34.201
#3	4.0537	1.3079	53.282	10.965	24.957	35.968	21.209	31.458

Elem	Pb2203	Mn2576	Mo2020	Ni2316	Se1960	Ag3280	Tl1908	Ti3349
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**15.019**	**7.5750**	**8.5305**	**29.550**	**.74870**	**.11304**	**5.4520**	**2.3882**
Stddev	.804	.1162	.4870	1.717	.04174	.00116	.2503	.0143
%RSD	5.3523	1.5342	5.7094	5.8114	5.5751	1.0247	4.5906	.59828
#1	15.568	7.6520	8.8607	30.708	.77666	.11170	5.6177	2.3960
#2	15.393	7.6317	8.7595	30.364	.76871	.11370	5.5741	2.3969
#3	14.097	7.4413	7.9711	27.577	.70072	.11371	5.1641	2.3717

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.69196**	**11.031**
Stddev	.00275	.670
%RSD	.39744	6.0749
#1	.68881	11.473
#2	.69392	11.360
#3	.69314	10.260

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1368.4**	**32001.**	**304000.**	**2588.3**	**21921.**	**142040.**
Stddev	31.3	173.	525.	71.2	123.	546.
%RSD	2.2839	.53962	.17263	2.7507	.56235	.38428
#1	1349.3	31855.	303400.	2547.5	21793.	142670.
#2	1351.4	31956.	304350.	2546.8	21931.	141720.
#3	1404.5	32191.	304270.	2670.5	22039.	141730.

Sample Name: S08 Acquired: 06/05/2019 14:18:23 Type: Cal

Method: ICP08 ISM02.4 2018(v94) Mode: IR Corr. Factor: 1.000000

User: sanchezjc SDG: Case: Prep:

Comment:

Elem	Al3082	Ca3179	Fe2598	Mg2790	K_7664	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.5776**	**20.792**	**3.9021**	**1.4027**	**8.0057**	**36.310**
Stddev	.0101	.083	.0262	.0087	.0929	.250
%RSD	.64232	.39766	.67029	.62249	1.1608	.68984
#1	1.5809	20.814	3.9104	1.4060	8.1050	36.457
#2	1.5856	20.862	3.9231	1.4093	7.9209	36.453
#3	1.5662	20.701	3.8728	1.3928	7.9911	36.021

Int. Std.	Sc3613	Y_3710
Units	Cts/S	Cts/S
Avg	**29602.**	**20255.**
Stddev	202.	133.
%RSD	.68267	.65486
#1	29444.	20160.
#2	29533.	20200.
#3	29830.	20407.

Sample Name: ICV Acquired: 06/05/2019 14:21:54 Type: QC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2473.3**	**1036.0**	**1039.5**	**543.25**	**516.69**	F **554.98**	**10310.**
Stddev	47.2	7.0	7.1	4.24	1.66	5.71	59.
%RSD	1.9101	.67239	.68533	.77990	.32069	1.0293	.57437
#1	2504.2	1038.4	1044.2	543.98	515.59	559.57	10243.
#2	2496.8	1041.5	1043.0	547.08	518.60	556.78	10336.
#3	2418.9	1028.2	1031.3	538.70	515.89	548.58	10352.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value						496.00	
Range						10.499%	

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**538.56**	**537.63**	**497.21**	**5406.3**	**1026.9**	**5817.7**	**529.26**
Stddev	5.85	4.77	6.07	33.7	11.1	22.8	4.28
%RSD	1.0866	.88750	1.2211	.62348	1.0838	.39190	.80887
#1	542.76	542.29	499.91	5375.4	1037.6	5801.8	524.55
#2	541.04	537.85	501.46	5442.2	1027.7	5843.9	532.91
#3	531.87	532.76	490.25	5401.3	1015.4	5807.5	530.31
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.44994**	**543.02**	**9790.4**	**1059.9**	**498.07**	**10038.**	**1105.1**
Stddev	.53033	3.98	39.0	9.5	5.42	64.	7.4
%RSD	117.87	.73231	.39878	.89772	1.0877	.63272	.66602
#1	.90920	546.06	9762.4	1056.6	503.85	10056.	1104.1
#2	.57110	544.49	9835.0	1070.7	493.11	10090.	1113.0
#3	-.13049	538.52	9773.8	1052.5	497.24	9967.3	1098.4
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: ICV Acquired: 06/05/2019 14:21:54 Type: QC

Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000

User: sanchezjc SDG: MF9L61 Case: 48266 Prep:

Comment:

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**-6.1680**	**519.79**	**1103.5**
Stddev	.5138	12.45	13.4
%RSD	8.3305	2.3951	1.2104
#1	-6.1319	527.81	1118.1
#2	-6.6989	505.45	1100.4
#3	-5.6732	526.11	1092.0
Check ?	None	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1431.4**	**31919.**	**311290.**	**2651.2**	**22076.**	**144420.**
Stddev	6.2	242.	6582.	5.2	156.	737.
%RSD	.43627	.75784	2.1144	.19579	.70718	.51028
#1	1433.2	32177.	307220.	2650.3	22252.	143660.
#2	1424.5	31882.	318880.	2646.5	22021.	145130.
#3	1436.6	31697.	307770.	2656.7	21955.	144490.

Sample Name: ICB Acquired: 06/05/2019 14:24:48 Type: QC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**31.013**	**3.9842**	**1.2249**	**.16628**	**-.11589**	**.28750**	**-.98306**	**.03385**
Stddev	10.734	1.0840	1.0292	.12285	.09619	.15753	1.8813	.22241
%RSD	34.611	27.207	84.025	73.886	83.003	54.794	191.37	657.10
#1	18.618	4.9474	1.8697	.30581	-.09370	.10562	-2.9816	-.20533
#2	37.186	2.8103	.03793	.07436	-.22124	.38126	-.72106	.07243
#3	37.234	4.1949	1.7671	.11865	-.03273	.37561	.75349	.23444
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.73457**	**.33959**	**-.46696**	**.46433**	**3.4617**	**-.01234**	**-.16015**	**-.47989**
Stddev	.24241	1.1257	9.4686	3.4976	38.511	.17598	.64114	.02364
%RSD	33.000	331.49	2027.7	753.26	1112.5	1426.2	400.34	4.9261
#1	1.0103	.83645	8.6578	.02195	40.748	.12024	-.88531	-.48283
#2	.55482	1.1314	-10.246	4.1621	5.8038	.05472	.33151	-.45492
#3	.63862	-.94908	.1869	-2.7911	-36.167	-.21199	.07336	-.50192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**66.281**	**4.1048**	**.08129**	**33.746**	**-.10238**	**-.48763**	**-.36951**	**.88559**
Stddev	5.268	4.1766	.24976	3.968	2.4080	.17797	.07225	.59814
%RSD	7.9485	101.75	307.24	11.758	2352.0	36.497	19.554	67.541
#1	70.974	8.3142	.35944	29.339	.44176	-.53935	-.43476	.40881
#2	60.583	4.0383	-.12379	37.035	1.9870	-.28953	-.29185	.69124
#3	67.287	-.03822	.00823	34.864	-2.7359	-.63402	-.38192	1.5567
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICB Acquired: 06/05/2019 14:24:48 Type: QC

Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000

User: sanchezjc SDG: MF9L61 Case: 48266 Prep:

Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1545.2**	**31659.**	**310750.**	**2737.0**	**22086.**	**148100.**
Stddev	24.0	85.	1702.	42.0	82.	395.
%RSD	1.5530	.26846	.54767	1.5348	.37284	.26690
#1	1527.1	31564.	308820.	2711.1	22006.	148500.
#2	1536.1	31729.	312050.	2714.6	22170.	147710.
#3	1572.5	31683.	311370.	2785.5	22082.	148100.

Sample Name: ICSA Acquired: 06/05/2019 14:27:56 Type: QC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**259050.**	**8.0456**	**6.9861**	**6.4754**	**-.12557**	**.37411**	**258850.**
Stddev	2156.	8.1290	4.1470	.1101	.03629	.28792	1586.
%RSD	.83223	101.04	59.361	1.6999	28.899	76.962	.61250
#1	261120.	11.981	3.8997	6.3860	-.14164	.62997	260560.
#2	259200.	-1.3022	11.700	6.5984	-.15106	.43004	257430.
#3	256820.	13.458	5.3586	6.4420	-.08402	.06233	258570.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**61.606**	**.63807**	**-4.5416**	**105450.**	**4.0884**	**263690.**	**17.392**
Stddev	2.167	.72965	2.4402	854.	5.3193	1554.	.224
%RSD	3.5179	114.35	53.731	.80978	130.11	.58943	1.2874
#1	62.298	.90016	-1.7546	106410.	-.23610	265460.	17.285
#2	63.343	-.18642	-5.5754	105140.	10.028	263110.	17.242
#3	59.178	1.2005	-6.2948	104790.	2.4733	262520.	17.649
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.15610**	**2.8099**	**67.285**	**12.520**	**.12704**	**48.526**	**-2.9201**
Stddev	.90558	.5099	3.601	5.906	.45935	7.744	3.4957
%RSD	580.13	18.147	5.3517	47.168	361.58	15.959	119.71
#1	.01426	2.9283	71.164	6.2338	.48447	57.196	-6.9307
#2	-.67019	2.2512	64.048	17.952	.28771	46.089	-.51911
#3	1.1242	3.2501	66.644	13.375	-.39106	42.294	-1.3106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA Acquired: 06/05/2019 14:27:56 Type: QC

Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000

User: sanchezjc SDG: MF9L61 Case: 48266 Prep:

Comment:

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**-5.5046**	**-1.2964**	**4.9020**
Stddev	.5590	.5701	2.9475
%RSD	10.156	43.976	60.129
#1	-5.9195	-.65278	2.0616
#2	-5.7255	-1.7379	7.9460
#3	-4.8689	-1.4985	4.6982
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1121.6**	**30748.**	**281490.**	**2494.1**	**21274.**	**131200.**
Stddev	19.1	183.	3820.	39.6	104.	35.
%RSD	1.6999	.59416	1.3570	1.5874	.48922	.02696
#1	1109.4	30608.	279680.	2471.0	21204.	131230.
#2	1111.8	30954.	285870.	2471.5	21393.	131160.
#3	1143.5	30681.	278900.	2539.8	21224.	131200.

Sample Name: ICSAB Acquired: 06/05/2019 14:31:00 Type: QC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**255290.**	**633.44**	**111.57**	**566.51**	**546.51**	**1087.9**	**255690.**
Stddev	4179.	9.97	2.19	9.90	8.13	18.5	3777.
%RSD	1.6371	1.5741	1.9642	1.7483	1.4868	1.7019	1.4771
#1	259510.	625.61	112.17	577.58	554.75	1068.1	259830.
#2	251150.	644.67	113.40	558.48	538.51	1104.8	252420.
#3	255210.	630.05	109.14	563.47	546.27	1090.7	254830.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**610.47**	**508.62**	**571.06**	**103940.**	**55.624**	**259770.**	**556.78**
Stddev	9.08	6.10	8.32	1475.	2.009	3716.	8.13
%RSD	1.4869	1.1994	1.4572	1.4188	3.6117	1.4306	1.4601
#1	600.35	502.55	561.46	105440.	53.314	263650.	565.42
#2	617.89	514.75	576.26	102490.	56.968	256250.	549.28
#3	613.17	508.57	575.47	103910.	56.589	259400.	555.65
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.51231**	**1015.6**	**57.974**	**67.957**	**213.83**	**42.782**	**106.59**
Stddev	1.4561	13.3	12.331	6.501	1.98	2.259	2.95
%RSD	284.22	1.3133	21.270	9.5663	.92807	5.2812	2.7706
#1	1.1741	1000.5	47.332	63.627	215.65	40.341	103.26
#2	1.5200	1025.8	71.488	64.812	211.71	44.799	107.63
#3	-1.1572	1020.5	55.103	75.432	214.12	43.207	108.89
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAB Acquired: 06/05/2019 14:31:00 Type: QC

Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000

User: sanchezjc SDG: MF9L61 Case: 48266 Prep:

Comment:

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**-7.4964**	**541.90**	**1068.3**
Stddev	.6278	3.57	14.9
%RSD	8.3745	.65941	1.3959
#1	-6.8114	544.03	1052.1
#2	-8.0443	543.90	1081.5
#3	-7.6336	537.78	1071.3
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1117.2**	**30969.**	**281710.**	**2488.9**	**21437.**	**131030.**
Stddev	7.6	226.	808.	16.3	186.	903.
%RSD	.67911	.73061	.28672	.65626	.86743	.68942
#1	1125.6	30752.	281240.	2506.4	21232.	130220.
#2	1110.9	31203.	281240.	2474.1	21593.	132010.
#3	1115.1	30952.	282640.	2486.3	21487.	130870.

Sample Name: CCV1 Acquired: 06/05/2019 14:33:52 Type: QC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**247340.**	**25618.**	**10530.**	**25247.**	**10077.**	**10127.**	**256500.**
Stddev	2848.	509.	242.	287.	118.	215.	2725.
%RSD	1.1513	1.9861	2.2969	1.1371	1.1694	2.1190	1.0625
#1	249750.	26201.	10808.	25337.	10190.	10373.	259050.
#2	248070.	25266.	10368.	25478.	10086.	9977.5	256820.
#3	244200.	25386.	10413.	24926.	9955.0	10030.	253620.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**25496.**	**24012.**	F **27662.**	**254670.**	**26525.**	**249740.**	**24757.**
Stddev	556.	523.	654.	2688.	589.	2814.	292.
%RSD	2.1814	2.1777	2.3627	1.0555	2.2214	1.1269	1.1785
#1	26136.	24611.	28413.	257140.	27199.	252170.	25028.
#2	25123.	23646.	27222.	255070.	26111.	250390.	24796.
#3	25231.	23778.	27350.	251810.	26264.	246650.	24448.
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			25000.				
Range			10.499%				

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**10158.**	**23822.**	**250370.**	**10123.**	**1048.5**	**251660.**	**9940.6**
Stddev	218.	510.	2250.	221.	9.8	5645.	216.7
%RSD	2.1437	2.1397	.89876	2.1836	.93012	2.2431	2.1795
#1	10408.	24406.	252370.	10378.	1055.9	256430.	10188.
#2	10007.	23469.	250800.	10001.	1052.0	253110.	9783.3
#3	10059.	23590.	247930.	9990.0	1037.4	245430.	9850.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV1 Acquired: 06/05/2019 14:33:52 Type: QC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**10156.**	**25197.**	**25228.**
Stddev	125.	204.	512.
%RSD	1.2311	.80942	2.0310
#1	10260.	25412.	25809.
#2	10190.	25175.	24839.
#3	10017.	25006.	25037.
Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1041.4**	**30400.**	**275170.**	**2374.3**	**20906.**	**127220.**
Stddev	15.7	278.	1292.	33.0	179.	743.
%RSD	1.5047	.91320	.46942	1.3912	.85680	.58396
#1	1023.8	30135.	273740.	2337.3	20728.	126610.
#2	1053.7	30375.	275520.	2400.9	20905.	127020.
#3	1046.8	30689.	276250.	2384.6	21086.	128050.

ample Name: CCB1 Acquired: 06/05/2019 14:36:56 Type: QC
lethod: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
ser: sanchezjc SDG: MF9L61 Case: 48266 Prep:
omment:

lem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
nits	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
vg	**44.572**	**.85011**	**1.5484**	**2.2763**	**.88941**	**.63633**	**24.867**	**1.3047**
tddev	29.443	.68784	3.1891	.6117	.29541	.15847	7.218	.2681
%RSD	66.056	80.912	205.96	26.873	33.214	24.904	29.027	20.551
1	13.781	1.0535	-2.0930	2.9688	1.2301	.46120	33.097	1.0485
2	72.450	.08350	2.8945	2.0509	.73291	.67796	21.896	1.2823
3	47.486	1.4133	3.8437	1.8093	.70518	.76984	19.609	1.5833
heck ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
igh Limit								
ow Limit								

lem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
nits	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
vg	**1.7582**	**1.5519**	**21.322**	**.53054**	**42.210**	**1.7064**	**1.1778**	**1.4314**
tddev	.7257	.4988	7.871	.95628	34.827	.2198	.4497	.3492
%RSD	41.274	32.140	36.913	180.25	82.508	12.882	38.180	24.397
1	2.5294	.97606	29.672	-.25633	57.375	1.7951	.69334	1.6771
2	1.0888	1.8307	20.256	.25308	2.3723	1.8681	1.5819	1.5855
3	1.6565	1.8490	14.039	1.5949	66.885	1.4561	1.2582	1.0317
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**104.44**	**1.8217**	**-.30999**	**49.723**	**-.30581**	**.44476**	**.97657**	**.63808**
Stddev	17.80	6.2589	.31540	7.885	2.1328	.33957	.35357	1.5041
%RSD	17.047	343.58	101.74	15.859	697.43	76.348	36.205	235.72
#1	119.69	5.1325	-.26952	55.813	-1.8965	.82802	1.1615	1.0293
#2	108.76	5.7298	-.64367	52.541	2.1178	.18143	.56889	-1.0230
#3	84.877	-5.3972	-.01678	40.816	-1.1388	.32484	1.1993	1.9079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB1 Acquired: 06/05/2019 14:36:56 Type: QC

Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000

User: sanchezjc SDG: MF9L61 Case: 48266 Prep:

Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1561.7	31369.	306650.	2768.4	21841.	146340.
Stddev	19.7	313.	7041.	43.3	196.	2917.
%RSD	1.2584	.99648	2.2961	1.5638	.89945	1.9931
#1	1583.8	31709.	298810.	2818.1	22053.	144160.
#2	1546.3	31305.	308710.	2747.9	21804.	145200.
#3	1554.9	31093.	312430.	2739.1	21665.	149650.

Sample Name: PBS1 Acquired: 06/05/2019 14:40:03 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**18.412**	**3.7559**	**-1.0526**	**.89878**	**.01511**	**.39271**	**13.973**	**1.1891**
Stddev	14.987	3.5598	1.9353	.18919	.06542	.16161	1.902	.3026
%RSD	81.399	94.779	183.87	21.050	432.87	41.152	13.611	25.451
#1	29.377	6.6994	.31573	1.0997	.08616	.35296	16.158	1.4754
#2	1.3346	-.20063	-.20655	.72401	.00182	.25469	13.064	1.2193
#3	24.525	4.7689	-3.2669	.87266	-.04264	.57049	12.695	.87244

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.42670**	**.92461**	**20.353**	**-1.0104**	**12.908**	**.00346**	**.72477**	**-.94676**
Stddev	.57229	.31405	4.057	2.2890	19.871	.08138	.42059	.28636
%RSD	134.12	33.966	19.933	226.55	153.94	2352.0	58.030	30.247
#1	.94693	1.2654	22.163	1.5089	18.120	-.04022	.36783	-.63663
#2	.51949	.86153	15.706	-1.5774	29.654	-.04675	.61804	-1.2012
#3	-.18632	.64689	23.190	-2.9626	-9.0494	.09735	1.1884	-1.0025

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**33.929**	**4.5485**	**.40946**	**46.610**	**-1.8936**	**-.35475**	**-.26364**	**1.2853**
Stddev	12.232	6.9201	.38722	3.107	1.3843	.92081	.18896	.2818
%RSD	36.053	152.14	94.569	6.6658	73.107	259.57	71.675	21.922
#1	22.056	8.9802	.83813	43.671	-1.8894	-1.2501	-.16643	1.0091
#2	33.239	8.0909	.08503	46.298	-.51134	.58955	-.48142	1.5724
#3	46.492	-3.4257	.30522	49.862	-3.2800	-.40368	-.14307	1.2745

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1457.7**	**31426.**	**312450.**	**2712.5**	**21814.**	**147580.**
Stddev	4.1	287.	1328.	3.7	202.	380.
%RSD	.27802	.91368	.42507	.13661	.92414	.25744
#1	1455.5	31307.	311060.	2709.1	21735.	147850.
#2	1462.3	31218.	312570.	2716.4	21664.	147140.
#3	1455.1	31754.	313710.	2711.8	22043.	147730.

Sample Name: LCS1 Acquired: 06/05/2019 14:43:11 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055	Co2286
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**427.42**	**128.65**	**19.710**	**448.48**	**11.011**	**11.441**	**10776.**	**23.447**	**110.56**
Stddev	22.22	.54	1.566	.97	.195	.267	18.	.644	.58
%RSD	5.1994	.41778	7.9444	.21592	1.7686	2.3331	.16306	2.7472	.52700
#1	442.17	128.47	21.031	447.52	10.849	11.543	10773.	22.787	110.05
#2	438.23	128.23	17.980	449.45	11.227	11.642	10795.	23.479	111.19
#3	401.86	129.25	20.118	448.47	10.957	11.138	10760.	24.075	110.44

Elem	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**53.882**	**233.53**	**22.490**	**9989.6**	**33.220**	**.46967**	**86.211**	**9831.0**	**80.664**
Stddev	.985	3.65	1.213	28.9	.187	.38600	.625	15.7	4.006
%RSD	1.8276	1.5618	5.3955	.28947	.56377	82.184	.72441	.15947	4.9668
#1	54.098	229.74	21.161	9976.1	33.051	.86424	86.799	9813.8	82.220
#2	54.741	233.84	23.538	9969.8	33.421	.45191	85.556	9844.6	83.659
#3	52.807	237.01	22.769	10023.	33.186	.09286	86.278	9834.5	76.113

Elem	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**19.828**	**10298.**	**51.920**	**.65598**	**109.10**	**135.67**
Stddev	.360	24.	.519	1.4444	1.14	1.00
%RSD	1.8172	.22844	1.0006	220.19	1.0457	.73393
#1	20.147	10273.	52.217	-.78115	110.40	134.76
#2	19.898	10319.	51.320	.64153	108.60	136.73
#3	19.437	10302.	52.222	2.1076	108.29	135.52

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1358.7**	**31424.**	**308510.**	**2674.7**	**21712.**	**144200.**
Stddev	4.9	63.	2753.	5.9	61.	713.
%RSD	.36128	.20190	.89241	.21971	.28170	.49411
#1	1359.8	31409.	305410.	2678.8	21704.	143800.
#2	1363.0	31370.	310690.	2677.4	21655.	143780.
#3	1353.4	31494.	309420.	2668.0	21777.	145020.

Sample Name: MF9L61 Acquired: 06/05/2019 14:46:16 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 4x for Ca.
JCS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**91782.**	**3.2765**	**67.266**	**758.42**	**5.7766**	**1.3200**
Stddev	1607.	4.3036	5.411	12.85	.1525	.3818
%RSD	1.7510	131.35	8.0436	1.6946	2.6397	28.921
#1	91549.	-1.3212	71.564	755.59	5.7310	.88451
#2	90305.	7.2084	69.044	747.22	5.9467	1.4787
#3	93494.	3.9424	61.190	772.45	5.6521	1.5968

Elem	Ca3179	Cr2055	Co2286	Cu2247	Fe2598	Pb2203
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **1360900.**	**187.77**	**54.875**	**189.36**	**112810.**	**555.04**
Stddev	12648.	1.52	.723	1.33	1876.	6.76
%RSD	.92941	.80860	1.3169	.70120	1.6626	1.2173
#1	1347200.	186.24	54.321	187.82	111830.	547.26
#2	1363500.	187.80	55.692	190.10	111630.	558.45
#3	1372000.	189.28	54.610	190.15	114970.	559.42

Elem	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**24554.**	**6485.5**	**2.4096**	**138.77**	**12994.**	**19.208**
Stddev	444.	110.8	.7731	1.18	273.	6.154
%RSD	1.8069	1.7088	32.085	.84817	2.1006	32.038
#1	24320.	6414.2	2.7567	139.21	12939.	26.283
#2	24277.	6429.1	1.5237	137.43	12753.	16.238
#3	25066.	6613.2	2.9483	139.66	13291.	15.102

Elem	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.0417**	**1473.2**	**-4.6451**	**271.75**	**276.78**	**775.42**
Stddev	.3599	23.8	.8890	5.81	4.09	8.11
%RSD	34.554	1.6156	19.139	2.1389	1.4777	1.0460
#1	-1.3768	1470.2	-3.9734	268.85	272.06	766.57
#2	-1.0871	1451.0	-4.3087	267.96	279.26	777.22
#3	-.66120	1498.3	-5.6532	278.44	279.02	782.49

Sample Name: MF9L61 Acquired: 06/05/2019 14:46:16 Type: Unk

Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000

User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B

Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1031.0**	**30036.**	**275620.**	**2514.2**	**21556.**	**133670.**
Stddev	5.9	303.	1567.	17.2	200.	1891.
%RSD	.57297	1.0091	.56837	.68310	.92796	1.4146
#1	1037.5	30306.	276700.	2530.9	21726.	135830.
#2	1029.6	30094.	276340.	2515.1	21607.	132280.
#3	1026.0	29708.	273830.	2496.6	21336.	132910.

Sample Name: MF9L69 Acquired: 06/05/2019 14:49:24 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 2x for Ca.
JCS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**76217.**	**.43382**	**32.442**	**552.71**	**4.5878**	**1.1081**	F **864860.**
Stddev	511.	2.8588	8.563	3.37	.1509	.6975	6490.
%RSD	.67025	658.98	26.395	.61034	3.2900	62.942	.75043
#1	76751.	1.1180	37.722	556.01	4.7496	1.2013	871930.
#2	75733.	-2.7049	37.043	549.26	4.4508	1.7543	859170.
#3	76168.	2.8884	22.562	552.85	4.5630	.36876	863480.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**216.33**	**35.865**	**106.27**	**77209.**	**197.18**	**15408.**	**3122.3**
Stddev	14.20	2.262	7.29	657.	15.63	183.	29.2
%RSD	6.5629	6.3081	6.8590	.85109	7.9262	1.1898	.93369
#1	220.18	36.002	109.98	77919.	203.40	15597.	3155.2
#2	228.21	38.056	110.95	76622.	208.74	15231.	3099.8
#3	200.61	33.537	97.867	77087.	179.40	15397.	3111.8

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1.0776**	**104.20**	**10169.**	**21.805**	**-.96134**	**938.11**	**-3.9998**
Stddev	.3008	6.23	48.	1.670	.25573	5.09	1.3198
%RSD	27.916	5.9800	.46859	7.6581	26.601	.54224	32.997
#1	.83674	105.74	10217.	20.048	-.76574	941.87	-2.6832
#2	1.4148	109.51	10122.	21.995	-1.2507	932.32	-5.3227
#3	.98130	97.342	10168.	23.371	-.86756	940.14	-3.9934

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**303.44**	**215.16**	**537.32**
Stddev	2.88	2.19	34.38
%RSD	.95048	1.0169	6.3990
#1	304.01	212.75	548.62
#2	305.99	215.72	564.62
#3	300.31	217.02	498.70

Sample Name: MF9L69 Acquired: 06/05/2019 14:49:24 Type: Unk

Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000

User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B

Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1110.5**	**30804.**	**279700.**	**2596.7**	**21887.**	**134250.**
Stddev	51.0	249.	1136.	103.0	181.	980.
%RSD	4.5970	.80826	.40604	3.9681	.82851	.72965
#1	1097.1	30543.	279340.	2564.5	21691.	135380.
#2	1067.5	31039.	278790.	2513.6	22048.	133650.
#3	1167.0	30828.	280970.	2712.0	21922.	133720.

Sample Name: MF9L70 Acquired: 06/05/2019 14:52:34 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000 See 2x for Ca.
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

JCS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**44380.**	**3.7710**	**24.339**	**445.28**	**3.3004**	**1.4307**	F **626660.**
Stddev	948.	5.6345	4.131	9.17	.1200	.1540	18520.
%RSD	2.1356	149.41	16.972	2.0592	3.6350	10.765	2.9554
#1	44853.	8.9852	25.464	450.31	3.3363	1.2627	636900.
#2	44999.	4.5339	19.763	450.83	3.3984	1.5653	637800.
#3	43289.	-2.2060	27.791	434.69	3.1666	1.4642	605280.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**211.03**	**28.944**	**129.91**	**56447.**	**277.36**	**10844.**	**2604.1**
Stddev	.54	.676	1.42	1493.	1.40	285.	69.7
%RSD	.25435	2.3356	1.0925	2.6450	.50460	2.6278	2.6766
#1	211.36	28.982	129.80	57209.	278.45	10964.	2640.2
#2	211.32	29.600	131.38	57405.	277.84	11050.	2648.2
#3	210.41	28.250	128.55	54726.	275.78	10519.	2523.7

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.91443**	**81.538**	**6637.7**	**14.201**	**-.62992**	**694.83**	**-3.8761**
Stddev	1.1607	.758	110.9	3.069	.47363	15.41	1.7249
%RSD	126.93	.93003	1.6701	21.610	75.188	2.2181	44.500
#1	1.8914	82.245	6719.3	16.851	-.49864	694.93	-2.4340
#2	-.36862	80.737	6682.4	14.912	-1.1553	710.18	-5.7869
#3	1.2205	81.631	6511.5	10.839	-.23579	679.36	-3.4074

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**213.88**	**153.40**	**497.13**
Stddev	5.61	2.86	4.70
%RSD	2.6236	1.8635	.94607
#1	215.80	150.47	501.76
#2	218.28	153.55	497.28
#3	207.56	156.18	492.36

Sample Name: MF9L70 Acquired: 06/05/2019 14:52:34 Type: Unk

Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000

User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B

Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1139.5**	**30969.**	**287180.**	**2591.1**	**21829.**	**134570.**
Stddev	1.2	631.	714.	6.0	411.	3545.
%RSD	.10381	2.0368	.24861	.23194	1.8829	2.6340
#1	1140.9	30612.	286570.	2587.3	21594.	138060.
#2	1139.0	30598.	287960.	2588.0	21589.	134680.
#3	1138.8	31697.	287000.	2598.1	22303.	130970.

Sample Name: MF9L74 Acquired: 06/05/2019 14:55:44 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000 See 3x for Ca.
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: JCS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**64296.**	**3.3849**	**51.056**	**554.77**	**4.4592**	**.98667**
Stddev	254.	2.0310	2.761	.88	.1451	.14768
%RSD	.39573	60.003	5.4069	.15932	3.2536	14.967
#1	64205.	5.3931	50.942	553.79	4.3689	1.1543
#2	64584.	1.3318	48.354	555.00	4.6265	.92987
#3	64100.	3.4297	53.872	555.52	4.3821	.87583

Elem	Ca3179	Cr2055	Co2286	Cu2247	Fe2598	Pb2203
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **1177200.**	**156.11**	**41.368**	**107.12**	**85535.**	**536.53**
Stddev	4809.	4.34	1.524	3.38	314.	9.72
%RSD	.40849	2.7821	3.6831	3.1537	.36731	1.8113
#1	1176000.	161.12	43.036	110.96	85351.	547.75
#2	1182500.	153.71	41.017	105.82	85897.	530.88
#3	1173100.	153.50	40.050	104.59	85355.	530.95

Elem	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**15285.**	**4939.2**	**2.0054**	**106.33**	**8971.3**	**15.421**
Stddev	89.	11.0	.8995	3.06	22.6	10.170
%RSD	.57983	.22229	44.857	2.8765	.25138	65.949
#1	15240.	4932.8	2.5499	109.70	8953.0	24.563
#2	15387.	4951.8	2.4991	103.72	8996.5	4.4665
#3	15228.	4932.9	.96708	105.59	8964.4	17.234

Elem	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.78282**	**1210.7**	**-3.0429**	**202.77**	**223.61**	**471.25**
Stddev	.16472	2.4	2.8034	1.58	1.70	9.62
%RSD	21.042	.19598	92.128	.78047	.76062	2.0412
#1	-.93629	1210.9	-1.2353	200.96	221.65	482.06
#2	-.60879	1213.0	-6.2723	203.88	224.72	463.64
#3	-.80339	1208.3	-1.6211	203.47	224.46	468.04

Sample Name: MF9L74 Acquired: 06/05/2019 14:55:44 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1055.3**	**30481.**	**275890.**	**2543.4**	**21721.**	**133110.**
Stddev	17.0	102.	368.	35.8	53.	1612.
%RSD	1.6133	.33563	.13322	1.4091	.24259	1.2108
#1	1035.7	30459.	276290.	2502.1	21699.	134920.
#2	1066.1	30391.	275570.	2567.0	21684.	131830.
#3	1064.2	30592.	275810.	2561.0	21782.	132580.

Sample Name: MF9L75 Acquired: 06/05/2019 14:58:53 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 3x for Ca.
JS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**82518.**	**3.7922**	**37.487**	**599.57**	**4.9499**	**2.1230**
Stddev	166.	3.1794	1.877	2.24	.1279	.3459
%RSD	.20067	83.842	5.0082	.37395	2.5845	16.292
#1	82343.	4.3939	37.398	596.99	4.8177	2.0003
#2	82536.	.35486	39.408	601.03	5.0730	2.5135
#3	82673.	6.6277	35.656	600.69	4.9591	1.8552

Elem	Ca3179	Cr2055	Co2286	Cu2247	Fe2598	Pb2203
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **1130600.**	**262.66**	**37.829**	**161.20**	**86216.**	**735.42**
Stddev	9296.	1.46	.125	1.35	495.	1.11
%RSD	.82222	.55451	.33150	.83485	.57449	.15114
#1	1120200.	264.16	37.972	162.36	85738.	734.81
#2	1138100.	261.26	37.777	161.53	86184.	734.74
#3	1133500.	262.56	37.737	159.73	86727.	736.70

Elem	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**18307.**	**3389.0**	**2.5810**	**115.13**	**11720.**	**15.686**
Stddev	151.	11.5	.6225	.61	41.	1.750
%RSD	.82695	.34061	24.117	.52601	.34641	11.157
#1	18143.	3376.1	3.2621	115.77	11673.	15.885
#2	18335.	3392.6	2.0417	115.05	11737.	17.329
#3	18442.	3398.3	2.4393	114.56	11749.	13.845

Elem	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.58647**	**1327.7**	**-5.1093**	**282.36**	**249.43**	**700.77**
Stddev	.42210	8.4	2.0149	.69	8.52	.19
%RSD	71.972	.63073	39.437	.24546	3.4163	.02758
#1	-1.0634	1318.8	-6.4893	282.31	259.25	700.95
#2	-.43511	1335.4	-6.0414	281.70	245.05	700.57
#3	-.26093	1329.0	-2.7970	283.08	243.99	700.79

Sample Name: MF9L75 Acquired: 06/05/2019 14:58:53 Type: Unk

Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000

User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B

Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1069.3**	**30515.**	**270490.**	**2565.2**	**21787.**	**133800.**
Stddev	6.0	89.	10735.	10.3	93.	1838.
%RSD	.55684	.29237	3.9688	.40204	.42738	1.3736
#1	1064.7	30595.	258110.	2553.7	21888.	135750.
#2	1076.0	30531.	277060.	2573.5	21769.	132100.
#3	1067.2	30419.	276320.	2568.5	21704.	133530.

Sample Name: MF9L76 Acquired: 06/05/2019 15:02:01 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 2x for Ca.
JCS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**57369.**	**-.90773**	**28.789**	**512.86**	**3.7120**	**1.5121**	F **804130.**
Stddev	345.	1.6270	4.562	2.47	.1559	.2063	7457.
%RSD	.60079	179.24	15.846	.48119	4.1988	13.644	.92727
#1	57369.	.96969	25.381	514.22	3.7487	1.3541	803640.
#2	57713.	-1.9060	27.014	514.34	3.8463	1.4368	811820.
#3	57024.	-1.7868	33.972	510.01	3.5411	1.7455	796930.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**178.59**	**32.872**	**139.41**	**65991.**	**382.30**	**13117.**	**3069.7**
Stddev	2.15	.281	1.59	536.	10.21	108.	14.8
%RSD	1.2031	.85624	1.1375	.81223	2.6701	.82615	.48275
#1	180.78	32.644	141.24	66212.	394.07	13117.	3075.4
#2	178.51	33.186	138.57	66381.	377.03	13225.	3080.7
#3	176.49	32.785	138.43	65379.	375.81	13009.	3052.8

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1.8109**	**98.242**	**8346.9**	**11.827**	**-.51819**	**857.62**	**-4.2423**
Stddev	.2653	1.088	65.7	4.639	.40037	8.57	3.0680
%RSD	14.653	1.1076	.78754	39.222	77.263	.99964	72.320
#1	2.1167	99.499	8369.3	12.417	-.17460	866.64	-3.5488
#2	1.6746	97.591	8398.4	16.142	-.42211	856.66	-1.5803
#3	1.6413	97.637	8272.8	6.9211	-.95786	849.57	-7.5976

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**215.23**	**181.26**	**555.96**
Stddev	2.47	2.76	9.54
%RSD	1.1459	1.5202	1.7162
#1	216.30	180.97	566.98
#2	216.98	178.66	550.61
#3	212.41	184.15	550.29

Sample Name: MF9L76 Acquired: 06/05/2019 15:02:01 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1124.4**	**30940.**	**285920.**	**2600.5**	**21916.**	**135630.**
Stddev	12.7	150.	5485.	22.1	114.	1437.
%RSD	1.1251	.48514	1.9183	.84936	.52062	1.0591
#1	1110.8	30907.	283570.	2577.0	21900.	137280.
#2	1126.4	30808.	292190.	2603.6	21811.	134760.
#3	1135.9	31103.	282000.	2620.9	22038.	134840.

Sample Name: MF9L77 Acquired: 06/05/2019 15:05:10 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 3x for Ca.
JS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**73070.**	**.90144**	**49.967**	**644.27**	**4.8321**	**1.7153**
Stddev	991.	4.4931	2.028	7.07	.1943	.2088
%RSD	1.3567	498.43	4.0585	1.0971	4.0207	12.172
#1	74143.	-4.2088	47.909	652.16	4.7166	1.6200
#2	72187.	2.6809	50.029	638.52	5.0564	1.5711
#3	72881.	4.2323	51.963	642.12	4.7232	1.9547

Elem	Ca3179	Cr2055	Co2286	Cu2247	Fe2598	Pb2203
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **1126100.**	**265.54**	**47.891**	**156.07**	**94500.**	**470.36**
Stddev	11818.	6.09	.756	3.95	1236.	9.51
%RSD	1.0495	2.2919	1.5783	2.5323	1.3079	2.0210
#1	1139700.	267.22	47.469	157.37	95828.	467.32
#2	1118200.	258.79	47.440	151.63	93384.	462.74
#3	1120400.	270.61	48.764	159.20	94288.	481.01

Elem	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**16595.**	**5224.4**	**2.4218**	**122.10**	**10483.**	**21.595**
Stddev	225.	66.2	.7166	1.81	53.	10.302
%RSD	1.3579	1.2678	29.591	1.4853	.50364	47.704
#1	16826.	5295.1	2.3260	122.36	10541.	13.043
#2	16376.	5163.8	3.1815	120.17	10438.	18.710
#3	16584.	5214.3	1.7579	123.77	10470.	33.031

Elem	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.1285**	**1221.5**	**-5.7062**	**179.70**	**216.86**	**651.41**
Stddev	.5996	3.2	3.6235	2.04	8.54	12.79
%RSD	53.132	.26111	63.502	1.1350	3.9401	1.9629
#1	-.43668	1224.9	-9.3155	181.04	215.61	652.70
#2	-1.4978	1218.5	-5.7344	177.35	209.01	638.02
#3	-1.4510	1221.0	-2.0687	180.71	225.96	663.50

Sample Name: MF9L77 Acquired: 06/05/2019 15:05:10 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1048.3**	**30672.**	**281730.**	**2520.1**	**21845.**	**134290.**
Stddev	15.7	274.	7974.	31.9	187.	2903.
%RSD	1.4992	.89231	2.8303	1.2661	.85382	2.1618
#1	1050.9	30389.	278180.	2513.8	21648.	137380.
#2	1062.6	30936.	290870.	2554.7	22019.	133870.
#3	1031.5	30689.	276150.	2491.9	21867.	131620.

ample Name: MF9L78 Acquired: 06/05/2019 15:08:19 Type: Unk
lethod: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
lser: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
comment:

See 2x for Ca.
gs 06/06/2019

lem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Jnits	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
\vg	**67788.**	**3.4637**	**35.940**	**580.03**	**4.0484**	**1.4489**	F **745530.**
Stddev	219.	3.8088	4.591	2.43	.0445	.1816	9967.
%RSD	.32345	109.96	12.773	.41970	1.0997	12.535	1.3368
1	68005.	-.93073	41.214	582.83	4.0525	1.6414	745010.
2	67794.	5.5082	32.843	578.90	4.0020	1.4249	755740.
3	67566.	5.8137	33.762	578.37	4.0908	1.2805	735830.

lem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Jnits	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
\vg	**177.65**	**38.642**	**154.88**	**76182.**	**352.27**	**14851.**	**4470.9**
Stddev	5.89	1.552	7.04	378.	13.53	145.	22.2
%RSD	3.3178	4.0168	4.5460	.49593	3.8412	.97429	.49740
1	182.44	40.433	160.49	76575.	364.03	15017.	4493.9
2	179.43	37.802	157.17	75822.	355.29	14754.	4449.5
3	171.06	37.691	146.98	76150.	337.48	14781.	4469.1

lem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Jnits	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
\vg	**1.4915**	**112.39**	**9786.8**	**16.881**	**-1.0661**	**817.42**	**-2.1005**
Stddev	.4267	3.50	73.8	2.661	.4280	2.48	.8272
%RSD	28.608	3.1168	.75429	15.766	40.143	.30297	39.379
#1	1.0411	114.82	9816.9	14.222	-1.0016	819.03	-2.4234
#2	1.8897	113.98	9702.7	19.545	-.67400	818.66	-2.7175
#3	1.5437	108.38	9840.8	16.876	-1.5226	814.57	-1.1606

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**267.38**	**205.65**	**620.84**
Stddev	2.19	.90	21.73
%RSD	.81725	.43905	3.5007
#1	268.52	204.68	640.91
#2	264.86	205.80	623.85
#3	268.75	206.47	597.76

Sample Name: MF9L78 Acquired: 06/05/2019 15:08:19 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1124.7**	**30623.**	**282050.**	**2612.6**	**21685.**	**136930.**
Stddev	30.1	179.	2689.	60.3	143.	1360.
%RSD	2.6732	.58487	.95321	2.3085	.66165	.99331
#1	1099.8	30458.	282600.	2559.5	21543.	137050.
#2	1116.3	30813.	284420.	2600.0	21830.	135510.
#3	1158.1	30599.	279130.	2678.2	21682.	138220.

Sample Name: MF9L79 Acquired: 06/05/2019 15:11:27 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 3x for Ca.
gas 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**92304.**	**2.4634**	**47.451**	**673.48**	**5.5370**	**.53638**	F **943900.**
Stddev	480.	5.7244	3.294	1.87	.3183	.16311	667.
%RSD	.52036	232.38	6.9423	.27719	5.7486	30.410	.07064
#1	92840.	9.0120	51.112	675.42	5.9034	.41597	944030.
#2	92159.	-1.5890	44.726	673.31	5.3292	.47115	943180.
#3	91913.	-.03279	46.515	671.70	5.3783	.72201	944490.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**241.93**	**46.143**	**146.06**	**98424.**	**436.14**	**18520.**	**5022.3**
Stddev	2.89	1.016	.81	340.	10.02	83.	13.4
%RSD	1.1929	2.2010	.55486	.34563	2.2979	.45061	.26768
#1	244.06	45.459	146.09	98773.	447.70	18603.	5035.8
#2	243.09	47.310	146.85	98405.	430.76	18519.	5022.1
#3	238.65	45.660	145.23	98093.	429.95	18436.	5008.9

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.81489**	**123.80**	**12458.**	**17.875**	**-.87700**	**1059.1**	**-3.8580**
Stddev	.36724	1.44	33.	8.620	.54187	1.4	3.2460
%RSD	45.066	1.1640	.26625	48.225	61.787	.13001	84.135
#1	1.2368	125.33	12460.	15.210	-.71025	1060.7	-7.2905
#2	.56738	122.47	12490.	27.513	-.43809	1058.2	-3.4456
#3	.64045	123.60	12424.	10.901	-1.4826	1058.5	-.83801

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**268.59**	**231.05**	**629.76**
Stddev	1.02	6.20	5.04
%RSD	.38117	2.6835	.80050
#1	269.55	229.43	633.78
#2	268.70	237.90	631.39
#3	267.51	225.83	624.10

Sample Name: MF9L79 Acquired: 06/05/2019 15:11:27 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1097.0**	**30085.**	**281220.**	**2618.2**	**21557.**	**134220.**
Stddev	8.3	86.	2900.	15.9	42.	4083.
%RSD	.76034	.28676	1.0313	.60546	.19537	3.0419
#1	1087.4	29986.	279630.	2600.1	21514.	136820.
#2	1101.7	30124.	279450.	2625.2	21560.	129510.
#3	1102.0	30146.	284560.	2629.4	21598.	136320.

Sample Name: MF9L79S Acquired: 06/05/2019 15:14:56 Type: RQC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**90916.**	F **41.344**	**123.94**	**4758.9**	**115.53**	**101.26**	**908190.**
Stddev	1216.	2.548	7.59	64.4	1.34	1.75	10055.
%RSD	1.3372	6.1632	6.1260	1.3524	1.1565	1.7286	1.1072
#1	89535.	42.303	116.23	4725.6	113.99	99.274	897110.
#2	91392.	38.455	124.17	4833.1	116.15	101.93	916730.
#3	91822.	43.273	131.41	4718.1	116.44	102.58	910730.
Check ?	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value		200.00					
Range		-25.000%					
	None		76.487	4085.5	109.99	100.72	None
Recovery		38.881	95.609%	102.14%	109.99%	100.72%	
% Recovery		19.440%					

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**641.11**	**976.66**	**716.89**	**97672.**	**485.62**	**17562.**	**5993.0**
Stddev	12.45	15.14	13.67	1114.	13.10	196.	72.7
%RSD	1.9424	1.5505	1.9073	1.1404	2.6966	1.1153	1.2127
#1	626.88	959.98	702.32	96397.	470.52	17337.	5909.2
#2	646.48	980.44	718.92	98455.	492.52	17655.	6039.0
#3	649.98	989.55	729.44	98164.	493.82	17694.	6030.8
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass
Value							
Range							
	399.18	930.51	570.83	None	49.480	None	970.74
Recovery	99.794%	93.051%	114.17%		123.70%		97.074%
% Recovery							

Sample Name: MF9L79S Acquired: 06/05/2019 15:14:56 Type: RQC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2.3935**	**1050.3**	**11764.**	**194.06**	**97.688**	**905.48**	**94.967**
Stddev	.2766	17.4	128.	13.93	.166	12.19	2.882
%RSD	11.558	1.6552	1.0900	7.1798	.17005	1.3462	3.0352
#1	2.5048	1030.5	11619.	183.60	97.507	892.95	91.901
#2	2.0786	1057.0	11862.	209.87	97.722	917.30	95.379
#3	2.5972	1063.3	11810.	188.70	97.834	906.21	97.621
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass
Value							
Range							
	None	926.47	None	176.18	98.565	None	98.825
Recovery		92.647%		88.091%	98.565%		98.825%
% Recovery							

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**280.14**	**1249.5**	**1622.8**
Stddev	4.28	11.6	24.9
%RSD	1.5262	.92751	1.5317
#1	275.50	1238.5	1596.4
#2	280.98	1261.6	1626.2
#3	283.93	1248.4	1645.8
Check ?	None	Chk Pass	Chk Pass
Value			
Range			
	None	1018.4	993.07
Recovery		101.84%	99.307%
% Recovery			

Sample Name: MF9L79S Acquired: 06/05/2019 15:14:56 Type: RQC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1105.0**	**30253.**	**280300.**	**2629.7**	**21701.**	**134300.**
Stddev	13.4	249.	2696.	28.3	145.	407.
%RSD	1.2156	.82467	.96166	1.0780	.66858	.30283
#1	1119.8	30538.	282980.	2661.5	21866.	134180.
#2	1101.7	30077.	277590.	2620.4	21593.	134760.
#3	1093.5	30143.	280350.	2607.2	21645.	133970.

Sample Name: MF9L79D Acquired: 06/05/2019 15:18:02 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 3x for Ca.
JS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**104620.**	**-.28393**	**45.966**	**678.61**	**5.5975**	**.67702**	F **935530.**
Stddev	1022.	3.7289	2.352	6.91	.3212	.30995	7566.
%RSD	.97643	1313.3	5.1176	1.0178	5.7380	45.781	.80877
#1	104110.	3.7765	43.445	674.62	5.4257	.99016	927740.
#2	105790.	-3.5548	46.349	686.58	5.9681	.37037	942850.
#3	103950.	-1.0735	48.103	674.61	5.3988	.67054	935990.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**244.33**	**45.304**	**139.60**	**104220.**	**414.75**	**20129.**	**5148.6**
Stddev	2.97	1.592	1.32	1539.	7.63	321.	73.1
%RSD	1.2161	3.5142	.94730	1.4766	1.8400	1.5958	1.4195
#1	246.90	45.730	139.92	103400.	422.23	20006.	5109.7
#2	245.01	46.639	138.15	105990.	406.98	20494.	5232.9
#3	241.07	43.542	140.74	103260.	415.04	19888.	5103.1

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1.4131**	**124.89**	**13677.**	**9.8633**	**-1.3626**	**986.76**	**-5.7894**
Stddev	.5299	1.78	175.	14.623	.3216	13.06	2.3412
%RSD	37.499	1.4288	1.2761	148.26	23.601	1.3238	40.439
#1	1.6261	125.94	13588.	18.171	-1.4882	979.05	-7.8519
#2	.80982	125.91	13879.	-7.0213	-1.6025	1001.8	-3.2447
#3	1.8033	122.83	13565.	18.441	-.99721	979.39	-6.2714

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**413.42**	**255.22**	**622.08**
Stddev	6.06	1.42	9.61
%RSD	1.4657	.55605	1.5456
#1	410.16	256.25	627.61
#2	420.41	255.81	627.65
#3	409.68	253.60	610.98

Sample Name: MF9L79D Acquired: 06/05/2019 15:18:02 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1094.5**	**30084.**	**280210.**	**2627.6**	**21529.**	**135140.**
Stddev	8.6	346.	2598.	18.3	276.	1262.
%RSD	.78960	1.1510	.92701	.69751	1.2833	.93417
#1	1084.9	30257.	277220.	2607.7	21695.	136480.
#2	1096.7	29685.	281810.	2631.2	21210.	133970.
#3	1101.8	30309.	281610.	2643.8	21682.	134970.

Sample Name: MF9L79L Acquired: 06/05/2019 15:21:10 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000 See 3x for Ca.
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: JCS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**18249.**	**.83981**	**8.5644**	**140.82**	**1.0352**	**.35785**	**206220.**
Stddev	154.	3.2128	2.9997	.56	.1582	.22353	1968.
%RSD	.84597	382.56	35.025	.39441	15.285	62.463	.95440
#1	18368.	-2.8681	6.6139	141.21	1.1667	.33334	208480.
#2	18074.	2.5907	12.019	140.19	.85959	.14759	204890.
#3	18304.	2.7968	7.0608	141.07	1.0793	.59263	205290.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**50.670**	**9.9260**	**28.813**	**20559.**	**81.746**	**3771.0**	**1048.2**
Stddev	1.401	1.1577	1.655	209.	2.963	30.6	7.7
%RSD	2.7644	11.663	5.7446	1.0168	3.6241	.81190	.73063
#1	51.806	10.775	30.674	20780.	84.225	3796.8	1056.2
#2	51.099	8.6072	27.507	20364.	82.547	3737.2	1040.9
#3	49.105	10.396	28.257	20535.	78.465	3779.0	1047.5

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.27762**	**28.276**	**2486.7**	**7.4564**	**-.19966**	**210.84**	**-1.1542**
Stddev	.69310	1.111	26.8	4.3047	.14961	4.54	1.2120
%RSD	249.65	3.9283	1.0778	57.731	74.928	2.1547	105.01
#1	.00747	29.387	2500.8	2.5082	-.06379	213.37	-1.0834
#2	.22746	28.274	2503.5	9.5218	-.17521	213.56	-2.4000
#3	-1.0678	27.166	2455.8	10.339	-.35999	205.60	.02084

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**68.549**	**48.049**	**138.52**
Stddev	.635	1.263	1.66
%RSD	.92644	2.6294	1.2009
#1	69.022	49.254	140.30
#2	67.827	46.735	138.27
#3	68.798	48.160	137.00

Sample Name: MF9L79L Acquired: 06/05/2019 15:21:10 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1346.3**	**30935.**	**304100.**	**2764.0**	**21544.**	**141270.**
Stddev	14.7	192.	5101.	24.2	149.	606.
%RSD	1.0919	.61937	1.6775	.87687	.69387	.42873
#1	1340.3	30714.	300680.	2751.3	21374.	140570.
#2	1335.6	31058.	309960.	2748.8	21600.	141580.
#3	1363.1	31032.	301640.	2792.0	21657.	141660.

Sample Name: MF9M24 Acquired: 06/05/2019 15:24:13 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 2x for Ca.
JS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**65069.**	**4.4827**	**27.237**	**459.86**	**3.9685**	**1.5656**	F **914300.**
Stddev	956.	3.2864	1.901	5.11	.1398	.2432	6998.
%RSD	1.4690	73.312	6.9809	1.1121	3.5230	15.532	.76534
#1	66146.	8.2646	25.211	465.76	4.0755	1.3529	921460.
#2	64739.	2.8623	27.517	456.73	3.8103	1.8307	913980.
#3	64322.	2.3213	28.982	457.08	4.0197	1.5132	907470.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**223.88**	**30.124**	**119.48**	**69017.**	**653.50**	**14356.**	**2664.0**
Stddev	2.48	.793	1.72	910.	10.15	232.	31.4
%RSD	1.1059	2.6316	1.4431	1.3181	1.5533	1.6191	1.1792
#1	226.52	30.657	120.83	70063.	665.06	14610.	2699.9
#2	223.49	29.213	120.06	68574.	646.05	14302.	2650.4
#3	221.62	30.501	117.54	68413.	649.38	14155.	2641.7

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1.5471**	**91.726**	**9133.0**	**13.390**	**-.50259**	**986.77**	**-2.2690**
Stddev	1.0602	.887	108.9	3.373	.78866	16.47	.8821
%RSD	68.531	.96705	1.1920	25.192	156.92	1.6692	38.875
#1	1.9430	92.739	9257.3	11.256	-.82814	1000.7	-2.0608
#2	2.3524	91.091	9054.6	17.279	.39673	968.61	-1.5096
#3	.34588	91.346	9087.1	11.636	-1.0763	990.96	-3.2365

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**277.75**	**189.43**	**560.07**
Stddev	4.75	8.21	4.55
%RSD	1.7087	4.3359	.81171
#1	283.19	189.82	564.20
#2	275.58	181.02	560.80
#3	274.46	197.43	555.20

Sample Name: MF9M24 Acquired: 06/05/2019 15:24:13 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1109.2**	**30198.**	**289920.**	**2611.2**	**21413.**	**135460.**
Stddev	10.8	275.	12188.	21.1	167.	2708.
%RSD	.97123	.91022	4.2039	.80895	.77836	1.9987
#1	1097.7	29902.	283190.	2587.6	21231.	138540.
#2	1111.0	30247.	303990.	2617.4	21450.	133420.
#3	1119.0	30445.	282570.	2628.5	21558.	134440.

Sample Name: MF9L62 Acquired: 06/05/2019 15:27:22 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 2x for Ca.
JCS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**74129.**	**5.1997**	**34.891**	**584.09**	**4.9761**	**.55632**	F **781860.**
Stddev	781.	.2691	2.239	4.93	.0706	.24145	3361.
%RSD	1.0534	5.1749	6.4166	.84330	1.4191	43.402	.42990
#1	74835.	5.2282	37.373	587.38	4.9457	.40981	783270.
#2	73290.	5.4534	34.275	578.43	5.0569	.83501	778020.
#3	74263.	4.9175	33.025	586.46	4.9258	.42415	784290.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**101.51**	**39.684**	**108.96**	**78322.**	**147.19**	**14936.**	**3768.7**
Stddev	1.65	1.003	2.93	596.	4.34	136.	23.7
%RSD	1.6249	2.5273	2.6902	.76124	2.9484	.91186	.62853
#1	101.97	39.973	111.39	78630.	144.40	14875.	3782.6
#2	102.88	40.510	109.78	77635.	152.19	14842.	3741.4
#3	99.677	38.568	105.70	78702.	144.98	15092.	3782.2

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.72880**	**106.89**	**9405.1**	**16.599**	**-1.0359**	**733.96**	**-2.3461**
Stddev	.56250	1.38	68.3	1.476	.2285	4.56	3.7349
%RSD	77.181	1.2871	.72623	8.8935	22.055	.62145	159.20
#1	.44928	107.75	9418.2	14.895	-1.1929	731.30	-1.6401
#2	1.3763	107.62	9331.2	17.460	-.77377	731.36	.98545
#3	.36082	105.31	9465.9	17.443	-1.1409	739.23	-6.3835

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**235.20**	**228.75**	**392.78**
Stddev	1.82	1.31	7.91
%RSD	.77184	.57150	2.0144
#1	236.56	228.43	396.07
#2	233.14	230.19	398.51
#3	235.90	227.64	383.75

ample Name: MF9L62 Acquired: 06/05/2019 15:27:22 Type: Unk
lethod: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
lser: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
:omment:

nt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Jnits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
\vg	**1118.6**	**30221.**	**282430.**	**2649.8**	**21599.**	**135890.**
Stddev	19.3	71.	1179.	42.8	48.	1128.
%RSD	1.7243	.23365	.41737	1.6160	.22162	.82983
1	1108.3	30182.	281330.	2624.3	21594.	137070.
2	1106.8	30302.	282280.	2625.9	21649.	134830.
3	1140.9	30178.	283680.	2699.3	21553.	135750.

Sample Name: MF9L63 Acquired: 06/05/2019 15:30:31 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 5x for Ca.
JS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**43240.**	**2.8418**	**57.473**	**405.93**	**4.3442**	**-.79448**
Stddev	83.	4.8961	.882	.14	.0905	.06825
%RSD	.19180	172.29	1.5338	.03362	2.0825	8.5909
#1	43232.	.42719	56.467	405.97	4.4481	-.84167
#2	43327.	-.37804	57.847	405.77	4.2828	-.82556
#3	43162.	8.4762	58.106	406.04	4.3017	-.71622

Elem	Ca3179	Cr2055	Co2286	Cu2247	Fe2598	Pb2203
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **1522400.**	**209.57**	**53.436**	**87.890**	**148470.**	**233.45**
Stddev	1819.	4.74	1.467	2.743	509.	2.60
%RSD	.11946	2.2617	2.7463	3.1206	.34311	1.1148
#1	1524300.	204.11	51.780	84.727	148150.	235.19
#2	1522400.	212.04	54.575	89.335	149060.	230.46
#3	1520600.	212.57	53.953	89.609	148210.	234.70

Elem	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**228830.**	**6175.9**	**3.5191**	**160.58**	**6573.0**	**17.519**
Stddev	847.	9.3	1.6658	4.33	38.0	9.670
%RSD	.37000	.15114	47.337	2.6956	.57798	55.196
#1	228410.	6173.1	1.6335	155.59	6542.5	11.302
#2	229810.	6186.3	4.7911	163.23	6615.5	28.660
#3	228280.	6168.2	4.1326	162.93	6561.0	12.595

Elem	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-2.6946**	**1566.3**	**-6.0092**	**304.59**	**202.05**	**506.04**
Stddev	.4585	7.4	1.6108	1.46	.76	10.77
%RSD	17.016	.47005	26.805	.47787	.37624	2.1280
#1	-2.1654	1560.7	-7.6424	305.12	202.29	493.88
#2	-2.9442	1563.5	-5.9634	305.70	202.65	509.87
#3	-2.9740	1574.6	-4.4218	302.94	201.19	514.38

Sample Name: MF9L63 Acquired: 06/05/2019 15:30:31 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1015.1**	**29123.**	**264360.**	**2510.3**	**20923.**	**128470.**
Stddev	9.1	131.	1004.	21.6	106.	1115.
%RSD	.89573	.45110	.37989	.86176	.50468	.86790
#1	1025.3	29092.	263220.	2533.2	20901.	129550.
#2	1007.8	29010.	264740.	2490.2	20829.	127320.
#3	1012.3	29267.	265110.	2507.3	21037.	128540.

Sample Name: MF9L64 Acquired: 06/05/2019 15:33:40 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**36306.**	**2.8795**	**21.590**	**347.58**	**2.2246**	**2.0155**	**478350.**
Stddev	66.	3.8936	1.420	.60	.2068	.1079	1873.
%RSD	.18242	135.22	6.5771	.17372	9.2980	5.3526	.39163
#1	36259.	5.4810	20.208	346.90	1.9960	2.1278	480280.
#2	36278.	4.7543	21.519	347.76	2.2787	1.9126	476540.
#3	36382.	-1.5968	23.045	348.07	2.3989	2.0062	478220.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**116.62**	**22.731**	**112.05**	**41963.**	**287.15**	**8893.3**	**1990.9**
Stddev	.32	.329	1.58	175.	5.17	47.3	9.0
%RSD	.27092	1.4480	1.4083	.41611	1.7997	.53142	.45360
#1	116.38	22.773	112.62	41850.	288.28	8925.0	1983.9
#2	116.51	23.036	113.26	41875.	291.66	8838.9	1987.7
#3	116.98	22.382	110.26	42164.	281.51	8915.9	2001.0

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1.9706**	**69.723**	**5686.5**	**15.586**	**-.74867**	**756.57**	**-3.2984**
Stddev	.2825	.841	8.5	7.479	.29098	4.59	2.2450
%RSD	14.336	1.2061	.14977	47.984	38.866	.60633	68.064
#1	2.2885	70.023	5676.8	12.887	-.84710	751.37	-2.6916
#2	1.8748	70.373	5689.7	9.8309	-.42124	758.31	-1.4192
#3	1.7484	68.773	5693.0	24.039	-.97767	760.03	-5.7845

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**240.94**	**116.17**	**686.28**
Stddev	.79	1.87	3.49
%RSD	.32593	1.6134	.50810
#1	241.65	118.12	690.27
#2	241.06	116.03	683.86
#3	240.10	114.38	684.70

ample Name: MF9L64 Acquired: 06/05/2019 15:33:40 Type: Unk
lethod: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
lser: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

nt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1192.4**	**30302.**	**291510.**	**2649.5**	**21227.**	**138700.**
Stddev	6.0	68.	3510.	13.8	46.	60.
%RSD	.50127	.22445	1.2040	.52183	.21518	.04317
1	1198.5	30234.	288540.	2657.0	21182.	138770.
2	1186.6	30370.	290590.	2633.5	21273.	138660.
3	1192.3	30302.	295380.	2657.9	21225.	138670.

Sample Name: MF9L65 Acquired: 06/05/2019 15:36:49 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 2x for Ca.
ges 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**68762.**	**4.3536**	**26.186**	**447.63**	**4.1248**	**.70257**	F **884080.**
Stddev	373.	2.2578	1.995	1.90	.1163	.04944	4514.
%RSD	.54247	51.860	7.6201	.42336	2.8205	7.0374	.51060
#1	69177.	6.9268	28.418	449.59	4.1448	.68711	886360.
#2	68656.	3.4292	25.563	447.51	4.2299	.75790	887000.
#3	68453.	2.7046	24.576	445.80	3.9998	.66271	878880.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**102.73**	**26.503**	**94.482**	**66159.**	**147.35**	**14959.**	**3271.7**
Stddev	.26	.931	2.941	144.	7.17	21.	8.6
%RSD	.25035	3.5133	3.1124	.21750	4.8646	.14308	.26338
#1	102.62	26.691	95.039	66299.	139.64	14978.	3281.6
#2	102.55	27.326	91.303	66168.	148.61	14936.	3265.8
#3	103.03	25.492	97.105	66011.	153.81	14963.	3267.6

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.84820**	**91.591**	**10302.**	**12.887**	**-.95014**	**499.44**	**-4.6730**
Stddev	.67158	1.653	79.	2.878	.54473	3.08	.0689
%RSD	79.178	1.8043	.76624	22.331	57.331	.61590	1.4745
#1	1.4177	92.788	10393.	16.181	-1.1167	502.89	-4.5935
#2	.10763	89.706	10267.	10.865	-1.3922	497.00	-4.7096
#3	1.0193	92.280	10247.	11.614	-.34159	498.43	-4.7159

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**251.47**	**174.35**	**365.00**
Stddev	3.03	1.28	.60
%RSD	1.2042	.73385	.16403
#1	254.83	172.87	365.69
#2	248.94	175.08	364.73
#3	250.65	175.09	364.59

Sample Name: MF9L65 Acquired: 06/05/2019 15:36:49 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1097.4**	**30353.**	**283920.**	**2563.2**	**21472.**	**133910.**
Stddev	4.5	23.	1858.	7.9	44.	3335.
%RSD	.41183	.07449	.65453	.30790	.20670	2.4905
#1	1101.5	30357.	284180.	2569.8	21464.	137240.
#2	1092.5	30329.	281940.	2554.4	21432.	133940.
#3	1098.1	30374.	285630.	2565.4	21520.	130570.

Sample Name: MF9L67 Acquired: 06/05/2019 15:39:58 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Data not used
High RSDs.
See rerun.
JCS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**67579.**	**3.1257**	**36.318**	**542.19**	**3.9519**	**.89496**	F **793450.**
Stddev	10746.	7.5332	1.938	82.83	.4902	.77091	73823.
%RSD	15.901	241.01	5.3354	15.276	12.405	86.139	9.3040
#1	55235.	9.4510	37.681	446.84	3.3963	1.7783	708610.
#2	74841.	-5.2082	34.100	596.28	4.1359	.54847	828730.
#3	72661.	5.1343	37.173	583.45	4.3235	.35809	843010.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**108.60**	**33.021**	**131.73**	**69543.**	**189.75**	**14941.**	**3455.8**
Stddev	2.37	1.452	3.95	10642.	3.42	2239.	529.3
%RSD	2.1845	4.3963	3.0008	15.302	1.8010	14.986	15.317
#1	109.73	33.697	131.21	57311.	187.34	12369.	2847.0
#2	110.19	34.012	135.92	76674.	193.66	16455.	3807.7
#3	105.87	31.355	128.06	74644.	188.25	15998.	3712.6

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2.0297**	**102.62**	**12564.**	**19.717**	**-1.0176**	**503.97**	**-4.2426**
Stddev	.6867	1.81	1886.	2.746	.1235	77.41	4.0362
%RSD	33.833	1.7605	15.012	13.928	12.139	15.360	95.136
#1	1.4907	104.07	10391.	22.514	-.88205	415.00	-7.8281
#2	1.7956	103.18	13771.	19.611	-1.0469	555.87	.12876
#3	2.8028	100.59	13531.	17.025	-1.1238	541.05	-5.0284

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**296.25**	**181.51**	**525.27**
Stddev	50.04	1.19	13.99
%RSD	16.891	.65817	2.6629
#1	238.74	180.41	534.17
#2	329.82	182.78	532.49
#3	320.20	181.32	509.15

Sample Name: MF9L67 Acquired: 06/05/2019 15:39:58 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1095.5**	**31484.**	**287250.**	**2571.6**	**22315.**	**139180.**
Stddev	16.8	2851.	1856.	36.8	1885.	2170.
%RSD	1.5369	9.0551	.64623	1.4320	8.4478	1.5589
#1	1087.2	34765.	285790.	2546.0	24485.	141350.
#2	1084.3	29611.	289340.	2555.1	21079.	137010.
#3	1114.8	30076.	286630.	2613.8	21382.	139190.

Sample Name: MF9L71 Acquired: 06/05/2019 15:43:06 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Data not used. High RSDs. See rerun. gs 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**60499.**	**3.2559**	**66.739**	**507.04**	**4.6604**	**-.19907**
Stddev	4745.	4.3127	8.108	38.38	.2316	.30109
%RSD	7.8435	132.46	12.149	7.5695	4.9691	151.24
#1	62495.	2.8371	74.129	522.76	4.7251	.14460
#2	63920.	-.83216	68.022	535.06	4.8526	-.41639
#3	55081.	7.7627	58.066	463.29	4.4033	-.32543

Elem	Ca3179	Cr2055	Co2286	Cu2247	Fe2598	Pb2203
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **1747500.**	**116.98**	**45.081**	**110.71**	**127820.**	**202.48**
Stddev	71155.	10.84	3.115	11.11	9807.	17.45
%RSD	4.0717	9.2687	6.9105	10.033	7.6722	8.6184
#1	1765200.	128.67	48.358	122.59	132460.	221.87
#2	1808200.	115.02	44.727	108.94	134440.	197.55
#3	1669200.	107.26	42.158	100.59	116550.	188.03

Elem	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**23049.**	**6313.1**	**3.3624**	**110.01**	**7939.2**	**10.221**
Stddev	1746.	475.6	.3760	7.59	581.7	6.314
%RSD	7.5734	7.5340	11.182	6.8977	7.3270	61.778
#1	23797.	6527.9	3.1701	117.83	8168.8	10.907
#2	24296.	6643.5	3.7956	109.53	8371.0	16.164
#3	21054.	5768.0	3.1214	102.68	7277.7	3.5916

Elem	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.1903**	**2021.0**	**-8.6080**	**197.99**	**272.53**	**490.27**
Stddev	.4373	152.0	3.9567	20.68	5.31	41.44
%RSD	36.737	7.5231	45.966	10.444	1.9483	8.4524
#1	-1.6934	2073.4	-6.8819	206.78	269.08	533.92
#2	-.90185	2139.8	-13.135	212.82	269.88	485.44
#3	-.97556	1849.6	-5.8076	174.37	278.65	451.46

Sample Name: MF9L71 Acquired: 06/05/2019 15:43:06 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

nt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1023.7**	**30547.**	**266000.**	**2523.0**	**21866.**	**127770.**
Stddev	61.6	1347.	1539.	136.3	900.	1498.
%RSD	6.0224	4.4108	.57858	5.4017	4.1147	1.1727
#1	959.20	29846.	267240.	2382.8	21399.	129050.
#2	1029.7	29694.	266490.	2531.4	21297.	128130.
#3	1082.1	32100.	264280.	2654.9	22904.	126120.

Sample Name: MF9L72 Acquired: 06/05/2019 15:46:15 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 3x for Ca.
gcs 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**53547.**	**4.5912**	**52.094**	**477.44**	**3.6206**	**.58008**
Stddev	860.	2.0716	2.963	5.33	.0500	.23552
%RSD	1.6053	45.122	5.6878	1.1161	1.3818	40.601
#1	54536.	6.3110	48.737	483.47	3.6500	.65155
#2	52974.	5.1712	54.343	473.36	3.5629	.77157
#3	53132.	2.2914	53.202	475.50	3.6490	.31710

Elem	Ca3179	Cr2055	Co2286	Cu2247	Fe2598	Pb2203
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **1136200.**	**93.882**	**37.568**	**98.842**	**83074.**	**320.38**
Stddev	14439.	3.997	1.817	4.715	1131.	18.17
%RSD	1.2708	4.2576	4.8352	4.7699	1.3611	5.6708
#1	1152100.	93.994	37.019	98.905	84336.	314.54
#2	1123800.	97.822	39.596	103.52	82153.	340.75
#3	1132800.	89.830	36.090	94.096	82733.	305.85

Elem	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**18799.**	**3760.1**	**2.0995**	**94.843**	**7120.9**	**16.247**
Stddev	320.	52.7	.3345	3.174	81.2	10.613
%RSD	1.7023	1.4011	15.930	3.3460	1.1402	65.320
#1	19151.	3819.5	2.3901	94.884	7213.4	13.675
#2	18526.	3719.2	2.1745	97.996	7087.6	27.910
#3	18720.	3741.5	1.7339	91.650	7061.6	7.1573

Elem	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.3911**	**1181.6**	**-2.5475**	**275.17**	**204.35**	**458.10**
Stddev	.3400	9.0	1.5786	3.53	4.57	15.92
%RSD	24.438	.76162	61.967	1.2830	2.2346	3.4744
#1	-1.7828	1191.7	-4.0493	279.24	201.59	455.82
#2	-1.2167	1174.3	-2.6914	272.96	209.62	475.04
#3	-1.1737	1178.9	-.90191	273.30	201.85	443.45

;ample Name: MF9L72 Acquired: 06/05/2019 15:46:15 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
Jser: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

nt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1043.3**	**30545.**	**276840.**	**2509.4**	**21841.**	**134150.**
Stddev	31.6	315.	2515.	64.8	224.	1837.
%RSD	3.0291	1.0298	.90833	2.5815	1.0256	1.3691
#1	1041.5	30221.	278140.	2496.7	21619.	136010.
#2	1012.6	30849.	273940.	2451.9	22067.	132340.
#3	1075.7	30565.	278440.	2579.6	21836.	134110.

Sample Name: MF9L73 Acquired: 06/05/2019 15:49:25 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 2x for Ca.
JAS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**51263.**	**3.8857**	**36.105**	**502.05**	**3.6207**	**1.3670**	F **765010.**
Stddev	140.	1.7671	2.659	2.22	.1522	.1959	3145.
%RSD	.27352	45.475	7.3638	.44226	4.2023	14.334	.41112
#1	51332.	3.6369	33.039	504.60	3.4467	1.1561	761480.
#2	51356.	2.2563	37.767	500.96	3.7285	1.5434	767520.
#3	51102.	5.7640	37.510	500.58	3.6869	1.4014	766020.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**87.950**	**34.681**	**183.52**	**65294.**	**188.13**	**14243.**	**2667.0**
Stddev	1.253	.771	2.09	243.	1.76	111.	7.1
%RSD	1.4245	2.2219	1.1390	.37164	.93448	.77596	.26595
#1	86.788	35.534	181.67	65036.	190.13	14172.	2660.5
#2	87.784	34.035	185.79	65328.	187.46	14188.	2666.0
#3	89.277	34.475	183.11	65517.	186.81	14370.	2674.5

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**3.6415**	**107.58**	**6876.0**	**14.952**	**-.20940**	**888.75**	**-4.4555**
Stddev	1.1755	1.88	22.7	2.425	.30856	4.38	5.8923
%RSD	32.281	1.7496	.33046	16.215	147.35	.49269	132.25
#1	2.6550	105.53	6885.7	14.836	.13547	893.78	1.2756
#2	4.9422	107.96	6850.0	17.433	-.30435	885.80	-10.497
#3	3.3274	109.24	6892.2	12.588	-.45932	886.68	-4.1455

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**294.40**	**226.62**	**603.83**
Stddev	1.39	.77	7.99
%RSD	.47352	.33925	1.3225
#1	294.93	227.51	594.75
#2	292.82	226.22	607.00
#3	295.45	226.14	609.75

Sample Name: MF9L73 Acquired: 06/05/2019 15:49:25 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1134.3**	**30687.**	**283720.**	**2608.9**	**21762.**	**135630.**
Stddev	6.7	124.	1397.	11.9	77.	1097.
%RSD	.59469	.40270	.49242	.45756	.35543	.80844
#1	1141.7	30828.	282150.	2621.9	21851.	136850.
#2	1128.5	30634.	284200.	2606.1	21721.	134720.
#3	1132.7	30598.	284820.	2598.5	21713.	135340.

Sample Name: MF9M33 Acquired: 06/05/2019 15:52:34 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 3x for Cu.
gcs 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**123790.**	**-1.4419**	**45.539**	**721.86**	**6.6469**	**.55417**	F **987830.**
Stddev	3631.	2.7083	5.820	18.44	.2625	.41243	12687.
%RSD	2.9333	187.83	12.780	2.5540	3.9489	74.424	1.2843
#1	125770.	-4.5681	49.201	731.81	6.9281	.58788	984430.
#2	126000.	.04886	38.828	733.19	6.6043	.12591	977190.
#3	119600.	.19347	48.587	700.59	6.4084	.94871	1001900.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**149.94**	**52.009**	**137.09**	**110980.**	**193.68**	**22986.**	**4572.5**
Stddev	3.20	1.284	3.59	3291.	4.64	801.	133.9
%RSD	2.1358	2.4684	2.6158	2.9658	2.3964	3.4833	2.9284
#1	148.69	52.207	137.72	112750.	194.85	23441.	4650.0
#2	153.57	53.183	140.31	113010.	197.63	23456.	4649.5
#3	147.54	50.638	133.23	107180.	188.57	22062.	4417.8

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1.2202**	**141.49**	**15064.**	**16.937**	**-1.3175**	**944.69**	**-7.8061**
Stddev	.8415	1.80	331.	7.158	.2275	21.67	3.1265
%RSD	68.959	1.2749	2.1979	42.262	17.268	2.2935	40.052
#1	2.1422	141.66	15210.	24.775	-1.0558	959.52	-4.5180
#2	1.0249	143.19	15298.	15.290	-1.4686	954.73	-10.741
#3	.49363	139.60	14685.	10.746	-1.4280	919.83	-8.1594

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**389.17**	**334.58**	**513.86**
Stddev	13.63	3.69	6.88
%RSD	3.5026	1.1022	1.3383
#1	394.81	330.40	511.80
#2	399.08	337.36	521.53
#3	373.63	335.97	508.25

ample Name: MF9M33 Acquired: 06/05/2019 15:52:34 Type: Unk
lethod: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
lser: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
comment:

nt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Jnits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
\vg	**1067.8**	**30806.**	**279510.**	**2596.6**	**22115.**	**135930.**
Stddev	9.8	634.	633.	26.0	441.	1447.
%RSD	.91563	2.0595	.22634	1.0015	1.9923	1.0645
t1	1068.0	30407.	279990.	2595.1	21813.	137540.
t2	1057.9	30473.	279750.	2571.5	21912.	134740.
t3	1077.4	31537.	278800.	2623.4	22620.	135530.

Sample Name: PBS2 Acquired: 06/05/2019 15:55:41 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**29.871**	**1.7746**	**.83203**	**.40398**	**.13975**	**.35330**	**87.401**	**.77587**
Stddev	17.948	1.0915	1.8645	.07826	.05823	.21796	26.490	.30573
%RSD	60.084	61.505	224.09	19.371	41.666	61.693	30.309	39.404
#1	49.844	.58379	-.77909	.42879	.20373	.58179	110.17	.90412
#2	15.096	2.7275	.40079	.46683	.08986	.33043	93.705	.99658
#3	24.673	2.0126	2.8744	.31633	.12566	.14767	58.327	.42691

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.37771**	**.19382**	**20.536**	**.25149**	**23.004**	**.43003**	**-.14159**	**-.47014**
Stddev	.77413	.89106	4.841	.75990	3.509	.06114	.57548	.98218
%RSD	204.95	459.73	23.574	302.16	15.254	14.218	406.44	208.91
#1	-.06857	.18330	21.587	.65519	24.421	.49411	-.46881	-.86400
#2	.19408	-.69192	24.765	-.62506	19.009	.42364	.52290	-1.1942
#3	-1.2586	1.0901	15.256	.72434	25.584	.37233	-.47886	.64784

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**3.0587**	**.72322**	**-.45498**	**15.333**	**-1.0705**	**.16801**	**-.22126**	**3.0797**
Stddev	14.095	2.3479	.45161	3.258	1.5636	.68809	.27833	.4433
%RSD	460.82	324.64	99.259	21.249	146.06	409.56	125.79	14.394
#1	13.551	-.09629	-.76032	11.572	.72080	-.25883	-.31748	3.3604
#2	-12.963	3.3710	-.66841	17.141	-2.1615	-.19894	-.43871	2.5687
#3	8.5876	-1.1051	.06379	17.287	-1.7708	.96180	.09241	3.3101

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1514.8**	**31834.**	**319530.**	**2797.7**	**22062.**	**149680.**
Stddev	8.7	215.	1087.	15.7	169.	1729.
%RSD	.57189	.67566	.34028	.55973	.76652	1.1551
#1	1506.0	31809.	319300.	2782.2	22016.	151650.
#2	1515.1	31633.	320710.	2797.2	21920.	149000.
#3	1523.4	32061.	318570.	2813.6	22249.	148400.

Sample Name: LCS2 Acquired: 06/05/2019 15:58:50 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**388.03**	**120.03**	**18.286**	**435.01**	**10.835**	**11.208**	**10513.**	**23.015**
Stddev	34.38	3.58	1.937	3.11	.061	.321	67.	.402
%RSD	8.8596	2.9849	10.594	.71574	.56720	2.8627	.63642	1.7469
#1	363.25	115.91	18.975	432.31	10.768	11.524	10443.	23.072
#2	373.58	121.70	16.098	438.42	10.889	11.219	10518.	22.587
#3	427.28	122.47	19.783	434.32	10.846	10.883	10577.	23.385

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**106.02**	**52.732**	**224.04**	**20.359**	**9699.4**	**32.485**	**.52903**	**83.846**
Stddev	2.75	.903	4.47	3.772	35.9	.534	.71698	1.697
%RSD	2.5942	1.7128	1.9932	18.526	.37008	1.6439	135.53	2.0244
#1	103.74	52.011	219.90	16.851	9665.7	31.884	1.1433	82.579
#2	105.25	52.439	228.77	19.877	9695.4	32.904	.70262	83.185
#3	109.07	53.745	223.44	24.348	9737.2	32.668	-.25881	85.775

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**9465.4**	**74.003**	**19.864**	**9996.1**	**53.318**	**-.42165**	**108.58**	**134.44**
Stddev	38.8	4.094	.972	53.6	1.150	.90966	2.33	3.49
%RSD	.41000	5.5325	4.8936	.53608	2.1563	215.74	2.1488	2.5981
#1	9432.8	76.843	18.759	9959.3	52.164	-.54339	108.17	131.27
#2	9508.4	69.310	20.246	10058.	53.326	.54274	106.48	133.86
#3	9455.2	75.858	20.587	9971.5	54.463	-1.2643	111.09	138.18

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1402.5**	**31295.**	**307960.**	**2739.5**	**21747.**	**145730.**
Stddev	17.6	169.	5284.	37.6	125.	898.
%RSD	1.2536	.54140	1.7158	1.3728	.57322	.61618
#1	1419.5	31429.	309190.	2771.6	21828.	146710.
#2	1403.5	31352.	312520.	2748.8	21809.	145520.
#3	1384.4	31105.	302170.	2698.1	21603.	144950.

Sample Name: MF9L66 Acquired: 06/05/2019 16:01:56 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 3x for Ca.
gs 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**93468.**	**4.3216**	**72.358**	**1178.7**	**5.6976**	**4.7396**
Stddev	518.	2.4873	1.666	5.8	.2501	.2635
%RSD	.55419	57.554	2.3023	.49614	4.3889	5.5585
#1	93922.	7.1878	71.892	1183.9	5.7719	5.0373
#2	93576.	3.0474	74.208	1179.9	5.4187	4.6453
#3	92904.	2.7296	70.976	1172.4	5.9020	4.5363

Elem	Ca3179	Cr2055	Co2286	Cu2247	Fe2598	Pb2203
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **1171300.**	**194.67**	**69.236**	**342.41**	**112310.**	**372.23**
Stddev	5017.	1.40	.632	1.43	630.	2.17
%RSD	.42833	.72015	.91354	.41728	.56083	.58315
#1	1168600.	196.11	69.944	343.94	112330.	371.30
#2	1177100.	194.58	68.726	341.11	112920.	374.71
#3	1168300.	193.31	69.038	342.20	111660.	370.68

Elem	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**23835.**	**9215.5**	**5.3664**	**171.17**	**18255.**	**40.067**
Stddev	155.	62.6	.7622	1.17	83.	13.587
%RSD	.64866	.67926	14.204	.68460	.45380	33.911
#1	23948.	9214.6	5.1243	171.47	18350.	41.097
#2	23899.	9278.5	4.7546	172.16	18223.	25.993
#3	23659.	9153.3	6.2203	169.88	18194.	53.109

Elem	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.0935**	**1864.4**	**-4.9666**	**280.90**	**288.85**	**1561.2**
Stddev	.5568	5.8	4.6695	3.33	2.27	12.3
%RSD	50.916	.31050	94.017	1.1840	.78529	.78931
#1	-1.3820	1870.5	-8.6975	281.32	287.80	1568.9
#2	-.45168	1863.8	.26992	283.99	291.45	1567.6
#3	-1.4468	1859.0	-6.4722	277.38	287.29	1547.0

Sample Name: MF9L66 Acquired: 06/05/2019 16:01:56 Type: Unk
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1035.6**	**30268.**	**273750.**	**2508.2**	**21743.**	**133700.**
Stddev	2.4	208.	1543.	8.0	140.	951.
%RSD	.23266	.68779	.56384	.32067	.64268	.71093
#1	1033.0	30304.	272010.	2504.8	21782.	134500.
#2	1036.0	30044.	274960.	2502.4	21588.	132650.
#3	1037.7	30455.	274270.	2517.4	21859.	133950.

Sample Name: CCV2 Acquired: 06/05/2019 16:05:04 Type: QC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**239470.**	**24566.**	**10186.**	**24681.**	**9959.5**	**9785.2**	**254070.**
Stddev	8482.	220.	79.	417.	286.4	81.7	8472.
%RSD	3.5419	.89488	.77715	1.6897	2.8755	.83538	3.3345
#1	229710.	24814.	10276.	24201.	9642.8	9877.8	244420.
#2	245110.	24494.	10149.	24888.	10035.	9754.6	260270.
#3	243580.	24392.	10131.	24955.	10200.	9723.2	257530.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**24533.**	**23209.**	**27106.**	**247950.**	**25844.**	**244670.**	**24317.**
Stddev	222.	184.	248.	8290.	210.	8519.	836.
%RSD	.90448	.79463	.91592	3.3434	.81288	3.4820	3.4371
#1	24780.	23417.	27385.	238470.	26076.	234930.	23361.
#2	24468.	23147.	27024.	253810.	25788.	250730.	24911.
#3	24351.	23064.	26909.	251580.	25667.	248350.	24679.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**9832.3**	**22981.**	**243870.**	**9786.7**	**1071.8**	**250610.**	**9676.3**
Stddev	83.2	184.	8089.	64.6	12.6	3301.	69.4
%RSD	.84638	.79923	3.3169	.65998	1.1797	1.3172	.71722
#1	9923.6	23187.	234550.	9854.9	1086.0	254340.	9756.1
#2	9812.7	22921.	248940.	9778.8	1067.7	248080.	9642.7
#3	9760.7	22834.	248140.	9726.4	1061.7	249390.	9630.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV2 Acquired: 06/05/2019 16:05:04 Type: QC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**10006.**	**25963.**	**24899.**
Stddev	353.	354.	186.
%RSD	3.5247	1.3638	.74709
#1	9600.6	26362.	25112.
#2	10241.	25841.	24810.
#3	10177.	25686.	24774.
Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1083.4**	**30092.**	**272790.**	**2478.4**	**20840.**	**126960.**
Stddev	5.0	613.	2628.	9.0	400.	1039.
%RSD	.45803	2.0374	.96354	.36347	1.9216	.81801
#1	1077.8	30772.	269860.	2468.0	21289.	125910.
#2	1084.8	29582.	273600.	2483.8	20519.	126990.
#3	1087.4	29921.	274930.	2483.5	20712.	127990.

Sample Name: CCB2 Acquired: 06/05/2019 16:08:08 Type: QC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**23.024**	**4.1697**	**.90700**	**1.3942**	**.58397**	**.51685**	**20.588**	**.75115**
Stddev	15.884	3.2607	1.9538	.4386	.17409	.21809	6.324	.11920
%RSD	68.990	78.200	215.41	31.457	29.811	42.197	30.716	15.868
#1	4.9434	4.8145	3.1478	1.7931	.76834	.68495	27.315	.84838
#2	29.394	.63479	.01295	1.4651	.56118	.27040	19.685	.78690
#3	34.735	7.0599	-.43981	.92452	.42240	.59520	14.764	.61817
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.78972**	**.93030**	**17.771**	**.37809**	**3.4114**	**1.4953**	**.31070**	**1.1998**
Stddev	.36519	.57406	5.676	.98774	14.364	.3077	.86962	.6800
%RSD	46.243	61.707	31.941	261.24	421.05	20.575	279.89	56.680
#1	1.1050	.32829	24.323	.83622	-8.5574	1.6400	.04751	1.2526
#2	.38955	.99103	14.638	-.75552	19.340	1.7039	-.39693	.49485
#3	.87463	1.4716	14.351	1.0536	-.54796	1.1420	1.2815	1.8518
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

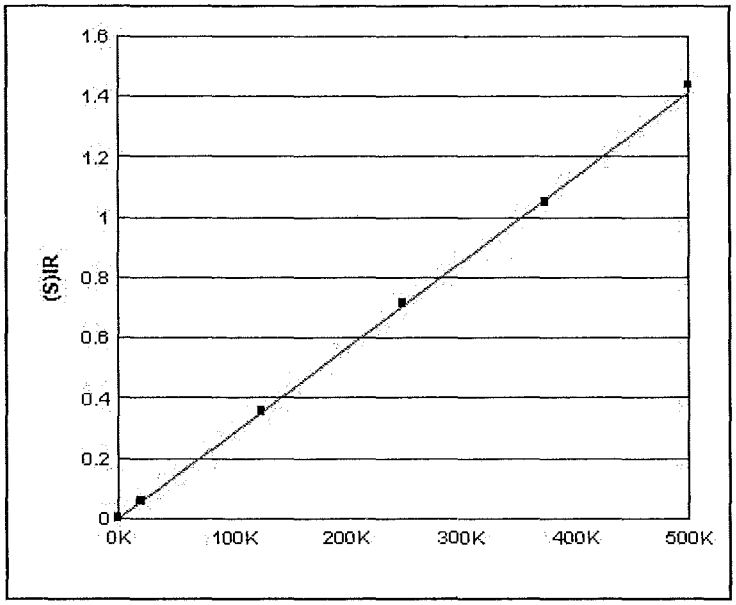
Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**79.687**	**7.7220**	**.18931**	**32.744**	**-.30558**	**1.2051**	**1.0056**	**1.2871**
Stddev	18.774	7.1380	.16214	12.281	.67460	.9476	.3530	.4494
%RSD	23.559	92.438	85.650	37.507	220.76	78.638	35.101	34.915
#1	100.98	15.043	.06529	38.547	-.61528	1.4417	1.0583	1.7898
#2	65.509	7.3399	.12985	41.050	-.76972	2.0120	1.3292	1.1470
#3	72.573	.78271	.37279	18.637	.46826	.16152	.62920	.92444
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB2 Acquired: 06/05/2019 16:08:08 Type: QC
Method: ICP08 ISM02.4 2018(v94) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1555.4**	**31533.**	**315910.**	**2798.9**	**22048.**	**149950.**
Stddev	68.1	162.	1597.	117.9	110.	932.
%RSD	4.3798	.51446	.50552	4.2115	.50043	.62151
#1	1538.2	31720.	315970.	2774.5	22175.	150990.
#2	1497.5	31424.	317480.	2695.1	21985.	149680.
#3	1630.5	31456.	314280.	2927.0	21983.	149190.

Calibration curves for k19120

Author: Joanna Sanchez
Published: 06/06/2019 13:33:47
Method Name: ICP08 ISM02.4 2018 (95)



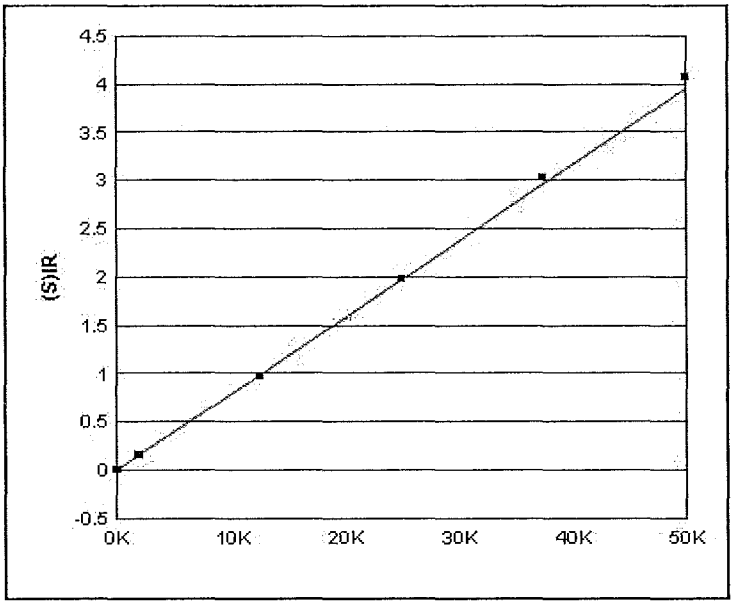
Element Name:	Al
Element Wavelength:	Al 308.215 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:41:05
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99993
A0 (Offset):	0.00062158
A1 (Gain):	0.0000028309
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope **QC Normalize**

Slope: 1.0000 **Slope factor:** 1.0000
Y Int: 0.00000 **Offset:** 0.00000

Concentration

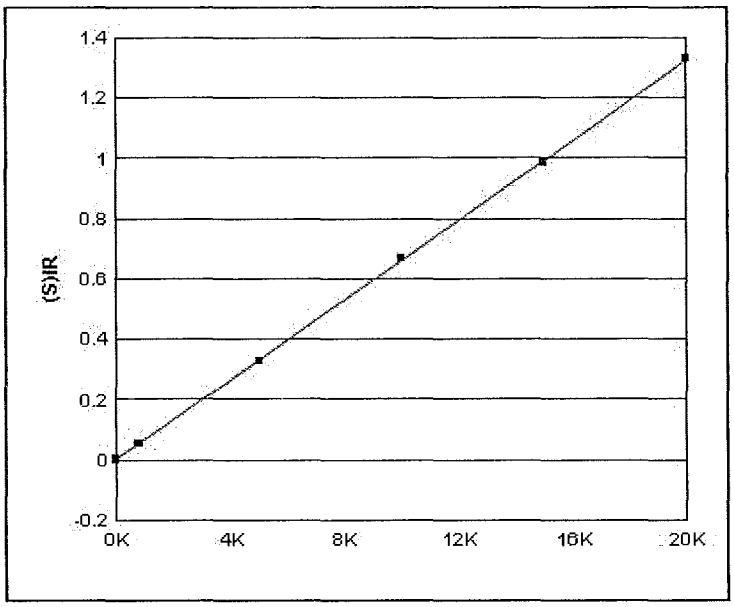
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.021901	0.021901	0.00000	0.00062164	0.000029108	1
S01	200.00	185.56	-14.443	-7.2216	0.0011664	0.000053621	1
S02	20,000	19,520	-479.92	-2.3996	0.056673	0.00027042	1
S03	125,000	123,480	-1,522.1	-1.2177	0.35513	0.0013016	1
S04	250,000	248,700	-1,301.4	-0.52054	0.71456	0.0044404	1
S06	375,000	371,040	-3,956.4	-1.0550	1.0510	0.024716	1
S08	500,000	507,320	7,320.9	1.4642	1.4368	0.0090900	1



Element Name:	Sb
Element Wavelength:	Sb 206.833 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:35
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99989
A0 (Offset):	-0.00069537
A1 (Gain):	0.000079147
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

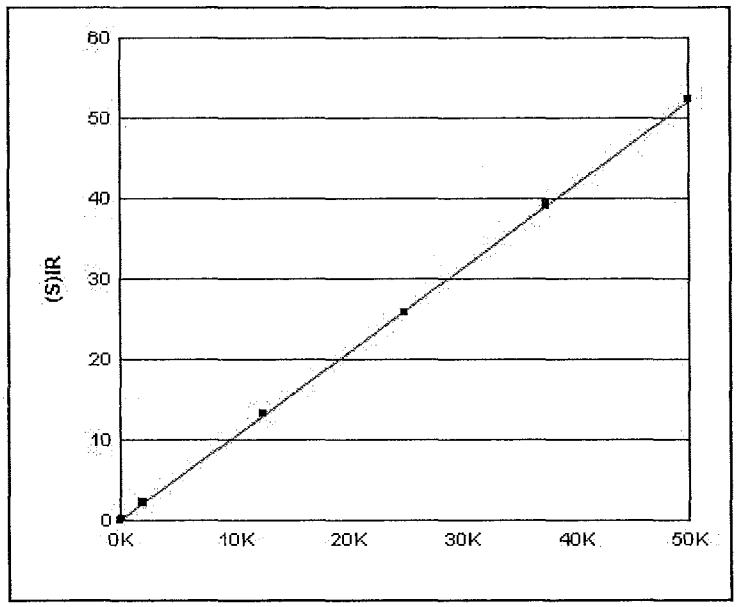
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.0026282	0.0026282	0.00000	-0.00069517	0.000081102	1
S01	60.000	60.730	0.72992	1.2165	0.0041212	0.00033592	1
S02	2,000.0	1,944.7	-55.289	-2.7644	0.15548	0.00043957	1
S03	12,500	12,138	-362.15	-2.8972	0.97407	0.0038287	1
S04	25,000	24,560	-440.43	-1.7617	1.9713	0.0077155	1
S05	37,500	37,668	167.72	0.44725	3.0220	0.024965	1
S07	50,000	50,690	689.67	1.3793	4.0665	0.028684	1



Element Name:	As
Element Wavelength:	As 189.042 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:35
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	-0.00020592
A1 (Gain):	0.000066118
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

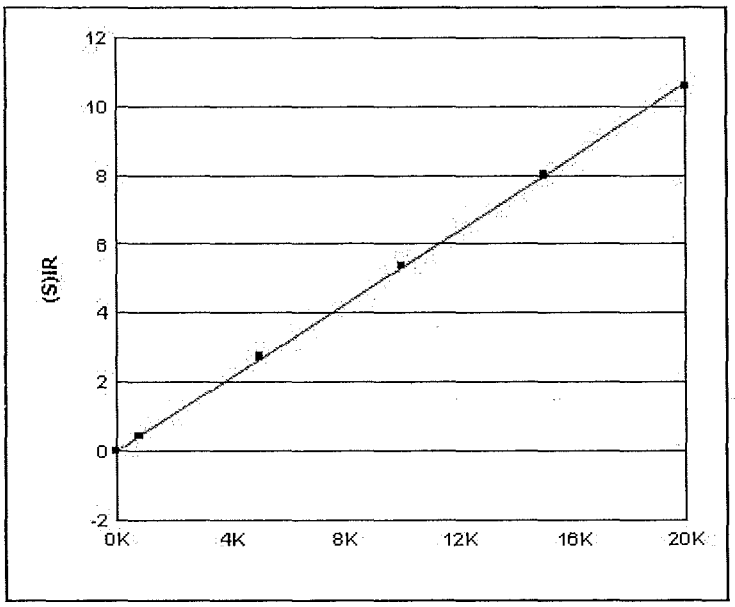
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.00047078	-0.00047078	0.00000	-0.00020595	0.000048587	1
S01	10.000	10.678	0.67824	6.7824	0.00050104	0.00035951	1
S02	800.00	788.09	-11.912	-1.4889	0.051990	0.00040139	1
S03	5,000.0	4,942.4	-57.635	-1.1527	0.32713	0.0011396	1
S04	10,000	10,081	81.397	0.81397	0.66747	0.0040019	1
S05	15,000	14,889	-110.57	-0.73710	0.98593	0.0072034	1
S07	20,000	20,098	98.037	0.49018	1.3309	0.010762	1



Element Name:	Ba
Element Wavelength:	Ba 455.403 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:35
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	0.0020601
A1 (Gain):	0.0010427
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.016831	-0.016831	0.00000	0.0020426	0.00021731	1
S01	200.00	212.21	12.212	6.1059	0.22334	0.00077374	1
S02	2,000.0	2,045.3	45.294	2.2647	2.1347	0.022250	1
S03	12,500	12,627	126.86	1.0149	13.168	0.18647	1
S04	25,000	24,683	-316.51	-1.2660	25.740	0.36341	1
S05	37,500	37,548	47.590	0.12691	39.154	0.44287	1
S07	50,000	50,085	84.556	0.16911	52.226	0.20979	1



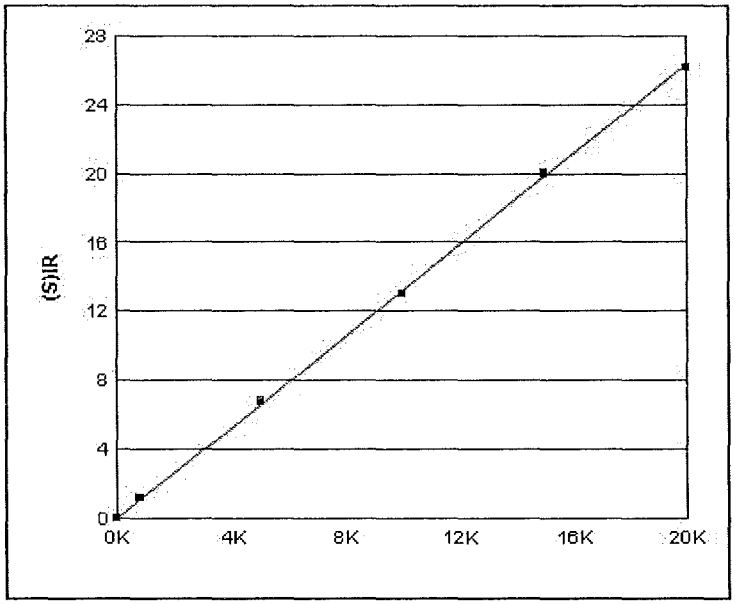
Element Name:	Be
Element Wavelength:	Be 313.107 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:35
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99994
A0 (Offset):	-0.000029576
A1 (Gain):	0.00053343
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope **QC Normalize**

Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.00055149	-0.00055149	0.00000	-0.000029870	0.000092964	1
S01	5.0000	5.2580	0.25798	5.1597	0.0027808	0.00014117	1
S02	800.00	831.86	31.856	3.9819	0.44393	0.0035642	1
S03	5,000.0	5,116.3	116.33	2.3266	2.7306	0.0063834	1
S04	10,000	10,065	64.798	0.64798	5.3717	0.020059	1
S05	15,000	14,988	-12.150	-0.080999	7.9992	0.10972	1
S07	20,000	19,799	-201.09	-1.0055	10.567	0.086939	1

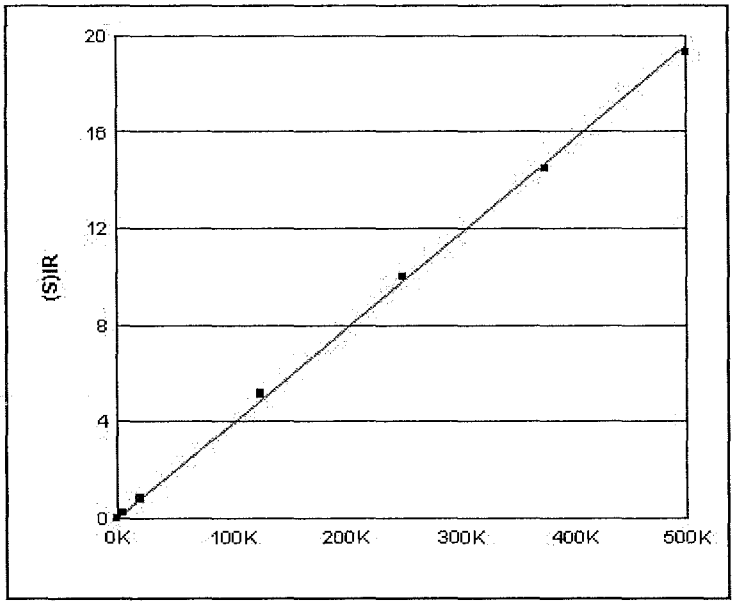


Element Name:	Cd
Element Wavelength:	Cd 214.438 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:35
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99985
A0 (Offset):	0.00021038
A1 (Gain):	0.0013197
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

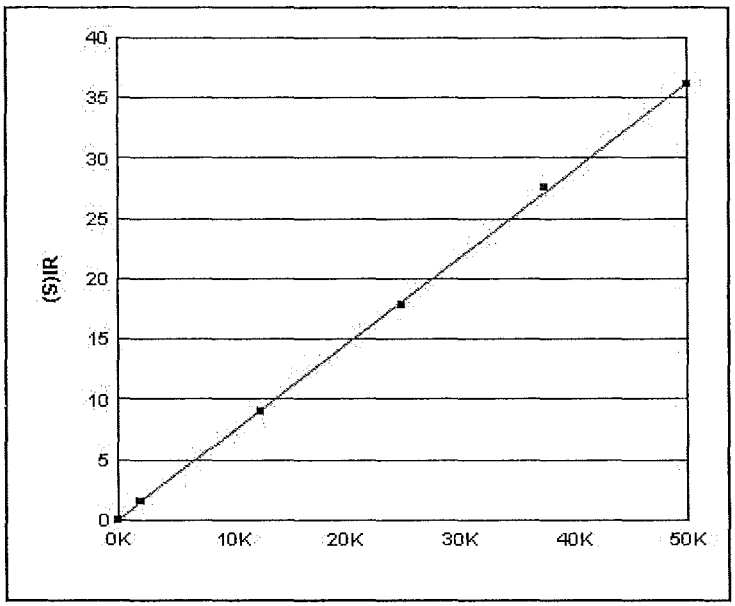
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0011395	-0.0011395	0.00000	0.00020888	0.00014641	1
S01	5.0000	5.6652	0.66523	13.305	0.0076970	0.00014308	1
S02	800.00	868.08	68.079	8.5098	1.1476	0.0021971	1
S03	5,000.0	5,124.8	124.77	2.4955	6.7745	0.035207	1
S04	10,000	9,836.4	-163.62	-1.6362	13.004	0.077593	1
S05	15,000	15,160	160.23	1.0682	20.006	0.18388	1
S07	20,000	19,810	-190.19	-0.95094	26.142	0.24640	1



Element Name:	Ca
Element Wavelength:	Ca 317.933 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:41:05
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99978
A0 (Offset):	0.0022012
A1 (Gain):	0.000039161
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

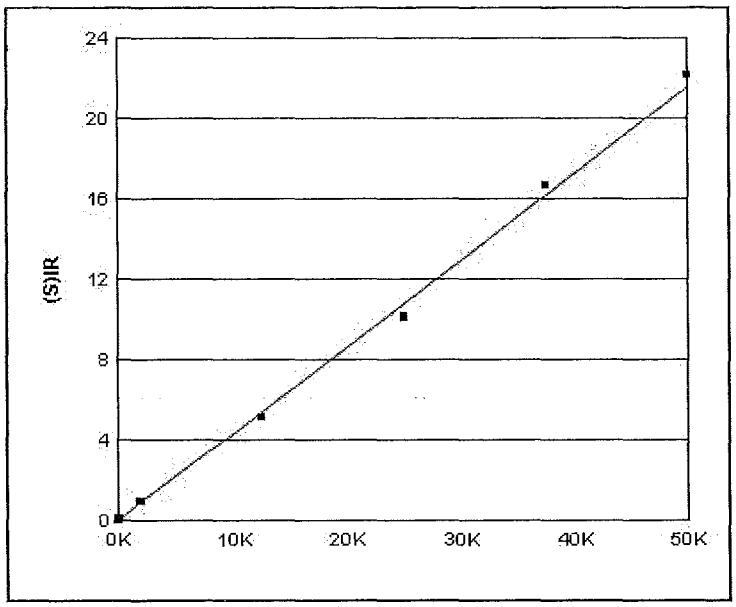
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.61887	-0.61887	0.00000	0.0021769	0.000049557	1
S01	5,000.0	5,284.6	284.62	5.6925	0.20915	0.00075677	1
S02	20,000	20,530	530.02	2.6501	0.80618	0.0066037	1
S03	125,000	130,850	5,850.9	4.6807	5.1265	0.013653	1
S04	250,000	255,060	5,059.9	2.0240	9.9906	0.051731	1
S06	375,000	370,130	-4,873.4	-1.2996	14.497	0.27022	1
S08	500,000	493,150	-6,852.0	-1.3704	19.314	0.14826	1



Element Name:	Cr
Element Wavelength:	Cr 205.552 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:35
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99992
A0 (Offset):	0.00030430
A1 (Gain):	0.00072486
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

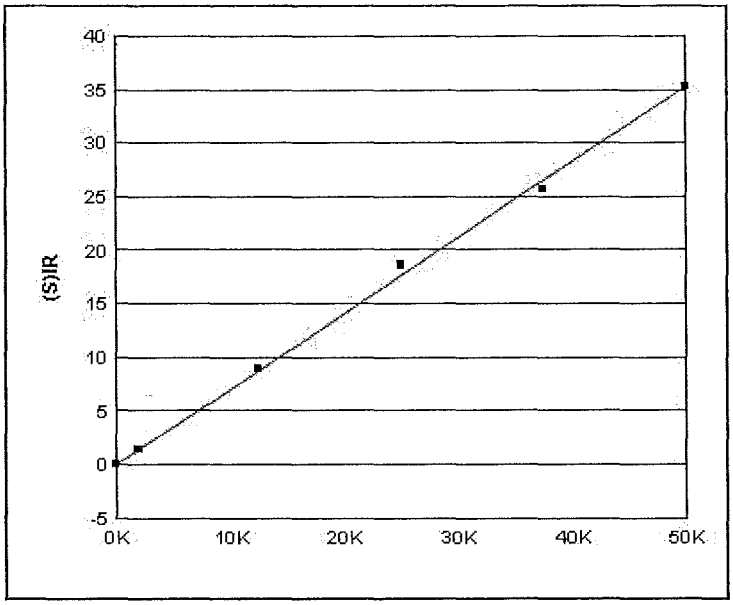
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0018057	-0.0018057	0.00000	0.00030299	0.00034649	1
S01	10.000	11.455	1.4553	14.553	0.0086059	0.00011204	1
S02	2,000.0	2,095.5	95.495	4.7748	1.5192	0.0048256	1
S03	12,500	12,389	-110.62	-0.88492	8.9804	0.047590	1
S04	25,000	24,608	-392.40	-1.5696	17.836	0.096326	1
S05	37,500	38,057	557.43	1.4865	27.588	0.33136	1
S07	50,000	49,849	-151.41	-0.30282	36.135	0.37285	1



Element Name:	Co
Element Wavelength:	Co 228.616 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:35
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99915
A0 (Offset):	0.00028100
A1 (Gain):	0.00043155
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.00098472	-0.00098472	0.00000	0.00028058	0.00028634	1
S01	50.000	53.375	3.3754	6.7508	0.023343	0.00023620	1
S02	2,000.0	2,040.6	40.614	2.0307	0.88174	0.0014142	1
S03	12,500	11,832	-667.79	-5.3423	5.1117	0.015965	1
S04	25,000	23,285	-1,714.5	-6.8580	10.060	0.048072	1
S05	37,500	38,567	1,067.5	2.8467	16.660	0.15701	1
S07	50,000	51,271	1,270.8	2.5416	22.147	0.20066	1

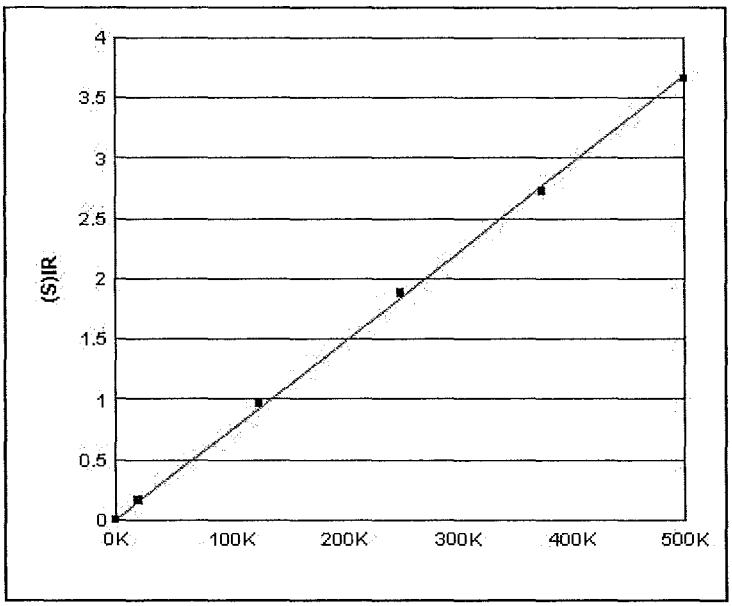


Element Name:	Cu
Element Wavelength:	Cu 224.700 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:35
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99958
A0 (Offset):	-0.0011159
A1 (Gain):	0.00070635
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.00098804	0.00098804	0.00000	-0.0011152	0.00038329	1
S01	25.000	24.071	-0.92937	-3.7175	0.015921	0.00036123	1
S02	2,000.0	1,945.8	-54.222	-2.7111	1.3767	0.0033618	1
S03	12,500	12,603	102.80	0.82243	8.9224	0.0035283	1
S04	25,000	26,277	1,276.7	5.1067	18.602	0.089017	1
S05	37,500	36,296	-1,203.6	-3.2096	25.685	0.25910	1
S07	50,000	49,878	-121.54	-0.24309	35.294	0.32594	1

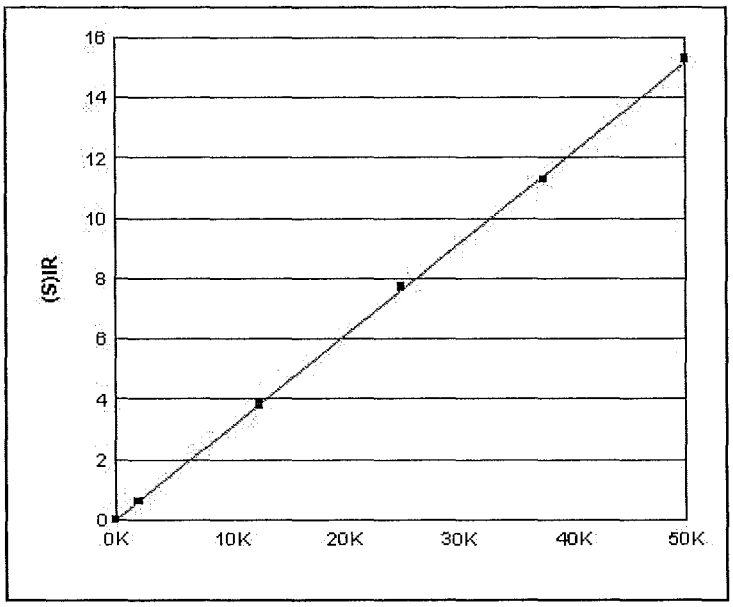


Element Name:	Fe
Element Wavelength:	Fe 259.837 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:41:05
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99980
A0 (Offset):	0.0000005098
A1 (Gain):	0.0000073819
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.014074	-0.014074	0.00000	0.0000004059	0.000014614	1
S01	100.00	104.40	4.3984	4.3984	0.00077132	0.000029724	1
S02	20,000	21,312	1,312.1	6.5607	0.15734	0.0017088	1
S03	125,000	129,770	4,772.8	3.8182	0.95809	0.0014773	1
S04	250,000	254,790	4,786.7	1.9147	1.8811	0.0071280	1
S06	375,000	368,360	-6,635.3	-1.7694	2.7192	0.062992	1
S08	500,000	495,760	-4,242.2	-0.84843	3.6596	0.021877	1

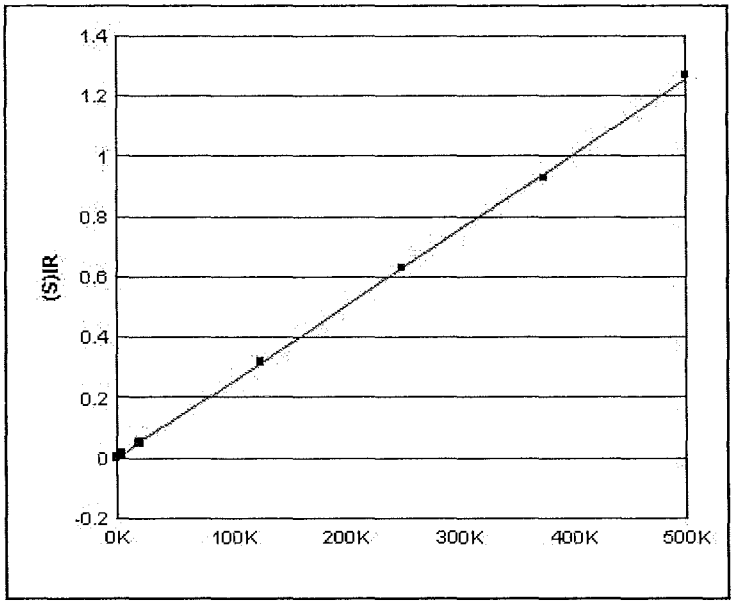


Element Name:	Pb
Element Wavelength:	Pb 220.353 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:36
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99995
A0 (Offset):	0.00037005
A1 (Gain):	0.00030422
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

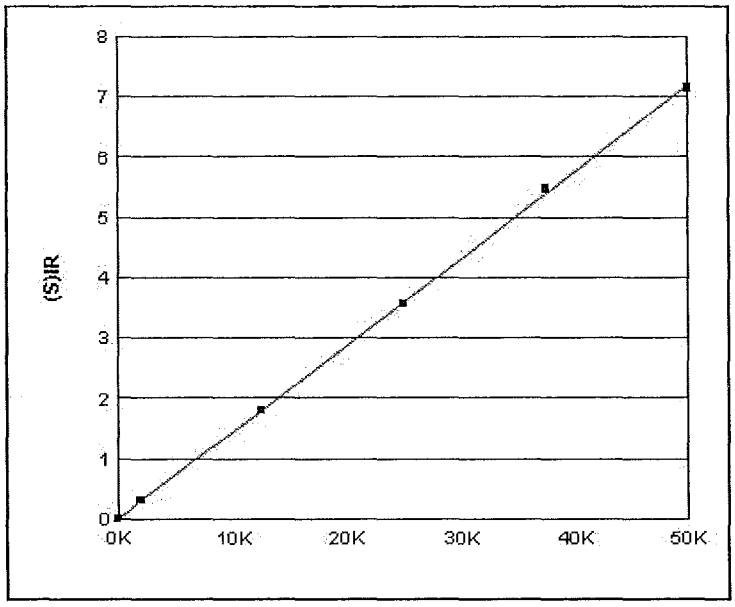
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.0013076	0.0013076	0.00000	0.00037045	0.00049402	1
S01	10.000	8.7994	-1.2006	-12.006	0.0030482	0.00025983	1
S02	2,000.0	1,974.1	-25.858	-1.2929	0.60111	0.0010424	1
S03	12,500	12,466	-33.679	-0.26943	3.7939	0.0029174	1
S04	25,000	25,346	345.89	1.3836	7.7132	0.034367	1
S05	37,500	37,019	-481.47	-1.2839	11.268	0.097094	1
S07	50,000	50,196	196.38	0.39276	15.279	0.14617	1



Element Name:	Mg
Element Wavelength:	Mg 279.079 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:41:05
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99993
A0 (Offset):	-0.000058957
A1 (Gain):	0.0000025130
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

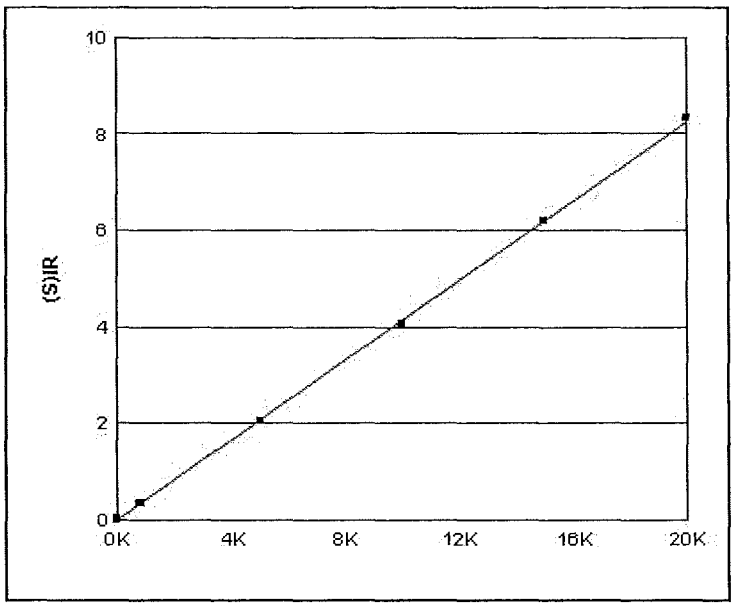
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.090246	0.090246	0.00000	-0.000058731	0.000073676	1
S01	5,000.0	5,027.0	26.998	0.53996	0.012574	0.00011034	1
S02	20,000	19,462	-537.81	-2.6891	0.048830	0.00044688	1
S03	125,000	125,770	770.43	0.61634	0.31588	0.00013184	1
S04	250,000	250,920	917.42	0.36697	0.63025	0.0016449	1
S06	375,000	368,940	-6,057.9	-1.6154	0.92730	0.021293	1
S08	500,000	504,880	4,881.5	0.97631	1.2690	0.0070512	1



Element Name:	Mn
Element Wavelength:	Mn 257.610 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:36
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99994
A0 (Offset):	0.000056819
A1 (Gain):	0.00014393
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

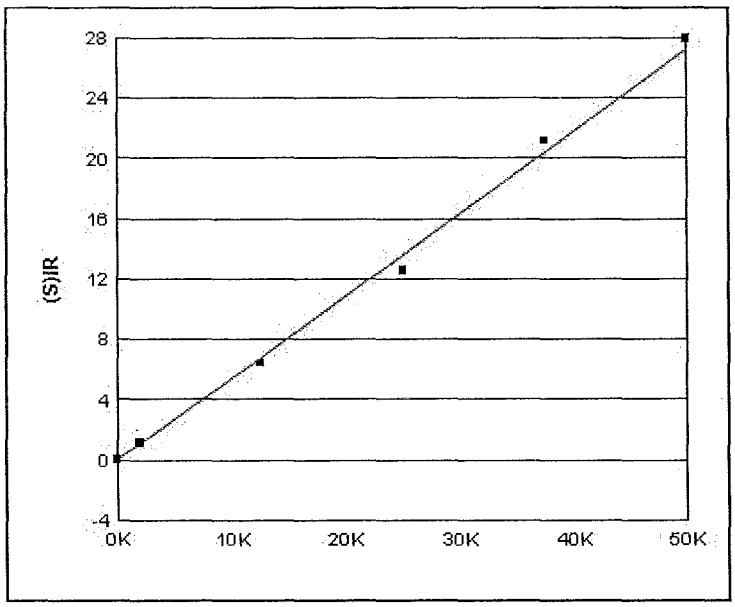
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0020016	-0.0020016	0.00000	0.000056531	0.000059598	1
S01	15.000	16.365	1.3650	9.1001	0.0024122	0.000021792	1
S02	2,000.0	2,093.8	93.755	4.6877	0.30141	0.0014092	1
S03	12,500	12,470	-30.380	-0.24304	1.7948	0.0042454	1
S04	25,000	24,802	-197.81	-0.79123	3.5699	0.012356	1
S05	37,500	37,986	485.91	1.2958	5.4674	0.15486	1
S07	50,000	49,647	-352.84	-0.70569	7.1458	0.040746	1



Element Name:	Mo
Element Wavelength:	Mo 202.030 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:36
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	0.00012045
A1 (Gain):	0.00041345
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.0000073524	0.0000073524	0.00000	0.00012045	0.00018325	1
S01	10.000	10.029	0.028952	0.28952	0.0042659	0.00037660	1
S02	800.00	808.97	8.9654	1.1207	0.33441	0.00086196	1
S03	5,000.0	4,954.5	-45.521	-0.91042	2.0475	0.010193	1
S04	10,000	9,843.2	-156.79	-1.5679	4.0676	0.021648	1
S05	15,000	15,017	17.010	0.11340	6.2077	0.057715	1
S07	20,000	20,176	176.25	0.88124	8.3403	0.071118	1

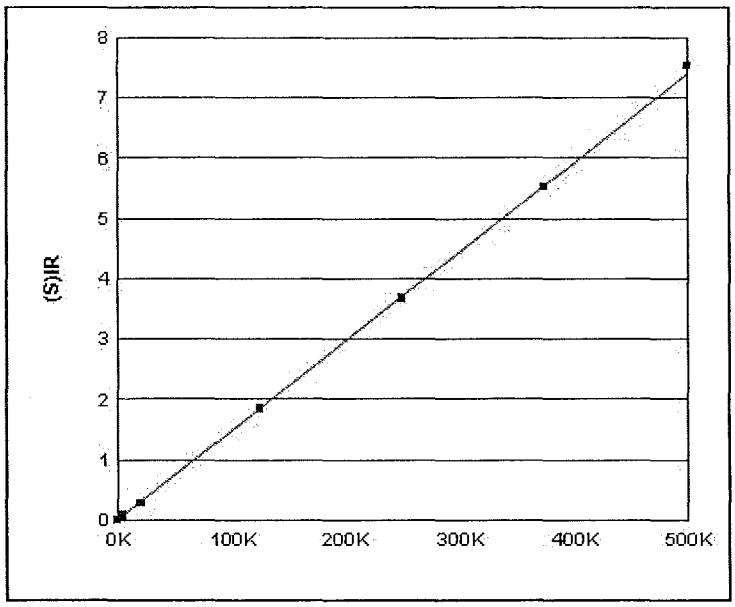


Element Name:	Ni
Element Wavelength:	Ni 231.604 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:36
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99887
A0 (Offset):	-0.0010379
A1 (Gain):	0.00054400
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.00072120	-0.00072120	0.00000	-0.0010383	0.00015493	1
S01	40.000	42.838	2.8379	7.0948	0.022267	0.00014392	1
S02	2,000.0	2,049.2	49.183	2.4591	1.1136	0.0029598	1
S03	12,500	11,733	-767.26	-6.1381	6.3810	0.026137	1
S04	25,000	23,029	-1,971.3	-7.8851	12.525	0.059402	1
S05	37,500	38,850	1,349.7	3.5992	21.134	0.19622	1
S07	50,000	51,337	1,336.5	2.6731	27.927	0.24120	1

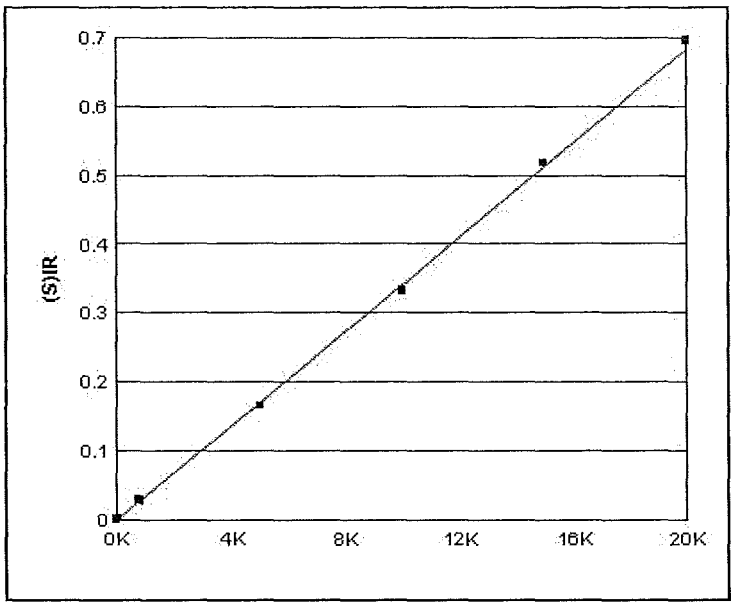


Element Name:	K
Element Wavelength:	K 766.490 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:41:05
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99989
A0 (Offset):	0.0015897
A1 (Gain):	0.000014813
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.53822	0.53822	0.00000	0.0015976	0.00037293	1
S01	5,000.0	4,796.3	-203.67	-4.0733	0.072638	0.00032374	1
S02	20,000	18,902	-1,097.9	-5.4897	0.28159	0.0020468	1
S03	125,000	123,810	-1,187.2	-0.94976	1.8356	0.00084983	1
S04	250,000	247,290	-2,713.8	-1.0855	3.6646	0.0085681	1
S06	375,000	371,900	-3,100.0	-0.82666	5.5105	0.10671	1
S08	500,000	508,300	8,302.5	1.6605	7.5311	0.13249	1

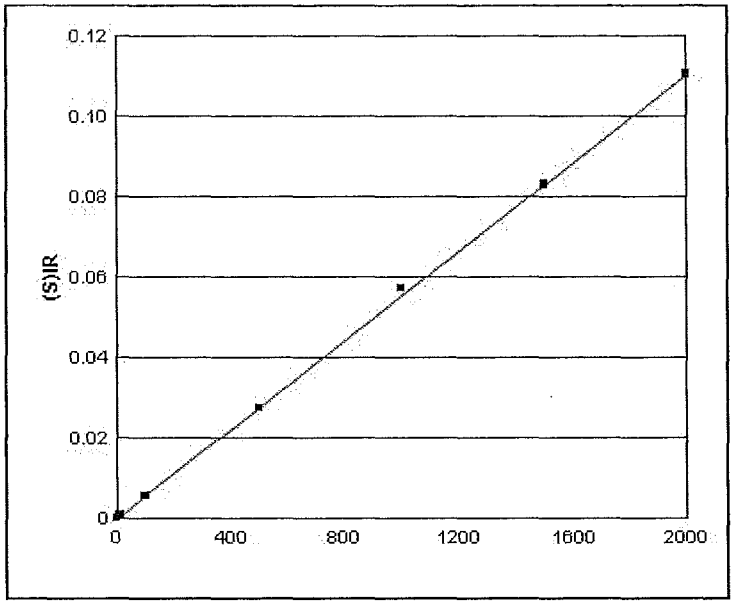


Element Name:	Se
Element Wavelength:	Se 196.090 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:36
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99977
A0 (Offset):	0.00029622
A1 (Gain):	0.000034092
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

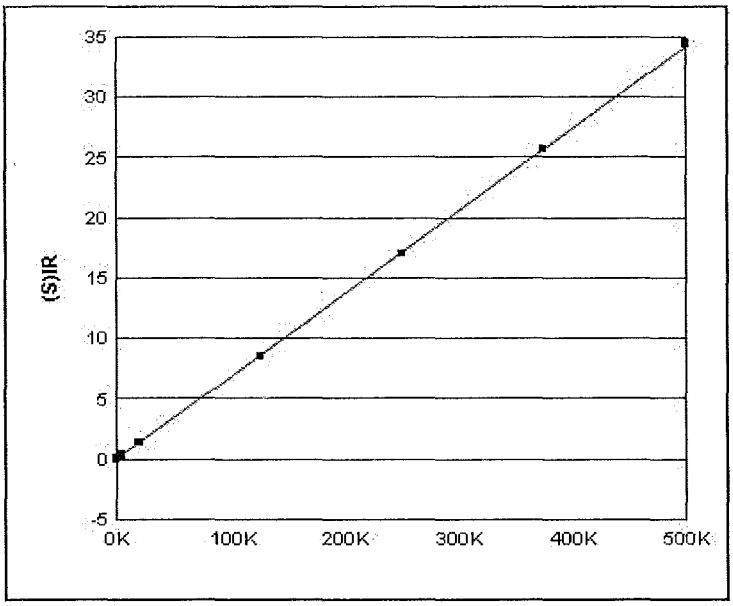
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.000029332	-0.000029332	0.00000	0.00029622	0.00013063	1
S01	35.000	36.481	1.4808	4.2310	0.0015410	0.00045567	1
S02	800.00	799.16	-0.84347	-0.10543	0.027623	0.00035679	1
S03	5,000.0	4,816.8	-183.22	-3.6644	0.16502	0.00037515	1
S04	10,000	9,694.3	-305.75	-3.0575	0.33182	0.00042923	1
S05	15,000	15,142	141.81	0.94538	0.51761	0.0025523	1
S07	20,000	20,347	346.95	1.7347	0.69543	0.0040962	1



Element Name:	Ag
Element Wavelength:	Ag 328.068 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:36
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99987
A0 (Offset):	0.000023970
A1 (Gain):	0.000055037
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

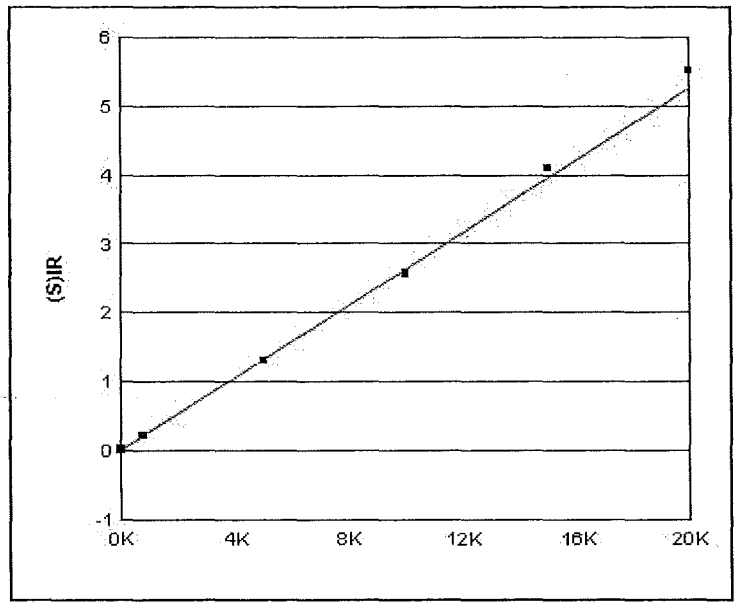
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.00089686	0.00089686	0.00000	0.000024019	0.000010913	1
S01	10.000	9.5085	-0.49151	-4.9151	0.00054778	0.000029013	1
S02	100.00	95.852	-4.1480	-4.1480	0.0053338	0.00010274	1
S03	500.00	489.65	-10.351	-2.0702	0.027188	0.00017038	1
S04	1,000.00	1,030.0	30.012	3.0012	0.057142	0.00021349	1
S05	1,500.0	1,494.9	-5.0881	-0.33921	0.082944	0.00047187	1
S07	2,000.0	1,990.1	-9.9427	-0.49713	0.11041	0.00062182	1



Element Name:	Na
Element Wavelength:	Na 589.592 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:41:05
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	-0.0016063
A1 (Gain):	0.000068360
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.36634	0.36634	0.00000	-0.0015813	0.000091849	1
S01	5,000.0	4,881.5	-118.50	-2.3701	0.33209	0.00024942	1
S02	20,000	19,126	-873.57	-4.3679	1.3059	0.016590	1
S03	125,000	124,410	-589.07	-0.47125	8.5031	0.019585	1
S04	250,000	247,880	-2,117.5	-0.84701	16.944	0.16152	1
S06	375,000	374,850	-153.57	-0.040953	25.623	0.046609	1
S08	500,000	503,850	3,852.2	0.77045	34.442	0.34247	1

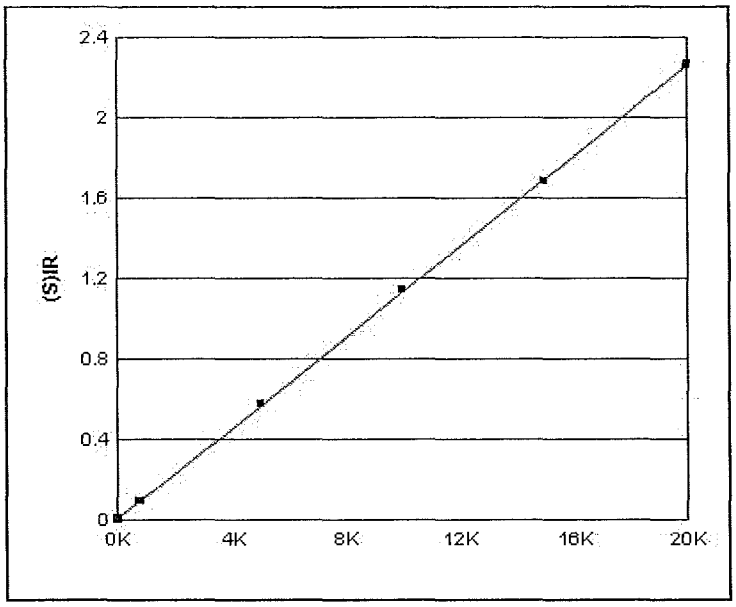


Element Name:	Tl
Element Wavelength:	Tl 190.856 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:36
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99959
A0 (Offset):	-0.00015149
A1 (Gain):	0.00026316
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.00066472	0.00066472	0.00000	-0.00015132	0.00050374	1
S01	25.000	25.449	0.44884	1.7954	0.0066626	0.00040393	1
S02	800.00	804.09	4.0878	0.51097	0.21627	0.00074235	1
S03	5,000.0	4,806.8	-193.16	-3.8633	1.2949	0.0010428	1
S04	10,000	9,520.6	-479.38	-4.7938	2.5655	0.010215	1
S05	15,000	15,213	213.14	1.4209	4.0977	0.014657	1
S07	20,000	20,454	454.19	2.2709	5.5084	0.038625	1

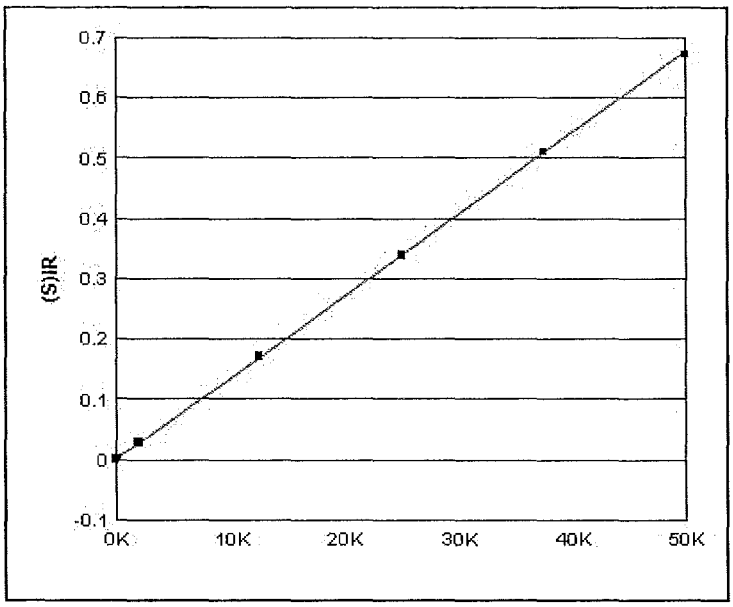


Element Name:	Ti
Element Wavelength:	Ti 334.941 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:36
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.000087469
A1 (Gain):	0.00011296
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Concentration

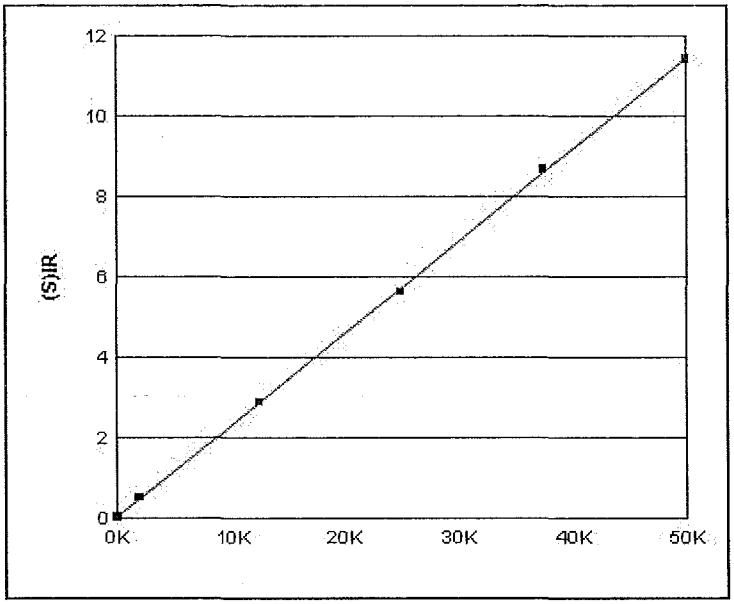
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0016210	-0.0016210	0.00000	0.000087286	0.000023049	1
S01	25.000	26.085	1.0854	4.3417	0.0031280	0.000093665	1
S02	800.00	811.83	11.831	1.4789	0.092340	0.00076854	1
S03	5,000.0	5,038.2	38.180	0.76359	0.57241	0.0016982	1
S04	10,000	10,072	71.504	0.71504	1.1442	0.0038607	1
S05	15,000	14,880	-120.01	-0.80004	1.6848	0.038179	1
S07	20,000	19,997	-3.0398	-0.015199	2.2642	0.016205	1



Element Name:	V
Element Wavelength:	V 292.402 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:36
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	-0.000023930
A1 (Gain):	0.000013576
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	-0.0057035	-0.0057035	0.00000	-0.000024007	0.0000024210	1
S01	50.000	53.293	3.2933	6.5867	0.00069879	0.0000035686	1
S02	2,000.0	2,086.2	86.229	4.3114	0.028231	0.00022872	1
S03	12,500	12,593	93.482	0.74786	0.17052	0.00066961	1
S04	25,000	24,985	-15.182	-0.060729	0.33832	0.0012402	1
S05	37,500	37,736	236.31	0.63016	0.51093	0.0026636	1
S07	50,000	49,596	-404.16	-0.80832	0.67148	0.0025072	1



Element Name:	Zn
Element Wavelength:	Zn 206.200 nm
Concentration Units:	ug/L
Date of Calibration:	06/06/2019 08:37:36
Date of Fit:	06/06/2019 13:09:26
Type of Fit:	Linear
Correlation:	0.99991
A0 (Offset):	0.0069114
A1 (Gain):	0.00022846
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.00039011	0.00039011	0.00000	0.0069115	0.00047999	1
S01	60.000	55.977	-4.0232	-6.7053	0.019700	0.00012342	1
S02	2,000.0	2,138.9	138.95	6.9474	0.49552	0.0026716	1
S03	12,500	12,516	15.812	0.12649	2.8659	0.017137	1
S04	25,000	24,509	-491.17	-1.9647	5.6055	0.043004	1
S05	37,500	37,898	397.68	1.0605	8.6640	0.066926	1
S07	50,000	49,943	-57.236	-0.11447	11.416	0.11970	1

Sample Name: S0 Acquired: 06/06/2019 08:13:39 Type: Cal
Method: ICP08 ISM02.4 2018(v95) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

K19120
Joanna C Sanchez
06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00062**	**-.00070**	**-.00021**	**.00204**	**-.00003**	**.00021**	**.00218**
Stddev	.00003	.00008	.00005	.00022	.00009	.00015	.00005
%RSD	4.6823	11.667	23.592	10.639	311.23	70.094	2.2765
#1	.00063	-.00077	-.00021	.00197	-.00002	.00030	.00223
#2	.00065	-.00061	-.00025	.00187	.00006	.00004	.00214
#3	.00059	-.00071	-.00016	.00229	-.00013	.00028	.00215

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00030**	**.00028**	**-.00112**	**.00000**	**.00037**	**-.00006**	**.00006**
Stddev	.00035	.00029	.00038	.00001	.00049	.00007	.00006
%RSD	114.36	102.05	34.368	3600.7	133.36	125.45	105.42
#1	.00070	.00061	-.00151	-.00001	.00093	-.00006	.00007
#2	.00007	.00013	-.00110	.00002	-.00002	.00002	-.00001
#3	.00013	.00010	-.00074	.00000	.00020	-.00013	.00011

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00012**	**-.00104**	**.00160**	**.00030**	**.00002**	**-.00158**	**-.00015**
Stddev	.00018	.00015	.00037	.00013	.00001	.00009	.00050
%RSD	152.14	14.922	23.343	44.099	45.435	5.8086	332.90
#1	.00005	-.00112	.00117	.00030	.00001	-.00164	-.00032
#2	.00033	-.00086	.00178	.00016	.00002	-.00163	.00041
#3	-.00002	-.00113	.00184	.00042	.00004	-.00148	-.00055

Elem	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S
Avg	**.00009**	**-.00002**	**.00691**
Stddev	.00002	.00000	.00048
%RSD	26.407	10.085	6.9448
#1	.00006	-.00003	.00742
#2	.00011	-.00002	.00685
#3	.00009	-.00003	.00646

Sample Name: S0 Acquired: 06/06/2019 08:13:39 Type: Cal
Method: ICP08 ISM02.4 2018(v95) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1590.9**	**30378.**	**318240.**	**2986.1**	**20602.**	**149830.**
Stddev	4.4	135.	2339.	6.2	67.	1558.
%RSD	.27628	.44403	.73508	.20654	.32450	1.0398
#1	1585.9	30504.	315680.	2979.0	20652.	151550.
#2	1594.3	30236.	320270.	2990.4	20526.	148520.
#3	1592.3	30394.	318750.	2988.8	20627.	149400.

Sample Name: S01 Acquired: 06/06/2019 08:16:44 Type: Cal
Method: ICP08 ISM02.4 2018(v95) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00117**	**.00412**	**.00050**	**.22334**	**.00278**	**.00770**	**.20915**	**.00861**
Stddev	.00005	.00034	.00036	.00077	.00014	.00014	.00076	.00011
%RSD	4.5970	8.1512	71.754	.34644	5.0765	1.8589	.36183	1.3018
#1	.00121	.00438	.00035	.22421	.00287	.00757	.20848	.00873
#2	.00118	.00424	.00091	.22307	.00285	.00767	.20901	.00851
#3	.00111	.00374	.00024	.22273	.00262	.00785	.20997	.00859

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02334**	**.01592**	**.00077**	**.00305**	**.01257**	**.00241**	**.00427**	**.02227**
Stddev	.00024	.00036	.00003	.00026	.00011	.00002	.00038	.00014
%RSD	1.0119	2.2689	3.8537	8.5239	.87753	.90340	8.8281	.64634
#1	.02310	.01615	.00080	.00328	.01253	.00239	.00394	.02216
#2	.02357	.01611	.00077	.00310	.01249	.00243	.00468	.02221
#3	.02335	.01550	.00074	.00277	.01270	.00242	.00418	.02243

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.07264**	**.00154**	**.00055**	**.33209**	**.00666**	**.00313**	**.00070**	**.01970**
Stddev	.00032	.00046	.00003	.00025	.00040	.00009	.00000	.00012
%RSD	.44569	29.570	5.2964	.07511	6.0626	2.9944	.51069	.62651
#1	.07233	.00191	.00057	.33180	.00624	.00303	.00070	.01984
#2	.07261	.00169	.00056	.33221	.00704	.00322	.00070	.01966
#3	.07298	.00103	.00051	.33226	.00671	.00314	.00069	.01960

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1551.7**	**30320.**	**316210.**	**2946.9**	**20544.**	**147300.**
Stddev	7.5	246.	3615.	13.8	176.	730.
%RSD	.48415	.81003	1.1434	.46747	.85643	.49557
#1	1544.0	30476.	314830.	2931.3	20687.	146980.
#2	1552.3	30447.	320310.	2952.3	20597.	146790.
#3	1558.9	30037.	313490.	2957.2	20347.	148140.

Sample Name: S02 Acquired: 06/06/2019 08:19:50 Type: Cal
Method: ICP08 ISM02.4 2018(v95) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.05667**	**.15548**	**.05199**	**2.1347**	**.44393**	**1.1476**	**.80618**	**1.5192**
Stddev	.00027	.00044	.00040	.0222	.00356	.0022	.00660	.0048
%RSD	.47715	.28273	.77206	1.0423	.80286	.19145	.81914	.31765
#1	.05641	.15598	.05241	2.1123	.44093	1.1501	.79907	1.5245
#2	.05695	.15514	.05161	2.1568	.44787	1.1459	.81213	1.5179
#3	.05665	.15531	.05194	2.1351	.44300	1.1468	.80734	1.5151

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.88174**	**1.3767**	**.15734**	**.60111**	**.04883**	**.30141**	**.33441**	**1.1136**
Stddev	.00141	.0034	.00171	.00104	.00045	.00141	.00086	.0030
%RSD	.16039	.24419	1.0861	.17342	.91517	.46755	.25775	.26578
#1	.88317	1.3787	.15555	.60231	.04846	.30041	.33480	1.1168
#2	.88170	1.3786	.15895	.60063	.04933	.30302	.33502	1.1132
#3	.88034	1.3728	.15754	.60040	.04870	.30080	.33343	1.1109

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.28159**	**.02762**	**.00533**	**1.3059**	**.21627**	**.09234**	**.02823**	**.49552**
Stddev	.00205	.00036	.00010	.0166	.00074	.00077	.00023	.00267
%RSD	.72689	1.2916	1.9262	1.2704	.34326	.83229	.81018	.53915
#1	.27935	.02802	.00539	1.2883	.21712	.09162	.02838	.49763
#2	.28336	.02734	.00522	1.3213	.21574	.09315	.02797	.49643
#3	.28205	.02751	.00540	1.3080	.21594	.09226	.02834	.49252

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1449.5**	**30749.**	**310370.**	**2916.8**	**20799.**	**144490.**
Stddev	4.9	31.	419.	6.8	20.	1579.
%RSD	.33478	.10028	.13499	.23270	.09376	1.0926
#1	1443.9	30719.	309950.	2909.1	20817.	143550.
#2	1452.3	30781.	310370.	2919.9	20802.	146320.
#3	1452.4	30748.	310790.	2921.5	20778.	143620.

Sample Name: S03 Acquired: 06/06/2019 08:22:36 Type: Cal
Method: ICP08 ISM02.4 2018(v95) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.35513**	**.97407**	**.32713**	**13.168**	**2.7306**	**6.7745**	**5.1265**	**8.9804**
Stddev	.00130	.00383	.00114	.186	.0064	.0352	.0137	.0476
%RSD	.36651	.39306	.34836	1.4161	.23377	.51970	.26632	.52993
#1	.35590	.97833	.32834	13.045	2.7372	6.8032	5.1269	9.0264
#2	.35585	.97093	.32697	13.383	2.7302	6.7852	5.1126	8.9834
#3	.35362	.97293	.32608	13.077	2.7244	6.7352	5.1399	8.9314

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.1117**	**8.9224**	**.95809**	**3.7939**	**.31588**	**1.7948**	**2.0475**	**6.3810**
Stddev	.0160	.0035	.00148	.0029	.00013	.0043	.0102	.0261
%RSD	.31232	.03954	.15419	.07690	.04174	.23653	.49782	.40961
#1	5.1282	8.9190	.95927	3.7957	.31573	1.7977	2.0571	6.4077
#2	5.1104	8.9221	.95643	3.7955	.31596	1.7968	2.0484	6.3797
#3	5.0964	8.9261	.95858	3.7905	.31595	1.7899	2.0368	6.3555

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.8356**	**.16502**	**.02719**	**8.5031**	**1.2949**	**.57241**	**.17052**	**2.8659**
Stddev	.0008	.00038	.00017	.0196	.0010	.00170	.00067	.0171
%RSD	.04630	.22733	.62666	.23032	.08053	.29668	.39269	.59796
#1	1.8352	.16546	.02700	8.5216	1.2961	.57389	.17121	2.8723
#2	1.8366	.16482	.02722	8.4826	1.2945	.57277	.16987	2.8790
#3	1.8351	.16480	.02734	8.5051	1.2941	.57055	.17047	2.8465

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1227.7**	**29884.**	**294450.**	**2738.5**	**20060.**	**135000.**
Stddev	1.2	49.	1451.	8.1	78.	437.
%RSD	.09664	.16356	.49264	.29678	.38872	.32347
#1	1227.2	29899.	292770.	2730.2	20074.	135500.
#2	1226.8	29924.	295230.	2738.7	20130.	134710.
#3	1229.0	29829.	295340.	2746.5	19976.	134780.

Sample Name: S04 Acquired: 06/06/2019 08:25:25 Type: Cal
Method: ICP08 ISM02.4 2018(v95) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.71456**	**1.9713**	**.66747**	**25.740**	**5.3717**	**13.004**	**9.9906**	**17.836**
Stddev	.00444	.0077	.00400	.363	.0201	.078	.0517	.096
%RSD	.62141	.39139	.59956	1.4118	.37343	.59670	.51780	.54005
#1	.71947	1.9767	.66923	25.350	5.3872	13.052	9.9584	17.897
#2	.71081	1.9747	.67029	25.801	5.3490	13.045	9.9631	17.887
#3	.71341	1.9625	.66289	26.070	5.3788	12.914	10.050	17.725

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**10.060**	**18.602**	**1.8811**	**7.7132**	**.63025**	**3.5699**	**4.0676**	**12.525**
Stddev	.048	.089	.0071	.0344	.00164	.0124	.0216	.059
%RSD	.47787	.47852	.37893	.44556	.26099	.34613	.53221	.47425
#1	10.088	18.660	1.8833	7.7316	.62918	3.5772	4.0821	12.554
#2	10.087	18.648	1.8731	7.7344	.62944	3.5556	4.0781	12.565
#3	10.004	18.500	1.8868	7.6735	.63215	3.5768	4.0427	12.457

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.6646**	**.33182**	**.05714**	**16.944**	**2.5655**	**1.1442**	**.33832**	**5.6055**
Stddev	.0086	.00043	.00021	.162	.0102	.0039	.00124	.0430
%RSD	.23380	.12936	.37361	.95330	.39818	.33742	.36659	.76716
#1	3.6743	.33208	.05693	16.878	2.5735	1.1478	.33718	5.6322
#2	3.6579	.33206	.05714	17.128	2.5690	1.1401	.33964	5.6285
#3	3.6618	.33133	.05736	16.825	2.5540	1.1445	.33813	5.5559

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1123.9**	**29477.**	**281950.**	**2615.8**	**19705.**	**128160.**
Stddev	3.2	148.	984.	7.4	105.	417.
%RSD	.28092	.50184	.34891	.28410	.53429	.32534
#1	1121.9	29607.	282050.	2609.2	19814.	128610.
#2	1122.3	29508.	280920.	2614.5	19698.	128080.
#3	1127.6	29316.	282880.	2623.8	19604.	127790.

Sample Name: S05 Acquired: 06/06/2019 08:28:22 Type: Cal
Method: ICP08 ISM02.4 2018(v95) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Sb2068	As1890	Ba4554	Be3131	Cd2144	Cr2055	Co2286	Cu2247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.0220**	**.98593**	**39.154**	**7.9992**	**20.006**	**27.588**	**16.660**	**25.685**
Stddev	.0250	.00720	.443	.1097	.184	.331	.157	.259
%RSD	.82610	.73062	1.1311	1.3716	.91909	1.2011	.94248	1.0088
#1	3.0454	.99147	39.105	8.0682	20.165	27.859	16.789	25.880
#2	3.0250	.98853	39.619	8.0566	20.049	27.686	16.704	25.783
#3	2.9957	.97778	38.738	7.8727	19.805	27.219	16.485	25.391

Elem	Pb2203	Mn2576	Mo2020	Ni2316	Se1960	Ag3280	Tl1908	Ti3349
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11.268**	**5.4674**	**6.2077**	**21.134**	**.51761**	**.08294**	**4.0977**	**1.6848**
Stddev	.097	.1549	.0577	.196	.00255	.00047	.0147	.0382
%RSD	.86169	2.8324	.92974	.92846	.49310	.56890	.35769	2.2660
#1	11.349	5.6002	6.2575	21.298	.51972	.08346	4.1120	1.7086
#2	11.294	5.5046	6.2211	21.187	.51832	.08285	4.0985	1.7051
#3	11.160	5.2973	6.1444	20.916	.51477	.08253	4.0827	1.6408

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.51093**	**8.6640**
Stddev	.00266	.0669
%RSD	.52133	.77246
#1	.51199	8.7198
#2	.50790	8.6825
#3	.51290	8.5898

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1440.3**	**31660.**	**314440.**	**2806.4**	**21140.**	**145190.**
Stddev	2.4	965.	1332.	5.3	674.	470.
%RSD	.16802	3.0475	.42368	.18721	3.1869	.32401
#1	1437.9	30623.	313910.	2801.2	20411.	144690.
#2	1440.2	31827.	315950.	2811.7	21272.	145250.
#3	1442.8	32531.	313450.	2806.2	21739.	145630.

Sample Name: S06 Acquired: 06/06/2019 08:31:22 Type: Cal
Method: ICP08 ISM02.4 2018(v95) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Ca3179	Fe2598	Mg2790	K_7664	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.0510**	**14.497**	**2.7192**	**.92730**	**5.5105**	**25.623**
Stddev	.0247	.270	.0630	.02129	.1067	.047
%RSD	2.3516	1.8640	2.3165	2.2963	1.9365	.18190
#1	1.0696	14.699	2.7663	.94333	5.5732	25.676
#2	1.0604	14.601	2.7438	.93542	5.5712	25.602
#3	1.0230	14.190	2.6477	.90314	5.3873	25.590

Int. Std.	Sc3613	Y_3710
Units	Cts/S	Cts/S
Avg	**30244.**	**20195.**
Stddev	463.	307.
%RSD	1.5322	1.5223
#1	29919.	20007.
#2	30038.	20028.
#3	30774.	20550.

Sample Name: S07 Acquired: 06/06/2019 08:34:42 Type: Cal
Method: ICP08 ISM02.4 2018(v95) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Sb2068	As1890	Ba4554	Be3131	Cd2144	Cr2055	Co2286	Cu2247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4.0665**	**1.3309**	**52.226**	**10.567**	**26.142**	**36.135**	**22.147**	**35.294**
Stddev	.0287	.0108	.210	.087	.246	.373	.201	.326
%RSD	.70536	.80867	.40169	.82275	.94252	1.0318	.90604	.92348
#1	4.0907	1.3413	52.345	10.659	26.358	36.511	22.335	35.634
#2	4.0739	1.3315	52.350	10.556	26.195	36.129	22.170	35.265
#3	4.0348	1.3198	51.984	10.486	25.874	35.765	21.936	34.984

Elem	Pb2203	Mn2576	Mo2020	Ni2316	Se1960	Ag3280	Tl1908	Ti3349
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**15.279**	**7.1458**	**8.3403**	**27.927**	**.69543**	**.11041**	**5.5084**	**2.2642**
Stddev	.146	.0408	.0711	.241	.00410	.00062	.0386	.0162
%RSD	.95666	.57021	.85269	.86369	.58902	.56319	.70120	.71572
#1	15.411	7.1918	8.4076	28.155	.69813	.11057	5.5326	2.2817
#2	15.303	7.1312	8.3475	27.951	.69743	.11094	5.5289	2.2611
#3	15.122	7.1144	8.2659	27.674	.69071	.10972	5.4639	2.2497

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.67148**	**11.416**
Stddev	.00251	.120
%RSD	.37339	1.0486
#1	.66930	11.524
#2	.67094	11.435
#3	.67422	11.287

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1387.7**	**31823.**	**315560.**	**2748.4**	**21071.**	**143610.**
Stddev	5.5	100.	1075.	7.6	66.	692.
%RSD	.39977	.31339	.34062	.27662	.31287	.48186
#1	1381.6	31708.	316550.	2740.0	20995.	143210.
#2	1389.1	31874.	315710.	2750.2	21115.	143210.
#3	1392.5	31887.	314420.	2754.9	21103.	144410.

Sample Name: S08 Acquired: 06/06/2019 08:37:50 Type: Cal
Method: ICP08 ISM02.4 2018(v95) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Ca3179	Fe2598	Mg2790	K_7664	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.4368**	**19.314**	**3.6596**	**1.2690**	**7.5311**	**34.442**
Stddev	.0091	.148	.0219	.0070	.1325	.342
%RSD	.63265	.76760	.59778	.55566	1.7592	.99436
#1	1.4469	19.316	3.6791	1.2749	7.6622	34.099
#2	1.4344	19.462	3.6638	1.2709	7.5337	34.442
#3	1.4292	19.165	3.6360	1.2612	7.3973	34.784

Int. Std.	Sc3613	Y_3710
Units	Cts/S	Cts/S
Avg	**29758.**	**19681.**
Stddev	90.	62.
%RSD	.30387	.31636
#1	29709.	19629.
#2	29702.	19663.
#3	29862.	19750.

Sample Name: ICV Acquired: 06/06/2019 08:41:23 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2409.7**	**1010.0**	**1021.1**	**534.07**	**499.85**	**531.02**	**10081.**	**518.78**
Stddev	39.5	5.9	5.2	.11	1.39	3.22	23.	3.97
%RSD	1.6376	.58846	.51364	.02044	.27868	.60613	.23233	.76600
#1	2371.6	1005.9	1023.2	534.11	498.53	534.08	10067.	519.38
#2	2450.4	1016.8	1024.9	534.15	501.31	531.32	10069.	522.41
#3	2407.2	1007.2	1015.1	533.94	499.71	527.66	10108.	514.54
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range								

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**518.29**	**489.72**	**5344.6**	**1004.0**	**5722.1**	**511.71**	**.07015**	**523.65**
Stddev	3.39	4.98	8.8	4.8	43.5	.92	.40100	2.23
%RSD	.65461	1.0177	.16477	.47664	.75938	.18050	571.60	.42551
#1	518.79	489.89	5335.2	1001.6	5702.7	510.67	.40342	524.97
#2	521.41	494.62	5352.7	1009.5	5771.8	512.01	.18191	524.91
#3	514.68	484.65	5345.7	1000.9	5691.6	512.44	-.37487	521.08
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value Range								

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**9716.3**	**1027.8**	**493.74**	**9928.3**	**1081.1**	**-5.5631**	**507.34**	**1031.7**
Stddev	35.1	5.8	3.42	21.9	4.5	1.2791	8.51	9.9
%RSD	.36142	.56101	.69195	.22040	.41523	22.992	1.6782	.95900
#1	9735.2	1024.4	497.56	9953.5	1079.6	-5.3590	512.94	1040.8
#2	9737.9	1024.7	490.96	9917.3	1086.2	-4.3983	497.54	1033.1
#3	9675.8	1034.5	492.71	9914.1	1077.6	-6.9319	511.54	1021.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value Range								

;ample Name: ICV Acquired: 06/06/2019 08:41:23 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
Jser: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

nt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1478.1**	**32088.**	**320750.**	**2872.8**	**21361.**	**146450.**
Stddev	6.0	112.	4588.	9.8	56.	721.
%RSD	.40825	.34858	1.4303	.34032	.26196	.49261
1	1479.1	32217.	318270.	2878.9	21408.	145630.
2	1471.7	32013.	326040.	2861.6	21376.	147000.
3	1483.6	32035.	317930.	2878.0	21299.	146710.

Sample Name: ICB Acquired: 06/06/2019 08:44:19 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-2.4666**	**1.5620**	**2.5847**	**-.20541**	**.01580**	**.21112**	**-3.7063**	**.38966**
Stddev	9.3418	5.0636	2.5348	.08247	.10799	.28802	1.5364	.30820
%RSD	378.73	324.17	98.071	40.150	683.38	136.42	41.454	79.095
#1	-13.246	-4.1575	5.0876	-.15978	.13043	-.04139	-2.2400	.03727
#2	2.5734	5.4728	2.6473	-.15583	-.08401	.52481	-3.5746	.60889
#3	3.2728	3.3709	.01910	-.30061	.00098	.14995	-5.3043	.52282
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.29001**	**.67497**	**3.1772**	**-2.1333**	**-27.653**	**-.19512**	**.01042**	**-.79537**
Stddev	.22941	.98351	4.9790	2.0534	13.308	.03379	.78048	.25421
%RSD	79.105	145.71	156.71	96.258	48.124	17.316	7492.4	31.961
#1	-.09041	-.06144	-2.4545	-.09721	-19.825	-.20762	.19307	-1.0438
#2	-.23898	1.7919	6.9948	-2.0989	-20.115	-.22087	-.84519	-.53571
#3	-.54064	.29447	4.9914	-4.2036	-43.019	-.15686	.68338	-.80665
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**67.148**	**-2.1647**	**-.43630**	**25.742**	**-1.6590**	**.37096**	**.15941**	**-27.967**
Stddev	10.518	2.3303	.58467	4.628	.9545	.52511	.28547	.109
%RSD	15.664	107.65	134.01	17.980	57.532	141.55	179.07	.38826
#1	77.196	-4.0289	-.61421	20.482	-1.3725	-.19531	.48803	-27.939
#2	68.030	.44788	.21665	29.190	-2.7240	.84181	-.02730	-27.875
#3	56.217	-2.9131	-.91135	27.555	-.88067	.46640	.01752	-28.087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

;ample Name: ICB Acquired: 06/06/2019 08:44:19 Type: QC
/lethod: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
Jser: sanchezjc SDG: MF9L61 Case: 48266 Prep:
;omment:

ıt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Jnits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
\vg	**1559.1**	**32029.**	**322820.**	**2906.1**	**21514.**	**150700.**
Stddev	4.4	116.	828.	8.9	81.	1187.
%RSD	.28370	.36217	.25654	.30737	.37732	.78789
ŧ1	1561.3	32061.	322210.	2895.8	21518.	152070.
ŧ2	1554.1	31900.	322480.	2910.8	21431.	150000.
ŧ3	1562.1	32125.	323760.	2911.7	21594.	150030.

Sample Name: ICSA Acquired: 06/06/2019 08:47:27 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**254070.**	**4.0785**	**5.3862**	**5.9992**	**-.03566**	**-.36629**	**252590.**
Stddev	2323.	3.4254	1.3266	.1184	.06122	.19834	1518.
%RSD	.91435	83.985	24.629	1.9734	171.70	54.149	.60101
#1	254650.	7.5440	6.7678	5.8802	-.03183	-.53010	253630.
#2	256050.	.69472	4.1224	6.0004	.02356	-.14577	253290.
#3	251520.	3.9969	5.2685	6.1169	-.09870	-.42298	250850.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**61.284**	**.29344**	**-1.6567**	**103070.**	**-.86325**	**257070.**	**16.636**
Stddev	1.106	.33585	.9284	740.	2.9793	1696.	.553
%RSD	1.8048	114.45	56.039	.71787	345.13	.65979	3.3246
#1	61.820	-.02080	-1.2045	103380.	-3.7442	257670.	17.263
#2	60.013	.25375	-2.7246	103600.	2.2055	258380.	16.428
#3	62.021	.64738	-1.0411	102220.	-1.0511	255150.	16.217
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.00529**	**3.3775**	**65.506**	**11.649**	**-.44069**	**42.114**	**-5.8683**
Stddev	.75556	.5233	21.432	1.213	.41475	2.324	1.5555
%RSD	14271.	15.495	32.717	10.410	94.114	5.5184	26.506
#1	.82144	2.7944	90.244	11.291	-.75713	40.028	-4.8208
#2	-.66981	3.5317	52.540	10.655	-.59379	41.694	-5.1285
#3	-.13575	3.8065	53.735	13.000	.02885	44.619	-7.6555
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA Acquired: 06/06/2019 08:47:27 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**-6.4269**	**-.05265**	**-24.564**
Stddev	1.4004	1.1559	.818
%RSD	21.790	2195.2	3.3297
#1	-7.9264	.05234	-25.468
#2	-5.1529	-1.2574	-24.349
#3	-6.2015	1.0471	-23.875
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1149.8**	**31161.**	**292210.**	**2652.8**	**20738.**	**132210.**
Stddev	8.9	181.	2378.	16.1	84.	547.
%RSD	.77504	.58021	.81363	.60679	.40351	.41391
#1	1139.8	31019.	290880.	2634.3	20657.	132840.
#2	1152.6	31099.	294960.	2661.4	20731.	131940.
#3	1156.9	31364.	290800.	2662.9	20824.	131850.

Sample Name: ICSAB Acquired: 06/06/2019 08:50:30 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**251370.**	**647.08**	**110.93**	**559.64**	**529.22**	**1059.5**	**249700.**
Stddev	2692.	7.87	3.39	4.82	5.23	3.0	2225.
%RSD	1.0708	1.2158	3.0599	.86091	.98906	.27926	.89119
#1	248280.	650.94	114.08	554.09	523.24	1062.0	247190.
#2	253220.	652.27	111.39	562.19	532.99	1060.2	251410.
#3	252620.	638.02	107.33	562.65	531.42	1056.2	250520.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**601.85**	**506.65**	**577.97**	**102040.**	**56.237**	**254340.**	**536.27**
Stddev	.90	1.01	5.91	1045.	.538	2723.	6.83
%RSD	.14897	.19861	1.0230	1.0245	.95750	1.0707	1.2730
#1	602.39	507.80	581.07	100830.	56.834	251260.	528.43
#2	602.34	506.17	581.68	102710.	56.086	256440.	540.89
#3	600.81	505.97	571.15	102570.	55.789	255320.	539.48
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.96758**	**1010.4**	**62.998**	**57.388**	**210.01**	**41.754**	**107.70**
Stddev	.19639	4.8	10.969	3.324	2.52	2.073	1.56
%RSD	20.297	.47825	17.411	5.7926	1.2007	4.9643	1.4508
#1	.75624	1015.8	50.884	56.825	211.16	42.157	109.11
#2	1.1445	1008.9	72.257	60.958	207.12	39.509	106.02
#3	1.0021	1006.4	65.854	54.381	211.76	43.596	107.97
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAB Acquired: 06/06/2019 08:50:30 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**-8.3971**	**524.24**	**1003.8**
Stddev	.8754	4.27	7.8
%RSD	10.425	.81520	.77885
#1	-9.4027	528.43	1011.9
#2	-7.9827	519.89	1003.2
#3	-7.8058	524.41	996.25
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1141.7**	**31390.**	**294730.**	**2632.4**	**20832.**	**133660.**
Stddev	5.7	244.	1389.	11.7	145.	1168.
%RSD	.49768	.77741	.47113	.44501	.69800	.87405
#1	1137.3	31666.	293500.	2620.3	20999.	132780.
#2	1139.7	31201.	296230.	2633.3	20731.	134990.
#3	1148.2	31303.	294440.	2643.7	20766.	133230.

Sample Name: CCV3 Acquired: 06/06/2019 08:53:23 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**242200.**	**25303.**	**10274.**	**24812.**	**9710.1**	**9596.5**	**245810.**
Stddev	1956.	171.	17.	263.	50.5	11.8	1782.
%RSD	.80763	.67721	.16370	1.0590	.52011	.12244	.72504
#1	244140.	25239.	10275.	24512.	9744.6	9587.5	244750.
#2	242230.	25173.	10257.	24925.	9733.6	9592.2	247860.
#3	240230.	25497.	10291.	24999.	9652.2	9609.8	244810.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range							

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**24516.**	**23239.**	**27101.**	**246460.**	**25819.**	**241160.**	**23613.**
Stddev	52.	52.	170.	1346.	151.	1150.	93.
%RSD	.21403	.22455	.62786	.54610	.58379	.47676	.39514
#1	24498.	23220.	27070.	246950.	25789.	240940.	23666.
#2	24475.	23199.	26949.	247490.	25686.	242410.	23667.
#3	24575.	23298.	27285.	244940.	25983.	240140.	23505.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**9881.4**	**23013.**	**246890.**	**9989.7**	**1030.4**	**248270.**	**9783.2**
Stddev	31.4	55.	771.	37.2	5.5	430.	67.0
%RSD	.31777	.23840	.31219	.37225	.53070	.17311	.68483
#1	9879.8	22998.	247770.	10006.	1031.1	248530.	9761.7
#2	9850.8	22968.	246540.	9947.2	1024.6	247780.	9729.5
#3	9913.6	23075.	246350.	10016.	1035.5	248510.	9858.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range							

Sample Name: CCV3 Acquired: 06/06/2019 08:53:23 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**9814.0**	**24449.**	**23768.**
Stddev	57.0	99.	17.
%RSD	.58069	.40581	.07279
#1	9868.1	24466.	23773.
#2	9819.4	24342.	23783.
#3	9754.5	24539.	23749.
Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1085.3**	**30965.**	**284910.**	**2561.3**	**20586.**	**129780.**
Stddev	7.1	127.	755.	8.5	141.	490.
%RSD	.64967	.40907	.26508	.33103	.68262	.37754
#1	1087.2	31071.	285760.	2563.5	20741.	129340.
#2	1091.2	30825.	284660.	2568.4	20466.	130310.
#3	1077.5	31000.	284310.	2551.9	20553.	129700.

Sample Name: CCB3 Acquired: 06/06/2019 08:56:19 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-31.684**	**1.7963**	**1.7445**	**.21199**	**.33241**	**.27771**	**-.26900**	**.86174**
Stddev	19.443	4.2919	2.4739	.18474	.00920	.10552	4.3760	.34892
%RSD	61.366	238.94	141.81	87.145	2.7686	37.998	1626.8	40.490
#1	-52.565	6.5976	-.98684	.41784	.32580	.39594	-.10940	.85610
#2	-28.384	.45883	3.8347	.06063	.34292	.24411	-4.7227	.51568
#3	-14.102	-1.6677	2.3857	.15750	.32851	.19308	4.0251	1.2134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.62625**	**.87621**	**15.774**	**-.25588**	**.64727**	**.03977**	**.89906**	**.44305**
Stddev	.42437	.75886	2.371	1.1161	12.589	.22322	.11024	.81749
%RSD	67.764	86.607	15.032	436.19	1944.9	561.24	12.262	184.51
#1	.60389	.36899	16.277	.21077	-13.887	.22864	1.0059	1.3024
#2	1.0614	1.7486	17.853	.55119	8.1178	-.20657	.78569	.35174
#3	.21351	.51102	13.192	-1.5296	7.7114	.09725	.90559	-.32495
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**59.547**	**8.7977**	**-.00651**	**33.501**	**-2.5427**	**.44055**	**1.2794**	**-29.212**
Stddev	12.613	3.6060	.21405	4.339	2.3256	.66918	.1814	.820
%RSD	21.183	40.988	3287.0	12.951	91.461	151.90	14.180	2.8082
#1	74.111	9.5361	-.17025	32.059	-.47912	.50062	1.4888	-28.266
#2	52.219	11.977	-.08499	30.066	-2.0864	1.0777	1.1772	-29.724
#3	52.309	4.8797	.23570	38.377	-5.0626	-.25664	1.1721	-29.647
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB3 Acquired: 06/06/2019 08:56:19 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1550.0**	**32049.**	**323810.**	**2874.7**	**21470.**	**150940.**
Stddev	22.5	138.	889.	45.7	62.	1200.
%RSD	1.4518	.42966	.27446	1.5892	.29050	.79521
#1	1524.1	32205.	322830.	2822.1	21542.	152310.
#2	1561.1	31998.	324040.	2905.0	21437.	150060.
#3	1564.9	31945.	324560.	2896.9	21432.	150450.

Sample Name: MF9L61-4x Acquired: 06/06/2019 08:59:26 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 4x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**21747.**	**7.0110**	**15.136**	**190.83**	**1.4712**	**.37741**	**352310.**
Stddev	48.	3.1133	3.563	.66	.1482	.21123	292.
%RSD	.21987	44.406	23.540	.34370	10.070	55.969	.08284
#1	21792.	10.326	11.502	190.56	1.3260	.13369	352590.
#2	21753.	6.5582	18.623	191.58	1.4654	.50760	352010.
#3	21697.	4.1489	15.284	190.36	1.6222	.49095	352330.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**48.432**	**14.670**	**45.066**	**27712.**	**132.55**	**5867.3**	**1568.6**
Stddev	.693	.645	.088	103.	1.59	58.0	6.4
%RSD	1.4310	4.3964	.19571	.37111	1.1980	.98888	.40856
#1	49.005	14.039	45.077	27704.	133.56	5842.8	1566.8
#2	48.629	15.328	44.972	27819.	130.72	5933.6	1575.7
#3	47.661	14.641	45.148	27614.	133.38	5825.6	1563.3

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.63388**	**37.361**	**2982.5**	**6.3186**	**-.52083**	**360.55**	**-.49585**
Stddev	.42081	.704	31.2	4.5318	.21235	4.63	1.3994
%RSD	66.387	1.8852	1.0477	71.722	40.772	1.2855	282.22
#1	.84458	37.114	2984.7	1.1395	-.51653	360.39	-2.1041
#2	.14933	38.155	3012.7	8.2598	-.31066	356.00	.44381
#3	.90772	36.813	2950.3	9.5565	-.73530	365.26	.17274

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**82.276**	**69.018**	**171.19**
Stddev	1.202	1.712	2.62
%RSD	1.4604	2.4803	1.5295
#1	81.612	67.126	172.09
#2	83.663	70.460	173.24
#3	81.553	69.467	168.24

;ample Name: MF9L61-4x Acquired: 06/06/2019 08:59:26 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
Jser: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 4x for Ca

nt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1224.0**	**31236.**	**302420.**	**2717.7**	**20928.**	**137770.**
Stddev	9.2	29.	3871.	13.4	56.	355.
%RSD	.75122	.09339	1.2799	.49182	.26635	.25761
#1	1213.4	31203.	305920.	2703.5	20922.	138180.
#2	1229.2	31251.	298260.	2719.4	20986.	137530.
#3	1229.4	31255.	303080.	2730.1	20875.	137600.

Sample Name: MF9L69-2x Acquired: 06/06/2019 09:02:37 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**38130.**	**1.0292**	**18.881**	**284.61**	**2.3831**	**.58350**	**443160.**
Stddev	103.	1.2244	3.429	.70	.1299	.06032	1260.
%RSD	.26882	118.97	18.159	.24641	5.4509	10.338	.28420
#1	38241.	1.2938	15.762	285.42	2.3642	.57629	442920.
#2	38039.	-.30588	22.552	284.21	2.2636	.52711	444520.
#3	38109.	2.0997	18.328	284.20	2.5214	.64711	442040.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**112.36**	**18.473**	**54.035**	**39094.**	**99.951**	**7767.4**	**1564.0**
Stddev	.24	.601	.926	115.	1.175	51.6	4.5
%RSD	.21767	3.2517	1.7144	.29459	1.1759	.66392	.29056
#1	112.46	18.058	54.883	39222.	100.63	7824.9	1569.2
#2	112.54	19.162	54.177	39060.	100.63	7725.3	1561.1
#3	112.08	18.200	53.046	38999.	98.594	7752.0	1561.6

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.49373**	**54.996**	**5064.1**	**10.368**	**-1.0203**	**479.99**	**-3.5920**
Stddev	.70992	1.673	12.3	15.762	.4504	4.05	.8654
%RSD	143.79	3.0427	.24225	152.02	44.141	.84308	24.091
#1	.27915	56.655	5051.6	25.626	-.93942	475.47	-3.5863
#2	1.2862	53.309	5076.2	11.331	-.61587	483.26	-2.7296
#3	-.08414	55.026	5064.6	-5.8526	-1.5057	481.25	-4.4603

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**163.03**	**105.79**	**245.15**
Stddev	1.48	.69	2.59
%RSD	.90704	.65455	1.0564
#1	163.71	105.01	246.79
#2	161.33	106.34	246.50
#3	164.05	106.02	242.17

Sample Name: MF9L69-2x Acquired: 06/06/2019 09:02:37 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

nt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1196.2**	**31193.**	**299850.**	**2726.3**	**21055.**	**138320.**
Stddev	3.0	62.	1971.	8.7	68.	654.
%RSD	.25340	.19780	.65725	.31786	.32148	.47289
t1	1193.2	31132.	300150.	2716.3	20989.	139080.
t2	1196.1	31255.	297740.	2731.5	21052.	137900.
t3	1199.2	31191.	301650.	2731.1	21124.	138000.

Sample Name: MF9L70-2x Acquired: 06/06/2019 09:05:47 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**22096.**	**3.2356**	**11.027**	**226.45**	**1.6958**	**.62807**	**318630.**
Stddev	348.	5.1821	1.324	1.96	.0469	.34184	3540.
%RSD	1.5771	160.16	12.008	.86351	2.7678	54.426	1.1112
#1	22426.	2.7297	12.418	228.55	1.7249	.98626	321690.
#2	22131.	8.6520	10.883	226.13	1.7209	.30536	319440.
#3	21732.	-1.6750	9.7812	224.68	1.6417	.59259	314750.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**107.12**	**14.982**	**65.428**	**28365.**	**135.92**	**5376.8**	**1284.1**
Stddev	1.13	.113	.357	441.	1.79	57.9	19.5
%RSD	1.0504	.75167	.54612	1.5538	1.3139	1.0778	1.5180
#1	108.34	14.854	65.804	28797.	137.91	5437.2	1303.5
#2	106.89	15.031	65.387	28382.	134.45	5371.5	1284.3
#3	106.13	15.063	65.093	27916.	135.39	5321.6	1264.6

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1.0565**	**41.610**	**3277.7**	**8.0423**	**-.67126**	**354.08**	**-.64215**
Stddev	.5504	.926	40.3	5.5981	.18330	5.16	2.0087
%RSD	52.095	2.2262	1.2281	69.608	27.307	1.4584	312.80
#1	.93420	42.675	3289.0	13.312	-.87776	360.01	-.59783
#2	.57756	40.990	3311.0	8.6503	-.60819	351.72	-2.6726
#3	1.6578	41.166	3233.0	2.1651	-.52781	350.53	1.3440

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**114.21**	**75.444**	**217.06**
Stddev	2.08	1.894	.60
%RSD	1.8201	2.5109	.27761
#1	115.67	73.296	217.65
#2	115.12	76.159	216.44
#3	111.83	76.876	217.10

Sample Name: MF9L70-2x Acquired: 06/06/2019 09:05:47 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1241.3**	**31538.**	**304280.**	**2754.2**	**21116.**	**139620.**
Stddev	10.0	374.	2848.	14.1	215.	1473.
%RSD	.80450	1.1848	.93580	.51094	1.0172	1.0552
#1	1229.9	31206.	307440.	2739.4	20919.	141030.
#2	1245.6	31466.	303490.	2755.7	21084.	138090.
#3	1248.5	31943.	301910.	2767.4	21345.	139740.

Sample Name: MF9L74-3x Acquired: 06/06/2019 09:08:58 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**21090.**	**2.9968**	**19.248**	**190.56**	**1.4925**	**.17483**	**412550.**
Stddev	66.	3.7212	2.025	.56	.0472	.19030	2434.
%RSD	.31264	124.17	10.521	.29587	3.1607	108.85	.58991
#1	21026.	.25248	20.531	190.52	1.5349	-.03774	409850.
#2	21086.	1.5056	16.914	190.02	1.4417	.32932	413250.
#3	21157.	7.2323	20.300	191.15	1.5009	.23290	414560.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**54.023**	**14.388**	**33.393**	**28934.**	**174.62**	**5047.2**	**1642.8**
Stddev	1.146	.924	1.000	164.	2.94	30.6	9.3
%RSD	2.1220	6.4221	2.9946	.56762	1.6815	.60632	.56507
#1	53.147	14.040	32.982	28755.	173.94	5014.1	1633.8
#2	53.600	13.689	32.665	28970.	172.09	5053.1	1642.2
#3	55.320	15.435	34.533	29077.	177.84	5074.5	1652.3

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.73407**	**37.645**	**2895.8**	**3.5304**	**-.92509**	**413.52**	**-3.5703**
Stddev	.75621	1.246	17.3	2.0592	.26157	4.76	1.4598
%RSD	103.02	3.3092	.59700	58.327	28.275	1.1501	40.886
#1	.85900	36.741	2892.2	1.8336	-1.1404	408.06	-5.1056
#2	-.07683	37.127	2880.6	5.8214	-.63401	415.70	-3.4051
#3	1.4200	39.066	2914.6	2.9364	-1.0008	416.79	-2.2002

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**81.490**	**72.443**	**129.24**
Stddev	1.208	.747	1.74
%RSD	1.4829	1.0318	1.3454
#1	80.804	71.665	127.87
#2	80.781	72.508	128.65
#3	82.885	73.156	131.19

;ample Name: MF9L74-3x Acquired: 06/06/2019 09:08:58 Type: Unk
/lethod: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
Jser: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
:omment: 3x for Ca

ıt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Jnits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
\vg	**1209.6**	**31223.**	**303480.**	**2716.9**	**20959.**	**139080.**
Stddev	13.3	165.	1443.	27.9	116.	806.
%RSD	1.1030	.52817	.47540	1.0259	.55548	.57953
#1	1211.0	31411.	305150.	2724.1	21091.	139590.
#2	1222.2	31152.	302630.	2740.5	20914.	138150.
#3	1195.6	31105.	302660.	2686.2	20871.	139500.

ample Name: MF9L75-3x Acquired: 06/06/2019 09:12:10 Type: Unk
lethod: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
lser: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
comment: 3x for Ca

lem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Jnits	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
\vg	**26813.**	**3.2973**	**18.891**	**205.44**	**1.5568**	**.92559**	**391670.**
tddev	805.	5.0071	.964	6.61	.0946	.01481	6527.
%RSD	3.0008	151.85	5.1022	3.2156	6.0794	1.6006	1.6664
#1	27700.	2.8014	18.562	212.72	1.4475	.92861	398290.
#2	26129.	8.5339	18.134	199.83	1.6128	.93867	391480.
#3	26610.	-1.4434	19.976	203.76	1.6100	.90950	385240.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Jnits	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**90.142**	**12.761**	**53.370**	**28871.**	**240.27**	**6020.3**	**1108.2**
Stddev	.922	1.135	1.284	880.	2.18	166.4	33.6
%RSD	1.0223	8.8943	2.4053	3.0478	.90585	2.7647	3.0360
#1	91.000	12.977	54.826	29878.	238.87	6208.8	1145.9
#2	90.257	13.772	52.399	28249.	242.78	5893.6	1081.1
#3	89.168	11.534	52.886	28485.	239.16	5958.5	1097.7

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.96059**	**40.488**	**3773.8**	**2.6472**	**-.17773**	**441.64**	**-1.1189**
Stddev	.22415	.058	121.0	1.5727	.04828	21.17	2.5232
%RSD	23.335	.14371	3.2071	59.407	27.164	4.7944	225.50
#1	.88542	40.516	3895.4	1.2463	-.21217	464.55	-1.2975
#2	.78368	40.527	3653.4	4.3483	-.12254	422.80	1.4888
#3	1.2127	40.421	3772.8	2.3471	-.19847	437.56	-3.5481

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**106.62**	**79.750**	**207.08**
Stddev	4.31	1.407	.48
%RSD	4.0406	1.7646	.23233
#1	111.41	80.009	207.25
#2	103.06	81.010	207.45
#3	105.38	78.232	206.54

Sample Name: MF9L75-3x Acquired: 06/06/2019 09:12:10 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

nt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1228.8**	**31750.**	**303650.**	**2755.0**	**21196.**	**138980.**
Stddev	3.9	535.	954.	14.4	380.	477.
%RSD	.31432	1.6849	.31412	.52328	1.7944	.34312
#1	1226.4	31136.	304620.	2749.2	20758.	138850.
#2	1226.7	32115.	302710.	2744.3	21440.	138570.
#3	1233.2	31998.	303600.	2771.4	21391.	139500.

ample Name: MF9L76-2x Acquired: 06/06/2019 09:15:21 Type: Unk
lethod: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
lser: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
comment: 2x for Ca

lem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Jnits	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
\vg	**28684.**	**2.1816**	**12.980**	**263.36**	**1.8081**	**.54946**	**406680.**
tddev	267.	2.5044	6.909	2.59	.2076	.49628	2732.
%RSD	.92910	114.80	53.233	.98400	11.479	90.322	.67180
#1	28402.	.37003	5.0431	260.84	1.5935	1.1225	408460.
#2	28716.	5.0394	16.241	263.23	1.8231	.27060	403540.
#3	28932.	1.1352	17.655	266.01	2.0078	.25533	408040.

lem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Jnits	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
\vg	**91.076**	**17.456**	**68.366**	**33142.**	**188.98**	**6496.7**	**1524.3**
tddev	.772	.986	1.537	129.	2.16	41.0	10.6
%RSD	.84808	5.6479	2.2478	.38980	1.1445	.63124	.69855
#1	91.591	17.899	69.659	32996.	186.58	6492.4	1514.5
#2	91.450	18.143	66.667	33191.	190.77	6458.0	1522.9
#3	90.188	16.327	68.773	33240.	189.60	6539.7	1535.6

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1.3607**	**50.500**	**4176.4**	**.33190**	**-.89582**	**433.86**	**-2.9567**
Stddev	1.0594	1.296	28.4	7.1941	.41211	2.34	2.9785
%RSD	77.851	2.5659	.67989	2167.6	46.004	.53899	100.73
#1	2.1036	51.866	4151.4	.61716	-.73329	431.81	-4.3607
#2	1.8309	50.345	4170.5	7.3791	-1.3644	433.35	-4.9738
#3	.14768	49.288	4207.2	-7.0006	-.58976	436.40	.46421

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**117.51**	**89.540**	**244.37**
Stddev	.76	1.108	3.63
%RSD	.64364	1.2377	1.4874
#1	116.65	89.192	246.47
#2	118.07	90.781	246.46
#3	117.82	88.648	240.17

Sample Name: MF9L76-2x Acquired: 06/06/2019 09:15:21 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1229.3**	**31490.**	**302770.**	**2760.9**	**21212.**	**139630.**
Stddev	5.8	61.	2449.	14.6	64.	1042.
%RSD	.47354	.19478	.80872	.52788	.30178	.74594
#1	1222.6	31436.	304520.	2744.7	21158.	139960.
#2	1232.3	31557.	299970.	2765.1	21283.	138460.
#3	1233.1	31476.	303830.	2772.9	21195.	140460.

Sample Name: MF9L77-3x Acquired: 06/06/2019 09:18:32 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**24129.**	**3.6240**	**16.333**	**221.21**	**1.6231**	**.29164**	**389120.**
Stddev	830.	4.9337	1.933	7.90	.1712	.23200	16232.
%RSD	3.4412	136.14	11.835	3.5724	10.547	79.549	4.1713
#1	24636.	7.9786	17.319	225.97	1.4259	.34371	392340.
#2	24581.	-1.7343	14.106	225.58	1.7337	.03804	403500.
#3	23171.	4.6278	17.574	212.09	1.7097	.49319	371520.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**87.585**	**16.112**	**48.984**	**31686.**	**146.84**	**5433.6**	**1732.7**
Stddev	4.708	.948	2.367	1078.	6.11	146.0	55.1
%RSD	5.3754	5.8852	4.8319	3.4021	4.1642	2.6863	3.1807
#1	92.951	16.970	51.617	32405.	153.89	5535.2	1773.6
#2	84.149	15.094	47.033	32206.	143.09	5499.3	1754.6
#3	85.654	16.270	48.302	30447.	143.53	5266.4	1670.1

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.50675**	**40.948**	**3390.3**	**4.8670**	**-.94836**	**410.65**	**-1.9088**
Stddev	.29556	1.636	127.3	4.2416	.34351	10.49	.8661
%RSD	58.325	3.9960	3.7552	87.152	36.222	2.5546	45.374
#1	.20611	42.748	3461.8	3.4874	-1.1177	418.54	-.97956
#2	.79696	40.547	3465.9	9.6267	-1.1743	414.66	-2.6936
#3	.51719	39.550	3243.4	1.4869	-.55305	398.75	-2.0534

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**73.689**	**71.680**	**182.86**
Stddev	2.279	1.943	12.70
%RSD	3.0923	2.7110	6.9458
#1	75.126	69.610	197.21
#2	74.878	73.464	173.06
#3	71.061	71.967	178.32

Sample Name: MF9L77-3x Acquired: 06/06/2019 09:18:32 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1233.2**	**31292.**	**303790.**	**2749.5**	**21090.**	**139760.**
Stddev	40.7	642.	3247.	81.5	432.	549.
%RSD	3.2993	2.0531	1.0687	2.9652	2.0497	.39301
#1	1187.1	30795.	306570.	2656.8	20775.	140080.
#2	1264.1	31063.	300220.	2809.8	20912.	139130.
#3	1248.4	32018.	304570.	2782.0	21583.	140080.

Sample Name: MF9L78-2x Acquired: 06/06/2019 09:21:43 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**33550.**	**3.3700**	**21.730**	**291.58**	**2.0363**	**.59068**	**367400.**
Stddev	180.	4.7699	4.223	.82	.1180	.19731	1932.
%RSD	.53525	141.54	19.435	.28284	5.7925	33.404	.52593
#1	33724.	-.83739	23.194	292.43	1.9025	.69121	368820.
#2	33562.	2.3954	16.969	291.53	2.1253	.36335	368180.
#3	33365.	8.5519	25.026	290.78	2.0811	.71747	365200.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**88.585**	**19.783**	**73.076**	**37665.**	**168.91**	**7228.1**	**2177.4**
Stddev	.430	1.028	1.137	8.	3.38	28.0	3.0
%RSD	.48495	5.1979	1.5560	.02030	2.0009	.38800	.13764
#1	88.468	18.832	73.874	37674.	168.79	7253.2	2179.5
#2	88.225	19.642	71.774	37661.	165.60	7233.1	2174.0
#3	89.060	20.874	73.580	37660.	172.35	7197.8	2178.8

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.58744**	**56.578**	**4775.5**	**9.5782**	**-1.1471**	**410.21**	**-3.6420**
Stddev	.30906	1.018	27.9	3.6745	.5013	5.71	2.6916
%RSD	52.610	1.7995	.58401	38.363	43.704	1.3920	73.907
#1	.94201	56.998	4806.8	11.039	-.57905	416.31	-4.5100
#2	.37512	57.319	4766.3	12.297	-1.3345	409.32	-5.7925
#3	.44520	55.417	4753.4	5.3979	-1.5277	404.99	-.62340

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**139.48**	**98.625**	**268.40**
Stddev	.71	.621	1.82
%RSD	.51140	.62941	.67784
#1	139.40	99.335	267.26
#2	140.23	98.355	267.44
#3	138.82	98.186	270.49

Sample Name: MF9L78-2x Acquired: 06/06/2019 09:21:43 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1243.9**	**31583.**	**305750.**	**2785.8**	**21308.**	**140820.**
Stddev	4.7	51.	2338.	9.5	33.	878.
%RSD	.37889	.16068	.76462	.33942	.15483	.62336
#1	1247.1	31526.	308080.	2790.5	21270.	141780.
#2	1246.1	31601.	303400.	2792.0	21324.	140060.
#3	1238.5	31622.	305760.	2774.9	21329.	140620.

Sample Name: MF9L79-3x Acquired: 06/06/2019 09:24:53 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**30092.**	**.49920**	**17.980**	**230.45**	**1.6582**	**.28011**	**320310.**
Stddev	79.	2.3540	2.325	1.27	.2106	.17814	1158.
%RSD	.26134	471.57	12.931	.55064	12.702	63.595	.36140
#1	30036.	3.1953	15.417	229.81	1.5543	.11509	319000.
#2	30059.	-.54919	19.953	231.91	1.5198	.46897	321190.
#3	30182.	-1.1485	18.571	229.62	1.9006	.25628	320730.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**83.770**	**16.083**	**47.287**	**32780.**	**136.92**	**5996.8**	**1636.8**
Stddev	1.836	.519	1.651	144.	5.50	27.0	5.5
%RSD	2.1916	3.2298	3.4924	.43836	4.0184	.45013	.33894
#1	82.179	15.654	45.983	32679.	136.88	5967.7	1634.6
#2	85.779	16.661	49.144	32944.	142.44	6001.7	1643.1
#3	83.352	15.935	46.733	32716.	131.44	6021.0	1632.7

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.49084**	**44.136**	**4055.7**	**8.2423**	**-.53934**	**358.07**	**-1.7193**
Stddev	.77415	.947	35.2	6.7992	.32588	6.19	1.8584
%RSD	157.72	2.1445	.86800	82.491	60.421	1.7298	108.09
#1	-.27603	45.111	4015.4	.39300	-.20105	355.91	-.34816
#2	.47647	44.076	4080.3	12.307	-.85119	353.25	-.97527
#3	1.2721	43.221	4071.5	12.027	-.56580	365.06	-3.8345

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**100.64**	**73.633**	**178.96**
Stddev	.42	1.792	4.88
%RSD	.42228	2.4335	2.7292
#1	100.73	71.756	173.38
#2	101.00	75.325	182.42
#3	100.17	73.819	181.10

Sample Name: MF9L79-3x Acquired: 06/06/2019 09:24:53 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1239.7**	**31446.**	**309420.**	**2749.1**	**21071.**	**140760.**
Stddev	16.9	61.	5183.	25.8	60.	428.
%RSD	1.3671	.19263	1.6750	.93944	.28511	.30391
#1	1252.5	31495.	315180.	2771.7	21128.	141070.
#2	1220.5	31378.	305130.	2720.9	21009.	140280.
#3	1246.1	31465.	307940.	2754.7	21075.	140950.

Sample Name: MF9L79D-3x Acquired: 06/06/2019 09:28:04 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**34143.**	**3.4033**	**15.479**	**228.69**	**1.8967**	**.10362**	**316950.**
Stddev	159.	.6528	1.229	1.12	.0377	.23435	1851.
%RSD	.46709	19.180	7.9377	.49042	1.9889	226.16	.58405
#1	34214.	2.6497	14.193	229.82	1.9402	.29645	315630.
#2	33960.	3.7723	16.641	227.58	1.8728	.17161	316150.
#3	34254.	3.7880	15.602	228.68	1.8771	-.15721	319060.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**84.082**	**15.918**	**43.407**	**34762.**	**133.25**	**6565.8**	**1679.6**
Stddev	.696	1.337	.920	182.	1.78	27.3	12.3
%RSD	.82743	8.4004	2.1199	.52299	1.3349	.41531	.73343
#1	84.146	17.438	43.000	34797.	135.21	6541.2	1678.1
#2	84.744	15.393	42.760	34565.	131.74	6561.1	1668.1
#3	83.357	14.923	44.460	34924.	132.81	6595.1	1692.6

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.23318**	**43.105**	**4432.7**	**1.6296**	**-.16777**	**333.59**	**-.06677**
Stddev	.48163	.661	4.2	2.5715	.13901	5.58	2.5791
%RSD	206.55	1.5333	.09568	157.79	82.860	1.6726	3862.4
#1	.48715	43.139	4437.6	4.5825	-.32483	334.11	1.7304
#2	.53469	42.427	4430.1	.42361	-.06057	327.77	-3.0219
#3	-.32228	43.748	4430.5	-.11717	-.11789	338.89	1.0912

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**146.94**	**82.544**	**177.34**
Stddev	.92	1.991	.20
%RSD	.62887	2.4116	.11284
#1	146.81	80.473	177.52
#2	147.93	84.443	177.13
#3	146.09	82.715	177.37

Sample Name: MF9L79D-3x Acquired: 06/06/2019 09:28:04 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1260.7**	**31349.**	**306850.**	**2794.8**	**21165.**	**140760.**
Stddev	7.4	153.	3359.	7.7	74.	818.
%RSD	.58581	.48856	1.0947	.27721	.34934	.58083
#1	1255.7	31390.	309020.	2786.9	21178.	141110.
#2	1257.2	31477.	302980.	2795.0	21232.	139830.
#3	1269.2	31179.	308560.	2802.4	21086.	141350.

Sample Name: MF9L79L-3x Acquired: 06/06/2019 09:31:16 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**5835.6**	**3.3570**	**2.7210**	**45.325**	**.39290**	**.18956**	**64564.**	**17.390**
Stddev	45.6	1.2212	1.3299	.408	.17332	.07651	657.	.445
%RSD	.78122	36.376	48.878	.89945	44.114	40.360	1.0184	2.5613
#1	5783.2	2.6893	3.1761	44.877	.33491	.10746	63821.	17.477
#2	5857.6	2.6153	3.7635	45.422	.25600	.25886	65073.	16.907
#3	5866.0	4.7664	1.2232	45.675	.58778	.20235	64796.	17.786

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**3.0166**	**10.375**	**6601.3**	**27.156**	**1188.5**	**329.38**	**-.25170**	**9.6914**
Stddev	.6964	.690	67.0	.917	66.6	1.82	.33591	.9267
%RSD	23.086	6.6539	1.0144	3.3752	5.6071	.55206	133.45	9.5619
#1	3.3499	10.815	6524.5	28.020	1112.5	327.28	-.19575	8.9942
#2	3.4838	10.731	6631.8	27.253	1236.7	330.40	-.61208	10.743
#3	2.2162	9.5796	6647.6	26.195	1216.4	330.45	.05272	9.3370

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**759.74**	**3.9195**	**-.40833**	**76.841**	**.87168**	**23.591**	**15.371**	**13.478**
Stddev	10.41	11.537	.23516	5.911	1.4039	1.335	.218	.415
%RSD	1.3701	294.36	57.591	7.6926	161.05	5.6603	1.4183	3.0805
#1	749.51	1.0229	-.66161	79.077	.30137	22.306	15.623	13.025
#2	770.32	-5.8937	-.36646	81.308	-.15730	23.495	15.246	13.568
#3	759.40	16.629	-.19691	70.138	2.4710	24.972	15.244	13.840

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1468.0**	**32451.**	**320950.**	**2885.7**	**21717.**	**147650.**
Stddev	8.5	291.	2808.	8.6	188.	761.
%RSD	.57787	.89764	.87477	.29975	.86428	.51513
#1	1467.6	32773.	318370.	2887.9	21915.	147010.
#2	1476.7	32207.	323940.	2893.1	21542.	147450.
#3	1459.8	32371.	320540.	2876.2	21693.	148490.

Sample Name: MF9M24-2x Acquired: 06/06/2019 09:34:19 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**32592.**	**3.0791**	**17.279**	**233.91**	**1.9944**	**.72704**	**466450.**
Stddev	80.	1.9068	.852	.37	.2417	.17910	1296.
%RSD	.24665	61.928	4.9305	.16002	12.118	24.635	.27773
#1	32672.	1.0192	16.908	233.81	1.8812	.52587	466950.
#2	32593.	3.4356	18.254	234.32	2.2720	.78607	467410.
#3	32511.	4.7826	16.676	233.59	1.8302	.86917	464970.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**116.45**	**15.056**	**57.718**	**34698.**	**319.66**	**7040.6**	**1316.1**
Stddev	1.63	.624	1.298	37.	6.08	10.6	3.0
%RSD	1.4011	4.1464	2.2480	.10733	1.9028	.15058	.22707
#1	115.88	14.343	56.307	34732.	315.99	7033.0	1313.9
#2	118.28	15.504	58.859	34705.	326.68	7052.7	1319.5
#3	115.17	15.320	57.988	34658.	316.31	7036.1	1314.8

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.77511**	**47.526**	**4560.4**	**10.644**	**-.68566**	**506.03**	**-2.2793**
Stddev	.23976	.691	35.4	6.865	.42523	3.71	2.7107
%RSD	30.933	1.4547	.77564	64.497	62.018	.73302	118.93
#1	1.0352	46.752	4550.2	2.7247	-.26033	502.56	-4.3407
#2	.56283	47.741	4599.8	14.909	-.68587	509.94	.79128
#3	.72735	48.083	4531.3	14.297	-1.1108	505.58	-3.2884

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**148.49**	**96.470**	**247.12**
Stddev	.54	.408	4.73
%RSD	.36093	.42264	1.9153
#1	148.84	96.845	245.42
#2	148.76	96.528	252.47
#3	147.88	96.036	243.48

Sample Name: MF9M24-2x Acquired: 06/06/2019 09:34:19 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1212.4**	**31235.**	**300400.**	**2731.4**	**21194.**	**139050.**
Stddev	12.0	62.	1785.	23.5	38.	420.
%RSD	.98896	.19751	.59422	.86140	.17917	.30228
#1	1219.5	31165.	301300.	2741.5	21159.	139370.
#2	1198.5	31260.	298340.	2704.5	21187.	138580.
#3	1219.1	31280.	301550.	2748.1	21234.	139210.

Sample Name: MF9L62-2x Acquired: 06/06/2019 09:37:30 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**37822.**	**2.7288**	**16.253**	**304.86**	**2.5581**	**.08598**	**404060.**
Stddev	290.	2.4693	1.879	2.02	.1732	.29873	3432.
%RSD	.76802	90.489	11.561	.66152	6.7699	347.43	.84931
#1	38145.	.01407	16.048	307.19	2.4262	-.24791	400120.
#2	37739.	4.8411	18.226	303.61	2.7542	.32793	405680.
#3	37583.	3.3312	14.485	303.79	2.4938	.17793	406380.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**52.505**	**20.536**	**51.610**	**40318.**	**74.357**	**7560.5**	**1879.3**
Stddev	.936	.665	.523	249.	3.133	96.1	9.2
%RSD	1.7830	3.2384	1.0131	.61857	4.2137	1.2716	.48826
#1	53.407	20.857	51.518	40595.	71.544	7654.5	1889.5
#2	52.570	20.980	52.172	40111.	73.795	7462.4	1871.8
#3	51.538	19.772	51.139	40250.	77.734	7564.6	1876.5

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.71587**	**55.611**	**4812.1**	**7.3396**	**-.98561**	**391.30**	**-3.2021**
Stddev	.50994	.506	33.3	6.2469	.85779	3.44	1.8965
%RSD	71.233	.91016	.69103	85.112	87.031	.88004	59.227
#1	1.1840	55.720	4848.7	9.5823	-.36797	395.04	-4.3779
#2	.17247	55.059	4783.8	12.155	-1.9650	390.61	-4.2143
#3	.79118	56.053	4803.8	.28093	-.62384	388.25	-1.0142

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**127.26**	**112.42**	**164.04**
Stddev	1.03	2.77	1.21
%RSD	.80703	2.4663	.73657
#1	128.32	109.40	165.04
#2	126.27	114.85	164.40
#3	127.17	113.01	162.70

Sample Name: MF9L62-2x Acquired: 06/06/2019 09:37:30 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1225.7**	**31257.**	**302970.**	**2768.7**	**21199.**	**139260.**
Stddev	1.9	121.	3280.	8.6	69.	1003.
%RSD	.15159	.38806	1.0825	.30907	.32559	.72006
#1	1226.1	31117.	305930.	2759.5	21125.	140320.
#2	1227.4	31331.	299440.	2776.4	21262.	138330.
#3	1223.7	31324.	303540.	2770.2	21209.	139110.

Sample Name: MF9L63-5x Acquired: 06/06/2019 09:40:41 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 5x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**8494.2**	**4.7720**	**13.007**	**86.661**	**.90576**	**-.51885**	**334680.**
Stddev	191.7	2.6252	.055	1.628	.16100	.09618	6636.
%RSD	2.2568	55.012	.42517	1.8786	17.775	18.538	1.9828
#1	8311.7	2.5764	12.958	85.200	.74129	-.61521	331090.
#2	8477.0	4.0600	13.067	86.366	.91296	-.42285	330610.
#3	8693.9	7.6798	12.994	88.416	1.0630	-.51850	342330.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**45.385**	**12.256**	**17.149**	**31279.**	**44.972**	**44919.**	**1258.7**
Stddev	.353	.702	1.506	706.	5.081	835.	21.2
%RSD	.77701	5.7256	8.7824	2.2559	11.299	1.8599	1.6882
#1	45.175	11.483	16.323	30604.	43.940	44350.	1240.3
#2	45.792	12.854	18.888	31221.	40.485	44530.	1253.7
#3	45.187	12.430	16.238	32012.	50.490	45878.	1281.9

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.87571**	**35.318**	**1259.2**	**4.2298**	**-.80056**	**318.94**	**-2.3599**
Stddev	.75952	.769	46.1	6.2334	.08794	11.03	2.0411
%RSD	86.732	2.1760	3.6596	147.37	10.985	3.4596	86.488
#1	1.0768	35.922	1214.3	-1.8901	-.71947	312.23	-3.7905
#2	.03589	35.579	1256.9	10.571	-.78816	312.91	-3.2667
#3	1.5145	34.453	1306.3	4.0086	-.89404	331.68	-.02260

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**77.765**	**39.646**	**77.814**
Stddev	2.116	.536	1.930
%RSD	2.7207	1.3529	2.4810
#1	75.443	40.014	78.872
#2	79.585	39.031	78.983
#3	78.267	39.894	75.585

Sample Name: MF9L63-5x Acquired: 06/06/2019 09:40:41 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 5x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1232.2**	**30919.**	**300340.**	**2715.4**	**20657.**	**138260.**
Stddev	8.4	351.	1392.	14.9	250.	913.
%RSD	.67789	1.1337	.46334	.54886	1.2118	.66036
#1	1222.6	31197.	298780.	2699.7	20836.	139320.
#2	1236.1	31035.	300760.	2717.0	20763.	137770.
#3	1237.9	30525.	301460.	2729.4	20371.	137700.

Sample Name: MF9L65-2x Acquired: 06/06/2019 09:43:53 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**35522.**	**.69982**	**11.297**	**237.77**	**2.0708**	**.14239**	**460770.**
Stddev	783.	3.5705	2.002	4.62	.3076	.28036	9844.
%RSD	2.2037	510.20	17.725	1.9446	14.853	196.90	2.1363
#1	34701.	-1.8131	10.236	233.01	1.8296	.12543	449410.
#2	36260.	4.7868	13.607	242.24	2.4172	-.12911	466830.
#3	35605.	-.87423	10.049	238.06	1.9656	.43084	466070.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**52.381**	**13.848**	**45.051**	**34215.**	**70.595**	**7588.3**	**1669.9**
Stddev	.718	1.400	1.236	834.	2.556	172.3	33.7
%RSD	1.3715	10.107	2.7423	2.4371	3.6205	2.2705	2.0177
#1	52.151	12.883	45.616	33429.	72.109	7422.5	1637.8
#2	53.186	15.453	45.903	35090.	67.644	7766.4	1705.0
#3	51.805	13.208	43.635	34128.	72.032	7576.0	1666.9

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.17201**	**47.089**	**5275.5**	**2.4476**	**-.54745**	**270.22**	**-2.5069**
Stddev	.36000	.753	81.9	11.587	.73560	7.33	.8825
%RSD	209.29	1.5988	1.5533	473.40	134.37	2.7123	35.203
#1	-.14821	47.135	5209.0	6.4689	.00881	272.51	-3.2203
#2	.10257	47.818	5367.0	11.488	-1.3815	276.13	-2.7804
#3	.56167	46.314	5250.4	-10.614	-.26968	262.02	-1.5200

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**140.63**	**85.049**	**153.60**
Stddev	3.21	.352	2.39
%RSD	2.2848	.41427	1.5567
#1	137.22	84.695	153.67
#2	143.61	85.051	155.95
#3	141.05	85.400	151.17

Sample Name: MF9L65-2x Acquired: 06/06/2019 09:43:53 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1209.3**	**30853.**	**305510.**	**2748.0**	**20733.**	**140360.**
Stddev	5.9	463.	752.	5.6	317.	466.
%RSD	.48446	1.5015	.24602	.20230	1.5293	.33167
#1	1203.1	31254.	306360.	2743.5	20996.	140750.
#2	1210.0	30346.	305260.	2746.2	20381.	139850.
#3	1214.8	30958.	304920.	2754.2	20820.	140490.

Sample Name: MF9L67-2x Acquired: 06/06/2019 09:47:04 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**34287.**	**.52998**	**20.709**	**277.73**	**2.0181**	**.05640**	**394720.**
Stddev	295.	5.6737	2.361	1.38	.1225	.32228	1523.
%RSD	.86039	1070.6	11.403	.49861	6.0713	571.37	.38583
#1	33971.	3.3106	23.032	276.32	2.0672	.41983	393010.
#2	34335.	4.2770	18.311	277.77	1.8787	-.05597	395940.
#3	34555.	-5.9977	20.785	279.09	2.1085	-.19464	395200.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**55.420**	**16.477**	**62.740**	**35680.**	**92.755**	**7512.2**	**1748.1**
Stddev	.647	.341	1.134	293.	3.074	81.4	14.1
%RSD	1.1671	2.0705	1.8070	.82147	3.3138	1.0839	.80720
#1	54.747	16.586	63.692	35387.	89.206	7420.7	1737.5
#2	55.478	16.095	61.486	35679.	94.590	7539.4	1742.7
#3	56.037	16.751	63.041	35973.	94.468	7576.6	1764.1

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.30406**	**53.690**	**6244.2**	**9.0111**	**-.98425**	**255.36**	**-1.9841**
Stddev	1.3491	1.445	61.8	1.6125	.37008	1.87	3.3420
%RSD	443.71	2.6913	.99001	17.895	37.600	.73304	168.44
#1	1.8466	53.079	6205.9	10.596	-.61845	253.75	-5.2932
#2	-.65579	52.650	6211.2	9.0650	-1.3585	254.90	-2.0488
#3	-.27866	55.340	6315.5	7.3723	-.97584	257.41	1.3898

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**160.68**	**91.946**	**234.27**
Stddev	2.07	1.445	4.11
%RSD	1.2877	1.5716	1.7528
#1	158.43	90.385	231.60
#2	161.08	93.236	232.21
#3	162.51	92.218	239.00

Sample Name: MF9L67-2x Acquired: 06/06/2019 09:47:04 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1224.9**	**31492.**	**301970.**	**2752.5**	**21299.**	**140340.**
Stddev	8.6	45.	1976.	22.5	25.	736.
%RSD	.70307	.14325	.65419	.81787	.11674	.52441
#1	1230.0	31529.	303780.	2768.1	21277.	141160.
#2	1229.8	31506.	299860.	2762.7	21294.	139740.
#3	1215.0	31442.	302270.	2726.7	21326.	140120.

Sample Name: MF9L71-5x Acquired: 06/06/2019 09:50:16 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 5x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**11997.**	**4.1426**	**13.024**	**105.46**	**.83923**	**.05005**	**387160.**
Stddev	66.	3.5137	1.834	.73	.14381	.15662	1931.
%RSD	.54863	84.819	14.078	.68980	17.136	312.95	.49887
#1	12073.	.34951	15.098	105.84	.80099	.07464	385090.
#2	11960.	7.2862	12.355	104.62	.71841	.19292	387470.
#3	11957.	4.7919	11.618	105.93	.99830	-.11742	388910.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**25.753**	**9.6464**	**20.635**	**27311.**	**39.150**	**4747.1**	**1311.3**
Stddev	.167	.2284	1.763	102.	1.635	52.4	5.7
%RSD	.64868	2.3675	8.5450	.37400	4.1774	1.1031	.43792
#1	25.583	9.7606	22.655	27352.	39.522	4754.7	1308.4
#2	25.917	9.7951	19.849	27195.	40.567	4691.4	1307.5
#3	25.760	9.3834	19.401	27387.	37.360	4795.3	1317.9

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.73159**	**23.737**	**1510.7**	**4.9398**	**-.50051**	**402.40**	**-3.4106**
Stddev	.08834	1.122	16.5	5.2517	.13109	6.87	1.9439
%RSD	12.076	4.7264	1.0918	106.31	26.192	1.7064	56.994
#1	.73510	23.481	1492.2	10.956	-.57998	408.35	-5.6314
#2	.64154	24.965	1516.0	2.5906	-.34920	394.89	-2.5821
#3	.81813	22.766	1523.9	1.2728	-.57234	403.96	-2.0182

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**58.251**	**53.661**	**76.801**
Stddev	.350	.866	.718
%RSD	.60124	1.6135	.93493
#1	58.497	52.745	77.560
#2	58.405	54.466	76.133
#3	57.850	53.771	76.709

Sample Name: MF9L71-5x Acquired: 06/06/2019 09:50:16 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 5x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1242.4**	**31089.**	**303230.**	**2726.2**	**20874.**	**139420.**
Stddev	8.1	45.	751.	11.4	50.	587.
%RSD	.64960	.14555	.24750	.41919	.23796	.42119
R1	1243.5	31102.	303900.	2730.8	20857.	140090.
R2	1233.8	31127.	302420.	2713.2	20931.	139180.
R3	1249.8	31039.	303380.	2734.6	20836.	138990.

Sample Name: MF9L72-3x Acquired: 06/06/2019 09:53:28 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**17611.**	**4.7687**	**19.271**	**160.99**	**1.1086**	**.23499**	**408460.**
Stddev	70.	4.2134	1.880	.92	.0490	.26781	1901.
%RSD	.39861	88.354	9.7552	.57402	4.4178	113.97	.46534
#1	17664.	1.6362	17.435	162.03	1.1555	.38926	410530.
#2	17636.	9.5588	19.186	160.68	1.0578	.38996	406790.
#3	17531.	3.1111	21.192	160.26	1.1125	-.07425	408070.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**32.356**	**12.524**	**30.794**	**28644.**	**99.921**	**6325.8**	**1256.7**
Stddev	.457	.513	.490	248.	1.622	20.0	10.2
%RSD	1.4126	4.0972	1.5916	.86745	1.6235	.31687	.80931
#1	31.841	13.099	30.319	28924.	98.204	6338.0	1266.7
#2	32.712	12.360	30.765	28559.	101.43	6336.9	1256.9
#3	32.514	12.114	31.298	28449.	100.13	6302.7	1246.4

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.68624**	**33.416**	**2255.4**	**.73806**	**-1.0267**	**391.91**	**-2.9124**
Stddev	.40255	2.348	26.1	4.9162	.3329	2.62	2.4680
%RSD	58.660	7.0264	1.1556	666.09	32.421	.66968	84.741
#1	.36716	30.989	2246.0	-3.4390	-1.3996	394.80	-5.5317
#2	1.1385	35.676	2284.9	6.1557	-.75950	389.68	-2.5751
#3	.55306	33.583	2235.4	-.50251	-.92100	391.24	-.63038

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**103.86**	**67.073**	**122.60**
Stddev	1.88	.484	3.99
%RSD	1.8133	.72222	3.2583
#1	104.15	66.605	121.42
#2	105.58	67.573	127.05
#3	101.85	67.041	119.33

Sample Name: MF9L72-3x Acquired: 06/06/2019 09:53:28 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1230.2**	**31220.**	**301930.**	**2728.2**	**21124.**	**140130.**
Stddev	14.6	156.	631.	32.8	91.	812.
%RSD	1.1834	.49920	.20892	1.2025	.43263	.57957
#1	1234.2	31065.	302240.	2747.5	21022.	140870.
#2	1214.0	31217.	301200.	2690.3	21153.	139260.
#3	1242.3	31377.	302340.	2746.7	21198.	140250.

ample Name: MF9L73-2x Acquired: 06/06/2019 09:56:39 Type: Unk
ethod: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
ser: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
omment: 2x for Ca

lem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
nits	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
vg	**25284.**	**3.1304**	**18.489**	**250.15**	**1.7034**	**.74282**	**393700.**
tddev	138.	2.2795	4.675	1.54	.0264	.16274	3039.
%RSD	.54756	72.819	25.283	.61449	1.5493	21.908	.77184
1	25440.	.53963	14.922	251.85	1.7338	.91818	392270.
2	25175.	4.8285	23.781	248.86	1.6907	.71363	397190.
3	25236.	4.0232	16.765	249.74	1.6858	.59665	391640.

lem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
nits	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
vg	**45.642**	**17.296**	**88.360**	**33217.**	**88.539**	**7159.9**	**1309.6**
tddev	.235	.276	.992	75.	4.861	48.4	2.0
%RSD	.51510	1.5965	1.1224	.22499	5.4901	.67627	.14942
1	45.903	17.043	89.198	33302.	93.678	7209.2	1310.8
2	45.576	17.253	88.618	33161.	87.923	7112.5	1307.4
3	45.447	17.591	87.265	33189.	84.015	7158.1	1310.7

lem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
nits	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
vg	**1.7733**	**55.814**	**3318.6**	**12.738**	**-.71912**	**445.48**	**-3.5620**
tddev	.4964	1.272	36.1	9.048	.31691	5.26	1.7102
%RSD	27.993	2.2788	1.0890	71.026	44.070	1.1805	48.013
1	2.3243	57.048	3356.9	4.8042	-.93508	451.54	-5.4445
2	1.3610	55.887	3313.6	10.820	-.86698	442.15	-2.1042
3	1.6346	54.508	3285.2	22.591	-.35530	442.76	-3.1372

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**151.81**	**110.40**	**275.15**
Stddev	1.02	.89	1.88
%RSD	.67520	.80905	.68388
#1	152.13	109.43	276.60
#2	150.66	110.58	275.83
#3	152.63	111.19	273.03

Sample Name: MF9L73-2x Acquired: 06/06/2019 09:56:39 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 2x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1245.6**	**31444.**	**303520.**	**2767.0**	**21210.**	**140480.**
Stddev	8.2	13.	1878.	19.0	37.	639.
%RSD	.66140	.04241	.61872	.68787	.17238	.45475
#1	1236.2	31429.	304720.	2746.3	21210.	140620.
#2	1249.3	31449.	301360.	2771.0	21174.	139780.
#3	1251.3	31453.	304480.	2783.7	21247.	141030.

Sample Name: MF9M33-3x Acquired: 06/06/2019 09:59:51 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**40510.**	**5.4656**	**17.039**	**243.21**	**2.2173**	**-.13527**	**333730.**
Stddev	1082.	.9324	1.144	6.22	.1224	.19212	13641.
%RSD	2.6713	17.060	6.7127	2.5578	5.5212	142.03	4.0875
#1	41205.	6.4235	18.223	247.21	2.2627	-.11663	348350.
#2	39263.	4.5610	16.955	236.04	2.0787	-.33603	321340.
#3	41061.	5.4124	15.940	246.37	2.3107	.04685	331510.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**51.553**	**18.387**	**43.834**	**37268.**	**59.842**	**7566.3**	**1511.2**
Stddev	1.035	1.148	1.064	1016.	1.782	196.0	36.1
%RSD	2.0069	6.2411	2.4266	2.7257	2.9774	2.5899	2.3901
#1	51.467	19.333	44.490	37949.	59.847	7723.3	1532.3
#2	52.628	17.111	44.404	36101.	61.622	7346.7	1469.5
#3	50.564	18.718	42.606	37754.	58.058	7628.8	1531.8

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.17615**	**49.291**	**4820.2**	**6.1950**	**-.57780**	**314.87**	**-3.2466**
Stddev	.05485	.572	129.3	8.3594	.42226	10.12	1.5928
%RSD	31.137	1.1612	2.6829	134.94	73.081	3.2137	49.062
#1	.16106	49.284	4890.2	3.7306	-.12551	310.17	-2.5433
#2	.23697	49.866	4671.0	15.510	-.64621	307.95	-5.0700
#3	.13043	48.722	4899.5	-.65516	-.96169	326.48	-2.1264

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**140.93**	**108.74**	**142.25**
Stddev	2.74	1.56	1.92
%RSD	1.9437	1.4315	1.3526
#1	142.42	107.06	140.25
#2	137.77	110.14	142.41
#3	142.61	109.00	144.08

Sample Name: MF9M33-3x Acquired: 06/06/2019 09:59:51 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1237.1**	**31540.**	**302220.**	**2760.0**	**21368.**	**140960.**
Stddev	9.6	490.	3347.	11.1	332.	498.
%RSD	.77481	1.5535	1.1076	.40167	1.5539	.35315
#1	1235.3	31198.	305110.	2755.9	21114.	141410.
#2	1228.6	32101.	298550.	2751.5	21744.	141050.
#3	1247.5	31320.	302990.	2772.5	21246.	140430.

Sample Name: MF9L66-3x Acquired: 06/06/2019 10:03:01 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**30805.**	**5.6318**	**25.076**	**396.13**	**1.7862**	**1.4234**	**420830.**
Stddev	395.	4.6472	2.371	4.51	.2352	.0454	1954.
%RSD	1.2821	82.516	9.4538	1.1394	13.165	3.1875	.46427
#1	30759.	.29040	22.651	397.31	1.7910	1.3711	422150.
#2	31220.	7.8574	27.388	399.93	2.0189	1.4470	421740.
#3	30434.	8.7476	25.190	391.14	1.5487	1.4521	418580.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**66.497**	**23.915**	**104.34**	**38484.**	**118.71**	**7988.5**	**3072.5**
Stddev	.490	.600	.93	346.	1.32	85.9	27.3
%RSD	.73744	2.5105	.88880	.89971	1.1140	1.0752	.88923
#1	66.651	24.596	105.00	38534.	117.31	7967.7	3084.2
#2	66.892	23.687	104.73	38803.	119.94	8082.9	3092.1
#3	65.948	23.463	103.28	38116.	118.87	7915.0	3041.3

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**3.0449**	**59.419**	**5868.3**	**9.8709**	**-.32575**	**615.89**	**-2.3438**
Stddev	.3557	.983	25.3	5.5024	.87368	9.37	1.3714
%RSD	11.682	1.6539	.43139	55.744	268.21	1.5215	58.512
#1	2.9734	60.439	5863.8	9.2302	.57906	621.27	-3.4890
#2	3.4309	59.340	5895.6	4.7169	-1.1646	621.34	-2.7185
#3	2.7304	58.478	5845.5	15.666	-.39175	605.07	-.82402

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**105.85**	**94.790**	**492.70**
Stddev	.69	1.390	3.47
%RSD	.65497	1.4662	.70516
#1	106.01	93.335	496.23
#2	106.45	96.104	492.58
#3	105.09	94.931	489.28

;ample Name: MF9L66-3x Acquired: 06/06/2019 10:03:01 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
Jser: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment: 3x for Ca

nt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Jnits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
\vg	**1228.2**	**31038.**	**299840.**	**2723.2**	**21031.**	**139450.**
Stddev	7.2	102.	918.	12.0	67.	887.
%RSD	.58927	.32764	.30606	.44093	.31932	.63608
#1	1220.1	31021.	299150.	2710.2	21013.	140280.
#2	1230.7	30946.	299500.	2725.5	20976.	138510.
#3	1234.0	31147.	300880.	2733.9	21106.	139570.

Sample Name: MF9L67 Acquired: 06/06/2019 10:06:12 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 2x for Ca.
JCS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**69328.**	**6.3771**	**36.644**	**544.32**	**3.9113**	**.45232**	F **770300.**
Stddev	207.	4.2756	4.978	1.25	.2704	.22607	5815.
%RSD	.29902	67.045	13.584	.22908	6.9143	49.980	.75488
#1	69166.	1.5370	41.381	545.64	3.6277	.54973	772960.
#2	69256.	7.9544	31.456	544.18	3.9398	.19387	763630.
#3	69561.	9.6400	37.096	543.16	4.1663	.61335	774310.

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**108.12**	**31.511**	**128.83**	**70552.**	**179.32**	**15106.**	**3445.1**
Stddev	.56	.438	1.34	464.	3.34	78.	20.2
%RSD	.51723	1.3889	1.0424	.65763	1.8609	.51483	.58596
#1	108.67	31.940	130.35	70919.	180.04	15159.	3460.2
#2	108.14	31.066	127.79	70030.	182.24	15017.	3422.2
#3	107.55	31.528	128.36	70707.	175.69	15141.	3453.0

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2.1741**	**103.77**	**12788.**	**16.505**	**-1.5164**	**517.10**	**-5.5158**
Stddev	.5589	1.33	21.	4.710	.1868	5.37	.5996
%RSD	25.706	1.2788	.16600	28.536	12.316	1.0382	10.870
#1	2.4151	104.54	12806.	18.374	-1.5731	513.41	-6.0926
#2	2.5721	102.24	12765.	11.147	-1.6683	523.26	-5.5589
#3	1.5352	104.54	12794.	19.993	-1.3079	514.63	-4.8958

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**298.50**	**182.98**	**475.35**
Stddev	3.16	.96	4.89
%RSD	1.0579	.52301	1.0286
#1	301.85	182.51	480.96
#2	298.05	184.08	473.08
#3	295.59	182.34	472.01

Sample Name: MF9L67 Acquired: 06/06/2019 10:06:12 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

nt. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1129.2**	**31044.**	**291290.**	**2701.4**	**21268.**	**137210.**
Stddev	11.4	198.	934.	21.4	139.	1098.
%RSD	1.0117	.63690	.32080	.79189	.65587	.80027
#1	1117.2	30903.	290390.	2677.0	21127.	138360.
#2	1130.3	31270.	291220.	2710.7	21406.	136180.
#3	1140.0	30960.	292250.	2716.7	21272.	137100.

Sample Name: MF9L71 Acquired: 06/06/2019 10:09:21 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

See 5x for Ca.
JCS 06/06/2019

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**63227.**	**7.0952**	**72.616**	**514.46**	**4.4320**	**-.91995**
Stddev	381.	4.2684	.916	2.42	.2632	.32457
%RSD	.60243	60.159	1.2612	.46968	5.9380	35.282
#1	63261.	4.6835	72.973	515.67	4.5956	-.81059
#2	63590.	12.024	73.300	516.03	4.5719	-.66418
#3	62830.	4.5786	71.576	511.68	4.1284	-1.2851

Elem	Ca3179	Cr2055	Co2286	Cu2247	Fe2598	Pb2203
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	F **1772000.**	**121.43**	**46.606**	**109.04**	**132590.**	**203.65**
Stddev	12698.	1.26	2.025	2.98	760.	2.23
%RSD	.71656	1.0407	4.3440	2.7306	.57327	1.0951
#1	1774400.	122.87	44.507	112.41	132830.	206.15
#2	1783300.	120.94	48.547	106.76	133200.	201.85
#3	1758300.	120.49	46.764	107.96	131740.	202.96

Elem	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**23726.**	**6400.3**	**4.2748**	**114.05**	**8221.3**	**15.372**
Stddev	144.	39.5	.5619	1.12	88.5	7.279
%RSD	.60583	.61697	13.144	.98150	1.0764	47.353
#1	23891.	6405.2	4.2994	114.03	8210.2	10.405
#2	23654.	6437.1	3.7010	112.95	8314.7	11.983
#3	23632.	6358.6	4.8239	115.19	8138.8	23.727

Elem	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.9816**	**2070.5**	**-5.0552**	**199.44**	**264.27**	**452.09**
Stddev	1.0070	12.2	.7389	1.56	1.20	1.52
%RSD	50.817	.58713	14.616	.78458	.45479	.33612
#1	-3.1366	2060.7	-5.4535	198.69	262.90	451.81
#2	-1.2879	2084.1	-5.5095	201.24	265.16	450.74
#3	-1.5203	2066.7	-4.2026	198.39	264.75	453.74

Sample Name: MF9L71 Acquired: 06/06/2019 10:09:21 Type: Unk
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep: 3050B
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1041.2**	**30167.**	**274750.**	**2600.1**	**20999.**	**131800.**
Stddev	4.7	161.	1094.	12.4	103.	1461.
%RSD	.45173	.53329	.39809	.47513	.49068	1.1087
#1	1035.8	30091.	273490.	2585.8	20948.	133410.
#2	1044.4	30058.	275340.	2606.2	20932.	130550.
#3	1043.4	30352.	275430.	2608.2	21118.	131450.

Sample Name: CCV4 Acquired: 06/06/2019 10:12:29 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**248890.**	**25833.**	**10540.**	**25114.**	**10009.**	**9730.5**	**259290.**
Stddev	456.	976.	407.	347.	25.	351.3	1348.
%RSD	.18310	3.7797	3.8646	1.3803	.24661	3.6100	.51967
#1	249000.	25064.	10215.	25438.	10015.	9450.0	260030.
#2	248390.	25503.	10408.	24748.	9982.0	9617.1	257730.
#3	249290.	26931.	10997.	25156.	10030.	10125.	260100.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cr2055	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**25158.**	**23570.**	**27074.**	**255100.**	**25971.**	**248720.**	**24270.**
Stddev	945.	877.	1061.	734.	985.	808.	71.
%RSD	3.7572	3.7211	3.9178	.28760	3.7940	.32469	.29436
#1	24389.	22879.	26200.	255550.	25157.	248730.	24312.
#2	24872.	23274.	26768.	254250.	25689.	247910.	24187.
#3	26213.	24557.	28254.	255500.	27066.	249520.	24310.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl1908
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**10007.**	**23576.**	**254530.**	**10331.**	**1041.2**	**258050.**	**9861.5**
Stddev	379.	872.	1854.	358.	8.7	3607.	339.7
%RSD	3.7855	3.6997	.72857	3.4686	.83304	1.3978	3.4442
#1	9702.8	22872.	253060.	10028.	1049.7	260380.	9576.5
#2	9887.6	23305.	253910.	10239.	1041.6	253900.	9770.5
#3	10431.	24552.	256620.	10727.	1032.4	259880.	10237.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV4 Acquired: 06/06/2019 10:12:29 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**10087.**	**24989.**	**24130.**
Stddev	17.	219.	886.
%RSD	.17011	.87760	3.6735
#1	10080.	24795.	23415.
#2	10074.	24946.	23853.
#3	10106.	25227.	25121.
Check ?	Chk Pass	Chk Pass	Chk Pass
Value			
Range			

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1088.4**	**30100.**	**281800.**	**2536.0**	**20260.**	**130390.**
Stddev	26.8	164.	3316.	57.8	110.	685.
%RSD	2.4586	.54507	1.1767	2.2779	.54086	.52544
#1	1111.1	29912.	284350.	2581.7	20142.	129760.
#2	1095.2	30216.	283000.	2555.3	20359.	130280.
#3	1058.9	30172.	278050.	2471.1	20278.	131120.

Sample Name: CCB4 Acquired: 06/06/2019 10:15:24 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-10.048**	**.90181**	**1.2489**	**.91952**	**.52800**	**.33829**	**16.467**	**.73336**
Stddev	18.804	4.0330	2.3983	.61197	.21538	.25320	9.200	.10344
%RSD	187.15	447.20	192.03	66.554	40.792	74.846	55.873	14.105
#1	6.7450	-3.5938	3.9295	1.6078	.70411	.50855	26.164	.67878
#2	-30.364	4.2018	-.69345	.71415	.59204	.45899	15.374	.66863
#3	-6.5237	2.0974	.51059	.43665	.28786	.04733	7.8615	.85266
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu2247	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.07028**	**.72398**	**12.039**	**-1.6302**	**20.388**	**.77905**	**.49637**	**.31234**
Stddev	.62881	.86318	2.641	1.9884	10.372	.32250	.36423	1.0090
%RSD	894.68	119.23	21.940	121.97	50.874	41.396	73.380	323.07
#1	-.76766	.82534	10.608	-1.6908	8.8262	1.0731	.18690	1.4075
#2	.10333	1.5320	15.087	.38781	23.463	.82995	.89775	-.57962
#3	.45348	-.18541	10.421	-3.5875	28.875	.43412	.40445	.10910
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	K_7664	Se1960	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**53.728**	**-1.4062**	**.06950**	**37.736**	**-.24743**	**.71417**	**1.5005**	**-29.487**
Stddev	9.026	6.5147	.76883	9.874	1.1150	1.1309	.2996	1.300
%RSD	16.800	463.29	1106.2	26.166	450.64	158.35	19.968	4.4078
#1	46.039	.88168	-.40435	44.968	-.53332	1.9893	1.2235	-28.381
#2	63.666	-8.7562	-.34373	41.753	-1.1917	-.16725	1.4593	-30.918
#3	51.480	3.6560	.95658	26.487	.98269	.32048	1.8185	-29.161
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB4 Acquired: 06/06/2019 10:15:24 Type: QC
Method: ICP08 ISM02.4 2018(v95) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MF9L61 Case: 48266 Prep:
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1568.6**	**31656.**	**322560.**	**2880.5**	**21424.**	**151780.**
Stddev	12.0	175.	1479.	26.0	121.	1425.
%RSD	.76539	.55236	.45850	.90386	.56447	.93907
#1	1576.8	31600.	322110.	2901.1	21353.	153380.
#2	1574.2	31517.	324220.	2889.0	21355.	150640.
#3	1554.8	31852.	321370.	2851.2	21564.	151320.

ISM02.4 3050B Preparation Log

Sample ID	Matrix	Prep Method	Prep Date	Amount Sample Used(g)	Final Sample Volume	Initials
PBS1	ASTM Type II H_2O	3050B	05/23/2019	NA	100 mL	JC
LCS1	ASTM Type II H_2O			NA		
MF9L61	Soil			1.4775		
MF9L69				1.1450		
MF9L70				1.0488		
MF9L74				1.0681		
MF9L75				1.3127		
MF9L76				1.2177		
MF9L77				1.3294		
MF9L78				1.4142		
MF9L79				1.2112		
MF9L79S				1.2105		
MF9L79D				1.2029		
MF9M24				1.1665		
MF9L62				1.1928		
MF9L63				1.3517		
MF9L64				1.1414		
MF9L65				1.0801		
~~MF9L66~~				~~1.3600~~		
MF9L67				1.3979		
MF9L71				1.3736		
MF9L72				1.1213		
MF9L73				1.2740		
MF9M33				1.3851		

RB
05/30/2019

% Solids under 30%. Sample reprepared for analysis

Hood	21
Hotblock	B
Thermometer	170728038
Time on/Temp °C	Time off/Temp °C
05/24/2019 8:50 / 94.7	05/24/2019 12:35 / 95.6

BALANCE ID:
102683

PREPARED BY:
Rex Bagley
Jesse Cummings
PREPARATION START DATE/TIME:
05/23/2019 14:51
PREPARATION END DATE/TIME:
05/28/2019 8:20
WORKORDER(S):
1914095
1914424
SDG:
MF9L61
CASE:
48266
METHOD/MATRIX:
3050B/Soil
BATCH:
6621
HBN #:
239930
MA #:
NA

ALS

QC ID	QC TYPE	MATRIX SOURCE	SPIKE SOURCE	PIPETTE ID	VOLUME SPIKED	INITIALS	Method Reagents		Reagent Dispenser
PBS1	PBS	ASTM Type II H_2O	NA	NA	NA	RB	1:1 HNO_3 Horizon STD #:	47795	MPL-10
LCS1	LCS	ASTM Type II H_2O	44749	WR-22	2000 µl		CONC. HNO_3 Baker LOT #:	0000213500	MPL-02
MF9L69	MS	MF9L61	47623 45028	WR-22	200 µl		30% H_2O_2 Macron LOT #:	0000210503	MPL-13
MF9L70	MD	MF9L61	NA	NA	NA		CONC. HCl Omni Trace LOT #:	58225	MPL-14

05/23/2019 Samples weighed and transferred into 100 mL flat-bottom tubes. 05/24/2019 QCs prepared as indicated above. 10 mL 1:1 HNO_3 added to all. Digestates covered and placed on hotblock at ~95°C for 10 minutes, removed from heat, and allowed to cool. 5 mL concentrated HNO_3 added to all. Digestates returned to hotblock and allowed to reduce to 5 mL then were removed from heat. 2 mL ASTM Type II H_2O (MPL-08) and 3 mL 30% H_2O_2 added, returned to hotblock, and heated until bubbling reaction subsided. Digestates allowed to reduce to 5 mL. Digestates removed from heat and allowed to cool. 10 mL conc. HCl added. Digestates returned to hotblock for 15 minutes, removed from heat, and allowed to cool. Digestates diluted to 100 mL final volume with ASTM Type II H_2O. Digestates inverted several times to mix. 05/28/2019 Digestates transferred to 50 mL tubes for analysis. Verified by: Kristine Batin 06/07/2019

ISM02.4 3050B Preparation Log

Sample ID	Matrix	Prep Method	Prep Date	Amount Sample Used(g)	Final Sample Volume	Initials
PBS1	ASTM Type II H_2O	3050B	05/23/2019	NA	100 mL	JC
LCS1	ASTM Type II H_2O			NA		
MF9L61	Soil					
MF9L69						
MF9L70						
MF9L74						
MF9L75						
MF9L76						
MF9L77						
MF9L78						
MF9L79						
MF9L79S						
MF9L79D						
MF9M24						
MF9L62						
MF9L63						
MF9L64						
MF9L65						
MF9L66						
MF9L67						
MF9L71						
MF9L72						
MF9L73						
MF9M33	↓	↓	↓		↓	↓

05/24/2019 RB

Hood	21
Hotblock	B
Thermometer	170728038
Time on/Temp °C	Time off/Temp °C
8:50 / 94.7	12:35 95.6

BALANCE ID:
102683

PREPARED BY:
Rex Bagley
Jesse Cummings
PREPARATION START DATE/TIME:
05/23/2019 14:51
PREPARATION END DATE/TIME:
05/28/2019 8:20
WORKORDER(S):
1914095
1914424
SDG:
MF9L61
CASE:
48266
METHOD/MATRIX:
3050B/Soil
BATCH:
6621
HBN #:
239930
MA #:
NA

QC ID	QC TYPE	MATRIX SOURCE	SPIKE SOURCE	PIPETTE ID	VOLUME SPIKED	INITIALS	Method Reagents	Reagent Dispenser
PBS1	PBS	ASTM Type II H_2O	NA	NA	NA	RB	1:1 HNO_3 Horizon STD #: 47795	MPL-10
LCS1	LCS	ASTM Type II H_2O	44749	WR-22	2000 µl		CONC. HNO_3 Baker LOT #: 0000213500	MPL-02
MF9L69	MS	MF9L61	47623 45028	WR-22	200 µl		30% H_2O_2 Macron LOT #: 0000210503	MPL-13
MF9L70	MD	MF9L61	NA	NA	NA		CONC. HCl Omni Trace LOT #: 58 225	MPL-14

Samples weighed and transferred into 100 mL flat-bottom tubes. QCs prepared as indicated above. 10 mL 1:1 HNO_3 added to all. Digestates covered and placed on hotblock at ~95°C for 10 minutes, removed from heat, and allowed to cool. 5 mL concentrated HNO_3 added to all. Digestates returned to hotblock and allowed to reduce to 5 mL then were removed from heat. 2 mL ASTM Type II H_2O (MPL-08) and 3 mL 30% H_2O_2 added, returned to hotblock, and heated until bubbling reaction subsided. Digestates allowed to reduce to 5 mL. Digestates removed from heat and allowed to cool. 10 mL conc. HCl added. Digestates returned to hotblock for 15 minutes, removed from heat, and allowed to cool. Digestates diluted to 100 mL final volume with ASTM Type II H_2O. Digestates inverted several times to mix. Digestates transferred to 50 mL tubes for analysis.
Verified by: KB 06/07/2019

05/28/2019
JC

SCS 05/28/19

ISM02.4 3050B Preparation Log

Sample ID	Matrix	Prep Method	Prep Date	Amount Sample Used(g)	Final Sample Volume	Initials
PBS2	ASTM Type II H_2O	3050B	06/03/2019	NA	100 mL	JC
LCS2	ASTM Type II H_2O	↓	↓	NA	↓	↓
MF9L66	Soil	↓	↓	4.8520	↓	↓

Hood	21
Hotblock	B
Thermometer	170728038
Time on/Temp °C	**Time off/Temp °C**
06/03/2019 11:30 / 94.9	06/03/2019 14:35 / 95.0

BALANCE ID:
102683

PREPARED BY:
Rex Bagley
Jesse Cummings
PREPARATION START DATE/TIME:
06/03/2019 10:50
PREPARATION END DATE/TIME:
06/04/2019 08:00
WORKORDER(S):
1914424

SDG:
MF9L61
CASE:
48266
METHOD/MATRIX:
3050B/Soil
BATCH:
6625
HBN #:
240293
MA #:
NA

QC ID	QC TYPE	MATRIX SOURCE	SPIKE SOURCE	PIPETTE ID	VOLUME SPIKED	INITIALS	Method Reagents		Reagent Dispenser
PBS1	PBS	ASTM Type II H_2O	NA	NA	NA	RB	1:1 HNO_3 Horizon STD #:	48021	MPL-10
LCS1	LCS	ASTM Type II H_2O	44749	WR-22	2000 µl	↓	CONC. HNO_3 Baker LOT #:	0000213500	MPL-02
NA	MS	NA	47623 45028	WR-22	200 µl	↓	30% H_2O_2 Macron LOT #:	0000210503	MPL-13
NA	MD	NA	NA	NA	NA	↓	CONC. HCl Omni Trace LOT #:	58225	MPL-14

06/03/2019 Samples weighed and transferred into 100 mL flat-bottom tubes. QCs prepared as indicated above. 10 mL 1:1 HNO_3 added to all. Digestates covered and placed on hotblock at ~95°C for 10 minutes, removed from heat, and allowed to cool. 5 mL concentrated HNO_3 added to all. Digestates returned to hotblock and allowed to reduce to 5 mL then were removed from heat. 2 mL ASTM Type II H_2O (MPL-08) and 3 mL 30% H_2O_2 added, returned to hotblock, and heated until bubbling reaction subsided. Digestates allowed to reduce to 5 mL. Digestates removed from heat and allowed to cool. 10 mL conc. HCl added. Digestates returned to hotblock for 15 minutes, removed from heat, and allowed to cool. Digestates diluted to 100 mL final volume with ASTM Type II H_2O. Digestates inverted several times to mix. 06/04/2019 Digestates transferred to 50 mL tubes for analysis. Verified by: KB 06/07/2019

05259

ISM02.4 3050B Preparation Log

Sample ID	Matrix	Prep Method	Prep Date	Amount Sample Used(g)	Final Sample Volume	Initials
PBS2	ASTM Type II H_2O	3050B	06/03/2019	NA	100 mL	JC ~~RB~~ 06/03/2019 RB
LCS2	ASTM Type II H_2O	↓	↓	NA	↓	↓
MF9L66	Soil	↓	↓		↓	↓

Hood	21
Hotblock	B
Thermometer	170728038
Time on/Temp °C	Time off/Temp °C
06/03/2019 11:30 /94.9	06/03/2019 14:35 /95.0

PREPARED BY:
Rex Bagley
Jesse Cummings
PREPARATION START DATE/TIME:
06/03/2019 10:00
PREPARATION END DATE/TIME:
06/04/2019 08:00
WORKORDER(S):
1914424

SDG:
MF9L61
CASE:
48266
METHOD/MATRIX:
3050B/Soil
BATCH:
6625
HBN #:
240293
MA #:
NA

ALS

BALANCE ID:
102683

QC ID	QC TYPE	MATRIX SOURCE	SPIKE SOURCE	PIPETTE ID	VOLUME SPIKED	INITIALS	Method Reagents		Reagent Dispenser
PBS1	PBS	ASTM Type II H_2O	NA	NA	NA	RB	1:1 HNO_3 Horizon STD #:	48021	MPL-10
LCS1	LCS	ASTM Type II H_2O	44749	WR-22	2000 µl	↓	CONC. HNO_3 Baker LOT #:	0000213500	MPL-02
NA	MS	NA	47623 45028	WR-22	200 µl	↓	30% H_2O_2 Macron LOT #:	0000210503	MPL-13
NA	MD	NA	NA	NA	NA	↓	CONC. HCl Omni Trace LOT #:	58225	MPL-14

Samples weighed and transferred into 100 mL flat-bottom tubes. QCs prepared as indicated above. 10 mL 1:1 HNO_3 added to all. Digestates covered and placed on hotblock at ~95°C for 10 minutes, removed from heat, and allowed to cool. 5 mL concentrated HNO_3 added to all. Digestates returned to hotblock and allowed to reduce to 5 mL then were removed from heat. 2 mL ASTM Type II H_2O (MPL-08) and 3 mL 30% H_2O_2 added, returned to hotblock, and heated until bubbling reaction subsided. Digestates allowed to reduce to 5 mL. Digestates removed from heat and allowed to cool. 10 mL conc. HCl added. Digestates returned to hotblock for 15 minutes, removed from heat, and allowed to cool. Digestates diluted to 100 mL final volume with ASTM Type II H_2O. Digestates inverted several times to mix. Digestates transferred to 50 mL tubes for analysis.
Verified by: LB 06/07/2019

06/04/2019
JC

00250

Solvent Standard - H2O2

H2O2		Description - 30% Hydrogen Peroxide
Standard: 47573	**Created By:** Rex Bagley	**Amount:** 1 L
MFG: Macron	**Create Date:** 11/14/2018 12:11AM	**Expires:** 09/20/2020
MFG Lot: 0000210503		**Usable:** Yes
Part ID: Not Provided		**Lab Lot:** H2O2 (0000210503)

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

Working Standard - 1:1 HNO3

1:1 HNO3		Description - 1:1 HNO3
Standard: 47795	**Created By:** Rex Bagley	**Amount:** 2 L
MFG: RB	**Create Date:** 05/20/2019 01:05PM	**Expires:** 11/20/2019
MFG Lot: JT Baker 0000213500		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** 1:1 HNO3

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 mg/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	1 L	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 L	01/01/2025
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	1 L	04/02/2021

Working Standard - 1:1 HNO3

1:1 HNO3		Description - 1:1 HNO3
Standard: 48021	**Created By:** Rex Bagley	**Amount:** 2 L
MFG: RB	**Create Date:** 05/31/2019 08:05AM	**Expires:** 11/30/2019
MFG Lot: JT Baker 0000213500		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** 1:1 HNO3

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 mg/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	1 L	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 L	01/01/2025
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	1 L	04/02/2021

Stock Standard - ICP-CLP-CRQL

ICP-CLP-CRQL — **Description - ISM CRQL Solution**

Standard:	44749	**Created By:**	Rex Bagley	**Amount:**	125 mL
MFG:	Inorganic Ventures	**Create Date:**	11/14/2018 09:11AM	**Expires:**	11/14/2019
MFG Lot:	N2-MEB666942	**Verified By:**	Joanna C. Sanchez	**Usable:**	Yes
Part ID:	CLP-AES-CRQL-2	**Verify Date:**	06/06/2019 08:06AM	**Lab Lot:**	ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	20 ug/mL
2	7440-36-0	Antimony	6 ug/mL
3	7440-38-2	Arsenic	1 ug/mL
4	7440-39-3	Barium	20 ug/mL
5	7440-41-7	Beryllium	0.5 ug/mL
6	7440-43-9	Cadmium	0.5 ug/mL
7	7440-70-2	Calcium	500 ug/mL
8	7440-47-3	Chromium	1 ug/mL
9	7440-48-4	Cobalt	5 ug/mL
10	7440-50-8	Copper	2.5 ug/mL
11	7439-89-6	Iron	10 ug/mL
12	7439-92-1	Lead	1 ug/mL
13	7439-95-4	Magnesium	500 ug/mL
14	7439-96-5	Manganese	1.5 ug/mL
15	7440-02-0	Nickel	4 ug/mL
16	7440-09-7	Potassium	500 ug/mL
17	7782-49-2	Selenium	3.5 ug/mL
18	7440-22-4	Silver	1 ug/mL
19	7440-23-5	Sodium	500 ug/mL
20	7440-28-0	Thallium	2.5 ug/mL
21	7440-62-2	Vanadium	5 ug/mL
22	7440-66-6	Zinc	6 ug/mL

Stock Standard - ICP CLP SPK2

ICP CLP SPK2		Description - ISM02.4 ICP Matrix Spike Soln #2
Standard: 45028	**Created By:** Rex Bagley	**Amount:** 125 mL
MFG: Inorganic Ventures	**Create Date:** 03/01/2018 12:03AM	**Expires:** 12/04/2019
MFG Lot: K2-MEB633141	**Verified By:** Joanna C. Sanchez	**Usable:** Yes
Part ID: ALS-132	**Verify Date:** 12/05/2018 02:12PM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7440-36-0	Antimony	100 ug/mL
2	7440-38-2	Arsenic	40 ug/mL
3	7440-43-9	Cadmium	50 ug/mL
4	7439-92-1	Lead	20 ug/mL
5	7782-49-2	Selenium	100 ug/mL
6	7440-28-0	Thallium	50 ug/mL

Stock Standard - ICP CLP SPK1

ICP CLP SPK1 — **Description - ISM02.4 ICP Matrix Spike Soln #1**

Standard:	47623	**Created By:**	Rex Bagley	**Amount:**	125 mL
MFG:	Inorganic Ventures	**Create Date:**	03/01/2018 12:03AM	**Expires:**	05/09/2020
MFG Lot:	K2-MEB622018	**Verified By:**	Oliver Anderson	**Usable:**	Yes
Part ID:	CLPP-SPK-1	**Verify Date:**	05/10/2019 10:05AM	**Lab Lot:**	ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	2000 ug/mL
2	7440-39-3	Barium	2000 ug/mL
3	7440-41-7	Beryllium	50 ug/mL
4	7440-47-3	Chromium	200 ug/mL
5	7440-48-4	Cobalt	500 ug/mL
6	7440-50-8	Copper	250 ug/mL
7	7439-89-6	Iron	1000 ug/mL
8	7439-96-5	Manganese	500 ug/mL
9	7440-02-0	Nickel	500 ug/mL
10	7440-22-4	Silver	50 ug/mL
11	7440-62-2	Vanadium	500 ug/mL
12	7440-66-6	Zinc	500 ug/mL

Analysis Log

WorkOrder#	Sample #'s	Analytes/Matrix	Prep Batch HBN	Prep Date/Time	Prep Method
1914095	MF9L61, L69, L70, L74-L79, M24	See Below/Soil	239930	05/23/2019 14:51	3050B
1914424	MF9L62-L65, L67, L71-L73, M33	See Below/Soil	239930	05/23/2019 14:51	3050B
1914424	MF9L66	See Below/Soil	240293	06/03/2019 22:50	3050B

Analytes: Al, Ca, Fe, Mg, Mn, K, Na

3050B Conversion Factor: (µg/L from instrument)(Dilution Factor)(0.1 L/1.0 g) = 0.1 µg/g

CALIBRATION AND QC STANDARDS UTILIZED:

	ID #	Book/Page
S0/ICB/CCB	48026	Horizon
S01	47818	Horizon
S02	47890	Horizon
S03	47891	Horizon
S04/CCV	47892	Horizon
S05	47893	Horizon
S06	47895	Horizon
S07	47896	Horizon
S08	47897	Horizon
ICV	47998	Horizon
ICSA	47898	Horizon
ICSAB	47819	Horizon
Bubbler Rinse	48018	Horizon
Internal Standard	46539	Horizon
Rinse	48025	Horizon

SDG # MF9L61
CASE # 48266
HBN # 240880
Analyst: Joanna Sanchez, Rex Bagley
Instrument ID: ICP08
Run ID: k19119
Analysis Method: ISM02.4
Analysis Date: 06/05/2019
Start Time: 13:54
End Time: 16:08

ANALYSIS PARAMETERS:
Pump Rate = 25 rpm
RF Power = 1200 W
Auxiliary Gas = 0.4 L/min
Nebulizer Flow = 0.50 L/min
Coolant Gas Flow = 14 L/min
ASXpress Plus = 3 mL Loop

Dilutions: None were analyzed in this run.

Pipettes: 28051204

Comments: No problems during analysis for the requested analytes except samples MF9L67 and MF9L71 had high %RSDs. They were rerun and were fine.

Rex Bagley poured the sample and made the dilution. Joanna Sanchez did the rest.

MF9L79L was made by combining 2.0 mL of MF9L79 with 8.0 mL of Horizon Standard #48026 in a 12mL tube.

Verified by: Kristie Bitner 06/07/2019

Analysis Log

Run# k19119		Al3082	Ca3179	Fe2598	Mg2790	Mn2576	K_7664	Na5895
		Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
S0	06/05/2019 13:54:08	0.00052	0.00235	0.00002	-0.00009	0.00004	0.00121	-0.00054
S01	06/05/2019 13:57:09	0.00113	0.2151	0.00085	0.01331	0.00243	0.07584	0.35266
S02	06/05/2019 14:00:13	0.06052	0.84302	0.16584	0.05256	0.30673	0.30584	1.4217
S03	06/05/2019 14:03:00	0.37878	5.3434	1.004	0.33932	1.8155	1.9709	9.0845
S04	06/05/2019 14:05:48	0.77914	10.582	1.9959	0.68771	3.6761	3.9822	17.977
S05	06/05/2019 14:08:53					5.5792		
S06	06/05/2019 14:11:54	1.1556	15.323	2.8983	1.0278		5.911	26.913
S07	06/05/2019 14:15:15					7.575		
S08	06/05/2019 14:18:23	1.5776	20.792	3.9021	1.4027		8.0057	36.31
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
ICV	06/05/2019 14:21:54	2473.3	10310	5406.3	5817.7	529.26	9790.4	10038
ICB	06/05/2019 14:24:48	31.013	-0.98306	-0.46696	3.4617	-0.01234	66.281	33.746
ICSA	06/05/2019 14:27:56	259050	258850	105450	263690	17.392	67.285	48.526
ICSAB	06/05/2019 14:31:00	255290	255690	103940	259770	556.78	57.974	42.782
CCV1	06/05/2019 14:33:52	247340	256500	254670	249740	24757	250370	251660
CCB1	06/05/2019 14:36:56	44.572	24.867	21.322	42.21	1.7064	104.44	49.723
PBS1	06/05/2019 14:40:03	18.412	13.973	20.353	12.908	0.00346	33.929	46.61
LCS1	06/05/2019 14:43:11	427.42	10776	233.53	9989.6	33.22	9831	10298
MF9L61	06/05/2019 14:46:16	91782	F 1360900.	112810	24554	6485.5	12994	1473.2
MF9L69	06/05/2019 14:49:24	76217	F 864860.	77209	15408	3122.3	10169	938.11
MF9L70	06/05/2019 14:52:34	44380	F 626660.	56447	10844	2604.1	6637.7	694.83
MF9L74	06/05/2019 14:55:44	64296	F 1177200.	85535	15285	4939.2	8971.3	1210.7
MF9L75	06/05/2019 14:58:53	82518	F 1130600.	86216	18307	3389	11720	1327.7
MF9L76	06/05/2019 15:02:01	57369	F 804130.	65991	13117	3069.7	8346.9	857.62
MF9L77	06/05/2019 15:05:10	73070	F 1126100.	94500	16595	5224.4	10483	1221.5
MF9L78	06/05/2019 15:08:19	67788	F 745530.	76182	14851	4470.9	9786.8	817.42
MF9L79	06/05/2019 15:11:27	92304	F 943900.	98424	18520	5022.3	12458	1059.1
MF9L79S	06/05/2019 15:14:56	90916	908190	97672	17562	5993	11764	905.48
MF9L79D	06/05/2019 15:18:02	104620	F 935530.	104220	20129	5148.6	13677	986.76
MF9L79L	06/05/2019 15:21:10	18249	206220	20559	3771	1048.2	2486.7	210.84
MF9M24	06/05/2019 15:24:13	65069	F 914300.	69017	14356	2664	9133	986.77
MF9L62	06/05/2019 15:27:22	74129	F 781860.	78322	14936	3768.7	9405.1	733.96
MF9L63	06/05/2019 15:30:31	43240	F 1522400.	148470	228830	6175.9	6573	1566.3
MF9L64	06/05/2019 15:33:40	36306	478350	41963	8893.3	1990.9	5686.5	756.57
MF9L65	06/05/2019 15:36:49	68762	F 884080.	66159	14959	3271.7	10302	499.44
MF9L67	06/05/2019 15:39:58	67579	F 793450.	69543	14941	3455.8	12564	503.97
MF9L71	06/05/2019 15:43:06	60499	F 1747500.	127820	23049	6313.1	7939.2	2021
MF9L72	06/05/2019 15:46:15	53547	F 1136200.	83074	18799	3760.1	7120.9	1181.6
MF9L73	06/05/2019 15:49:25	51263	F 765010.	65294	14243	2667	6876	888.75
MF9M33	06/05/2019 15:52:34	123790	F 987830.	110980	22986	4572.5	15064	944.69
PBS2	06/05/2019 15:55:41	29.871	87.401	20.536	23.004	0.43003	3.0587	15.333
LCS2	06/05/2019 15:58:50	388.03	10513	224.04	9699.4	32.485	9465.4	9996.1

Analysis Log

MF9L66	06/05/2019 16:01:56	93468	F 1171300.	112310	23835	9215.5	18255	1864.4
CCV2	06/05/2019 16:05:04	239470	254070	247950	244670	24317	243870	250610
CCB2	06/05/2019 16:08:08	23.024	20.588	17.771	3.4114	1.4953	79.687	32.744

Needs dilution
Dilution results
Not required

Analysis Log

WorkOrder#	Sample #'s	Analytes/Matrix	Prep Batch HBN	Prep Date/Time	Prep Method
1914095	MF9L61, L69, L70, L74-L79, M24	See Below/Soil	239930	05/23/2019 14:51	3050B
1914424	MF9L62, L63, L65, L67, L71-L73, M33	See Below/Soil	239930	05/23/2019 14:51	3050B
1914424	MF9L66	See Below/Soil	240293	06/03/2019 22:50	3050B

Analytes: Al, Ca, Fe, Mg, Mn, K, Na

3050B Conversion Factor: (µg/L from instrument)(Dilution Factor)(0.1 L/1.0 g) = 0.1 µg/g

CALIBRATION AND QC STANDARDS UTILIZED:

	ID #	Book/Page
S0/ICB/CCB	48026	Horizon
S01	47818	Horizon
S02	47890	Horizon
S03	47891	Horizon
S04/CCV	47892	Horizon
S05	47893	Horizon
S06	47895	Horizon
S07	47896	Horizon
S08	47897	Horizon
ICV	47998	Horizon
ICSA	47898	Horizon
ICSAB	47819	Horizon
Bubbler Rinse	48018	Horizon
Internal Standard	46539	Horizon
Rinse	48025	Horizon

SDG # MF9L61
CASE # 48266
HBN # 240880
Analyst: Joanna Sanchez, Rex Bagley
Instrument ID: ICP08
Run ID: k19120
Analysis Method: ISM02.4
Analysis Date: 06/06/2019
Start Time: 8:13
End Time: 10:15

ANALYSIS PARAMETERS:
Pump Rate = 25 rpm
RF Power = 1200 W
Auxiliary Gas = 0.4 L/min
Nebulizer Flow = 0.50 L/min
Coolant Gas Flow = 14 L/min
ASXpress Plus = 3 mL Loop

Dilutions: Samples MF9L63 and MF9L71 were diluted 5x for Ca.
Sample MF9L61 was diluted 4x for Ca.
Samples MF9L74, MF9L75, MF9L77, MF9L79, MF9L79D, MF9L72, MF9M33 and MF9L66 were diluted 3x for Ca.
Samples MF9L69, MF9L70, MF9L76, MF9L78, MF9M24, MF9L62, MF9L65, MF9L67 and MF9L73 were diluted 2x for Ca.

The 5x dilutions were made by mixing 8.0 mL of 3050B Dilutent (Horizon #48131) with 2.0 mL of sample in a 12 mL tube.
The 4x dilutions were made by mixing 7.5 mL of 3050B Dilutent (Horizon #48027) with 2.5 mL of sample in a 12 mL tube.
The 3x dilutions through MF9L79D were made by mixing 6.0 mL of 3050B Dilutent (Horizon #48027) with 3.0 mL of sample in a 12 mL tube.
The 3x dilutions for MF9L72, MF9M33 and MF9L66 were made by mixing 6.0 mL of 3050B Dilutent (Horizon #48131) with 3.0 mL of sample.
The 2x dilutions through MF9L62 were made by mixing 5.0 mL of 3050B Dilutent (Horizon #48027) with 5.0 mL of sample in a 12 mL tube.
The 2x dilutions for MF9L65, MF9L67 and MF9L73 were made by mixing 5.0 mL of 3050B Dilutent (Horizon #48131) with 5.0 mL of sample.

Pipettes: 28051204

Comments: No problems during analysis for the requested analytes.

Rex Bagley poured the samples and made the dilutions. Joanna Sanchez did the rest.

MF9L79L-3x was made by combining 2.0 mL of MF9L79-3x with 8.0 mL of Horizon Standard #48026 in a 12mL tube.

Verified by: Kristie Bitner 06/07/2019

Analysis Log

Run# k19120		Al3082	Ca3179	Fe2598	Mg2790	Mn2576	K_7664	Na5895
		Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
S0	06/06/2019 08:13:39	0.00062	0.00218	0	-0.00006	0.00006	0.0016	-0.00158
S01	06/06/2019 08:16:44	0.00117	0.20915	0.00077	0.01257	0.00241	0.07264	0.33209
S02	06/06/2019 08:19:50	0.05667	0.80618	0.15734	0.04883	0.30141	0.28159	1.3059
S03	06/06/2019 08:22:36	0.35513	5.1265	0.95809	0.31588	1.7948	1.8356	8.5031
S04	06/06/2019 08:25:25	0.71456	9.9906	1.8811	0.63025	3.5699	3.6646	16.944
S05	06/06/2019 08:28:22					5.4674		
S06	06/06/2019 08:31:22	1.051	14.497	2.7192	0.9273		5.5105	25.623
S07	06/06/2019 08:34:42					7.1458		
S08	06/06/2019 08:37:50	1.4368	19.314	3.6596	1.269		7.5311	34.442
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
ICV	06/06/2019 08:41:23	2409.7	10081	5344.6	5722.1	511.71	9716.3	9928.3
ICB	06/06/2019 08:44:19	-2.4666	-3.7063	3.1772	-27.653	-0.19512	67.148	25.742
ICSA	06/06/2019 08:47:27	254070	252590	103070	257070	16.636	65.506	42.114
ICSAB	06/06/2019 08:50:30	251370	249700	102040	254340	536.27	62.998	41.754
CCV3	06/06/2019 08:53:23	242200	245810	246460	241160	23613	246890	248270
CCB3	06/06/2019 08:56:19	-31.684	-0.269	15.774	0.64727	0.03977	59.547	33.501
MF9L61-4x	06/06/2019 08:59:26	21747	352310	27712	5867.3	1568.6	2982.5	360.55
MF9L69-2x	06/06/2019 09:02:37	38130	443160	39094	7767.4	1564	5064.1	479.99
MF9L70-2x	06/06/2019 09:05:47	22096	318630	28365	5376.8	1284.1	3277.7	354.08
MF9L74-3x	06/06/2019 09:08:58	21090	412550	28934	5047.2	1642.8	2895.8	413.52
MF9L75-3x	06/06/2019 09:12:10	26813	391670	28871	6020.3	1108.2	3773.8	441.64
MF9L76-2x	06/06/2019 09:15:21	28684	406680	33142	6496.7	1524.3	4176.4	433.86
MF9L77-3x	06/06/2019 09:18:32	24129	389120	31686	5433.6	1732.7	3390.3	410.65
MF9L78-2x	06/06/2019 09:21:43	33550	367400	37665	7228.1	2177.4	4775.5	410.21
MF9L79-3x	06/06/2019 09:24:53	30092	320310	32780	5996.8	1636.8	4055.7	358.07
MF9L79D-3x	06/06/2019 09:28:04	34143	316950	34762	6565.8	1679.6	4432.7	333.59
MF9L79L-3x	06/06/2019 09:31:16	5835.6	64564	6601.3	1188.5	329.38	759.74	76.841
MF9M24-2x	06/06/2019 09:34:19	32592	466450	34698	7040.6	1316.1	4560.4	506.03
MF9L62-2x	06/06/2019 09:37:30	37822	404060	40318	7560.5	1879.3	4812.1	391.3
MF9L63-5x	06/06/2019 09:40:41	8494.2	334680	31279	44919	1258.7	1259.2	318.94
MF9L65-2x	06/06/2019 09:43:53	35522	460770	34215	7588.3	1669.9	5275.5	270.22
MF9L67-2x	06/06/2019 09:47:04	34287	394720	35680	7512.2	1748.1	6244.2	255.36
MF9L71-5x	06/06/2019 09:50:16	11997	387160	27311	4747.1	1311.3	1510.7	402.4
MF9L72-3x	06/06/2019 09:53:28	17611	408460	28644	6325.8	1256.7	2255.4	391.91
MF9L73-2x	06/06/2019 09:56:39	25284	393700	33217	7159.9	1309.6	3318.6	445.48
MF9M33-3x	06/06/2019 09:59:51	40510	333730	37268	7566.3	1511.2	4820.2	314.87
MF9L66-3x	06/06/2019 10:03:01	30805	420830	38484	7988.5	3072.5	5868.3	615.89
MF9L67	06/06/2019 10:06:12	69328	F 770300.	70552	15106	3445.1	12788	517.1
MF9L71	06/06/2019 10:09:21	63227	F 1772000.	132590	23726	6400.3	8221.3	2070.5
CCV4	06/06/2019 10:12:29	248890	259290	255100	248720	24270	254530	258050
CCB4	06/06/2019 10:15:24	-10.048	16.467	12.039	20.388	0.77905	53.728	37.736

Needs dilution
Dilution results
Not required

Working Standard - 2% S0

2% S0		Description - 2% HNO3 S0/ICB/CCB
Standard: 48026	**Created By:** Rex Bagley	**Amount:** 1 L
MFG: RB	**Create Date:** 06/01/2019 06:06AM	**Expires:** 12/01/2019
MFG Lot: Not Provided	**Verified By:** Joanna C. Sanchez	**Usable:** Yes
Pipette ID: Not Provided	**Verify Date:** 06/01/2019 07:06AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	980 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	20 mL	04/02/2021

Working Standard - ISM02.4 S01

ISM02.4 S01		Description - ISM02.4 S01
Standard: 47818	**Created By:** Oliver Anderson	**Amount:** 500 mL
MFG: OA	**Create Date:** 05/21/2019 11:05AM	**Expires:** 08/30/2019
MFG Lot: Not Provided	**Verified By:** Rex Bagley	**Usable:** Yes
Pipette ID: P-28051204, 279094, ICP-1	**Verify Date:** 05/21/2019 11:05AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	200 ug/L
2	7440-36-0	Antimony	60 ug/L
3	7440-38-2	Arsenic	10 ug/L
4	7440-39-3	Barium	200 ug/L
5	7440-41-7	Beryllium	5 ug/L
6	7440-43-9	Cadmium	5 ug/L
7	7440-70-2	Calcium	5000 ug/L
8	7440-47-3	Chromium	10 ug/L
9	7440-48-4	Cobalt	50 ug/L
10	7440-50-8	Copper	25 ug/L
11	7439-89-6	Iron	100 ug/L
12	7439-92-1	Lead	10 ug/L
13	7439-95-4	Magnesium	5000 ug/L
14	7439-96-5	Manganese	15 ug/L
15	7440-02-0	Nickel	40 ug/L
16	7440-09-7	Potassium	5000 ug/L
17	7782-49-2	Selenium	35 ug/L
18	7440-22-4	Silver	10 ug/L
19	7440-23-5	Sodium	5000 ug/L
20	7440-28-0	Thallium	25 ug/L
21	7440-62-2	Vanadium	50 ug/L
22	7440-66-6	Zinc	60 ug/L
23	7440-32-6	Titanium	25 ug/L
24	REAGENT	Solvent/Reagent	0 ug/L
25	7439-98-7	Molybdenum	10 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	484.825 mL	11/07/2025
44749	ICP-CLP-CRQL	ISM CRQL Solution	ICP-CLP	5 mL	11/14/2019
46792	100 ppm Mo	100 ppm Mo in 2% HNO3	OA-032719-01	0.05 mL	08/30/2019
46793	100 ppm Ti	100 ppm Ti in 2% HNO3	OA-032719-02	0.125 mL	08/30/2019
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	10 mL	04/02/2021

Working Standard - ISM02.4 S02

ISM02.4 S02		Description - ISM02.4 S02
Standard: 47890	**Created By:** Oliver Anderson	**Amount:** 500 mL
MFG: OA	**Create Date:** 05/24/2019 10:05AM	**Expires:** 09/30/2019
MFG Lot: Not Provided	**Verified By:** Rex Bagley	**Usable:** Yes
Pipette ID: P-28051204, 279094	**Verify Date:** 05/24/2019 01:05PM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	20000 ug/L
2	7439-89-6	Iron	20000 ug/L
3	7440-36-0	Antimony	2000 ug/L
4	7440-38-2	Arsenic	800 ug/L
5	7439-98-7	Molybdenum	800 ug/L
6	7782-49-2	Selenium	800 ug/L
7	7440-32-6	Titanium	800 ug/L
8	7440-39-3	Barium	2000 ug/L
9	7440-62-2	Vanadium	2000 ug/L
10	7440-41-7	Beryllium	800 ug/L
11	7440-43-9	Cadmium	800 ug/L
12	7440-48-4	Cobalt	2000 ug/L
13	7440-47-3	Chromium	2000 ug/L
14	7440-50-8	Copper	2000 ug/L
15	7439-96-5	Manganese	2000 ug/L
16	7440-02-0	Nickel	2000 ug/L
17	7439-92-1	Lead	2000 ug/L
18	7440-66-6	Zinc	2000 ug/L
19	7440-28-0	Thallium	800 ug/L
20	7440-70-2	Calcium	20000 ug/L
21	7440-09-7	Potassium	20000 ug/L
22	7439-95-4	Magnesium	20000 ug/L
23	7440-23-5	Sodium	20000 ug/L
24	7440-22-4	Silver	100 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	487.95 mL	11/07/2025
43923	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	0.05 mL	09/30/2019
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	10 mL	04/02/2021
47883	STD-1	ISM02.4 Standard	ICP-CLP	0.4 mL	05/23/2020
47884	STD-2A	ISM02.4 Standard	ICP-CLP	0.2 mL	05/23/2020
47885	STD-2B	ISM02.4 Standard	ICP-CLP	0.2 mL	05/23/2020
47886	STD-2C	ISM02.4 Standard	ICP-CLP	0.2 mL	05/23/2020
47887	IV-STOCK-2	ISM02.4 Standard	ICP-CLP	1 mL	05/23/2020

Working Standard - ISM02.4 S03

ISM02.4 S03			Description - ISM02.4 S03
Standard: 47891	**Created By:** Oliver Anderson	**Amount:** 500 mL	
MFG: OA	**Create Date:** 05/24/2019 10:05AM	**Expires:** 09/30/2019	
MFG Lot: Not Provided	**Verified By:** Rex Bagley	**Usable:** Yes	
Pipette ID: P-28051204, 279094	**Verify Date:** 05/24/2019 01:05PM	**Lab Lot:** ICP-CLP	

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	125000 ug/L
2	7439-89-6	Iron	125000 ug/L
3	7440-36-0	Antimony	12500 ug/L
4	7440-38-2	Arsenic	5000 ug/L
5	7439-98-7	Molybdenum	5000 ug/L
6	7782-49-2	Selenium	5000 ug/L
7	7440-32-6	Titanium	5000 ug/L
8	7440-39-3	Barium	12500 ug/L
9	7440-62-2	Vanadium	12500 ug/L
10	7440-41-7	Beryllium	5000 ug/L
11	7440-43-9	Cadmium	5000 ug/L
12	7440-48-4	Cobalt	12500 ug/L
13	7440-47-3	Chromium	12500 ug/L
14	7440-50-8	Copper	12500 ug/L
15	7439-96-5	Manganese	12500 ug/L
16	7440-02-0	Nickel	12500 ug/L
17	7439-92-1	Lead	12500 ug/L
18	7440-66-6	Zinc	12500 ug/L
19	7440-28-0	Thallium	5000 ug/L
20	7440-70-2	Calcium	125000 ug/L
21	7440-09-7	Potassium	125000 ug/L
22	7439-95-4	Magnesium	125000 ug/L
23	7440-23-5	Sodium	125000 ug/L
24	7440-22-4	Silver	500 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	477.25 mL	11/07/2025
43923	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	0.25 mL	09/30/2019
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	10 mL	04/02/2021
47883	STD-1	ISM02.4 Standard	ICP-CLP	2.5 mL	05/23/2020
47884	STD-2A	ISM02.4 Standard	ICP-CLP	1.25 mL	05/23/2020
47885	STD-2B	ISM02.4 Standard	ICP-CLP	1.25 mL	05/23/2020
47886	STD-2C	ISM02.4 Standard	ICP-CLP	1.25 mL	05/23/2020
47887	IV-STOCK-2	ISM02.4 Standard	ICP-CLP	6.25 mL	05/23/2020

Working Standard - ISM02.4 S04

ISM02.4 S04		Description - ISM02.4 S04
Standard: 47892	**Created By:** Oliver Anderson	**Amount:** 1000 mL
MFG: OA	**Create Date:** 05/24/2019 10:05AM	**Expires:** 09/30/2019
MFG Lot: Not Provided	**Verified By:** Rex Bagley	**Usable:** Yes
Pipette ID: P-28051204, 279094	**Verify Date:** 05/24/2019 01:05PM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	250000 ug/L
2	7439-89-6	Iron	250000 ug/L
3	7440-36-0	Antimony	25000 ug/L
4	7440-38-2	Arsenic	10000 ug/L
5	7439-98-7	Molybdenum	10000 ug/L
6	7782-49-2	Selenium	10000 ug/L
7	7440-32-6	Titanium	10000 ug/L
8	7440-39-3	Barium	25000 ug/L
9	7440-62-2	Vanadium	25000 ug/L
10	7440-41-7	Beryllium	10000 ug/L
11	7440-43-9	Cadmium	10000 ug/L
12	7440-48-4	Cobalt	25000 ug/L
13	7440-47-3	Chromium	25000 ug/L
14	7440-50-8	Copper	25000 ug/L
15	7439-96-5	Manganese	25000 ug/L
16	7440-02-0	Nickel	25000 ug/L
17	7439-92-1	Lead	25000 ug/L
18	7440-66-6	Zinc	25000 ug/L
19	7440-28-0	Thallium	10000 ug/L
20	7440-70-2	Calcium	250000 ug/L
21	7440-09-7	Potassium	250000 ug/L
22	7439-95-4	Magnesium	250000 ug/L
23	7440-23-5	Sodium	250000 ug/L
24	7440-22-4	Silver	1000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	929 mL	11/07/2025
43923	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	1 mL	09/30/2019
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	20 mL	04/02/2021
47883	STD-1	ISM02.4 Standard	ICP-CLP	10 mL	05/23/2020
47884	STD-2A	ISM02.4 Standard	ICP-CLP	5 mL	05/23/2020
47885	STD-2B	ISM02.4 Standard	ICP-CLP	5 mL	05/23/2020
47886	STD-2C	ISM02.4 Standard	ICP-CLP	5 mL	05/23/2020
47887	IV-STOCK-2	ISM02.4 Standard	ICP-CLP	25 mL	05/23/2020

Working Standard - ISM02.4 S05

ISM02.4 S05		Description - ISM02.4 S05
Standard: 47893	**Created By:** Oliver Anderson	**Amount:** 500 mL
MFG: OA	**Create Date:** 05/24/2019 10:05AM	**Expires:** 09/30/2019
MFG Lot: Not Provided	**Verified By:** Rex Bagley	**Usable:** Yes
Pipette ID: P-28051204, 279094	**Verify Date:** 05/24/2019 01:05PM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7440-36-0	Antimony	37500 ug/L
2	7440-38-2	Arsenic	15000 ug/L
3	7439-98-7	Molybdenum	15000 ug/L
4	7782-49-2	Selenium	15000 ug/L
5	7440-32-6	Titanium	15000 ug/L
6	7440-39-3	Barium	37500 ug/L
7	7440-62-2	Vanadium	37500 ug/L
8	7440-41-7	Beryllium	15000 ug/L
9	7440-43-9	Cadmium	15000 ug/L
10	7440-48-4	Cobalt	37500 ug/L
11	7440-47-3	Chromium	37500 ug/L
12	7440-50-8	Copper	37500 ug/L
13	7439-96-5	Manganese	37500 ug/L
14	7440-02-0	Nickel	37500 ug/L
15	7439-92-1	Lead	37500 ug/L
16	7440-66-6	Zinc	37500 ug/L
17	7440-28-0	Thallium	15000 ug/L
18	7440-22-4	Silver	1500 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	478 mL	11/07/2025
43923	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	0.75 mL	09/30/2019
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	10 mL	04/02/2021
47884	STD-2A	ISM02.4 Standard	ICP-CLP	3.75 mL	05/23/2020
47885	STD-2B	ISM02.4 Standard	ICP-CLP	3.75 mL	05/23/2020
47886	STD-2C	ISM02.4 Standard	ICP-CLP	3.75 mL	05/23/2020

Working Standard - ISM02.4 S06

ISM02.4 S06 — **Description - ISM02.4 S06**

Standard: 47895
MFG: OA
MFG Lot: Not Provided
Pipette ID: P-28051204

Created By: Oliver Anderson
Create Date: 05/24/2019 10:05AM
Verified By: Rex Bagley
Verify Date: 05/24/2019 01:05PM

Amount: 500 mL
Expires: 11/23/2019
Usable: Yes
Lab Lot: ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	375000 ug/L
2	7439-89-6	Iron	375000 ug/L
3	7440-70-2	Calcium	375000 ug/L
4	7440-09-7	Potassium	375000 ug/L
5	7439-95-4	Magnesium	375000 ug/L
6	7440-23-5	Sodium	375000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	463.75 mL	11/07/2025
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	10 mL	04/02/2021
47883	STD-1	ISM02.4 Standard	ICP-CLP	7.5 mL	05/23/2020
47887	IV-STOCK-2	ISM02.4 Standard	ICP-CLP	18.75 mL	05/23/2020

Working Standard - ISM02.4 S07

ISM02.4 S07		Description - ISM02.4 S07
Standard: 47896	**Created By:** Oliver Anderson	**Amount:** 500 mL
MFG: OA	**Create Date:** 05/24/2019 10:05AM	**Expires:** 09/30/2019
MFG Lot: Not Provided	**Verified By:** Rex Bagley	**Usable:** Yes
Pipette ID: P-28051204, 279094	**Verify Date:** 05/24/2019 01:05PM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7440-36-0	Antimony	50000 ug/L
2	7440-38-2	Arsenic	20000 ug/L
3	7439-98-7	Molybdenum	20000 ug/L
4	7782-49-2	Selenium	20000 ug/L
5	7440-32-6	Titanium	20000 ug/L
6	7440-39-3	Barium	50000 ug/L
7	7440-62-2	Vanadium	50000 ug/L
8	7440-41-7	Beryllium	20000 ug/L
9	7440-43-9	Cadmium	20000 ug/L
10	7440-48-4	Cobalt	50000 ug/L
11	7440-47-3	Chromium	50000 ug/L
12	7440-50-8	Copper	50000 ug/L
13	7439-96-5	Manganese	50000 ug/L
14	7440-02-0	Nickel	50000 ug/L
15	7439-92-1	Lead	50000 ug/L
16	7440-66-6	Zinc	50000 ug/L
17	7440-28-0	Thallium	20000 ug/L
18	7440-22-4	Silver	2000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	474 mL	11/07/2025
43923	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	1 mL	09/30/2019
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	10 mL	04/02/2021
47884	STD-2A	ISM02.4 Standard	ICP-CLP	5 mL	05/23/2020
47885	STD-2B	ISM02.4 Standard	ICP-CLP	5 mL	05/23/2020
47886	STD-2C	ISM02.4 Standard	ICP-CLP	5 mL	05/23/2020

Working Standard - ISM02.4 S08

ISM02.4 S08		Description - ISM02.4 S08
Standard: 47897	**Created By:** Oliver Anderson	**Amount:** 500 mL
MFG: OA	**Create Date:** 05/24/2019 10:05AM	**Expires:** 11/23/2019
MFG Lot: Not Provided	**Verified By:** Rex Bagley	**Usable:** Yes
Pipette ID: P-28051204	**Verify Date:** 05/24/2019 01:05PM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	500000 ug/L
2	7439-89-6	Iron	500000 ug/L
3	7440-70-2	Calcium	500000 ug/L
4	7440-09-7	Potassium	500000 ug/L
5	7439-95-4	Magnesium	500000 ug/L
6	7440-23-5	Sodium	500000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	455 mL	11/07/2025
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	10 mL	04/02/2021
47883	STD-1	ISM02.4 Standard	ICP-CLP	10 mL	05/23/2020
47887	IV-STOCK-2	ISM02.4 Standard	ICP-CLP	25 mL	05/23/2020

Working Standard - ISM ICP ICV

ISM ICP ICV — **Description - ISM02.4 ICP ICV**

Standard: 47998	**Created By:** Oliver Anderson	**Amount:** 500 mL
MFG: OA	**Create Date:** 05/30/2019 11:05AM	**Expires:** 11/29/2019
MFG Lot: ICV-1(0307)	**Verified By:** Rex Bagley	**Usable:** Yes
Pipette ID: P-28051204	**Verify Date:** 05/31/2019 07:05AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	2521 ug/L
2	7440-36-0	Antimony	994 ug/L
3	7440-38-2	Arsenic	999 ug/L
4	7440-39-3	Barium	497 ug/L
5	7440-41-7	Beryllium	495 ug/L
6	7440-43-9	Cadmium	496 ug/L
7	7440-70-2	Calcium	10026 ug/L
8	7440-47-3	Chromium	490 ug/L
9	7440-48-4	Cobalt	499 ug/L
10	7440-50-8	Copper	492 ug/L
11	7439-89-6	Iron	5082 ug/L
12	7439-92-1	Lead	1002 ug/L
13	7439-95-4	Magnesium	6074 ug/L
14	7439-96-5	Manganese	499 ug/L
15	7440-02-0	Nickel	503 ug/L
16	7440-09-7	Potassium	10021 ug/L
17	7782-49-2	Selenium	1029 ug/L
18	7440-22-4	Silver	501 ug/L
19	7440-23-5	Sodium	10097 ug/L
20	7440-28-0	Thallium	1028 ug/L
21	7440-62-2	Vanadium	501 ug/L
22	7440-66-6	Zinc	1025 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	440 mL	11/07/2025
25735	CLPICP-ICV1	CLP-ICP/ICPMS-ICV-1	ICP-CLP	50 mL	10/21/2024
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	10 mL	04/02/2021

Working Standard - ISM02.4 ICSA

ISM02.4 ICSA — **Description - ISM02.4 ICP-AES ICSA**

Standard:	47898	**Created By:**	Oliver Anderson	**Amount:**	500 mL
MFG:	OA	**Create Date:**	05/24/2019 10:05AM	**Expires:**	11/23/2019
MFG Lot:	Not Provided	**Verified By:**	Rex Bagley	**Usable:**	Yes
Pipette ID:	P-28051204	**Verify Date:**	05/24/2019 01:05PM	**Lab Lot:**	ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	254900 ug/L
2	7440-39-3	Barium	6 ug/L
3	7440-43-9	Cadmium	1 ug/L
4	7440-70-2	Calcium	244500 ug/L
5	7440-47-3	Chromium	52 ug/L
6	7440-50-8	Copper	2 ug/L
7	7439-89-6	Iron	100700 ug/L
8	7439-95-4	Magnesium	255400 ug/L
9	7439-96-5	Manganese	7 ug/L
10	7440-02-0	Nickel	2 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	440 mL	11/07/2025
42054	CLPICP-ICS-A	CLP-ICP-ICS-Part A	ICP-CLP	50 mL	05/11/2028
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	10 mL	04/02/2021

Working Standard - ISM ICSAB

ISM ICSAB — **Description - ISM02.4 ICSAB**

Standard:	47819	**Created By:**	Oliver Anderson	**Amount:**	500 mL
MFG:	OA	**Create Date:**	05/21/2019 11:05AM	**Expires:**	11/21/2019
MFG Lot:	ICSB-(1211/0710)	**Verified By:**	Rex Bagley	**Usable:**	Yes
Pipette ID:	P-28051204	**Verify Date:**	05/21/2019 11:05AM	**Lab Lot:**	ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	246800 ug/L
2	7440-39-3	Barium	537 ug/L
3	7440-43-9	Cadmium	972 ug/L
4	7440-70-2	Calcium	234900 ug/L
5	7440-47-3	Chromium	542 ug/L
6	7440-50-8	Copper	511 ug/L
7	7439-89-6	Iron	99320 ug/L
8	7439-95-4	Magnesium	248000 ug/L
9	7439-96-5	Manganese	507 ug/L
10	7440-02-0	Nickel	954 ug/L
11	7440-36-0	Antimony	618 ug/L
12	7440-38-2	Arsenic	104 ug/L
13	7440-41-7	Beryllium	495 ug/L
14	7440-48-4	Cobalt	476 ug/L
15	7439-92-1	Lead	49 ug/L
16	7782-49-2	Selenium	46 ug/L
17	7440-22-4	Silver	201 ug/L
18	7440-28-0	Thallium	108 ug/L
19	7440-62-2	Vanadium	491 ug/L
20	7440-66-6	Zinc	952 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	390 mL	11/07/2025
25742	CLPICP-ICS-B	CLP-ICP-ICS-Part B	ICP-CLP	50 mL	10/21/2024
42054	CLPICP-ICS-A	CLP-ICP-ICS-Part A	ICP-CLP	50 mL	05/11/2028
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	10 mL	04/02/2021

Working Standard - 2% ScYIS

2% ScYIS		Description - 2% HNO3 Sc/Y Internal Std
Standard: 46539	**Created By:** Rex Bagley	**Amount:** 2 L
MFG: RB	**Create Date:** 03/12/2019 01:03PM	**Expires:** 08/30/2019
MFG Lot: Not Provided	**Verified By:** Oliver Anderson	**Usable:** Yes
Pipette ID: P-279094	**Verify Date:** 03/12/2019 02:03PM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/mL
2	7440-65-5	Yttrium	2.5 ug/mL
3	7440-20-2	Scandium	6 ug/mL

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	1958.3 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
43334	Y Stock	10,000 ug/mL Y Stock	SPEX Y 10,000 ug/mL	0.5 mL	08/30/2019
45053	Sc Stock	10,000 ug/mL Sc Stock	IV Sc 10,000 ug/mL	1.2 mL	12/04/2019
45673	HNO3	Concentrated Nitric Acid	HNO3 (205793)	40 mL	01/16/2020

Working Standard - 2% Rinse

2% Rinse		Description - 2% HNO3 Rinse 2L
Standard: 48018	**Created By:** Oliver Anderson	**Amount:** 2 L
MFG: OA	**Create Date:** 05/30/2019 05:05PM	**Expires:** 11/30/2020
MFG Lot: Not Provided	**Verified By:** Rex Bagley	**Usable:** Yes
Pipette ID: Not Provided	**Verify Date:** 05/31/2019 07:05AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	1960 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	40 mL	04/02/2021

Working Standard - 2% Rinse 10L

2% Rinse 10L		Description - 2% HNO3 Rinse
Standard: 48025	**Created By:** Rex Bagley	**Amount:** 10 L
MFG: RB	**Create Date:** 06/01/2019 06:06AM	**Expires:** 12/01/2019
MFG Lot: Not Provided	**Verified By:** Joanna C. Sanchez	**Usable:** Yes
Pipette ID: Not Provided	**Verify Date:** 06/01/2019 06:06AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	9800 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	200 mL	04/02/2021

Working Standard - 3050B Dilute

3050B Dilute		Description - Dilutent- 5% HNO3/10% HCl
Standard: 48027	**Created By:** Rex Bagley	**Amount:** 500 mL
MFG: RB	**Create Date:** 06/01/2019 10:06AM	**Expires:** 12/01/2019
MFG Lot: Not Provided	**Verified By:** Joanna C. Sanchez	**Usable:** Yes
Pipette ID: Not Provided	**Verify Date:** 06/01/2019 10:06AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	425 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	25 mL	04/02/2021
47530	HCl	concentrated hydrochloric acid	HCl (58225)	50 mL	03/11/2029

Working Standard - 3050B Dilute

3050B Dilute		Description - Dilutent- 5% HNO3/10% HCl
Standard: 48131	**Created By:** Rex Bagley	**Amount:** 500 mL
MFG: RB	**Create Date:** 06/06/2019 08:06AM	**Expires:** 12/06/2019
MFG Lot: Not Provided	**Verified By:** Joanna C. Sanchez	**Usable:** Yes
Pipette ID: Not Provided	**Verify Date:** 06/06/2019 09:06AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	425 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	25 mL	04/02/2021
47530	HCl	concentrated hydrochloric acid	HCl (58225)	50 mL	03/11/2029

STANDARD REPORT

Constituent

Stock Standard - CLPICP-ICV1

CLPICP-ICV1 — **Description - CLP-ICP/ICPMS-ICV-1**

Standard: 25735
MFG: QATS Laboratory
MFG Lot: ICV1-0307
Part ID: Not Provided

Created By: Joanna C. Sanchez
Create Date: 10/21/2014 09:10AM

Amount: 100 mL
Expires: 10/21/2024
Usable: Yes
Lab Lot: ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	25210 ug/L
2	7440-36-0	Antimony	9940 ug/L
3	7440-38-2	Arsenic	9990 ug/L
4	7440-39-3	Barium	4970 ug/L
5	7440-41-7	Beryllium	4950 ug/L
6	7440-43-9	Cadmium	4960 ug/L
7	7440-70-2	Calcium	100260 ug/L
8	7440-47-3	Chromium	4900 ug/L
9	7440-48-4	Cobalt	4990 ug/L
10	7440-50-8	Copper	4920 ug/L
11	7439-89-6	Iron	50820 ug/L
12	7439-92-1	Lead	10020 ug/L
13	7439-95-4	Magnesium	60740 ug/L
14	7439-96-5	Manganese	4990 ug/L
15	7440-02-0	Nickel	5030 ug/L
16	7440-09-7	Potassium	100210 ug/L
17	7782-49-2	Selenium	10290 ug/L
18	7440-22-4	Silver	5010 ug/L
19	7440-23-5	Sodium	100970 ug/L
20	7440-28-0	Thallium	10280 ug/L
21	7440-62-2	Vanadium	5010 ug/L
22	7440-66-6	Zinc	10250 ug/L

STANDARD REPORT

Constituent

Stock Standard - CLPICP-ICS-B

CLPICP-ICS-B		Description - CLP-ICP-ICS-Part B
Standard: 25742	**Created By:** Joanna C. Sanchez	**Amount:** 100 mL
MFG: QATS Laboratory	**Create Date:** 10/21/2014 10:10AM	**Expires:** 10/21/2024
MFG Lot: ICSB-0710		**Usable:** Yes
Part ID: Not Provided		**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	-81000 ug/L
2	7440-36-0	Antimony	6180 ug/L
3	7440-38-2	Arsenic	1040 ug/L
4	7440-39-3	Barium	5310 ug/L
5	7440-41-7	Beryllium	4950 ug/L
6	7440-43-9	Cadmium	9710 ug/L
7	7440-70-2	Calcium	-96000 ug/L
8	7440-47-3	Chromium	4900 ug/L
9	7440-48-4	Cobalt	4760 ug/L
10	7440-50-8	Copper	5090 ug/L
11	7439-89-6	Iron	-13800 ug/L
12	7439-92-1	Lead	490 ug/L
13	7439-95-4	Magnesium	-74000 ug/L
14	7439-96-5	Manganese	5000 ug/L
15	7440-02-0	Nickel	9520 ug/L
16	7782-49-2	Selenium	460 ug/L
17	7440-22-4	Silver	2010 ug/L
18	7440-28-0	Thallium	1080 ug/L
19	7440-62-2	Vanadium	4910 ug/L
20	7440-66-6	Zinc	9520 ug/L

STANDARD REPORT

Constituent

Stock Standard - REAGENT

REAGENT			Description - Solvent/Reagent
Standard: 32254	**Created By:** Neil A. Edwards	**Amount:** 1 L	
MFG: NA	**Create Date:** 01/01/2016 12:01AM	**Expires:** 01/01/2025	
MFG Lot: NA		**Usable:** Yes	
Part ID: NA		**Lab Lot:** REAGENT	

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	1 mg/L

STANDARD REPORT

Constituent

Stock Standard - CLPICP-ICS-A

CLPICP-ICS-A		Description - CLP-ICP-ICS-Part A
Standard: 42054	**Created By:** Joanna C. Sanchez	**Amount:** 100 mL
MFG: QATS Laboratory	**Create Date:** 05/11/2018 12:05AM	**Expires:** 05/11/2028
MFG Lot: ICSA-1211	**Verified By:** Jacob Knudson	**Usable:** Yes
Part ID: Not Provided	**Verify Date:** 05/31/2018 10:05AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	2549000 ug/L
2	7440-39-3	Barium	60 ug/L
3	7440-43-9	Cadmium	10 ug/L
4	7440-70-2	Calcium	2445000 ug/L
5	7440-47-3	Chromium	520 ug/L
6	7440-50-8	Copper	20 ug/L
7	7439-89-6	Iron	1007000 ug/L
8	7439-95-4	Magnesium	2554000 ug/L
9	7439-96-5	Manganese	70 ug/L
10	7440-02-0	Nickel	20 ug/L

Stock Standard - Mo Low Stock

Mo Low Stock		**Description - 1,000 ug/mL Mo Stock**
Standard: 43323	**Created By:** Joanna C. Sanchez	**Amount:** 30 mL
MFG: SPEX CertiPrep	**Create Date:** 08/20/2018 12:08AM	**Expires:** 08/30/2019
MFG Lot: 23-122MOM	**Verified By:** Oliver Anderson	**Usable:** Yes
Part ID: PLMO9-2M	**Verify Date:** 08/30/2018 12:08PM	**Lab Lot:** SPEX Mo 1,000 ug/mL

Pos.	Analyte	Name	Concentration
1	7439-98-7	Molybdenum	1000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Ti Stock Low

Ti Stock Low			Description - 1,000 ug/mL Ti Stock
Standard: 43331	**Created By:** Joanna C. Sanchez	**Amount:** 30 mL	
MFG: SPEX CertiPrep	**Create Date:** 08/20/2018 12:08AM	**Expires:** 08/30/2019	
MFG Lot: 23-110TIM	**Verified By:** Oliver Anderson	**Usable:** Yes	
Part ID: PLTI9-2M	**Verify Date:** 08/30/2018 01:08PM	**Lab Lot:** SPEX Ti 1,000 ug/mL	

Pos.	Analyte	Name	Concentration
1	7440-32-6	Titanium	1000 ug/mL

Stock Standard - Y Stock

Y Stock			**Description - 10,000 ug/mL Y Stock**
Standard: 43334	**Created By:** Joanna C. Sanchez	**Amount:** 125 mL	
MFG: SPEX CertiPrep	**Create Date:** 08/20/2018 12:08AM	**Expires:** 08/30/2019	
MFG Lot: AP17-110YY	**Verified By:** Oliver Anderson	**Usable:** Yes	
Part ID: PLY2-3Y	**Verify Date:** 08/30/2018 01:08PM	**Lab Lot:** SPEX Y 10,000 ug/mL	

Pos.	Analyte	Name	Concentration
1	7440-65-5	Yttrium	10000 ug/mL

Stock Standard - Ag Stock

Ag Stock			Description - 1,000 ug/mL Ag Stock
Standard: 43923	**Created By:** Joanna C. Sanchez	**Amount:** 125 mL	
MFG: Spex CertiPrep	**Create Date:** 09/28/2018 12:09AM	**Expires:** 09/30/2019	
MFG Lot: 23-165AGY	**Verified By:** Rex Bagley	**Usable:** Yes	
Part ID: PLAG2-2Y	**Verify Date:** 10/02/2018 03:10PM	**Lab Lot:** Ag 1,000 ug/mL	

Pos.	Analyte	Name	Concentration
1	7440-22-4	Silver	1000 ug/mL

Stock Standard - ICP-CLP-CRQL

ICP-CLP-CRQL		Description - ISM CRQL Solution
Standard: 44749	**Created By:** Rex Bagley	**Amount:** 125 mL
MFG: Inorganic Ventures	**Create Date:** 11/14/2018 09:11AM	**Expires:** 11/14/2019
MFG Lot: N2-MEB666942	**Verified By:** Joanna C. Sanchez	**Usable:** Yes
Part ID: CLP-AES-CRQL-2	**Verify Date:** 06/06/2019 08:06AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	20 ug/mL
2	7440-36-0	Antimony	6 ug/mL
3	7440-38-2	Arsenic	1 ug/mL
4	7440-39-3	Barium	20 ug/mL
5	7440-41-7	Beryllium	0.5 ug/mL
6	7440-43-9	Cadmium	0.5 ug/mL
7	7440-70-2	Calcium	500 ug/mL
8	7440-47-3	Chromium	1 ug/mL
9	7440-48-4	Cobalt	5 ug/mL
10	7440-50-8	Copper	2.5 ug/mL
11	7439-89-6	Iron	10 ug/mL
12	7439-92-1	Lead	1 ug/mL
13	7439-95-4	Magnesium	500 ug/mL
14	7439-96-5	Manganese	1.5 ug/mL
15	7440-02-0	Nickel	4 ug/mL
16	7440-09-7	Potassium	500 ug/mL
17	7782-49-2	Selenium	3.5 ug/mL
18	7440-22-4	Silver	1 ug/mL
19	7440-23-5	Sodium	500 ug/mL
20	7440-28-0	Thallium	2.5 ug/mL
21	7440-62-2	Vanadium	5 ug/mL
22	7440-66-6	Zinc	6 ug/mL

Stock Standard - Sc Stock

Sc Stock		**Description - 10,000 ug/mL Sc Stock**
Standard: 45053	**Created By:** Rex Bagley	**Amount:** 125 mL
MFG: Inorganic Ventures	**Create Date:** 10/11/2018 12:10AM	**Expires:** 12/04/2019
MFG Lot: N2-SC665349	**Verified By:** Joanna C. Sanchez	**Usable:** Yes
Part ID: CGSC10-1	**Verify Date:** 12/05/2018 02:12PM	**Lab Lot:** IV Sc 10,000 ug/mL

Pos.	Analyte	Name	Concentration
1	7440-20-2	Scandium	10000 ug/mL

STANDARD REPORT

Constituent

Working Standard - 2% S0

2% S0			Description - 2% HNO3 S0/ICB/CCB
Standard: 46331	**Created By:** Oliver Anderson	**Amount:** 1 L	
MFG: OA	**Create Date:** 03/04/2019 03:03PM	**Expires:** 09/04/2019	
MFG Lot: Not Provided	**Verified By:** Rex Bagley	**Usable:** Yes	
Pipette ID: Not Provided	**Verify Date:** 03/05/2019 09:03AM	**Lab Lot:** ICP-CLP	

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	980 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
45673	HNO3	Concentrated Nitric Acid	HNO3 (205793)	20 mL	01/16/2020

STANDARD REPORT

Constituent

Working Standard - 100 ppm Mo

100 ppm Mo			Description - 100 ppm Mo in 2% HNO3
Standard: 46792	**Created By:** Oliver Anderson	**Amount:** 10 mL	
MFG: OA	**Create Date:** 03/27/2019 11:03AM	**Expires:** 08/30/2019	
MFG Lot: Not Provided	**Verified By:** Rex Bagley	**Usable:** Yes	
Pipette ID: P-28051204, 279094	**Verify Date:** 03/27/2019 11:03AM	**Lab Lot:** OA-032719-01	

Pos.	Analyte	Name	Concentration
1	7439-98-7	Molybdenum	100 ug/mL
2	REAGENT	Solvent/Reagent	0 ug/mL

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
43323	Mo Low Stock	1,000 ug/mL Mo Stock	SPEX Mo 1,000 ug/mL	1 mL	08/30/2019
46331	2% S0	2% HNO3 S0/ICB/CCB	ICP-CLP	9 mL	09/04/2019

STANDARD REPORT

Constituent

Working Standard - 100 ppm Ti

100 ppm Ti		Description - 100 ppm Ti in 2% HNO3
Standard: 46793	**Created By:** Oliver Anderson	**Amount:** 10 mL
MFG: OA	**Create Date:** 03/27/2019 11:03AM	**Expires:** 08/30/2019
MFG Lot: Not Provided	**Verified By:** Rex Bagley	**Usable:** Yes
Pipette ID: P-ICP-10S, 279094	**Verify Date:** 03/27/2019 11:03AM	**Lab Lot:** OA-032719-02

Pos.	Analyte	Name	Concentration
1	7440-32-6	Titanium	100 ug/mL
2	REAGENT	Solvent/Reagent	0 ug/mL

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
43331	Ti Stock Low	1,000 ug/mL Ti Stock	SPEX Ti 1,000 ug/mL	1 mL	08/30/2019
46331	2% S0	2% HNO3 S0/ICB/CCB	ICP-CLP	9 mL	09/04/2019

STANDARD REPORT

Constituent

Stock Standard - STD-1

STD-1 — **Description - ISM02.4 Standard**

Standard:	47883	**Created By:**	Oliver Anderson	**Amount:**	250 mL
MFG:	Inorganic Ventures	**Create Date:**	05/03/2018 12:05AM	**Expires:**	05/23/2020
MFG Lot:	N2-MEB667565	**Verified By:**	Rex Bagley	**Usable:**	Yes
Part ID:	ALSUT-STD-1	**Verify Date:**	05/24/2019 09:05AM	**Lab Lot:**	ICP-CLP

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	25000 ug/mL
2	7439-89-6	Iron	25000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - STD-2A

STD-2A		Description - ISM02.4 Standard
Standard: 47884	**Created By:** Oliver Anderson	**Amount:** 250 mL
MFG: Inorganic Ventures	**Create Date:** 05/03/2018 12:05AM	**Expires:** 05/23/2020
MFG Lot: N2-MEB667566	**Verified By:** Rex Bagley	**Usable:** Yes
Part ID: ALSUT-STD-2A	**Verify Date:** 05/24/2019 09:05AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7440-36-0	Antimony	5000 ug/mL
2	7440-38-2	Arsenic	2000 ug/mL
3	7439-98-7	Molybdenum	2000 ug/mL
4	7782-49-2	Selenium	2000 ug/mL
5	7440-32-6	Titanium	2000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - STD-2B

STD-2B		Description - ISM02.4 Standard
Standard: 47885	**Created By:** Oliver Anderson	**Amount:** 250 mL
MFG: Inorganic Ventures	**Create Date:** 05/03/2018 12:05AM	**Expires:** 05/23/2020
MFG Lot: N2-MEB667567	**Verified By:** Rex Bagley	**Usable:** Yes
Part ID: ALSUT-STD-2B	**Verify Date:** 05/24/2019 09:05AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7440-39-3	Barium	5000 ug/mL
2	7440-62-2	Vanadium	5000 ug/mL
3	7440-41-7	Beryllium	2000 ug/mL
4	7440-43-9	Cadmium	2000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - STD-2C

STD-2C		Description - ISM02.4 Standard
Standard: 47886	**Created By:** Oliver Anderson	**Amount:** 250 mL
MFG: Inorganic Ventures	**Create Date:** 05/03/2018 12:05AM	**Expires:** 05/23/2020
MFG Lot: N2-MEB667568	**Verified By:** Rex Bagley	**Usable:** Yes
Part ID: ALSUT-STD-2C	**Verify Date:** 05/24/2019 09:05AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7440-48-4	Cobalt	5000 ug/mL
2	7440-47-3	Chromium	5000 ug/mL
3	7440-50-8	Copper	5000 ug/mL
4	7439-96-5	Manganese	5000 ug/mL
5	7440-02-0	Nickel	5000 ug/mL
6	7439-92-1	Lead	5000 ug/mL
7	7440-66-6	Zinc	5000 ug/mL
8	7440-28-0	Thallium	2000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - IV-STOCK-2

IV-STOCK-2		Description - ISM02.4 Standard
Standard: 47887	**Created By:** Oliver Anderson	**Amount:** 500 mL
MFG: Inorganic Ventures	**Create Date:** 05/03/2018 12:05AM	**Expires:** 05/23/2020
MFG Lot: M2-MEB663066	**Verified By:** Rex Bagley	**Usable:** Yes
Part ID: IV-STOCK-2	**Verify Date:** 05/24/2019 09:05AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7440-70-2	Calcium	10000 ug/mL
2	7440-09-7	Potassium	10000 ug/mL
3	7439-95-4	Magnesium	10000 ug/mL
4	7440-23-5	Sodium	10000 ug/mL

STANDARD REPORT

Constituent

Solvent Standard - ASTM H2O

ASTM H2O		Description - ASTM Type II Water
Standard: 109	**Created By:** ALS Support (Lims)	**Amount:** 1000 L
MFG: DCL In House	**Create Date:** 10/06/2005 09:10AM	**Expires:** 11/07/2025
MFG Lot: Not Provided		**Usable:** Yes
Part ID: Not Provided		**Lab Lot:** LAB 109

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - HNO3

HNO3		Description - Concentrated Nitric Acid
Standard: 45673	**Created By:** Rex Bagley	**Amount:** 2.5 L
MFG: JT Baker	**Create Date:** 12/10/2018 12:12AM	**Expires:** 01/16/2020
MFG Lot: 0000205793		**Usable:** Yes
Part ID: Not Provided		**Lab Lot:** HNO3 (205793)

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - HNO3

HNO3		Description - Concentrated Nitric Acid
Standard: 46909	**Created By:** Emilee Sandoval	**Amount:** 2.5 L
MFG: JT Baker	**Create Date:** 04/02/2019 12:04PM	**Expires:** 04/02/2021
MFG Lot: 0000213500		**Usable:** Yes
Part ID: Not Provided		**Lab Lot:** HNO3 (213500)

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - HCl

HCl		Description - concentrated hydrochloric acid
Standard: 47530	**Created By:** Rex Bagley	**Amount:** 2 L
MFG: EMD	**Create Date:** 03/11/2019 12:03AM	**Expires:** 03/11/2029
MFG Lot: 58225		**Usable:** Yes
Part ID: Not Provided		**Lab Lot:** HCl (58225)

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L61

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095001

% Solids: 59.7 Date Received: 05/15/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.27	J*	06/04/2019	17:19
7440-38-2	Arsenic	6.9		06/04/2019	17:19
7440-39-3	Barium	97.5		06/04/2019	17:19
7440-41-7	Beryllium	0.74	J	06/04/2019	17:19
7440-43-9	Cadmium	0.43	J	06/04/2019	17:19
7440-70-2	Calcium				
7440-47-3	Chromium	18.8		06/04/2019	17:19
7440-48-4	Cobalt	7.6		06/04/2019	17:19
7440-50-8	Copper	20.3	*	06/04/2019	17:19
7439-89-6	Iron				
7439-92-1	Lead	68.6		06/04/2019	17:19
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	20.3	*	06/04/2019	17:19
7440-09-7	Potassium				
7782-49-2	Selenium	0.40	J	06/04/2019	17:19
7440-22-4	Silver	0.24	J	06/04/2019	17:19
7440-23-5	Sodium				
7440-28-0	Thallium	0.075	J	06/04/2019	17:19
7440-62-2	Vanadium	31.1		06/04/2019	17:19
7440-66-6	Zinc	93.3	*	06/04/2019	17:19

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L62

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424001

% Solids: 51.7 Date Received: 05/18/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.26	J*	06/04/2019	18:11
7440-38-2	Arsenic	6.0		06/04/2019	18:11
7440-39-3	Barium	108		06/04/2019	18:11
7440-41-7	Beryllium	0.94	J	06/04/2019	18:11
7440-43-9	Cadmium	0.31	J	06/04/2019	18:11
7440-70-2	Calcium				
7440-47-3	Chromium	13.0		06/04/2019	18:11
7440-48-4	Cobalt	7.5		06/04/2019	18:11
7440-50-8	Copper	17.3	*	06/04/2019	18:11
7439-89-6	Iron				
7439-92-1	Lead	27.7		06/04/2019	18:11
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	20.5	*	06/04/2019	18:11
7440-09-7	Potassium				
7782-49-2	Selenium	0.50	J	06/04/2019	18:11
7440-22-4	Silver	0.076	J	06/04/2019	18:11
7440-23-5	Sodium				
7440-28-0	Thallium	0.11	J	06/04/2019	18:11
7440-62-2	Vanadium	40.0		06/04/2019	18:11
7440-66-6	Zinc	64.6	*	06/04/2019	18:11

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

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L63

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424002

% Solids: 70.8 Date Received: 05/18/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.16	J*	06/04/2019	18:16
7440-38-2	Arsenic	2.9		06/04/2019	18:16
7440-39-3	Barium	41.4		06/04/2019	18:16
7440-41-7	Beryllium	0.38	J	06/04/2019	18:16
7440-43-9	Cadmium	0.25	J	06/04/2019	18:16
7440-70-2	Calcium				
7440-47-3	Chromium	25.3		06/04/2019	18:16
7440-48-4	Cobalt	4.1		06/04/2019	18:16
7440-50-8	Copper	8.7	*	06/04/2019	18:16
7439-89-6	Iron				
7439-92-1	Lead	20.0		06/04/2019	18:16
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	55.9	*	06/04/2019	18:16
7440-09-7	Potassium				
7782-49-2	Selenium	0.35	J	06/04/2019	18:16
7440-22-4	Silver	0.024	J	06/04/2019	18:16
7440-23-5	Sodium				
7440-28-0	Thallium	0.024	J	06/04/2019	18:16
7440-62-2	Vanadium	10.3		06/04/2019	18:16
7440-66-6	Zinc	44.0	*	06/04/2019	18:16

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

Comments:

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EPA SAMPLE NO.
MF9L64

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424003

% Solids: 39.8 Date Received: 05/18/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.57	J*	06/04/2019	18:21
7440-38-2	Arsenic	5.5		06/04/2019	18:21
7440-39-3	Barium	106		06/04/2019	18:21
7440-41-7	Beryllium	0.76	J	06/04/2019	18:21
7440-43-9	Cadmium	0.43	J	06/04/2019	18:21
7440-70-2	Calcium				
7440-47-3	Chromium	23.6		06/04/2019	18:21
7440-48-4	Cobalt	6.5		06/04/2019	18:21
7440-50-8	Copper	28.8	*	06/04/2019	18:21
7439-89-6	Iron				
7439-92-1	Lead	64.1		06/04/2019	18:21
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	20.9	*	06/04/2019	18:21
7440-09-7	Potassium				
7782-49-2	Selenium	0.86	J	06/04/2019	18:21
7440-22-4	Silver	0.063	J	06/04/2019	18:21
7440-23-5	Sodium				
7440-28-0	Thallium	0.077	J	06/04/2019	18:21
7440-62-2	Vanadium	27.7		06/04/2019	18:21
7440-66-6	Zinc	151	*	06/04/2019	18:21

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

Comments:

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EPA SAMPLE NO.
MF9L65

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424004

% Solids: 46.4 Date Received: 05/18/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	2.1	U*	06/04/2019	18:26
7440-38-2	Arsenic	4.3		06/04/2019	18:26
7440-39-3	Barium	95.7		06/04/2019	18:26
7440-41-7	Beryllium	1.0	J	06/04/2019	18:26
7440-43-9	Cadmium	0.39	J	06/04/2019	18:26
7440-70-2	Calcium				
7440-47-3	Chromium	15.0		06/04/2019	18:26
7440-48-4	Cobalt	5.7		06/04/2019	18:26
7440-50-8	Copper	16.8	*	06/04/2019	18:26
7439-89-6	Iron				
7439-92-1	Lead	27.4		06/04/2019	18:26
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	20.6	*	06/04/2019	18:26
7440-09-7	Potassium				
7782-49-2	Selenium	0.40	J	06/04/2019	18:26
7440-22-4	Silver	0.061	J	06/04/2019	18:26
7440-23-5	Sodium				
7440-28-0	Thallium	0.096	J	06/04/2019	18:26
7440-62-2	Vanadium	29.3		06/04/2019	18:26
7440-66-6	Zinc	66.2	*	06/04/2019	18:26

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

Comments:

FORM 1-IN
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EPA SAMPLE NO.
MF9L66

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424005

% Solids: 24.1 Date Received: 05/18/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.25	J*	06/04/2019	18:30
7440-38-2	Arsenic	3.5		06/04/2019	18:30
7440-39-3	Barium	88.7		06/04/2019	18:30
7440-41-7	Beryllium	0.48		06/04/2019	18:30
7440-43-9	Cadmium	0.55		06/04/2019	18:30
7440-70-2	Calcium				
7440-47-3	Chromium	12.2		06/04/2019	18:30
7440-48-4	Cobalt	5.1		06/04/2019	18:30
7440-50-8	Copper	22.3	*	06/04/2019	18:30
7439-89-6	Iron				
7439-92-1	Lead	28.4		06/04/2019	18:30
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	13.5	*	06/04/2019	18:30
7440-09-7	Potassium				
7782-49-2	Selenium	0.63	J	06/04/2019	18:30
7440-22-4	Silver	0.058	J	06/04/2019	18:30
7440-23-5	Sodium				
7440-28-0	Thallium	0.087	J	06/04/2019	18:30
7440-62-2	Vanadium	19.2		06/04/2019	18:30
7440-66-6	Zinc	110	*	06/04/2019	18:30

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

Comments:

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EPA SAMPLE NO.
MF9L67

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424006

% Solids: 40.3 Date Received: 05/18/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.25	J*	06/04/2019	18:35
7440-38-2	Arsenic	5.1		06/04/2019	18:35
7440-39-3	Barium	99.0		06/04/2019	18:35
7440-41-7	Beryllium	0.79	J	06/04/2019	18:35
7440-43-9	Cadmium	0.40	J	06/04/2019	18:35
7440-70-2	Calcium				
7440-47-3	Chromium	14.0		06/04/2019	18:35
7440-48-4	Cobalt	6.0		06/04/2019	18:35
7440-50-8	Copper	20.3	*	06/04/2019	18:35
7439-89-6	Iron				
7439-92-1	Lead	32.3		06/04/2019	18:35
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	19.5	*	06/04/2019	18:35
7440-09-7	Potassium				
7782-49-2	Selenium	0.74	J	06/04/2019	18:35
7440-22-4	Silver	0.075	J	06/04/2019	18:35
7440-23-5	Sodium				
7440-28-0	Thallium	0.074	J	06/04/2019	18:35
7440-62-2	Vanadium	26.8		06/04/2019	18:35
7440-66-6	Zinc	86.8	*	06/04/2019	18:35

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

Comments:

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EPA SAMPLE NO.
MF9L69

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095002

% Solids: 54.0 Date Received: 05/15/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.27	J*	06/04/2019	17:24
7440-38-2	Arsenic	4.7		06/04/2019	17:24
7440-39-3	Barium	100		06/04/2019	17:24
7440-41-7	Beryllium	0.91		06/04/2019	17:24
7440-43-9	Cadmium	0.53	J	06/04/2019	17:24
7440-70-2	Calcium				
7440-47-3	Chromium	31.9		06/04/2019	17:24
7440-48-4	Cobalt	6.9		06/04/2019	17:24
7440-50-8	Copper	16.9	*	06/04/2019	17:24
7439-89-6	Iron				
7439-92-1	Lead	33.9		06/04/2019	17:24
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	21.2	*	06/04/2019	17:24
7440-09-7	Potassium				
7782-49-2	Selenium	0.49	J	06/04/2019	17:24
7440-22-4	Silver	0.070	J	06/04/2019	17:24
7440-23-5	Sodium				
7440-28-0	Thallium	0.093	J	06/04/2019	17:24
7440-62-2	Vanadium	32.2		06/04/2019	17:24
7440-66-6	Zinc	108	*	06/04/2019	17:24

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

Comments:

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EPA SAMPLE NO.
MF9L70

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095003

% Solids: 51.0 Date Received: 05/15/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.24	J*	06/04/2019	17:28
7440-38-2	Arsenic	3.5		06/04/2019	17:28
7440-39-3	Barium	94.8		06/04/2019	17:28
7440-41-7	Beryllium	0.81	J	06/04/2019	17:28
7440-43-9	Cadmium	0.45	J	06/04/2019	17:28
7440-70-2	Calcium				
7440-47-3	Chromium	38.8		06/04/2019	17:28
7440-48-4	Cobalt	6.0		06/04/2019	17:28
7440-50-8	Copper	23.6	*	06/04/2019	17:28
7439-89-6	Iron				
7439-92-1	Lead	56.2		06/04/2019	17:28
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	17.9	*	06/04/2019	17:28
7440-09-7	Potassium				
7782-49-2	Selenium	0.49	J	06/04/2019	17:28
7440-22-4	Silver	0.086	J	06/04/2019	17:28
7440-23-5	Sodium				
7440-28-0	Thallium	0.071	J	06/04/2019	17:28
7440-62-2	Vanadium	24.5		06/04/2019	17:28
7440-66-6	Zinc	99.6	*	06/04/2019	17:28

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

Comments:

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EPA SAMPLE NO.
MF9L71

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424007

% Solids: 62.5 Date Received: 05/18/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.20	J*	06/04/2019	18:40
7440-38-2	Arsenic	7.6		06/04/2019	18:40
7440-39-3	Barium	76.7		06/04/2019	18:40
7440-41-7	Beryllium	0.67	J	06/04/2019	18:40
7440-43-9	Cadmium	0.28	J	06/04/2019	18:40
7440-70-2	Calcium				
7440-47-3	Chromium	13.8		06/04/2019	18:40
7440-48-4	Cobalt	7.2		06/04/2019	18:40
7440-50-8	Copper	13.8	*	06/04/2019	18:40
7439-89-6	Iron				
7439-92-1	Lead	34.2		06/04/2019	18:40
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	19.0	*	06/04/2019	18:40
7440-09-7	Potassium				
7782-49-2	Selenium	0.34	J	06/04/2019	18:40
7440-22-4	Silver	0.051	J	06/04/2019	18:40
7440-23-5	Sodium				
7440-28-0	Thallium	0.057	J	06/04/2019	18:40
7440-62-2	Vanadium	31.8		06/04/2019	18:40
7440-66-6	Zinc	66.1	*	06/04/2019	18:40

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

Comments:

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EPA SAMPLE NO.
MF9L72

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424008

% Solids: 65.1 Date Received: 05/18/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.22	J*	06/04/2019	18:45
7440-38-2	Arsenic	5.4		06/04/2019	18:45
7440-39-3	Barium	65.3		06/04/2019	18:45
7440-41-7	Beryllium	0.48	J	06/04/2019	18:45
7440-43-9	Cadmium	0.25	J	06/04/2019	18:45
7440-70-2	Calcium				
7440-47-3	Chromium	11.1		06/04/2019	18:45
7440-48-4	Cobalt	5.5		06/04/2019	18:45
7440-50-8	Copper	19.9	*	06/04/2019	18:45
7439-89-6	Iron				
7439-92-1	Lead	39.1		06/04/2019	18:45
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	14.5	*	06/04/2019	18:45
7440-09-7	Potassium				
7782-49-2	Selenium	3.6	U	06/04/2019	18:45
7440-22-4	Silver	0.063	J	06/04/2019	18:45
7440-23-5	Sodium				
7440-28-0	Thallium	0.050	J	06/04/2019	18:45
7440-62-2	Vanadium	24.7		06/04/2019	18:45
7440-66-6	Zinc	60.3	*	06/04/2019	18:45

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

Comments:

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EPA SAMPLE NO.
MF9L73

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424009

% Solids: 55.6 Date Received: 05/18/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.30	J*	06/04/2019	18:49
7440-38-2	Arsenic	5.7		06/04/2019	18:49
7440-39-3	Barium	58.0		06/04/2019	18:49
7440-41-7	Beryllium	0.53	J	06/04/2019	18:49
7440-43-9	Cadmium	0.37	J	06/04/2019	18:49
7440-70-2	Calcium				
7440-47-3	Chromium	27.2		06/04/2019	18:49
7440-48-4	Cobalt	6.6		06/04/2019	18:49
7440-50-8	Copper	14.2	*	06/04/2019	18:49
7439-89-6	Iron				
7439-92-1	Lead	69.4		06/04/2019	18:49
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	19.0	*	06/04/2019	18:49
7440-09-7	Potassium				
7782-49-2	Selenium	4.2	U	06/04/2019	18:49
7440-22-4	Silver	0.061	J	06/04/2019	18:49
7440-23-5	Sodium				
7440-28-0	Thallium	0.040	J	06/04/2019	18:49
7440-62-2	Vanadium	28.2		06/04/2019	18:49
7440-66-6	Zinc	63.7	*	06/04/2019	18:49

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

Comments:

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EPA SAMPLE NO.
MF9L74

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095004

% Solids: 58.5 Date Received: 05/15/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.23	J*	06/04/2019	17:33
7440-38-2	Arsenic	6.7		06/04/2019	17:33
7440-39-3	Barium	87.6		06/04/2019	17:33
7440-41-7	Beryllium	0.68	J	06/04/2019	17:33
7440-43-9	Cadmium	0.40	J	06/04/2019	17:33
7440-70-2	Calcium				
7440-47-3	Chromium	21.3		06/04/2019	17:33
7440-48-4	Cobalt	6.9		06/04/2019	17:33
7440-50-8	Copper	14.7	*	06/04/2019	17:33
7439-89-6	Iron				
7439-92-1	Lead	87.3		06/04/2019	17:33
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	18.9	*	06/04/2019	17:33
7440-09-7	Potassium				
7782-49-2	Selenium	0.49	J	06/04/2019	17:33
7440-22-4	Silver	0.10	J	06/04/2019	17:33
7440-23-5	Sodium				
7440-28-0	Thallium	0.070	J	06/04/2019	17:33
7440-62-2	Vanadium	30.2		06/04/2019	17:33
7440-66-6	Zinc	67.0	*	06/04/2019	17:33

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L75

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095005

% Solids: 52.9 Date Received: 05/15/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.30	J*	06/04/2019	17:38
7440-38-2	Arsenic	5.4		06/04/2019	17:38
7440-39-3	Barium	88.3		06/04/2019	17:38
7440-41-7	Beryllium	0.82	J	06/04/2019	17:38
7440-43-9	Cadmium	0.54	J	06/04/2019	17:38
7440-70-2	Calcium				
7440-47-3	Chromium	34.7		06/04/2019	17:38
7440-48-4	Cobalt	6.0		06/04/2019	17:38
7440-50-8	Copper	20.4	*	06/04/2019	17:38
7439-89-6	Iron				
7439-92-1	Lead	117		06/04/2019	17:38
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	19.0	*	06/04/2019	17:38
7440-09-7	Potassium				
7782-49-2	Selenium	0.74	J	06/04/2019	17:38
7440-22-4	Silver	0.12	J	06/04/2019	17:38
7440-23-5	Sodium				
7440-28-0	Thallium	0.078	J	06/04/2019	17:38
7440-62-2	Vanadium	30.6		06/04/2019	17:38
7440-66-6	Zinc	97.4	*	06/04/2019	17:38

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

Comments:

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EPA SAMPLE NO.
MF9L76

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095006

% Solids: 39.6 Date Received: 05/15/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.42	J*	06/04/2019	17:43
7440-38-2	Arsenic	5.0		06/04/2019	17:43
7440-39-3	Barium	103		06/04/2019	17:43
7440-41-7	Beryllium	0.86	J	06/04/2019	17:43
7440-43-9	Cadmium	0.55	J	06/04/2019	17:43
7440-70-2	Calcium				
7440-47-3	Chromium	30.8		06/04/2019	17:43
7440-48-4	Cobalt	7.0		06/04/2019	17:43
7440-50-8	Copper	25.8	*	06/04/2019	17:43
7439-89-6	Iron				
7439-92-1	Lead	70.6		06/04/2019	17:43
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	21.4	*	06/04/2019	17:43
7440-09-7	Potassium				
7782-49-2	Selenium	0.81	J	06/04/2019	17:43
7440-22-4	Silver	0.10	J	06/04/2019	17:43
7440-23-5	Sodium				
7440-28-0	Thallium	0.084	J	06/04/2019	17:43
7440-62-2	Vanadium	32.4		06/04/2019	17:43
7440-66-6	Zinc	108	*	06/04/2019	17:43

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L77

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095007

% Solids: 52.3 Date Received: 05/15/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.26	J*	06/04/2019	17:47
7440-38-2	Arsenic	5.7		06/04/2019	17:47
7440-39-3	Barium	103		06/04/2019	17:47
7440-41-7	Beryllium	0.79	J	06/04/2019	17:47
7440-43-9	Cadmium	0.43	J	06/04/2019	17:47
7440-70-2	Calcium				
7440-47-3	Chromium	34.0		06/04/2019	17:47
7440-48-4	Cobalt	7.4		06/04/2019	17:47
7440-50-8	Copper	20.1	*	06/04/2019	17:47
7439-89-6	Iron				
7439-92-1	Lead	70.9		06/04/2019	17:47
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	19.9	*	06/04/2019	17:47
7440-09-7	Potassium				
7782-49-2	Selenium	0.54	J	06/04/2019	17:47
7440-22-4	Silver	0.099	J	06/04/2019	17:47
7440-23-5	Sodium				
7440-28-0	Thallium	0.081	J	06/04/2019	17:47
7440-62-2	Vanadium	27.1		06/04/2019	17:47
7440-66-6	Zinc	92.1	*	06/04/2019	17:47

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L78

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095008

% Solids: 43.8 Date Received: 05/15/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.36	J*	06/04/2019	17:52
7440-38-2	Arsenic	5.0		06/04/2019	17:52
7440-39-3	Barium	100		06/04/2019	17:52
7440-41-7	Beryllium	0.80	J	06/04/2019	17:52
7440-43-9	Cadmium	0.46	J	06/04/2019	17:52
7440-70-2	Calcium				
7440-47-3	Chromium	25.6		06/04/2019	17:52
7440-48-4	Cobalt	6.4		06/04/2019	17:52
7440-50-8	Copper	22.3	*	06/04/2019	17:52
7439-89-6	Iron				
7439-92-1	Lead	58.8		06/04/2019	17:52
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	19.0	*	06/04/2019	17:52
7440-09-7	Potassium				
7782-49-2	Selenium	0.81	J	06/04/2019	17:52
7440-22-4	Silver	0.11	J	06/04/2019	17:52
7440-23-5	Sodium				
7440-28-0	Thallium	0.075	J	06/04/2019	17:52
7440-62-2	Vanadium	28.6		06/04/2019	17:52
7440-66-6	Zinc	101	*	06/04/2019	17:52

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L79

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095009

% Solids: 52.8 Date Received: 05/15/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.27	J*	06/04/2019	16:55
7440-38-2	Arsenic	6.8		06/04/2019	16:55
7440-39-3	Barium	119		06/04/2019	16:55
7440-41-7	Beryllium	0.96		06/04/2019	16:55
7440-43-9	Cadmium	0.42	J	06/04/2019	16:55
7440-70-2	Calcium				
7440-47-3	Chromium	34.6		06/04/2019	16:55
7440-48-4	Cobalt	8.3		06/04/2019	16:55
7440-50-8	Copper	21.0	*	06/04/2019	16:55
7439-89-6	Iron				
7439-92-1	Lead	72.7		06/04/2019	16:55
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	23.0	*	06/04/2019	16:55
7440-09-7	Potassium				
7782-49-2	Selenium	0.52	J	06/04/2019	16:55
7440-22-4	Silver	0.11	J	06/04/2019	16:55
7440-23-5	Sodium				
7440-28-0	Thallium	0.12	J	06/04/2019	16:55
7440-62-2	Vanadium	32.7		06/04/2019	16:55
7440-66-6	Zinc	92.5	*	06/04/2019	16:55

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9M24

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095012

% Solids: 53.5 Date Received: 05/15/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	0.43	J*	06/04/2019	18:07
7440-38-2	Arsenic	4.7		06/04/2019	18:07
7440-39-3	Barium	88.2		06/04/2019	18:07
7440-41-7	Beryllium	0.86	J	06/04/2019	18:07
7440-43-9	Cadmium	0.51	J	06/04/2019	18:07
7440-70-2	Calcium				
7440-47-3	Chromium	36.7		06/04/2019	18:07
7440-48-4	Cobalt	6.2		06/04/2019	18:07
7440-50-8	Copper	21.0	*	06/04/2019	18:07
7439-89-6	Iron				
7439-92-1	Lead	120		06/04/2019	18:07
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	19.6	*	06/04/2019	18:07
7440-09-7	Potassium				
7782-49-2	Selenium	0.42	J	06/04/2019	18:07
7440-22-4	Silver	0.13	J	06/04/2019	18:07
7440-23-5	Sodium				
7440-28-0	Thallium	0.094	J	06/04/2019	18:07
7440-62-2	Vanadium	30.9		06/04/2019	18:07
7440-66-6	Zinc	96.9	*	06/04/2019	18:07

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9M33

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424010

% Solids: 49.3 Date Received: 05/18/2019

Analytical Method: ICP-MS

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7429-90-5	Aluminum				
7440-36-0	Antimony	1.9	U*	06/04/2019	18:54
7440-38-2	Arsenic	6.4		06/04/2019	18:54
7440-39-3	Barium	106		06/04/2019	18:54
7440-41-7	Beryllium	0.99		06/04/2019	18:54
7440-43-9	Cadmium	0.32	J	06/04/2019	18:54
7440-70-2	Calcium				
7440-47-3	Chromium	11.5		06/04/2019	18:54
7440-48-4	Cobalt	7.3		06/04/2019	18:54
7440-50-8	Copper	16.3	*	06/04/2019	18:54
7439-89-6	Iron				
7439-92-1	Lead	24.5		06/04/2019	18:54
7439-95-4	Magnesium				
7439-96-5	Manganese				
7440-02-0	Nickel	20.9	*	06/04/2019	18:54
7440-09-7	Potassium				
7782-49-2	Selenium	0.43	J	06/04/2019	18:54
7440-22-4	Silver	0.066	J	06/04/2019	18:54
7440-23-5	Sodium				
7440-28-0	Thallium	0.095	J	06/04/2019	18:54
7440-62-2	Vanadium	39.7		06/04/2019	18:54
7440-66-6	Zinc	56.8	*	06/04/2019	18:54

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

Comments:

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Initial Calibration Verification Source: EPA ICV1 (0307)

Continuing Calibration Verification Source: 48084

Run Batch: MS219048 Analytical Method: ICP-MS

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV				ID: CCV1				ID: CCV2		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Aluminum											
Antimony	199	194	98	2	2500	2500	100	2	2470	99	1
Arsenic	200	213	107	2	2500	2510	100	2	2470	99	1
Barium	99	100	101	2	2500	2510	101	2	2470	99	1
Beryllium	99	104	105	2	2500	2390	96	3	2460	98	2
Cadmium	99	102	104	3	2500	2420	97	3	2370	95	1
Calcium											
Chromium	98	99.5	102	2	2500	2480	99	2	2460	98	1
Cobalt	100	102	102	2	2500	2460	98	2	2430	97	1
Copper	98	104	106	2	2500	2340	93	2	2330	93	1
Iron											
Lead	200	201	100	2	2500	2560	102	2	2530	101	1
Magnesium											
Manganese											
Nickel	101	108	107	2	2500	2470	99	2	2450	98	1
Potassium											
Selenium	206	205	99	2	250	266	106	2	262	105	1
Silver	100	99.1	99	2	250	239	96	2	234	94	2
Sodium											
Thallium	206	203	99	2	2500	2570	103	2	2540	102	1
Vanadium	100	99.2	99	3	2500	2540	102	2	2530	101	1
Zinc	205	214	104	3	2500	2370	95	2	2330	93	1

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Initial Calibration Verification Source:

Continuing Calibration Verification Source: 48084

Run Batch: MS219048 Analytical Method: ICP-MS

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID: CCV3				ID:		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Aluminum											
Antimony					2500	2480	99	2			
Arsenic					2500	2480	99	2			
Barium					2500	2480	99	2			
Beryllium					2500	2480	99	3			
Cadmium					2500	2360	94	2			
Calcium											
Chromium					2500	2460	99	2			
Cobalt					2500	2460	98	2			
Copper					2500	2380	95	2			
Iron											
Lead					2500	2540	102	2			
Magnesium											
Manganese											
Nickel					2500	2490	99	2			
Potassium											
Selenium					250	262	105	3			
Silver					250	234	94	2			
Sodium											
Thallium					2500	2560	103	2			
Vanadium					2500	2530	101	2			
Zinc					2500	2340	94	2			

FORM 3-IN
BLANKS

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Preparation Blank Matrix: Soil

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

Analytical Method: ICP-MS Preparation Batch: 239773

Run Batch: MS219048 Preparation Method: 200.8

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB	Q	ID: CCB1	Q	ID: CCB2	Q	ID: CCB3	Q	ID: PBS1	Q
Aluminum										
Antimony	0.35	J	0.71	J	0.71	J	0.80	J	1.0	U
Arsenic	1.0	U	0.13	J	1.0	U	1.0	U	0.50	U
Barium	10.0	U	0.033	J	0.024	J	10.0	U	0.011	J
Beryllium	0.11	J	0.13	J	0.091	J	0.11	J	0.049	J
Cadmium	0.035	J	0.061	J	0.027	J	0.029	J	0.012	J
Calcium										
Chromium	2.0	U	2.0	U	2.0	U	2.0	U	0.20	J
Cobalt	0.0076	J	0.040	J	0.013	J	1.0	U	0.50	U
Copper	2.0	U	0.35	J	2.0	U	2.0	U	0.10	J
Iron										
Lead	1.0	U	1.0	U	1.0	U	1.0	U	0.50	U
Magnesium										
Manganese										
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	0.50	U
Potassium										
Selenium	5.0	U	5.0	U	5.0	U	5.0	U	2.5	U
Silver	0.048	J	0.025	J	0.014	J	1.0	U	0.0078	J
Sodium										
Thallium	0.025	J	0.050	J	1.0	U	1.0	U	0.50	U
Vanadium	5.0	U	5.0	U	5.0	U	5.0	U	2.5	U
Zinc	-0.23	J	-0.20	J	-0.20	J	-0.25	J	-0.088	J

FORM 4-IN
ICP INTERFERENCE CHECK SAMPLE

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Analytical Method: ICP-MS ICSA Source: EPA ICSA (0803)

Instrument ID: ICPM02 ICSAB Source: EPA ICSB (0803)

Run Batch: MS219048

Concentration Units: ug/L

Analyte	True		Found			
	ICSA	ICSAB	ICSA	%R	ICSAB	%R
Aluminum						
Antimony	1.5	22	1.3	86	20.3	92
Arsenic	0.1	19	-0.24	240	19.8	104
Barium	1.2	22	1.6	131	22.5	102
Beryllium	0	19	0.36		20.1	106
Cadmium	0.7	20	0.39	55	18.8	94
Calcium						
Chromium	21	40	19.6	93	39.9	100
Cobalt	1	20	1.4	137	21.0	105
Copper	8	25	7.3	91	25.7	103
Iron						
Lead	4	25	4.5	111	25.6	102
Magnesium						
Manganese						
Molybdenum	2000	2000	0.0	0	0.0	0
Nickel	6	24	6.4	107	26.2	109
Potassium						
Selenium	0.3	19	-2.0	672	16.9	89
Silver	0	18	0.024		17.6	98
Sodium						
Thallium	0	21	0.028		21.5	102
Titanium	2000	2000	270	14	271	14
Vanadium	0.5	19	-2.3	455	18.0	95
Zinc	11	29	11.1	101	29.0	100

FORM 5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MF9L79S

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Analytical Method: ICP-MS

% Solids: 52.8

Concentration Units (ug/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
Aluminum								
Antimony	75-125	4.4		0.27	J	17.5	23	*
Arsenic	75-125	13.2		6.8		7.0	90	
Barium	75-125	481		119		351	103	
Beryllium	75-125	11.0		0.96		8.8	115	
Cadmium	75-125	9.5		0.42	J	8.8	104	
Calcium								
Chromium	75-125	67.7		34.6		35.1	94	
Cobalt	75-125	93.5		8.3		87.7	97	
Copper	75-125	61.2		21.0		43.8	92	
Iron								
Lead		73.6		72.7		3.5	25	
Magnesium								
Manganese								
Nickel	75-125	110		23.0		87.7	100	
Potassium								
Selenium	75-125	13.7		0.52	J	17.5	75	
Silver	75-125	8.4		0.11	J	8.8	94	
Sodium								
Thallium	75-125	8.6		0.12	J	8.8	97	
Vanadium	75-125	122		32.7		87.7	102	
Zinc	75-125	176		92.5		87.7	95	

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

EPA SAMPLE NO.
MF9L79A

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Analytical Method: ICP-MS

% Solids: 52.8

Concentration Units (ug/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
Aluminum								
Antimony		3.4		0.27	J	3.5	91	
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

FORM 6-IN
DUPLICATES

EPA SAMPLE NO.
MF9L79D

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Analytical Method: ICP-MS

% Solids: 52.8

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

Analyte	Control Limit	Sample (S)	Q	Duplicate (D)	Q	RPD	Q
Aluminum							
Antimony		0.27	J	0.24	J		
Arsenic		6.8		7.0		3	
Barium		119		118		1	
Beryllium	0.87	0.96		1.0		7	
Cadmium		0.42	J	0.41	J		
Calcium							
Chromium		34.6		34.1		1	
Cobalt		8.3		8.5		2	
Copper		21.0		21.1		0	
Iron							
Lead		72.7		71.8		1	
Magnesium							
Manganese							
Nickel		23.0		22.9		0	
Potassium							
Selenium		0.52	J	0.48	J		
Silver		0.11	J	0.11	J		
Sodium							
Thallium		0.12	J	0.12	J		
Vanadium		32.7		32.8		0	
Zinc		92.5		95.8		3	

FORM 7-IN
LABORATORY CONTROL SAMPLE

EPA SAMPLE NO.
LCS1

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Preparation Method: 200.8

Analytical Method: ICP-MS Preparation Batch: 239773

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

Analyte	True	Found	%R
Aluminum			
Antimony	2.0	2.0	100
Arsenic	1.0	1.1	110
Barium	10.0	9.9	99
Beryllium	1.0	1.1	111
Cadmium	1.0	1.1	106
Calcium			
Chromium	2.0	2.1	106
Cobalt	1.0	0.99	99
Copper	2.0	2.1	104
Iron			
Lead	1.0	0.96	96
Magnesium			
Manganese			
Nickel	1.0	1.1	106
Potassium			
Selenium	5.0	5.2	103
Silver	1.0	0.99	99
Sodium			
Thallium	1.0	0.89	89
Vanadium	5.0	5.1	102
Zinc	2.0	2.1	107

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

EPA SAMPLE NO.
MF9L79L

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Analytical Method: ICP-MS

% Solids: 52.8

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

Analyte	Initial Sample Result (I)	Q	Serial Dilution Result (S)	Q	% Difference	Q
Aluminum						
Antimony	0.27	J	8.7	U	100	
Arsenic	6.8		7.4		9	
Barium	119		125		5	
Beryllium	0.96		1.1	J	11	
Cadmium	0.42	J	0.47	J	11	
Calcium						
Chromium	34.6		36.4		5	
Cobalt	8.3		9.0		8	
Copper	21.0		24.1		15	*
Iron						
Lead	72.7		73.4		1	
Magnesium						
Manganese						
Nickel	23.0		26.1		14	*
Potassium						
Selenium	0.52	J	21.8	U	100	
Silver	0.11	J	0.11	J	2	
Sodium						
Thallium	0.12	J	4.4	U	100	
Vanadium	32.7		34.7		6	
Zinc	92.5		111		20	*

FORM 9-IN
METHOD DETECTION LIMIT

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Analytical Method: ICP-MS Instrument ID: ICPM02

Preparation Method: 200.8

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

Analyte	Wavelength/Mass	MDL	Date Analyzed
Aluminum			
Antimony	121.00	0.099	02/18/2019
Arsenic	75.00	0.054	02/18/2019
Barium	137.00	0.011	02/18/2019
Beryllium	9.00	0.018	02/18/2019
Cadmium	111.00	0.0065	02/18/2019
Calcium			
Chromium	52.00	0.028	02/18/2019
Cobalt	59.00	0.0037	02/18/2019
Copper	63.00	0.051	02/18/2019
Iron			
Lead	208.00	0.024	02/18/2019
Magnesium			
Manganese			
Nickel	60.00	0.047	02/18/2019
Potassium			
Selenium	82.00	0.17	02/18/2019
Silver	107.00	0.0050	02/18/2019
Sodium			
Thallium	205.00	0.012	02/18/2019
Vanadium	51.00	0.25	02/18/2019
Zinc	66.00	0.083	02/18/2019

FORM 11-IN
ICP-MS INTERNAL STANDARD ASSOCIATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICPM02 Date: 06/04/2019 14:45:00

Run Batch: MS219048

Analyte	Assoc. Internal Standard 1	Assoc. Internal Standard 2
Aluminum		
Antimony	In	Tb
Arsenic	Sc	Y
Barium	In	Tb
Beryllium	Li	Sc
Cadmium	Rh	In
Calcium		
Chromium	Sc	Y
Cobalt	Sc	Y
Copper	Sc	Y
Iron		
Lead	Tb	Bi
Magnesium		
Manganese		
Nickel	Sc	Y
Potassium		
Selenium	Sc	Y
Silver	Rh	In
Sodium		
Thallium	Tb	Bi
Vanadium	Sc	Y
Zinc	Sc	Y

FORM 12-IN
ANALYSIS LOG

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICPM02 Analytical Method: ICP-MS

Start Date: 06/04/2019 End Date: 06/04/2019

Run Batch: MS219048

EPA Sample No.	D/F	Time	Analytes																										
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn					
TUNE	1.0	1445																											
S0	1.0	1539		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
S01	1.0	1544		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
S02	1.0	1548		X	X		X	X		X	X	X		X			X		X	X		X	X	X					
S03	1.0	1553		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
S04	1.0	1558		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
S05	1.0	1603		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
S06	1.0	1607		X	X	X	X	X		X	X	X		X			X					X	X	X					
S07	1.0	1612		X	X	X	X	X		X	X	X		X			X					X	X	X					
ICV	1.0	1617		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
ICB	1.0	1622		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
ICSA	1.0	1626		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
ICSAB	1.0	1631		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
CCV1	1.0	1636		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
CCB1	1.0	1641		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
PBS1	1.0	1645		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
LCS1	1.0	1650		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
MF9L79	1.0	1655		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
MF9L79S	1.0	1700		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
MF9L79D	1.0	1704		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
MF9L79L	5.0	1709		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
MF9L79A	1.0	1714		X																									
MF9L61	1.0	1719		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
MF9L69	1.0	1724		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
MF9L70	1.0	1728		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
MF9L74	1.0	1733		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
MF9L75	1.0	1738		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
MF9L76	1.0	1743		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
MF9L77	1.0	1747		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
MF9L78	1.0	1752		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
CCV2	1.0	1757		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					
CCB2	1.0	1802		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X					

FORM 12-IN
ANALYSIS LOG

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICPM02 Analytical Method: ICP-MS

Start Date: 06/04/2019 End Date: 06/04/2019

Run Batch: MS219048

EPA Sample No.	D/F	Time	Analytes																											
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn						
MF9M24	1.0	1807		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						
MF9L62	1.0	1811		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						
MF9L63	1.0	1816		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						
MF9L64	1.0	1821		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						
MF9L65	1.0	1826		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						
MF9L66	1.0	1830		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						
MF9L67	1.0	1835		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						
MF9L71	1.0	1840		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						
MF9L72	1.0	1845		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						
MF9L73	1.0	1849		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						
MF9M33	1.0	1854		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						
CCV3	1.0	1859		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						
CCB3	1.0	1904		X	X	X	X	X		X	X	X		X			X		X	X		X	X	X						

FORM 13-IN
ICP-MS TUNE

EPA SAMPLE NO.
TUNE

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICPM02 Date: 06/04/2019

Run Batch: MS219048

Element - Mass	Avg. Measured Mass (u)	Average Peak Width (u)	%Height	%RSD
Be - 9	9.0	0.8	5	1.7
Mg - 24	24.0	0.8	5	1.6
Mg - 25	25.0	0.7	5	1.2
Mg - 26	26.0	0.7	5	2.0
Co - 59	58.9	0.7	5	2.0
In - 113	112.9	0.8	5	0.7
In - 115	114.9	0.8	5	0.7
Pb - 206	206.0	0.7	5	3.0
Pb - 207	207.0	0.7	5	3.1
Pb - 208	208.0	0.7	5	3.1

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICPM02 Start Date: 06/04/2019

Run Batch: MS219048 End Date: 06/04/2019

EPA Sample No.	Time	Internal Standards %RI For:									
		Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 115In	Q
S0	1539	100		100		100		100		100	
S01	1544	100		99		100		100		101	
S02	1548	102		101		101		101		100	
S03	1553	100		98		100		100		102	
S04	1558	98		96		96		95		96	
S05	1603	92		88		88		88		89	
S06	1607	83		81		79		80		80	
S07	1612	78		77		75		76		78	
ICV	1617	79		80		77		78		77	
ICB	1622	81		83		81		81		81	
ICSA	1626	62		66		65		65		71	
ICSAB	1631	61		66		67		67		73	
CCV1	1636	65		75		75		75		80	
CCB1	1641	74		89		90		91		93	
PBS1	1645	72		84		86		87		89	
LCS1	1650	74		83		85		86		88	
MF9L79	1655	70		69		81		73		78	
MF9L79S	1700	70		68		78		71		75	
MF9L79D	1704	70		67		78		71		76	
MF9L79L	1709	77		84		87		85		87	
MF9L79A	1714	73		70		81		73		78	
MF9L61	1719	73		71		80		72		76	
MF9L69	1724	73		69		79		72		77	
MF9L70	1728	73		67		76		70		75	
MF9L74	1733	73		69		78		72		76	
MF9L75	1738	73		68		77		71		76	
MF9L76	1743	74		69		76		72		76	
MF9L77	1747	73		66		75		69		75	
MF9L78	1752	73		67		75		71		76	
CCV2	1757	69		75		75		75		80	
CCB2	1802	78		89		90		90		91	
MF9M24	1807	71		69		78		72		76	

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICPM02 Start Date: 06/04/2019

Run Batch: MS219048 End Date: 06/04/2019

EPA Sample No.	Time	Internal Standards %RI For:									
		Element 159Tb	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
S0	1539	100		100							
S01	1544	102		103							
S02	1548	100		99							
S03	1553	103		104							
S04	1558	96		94							
S05	1603	91		91							
S06	1607	81		81							
S07	1612	81		82							
ICV	1617	80		79							
ICB	1622	84		86							
ICSA	1626	74		71							
ICSAB	1631	77		73							
CCV1	1636	84		82							
CCB1	1641	98		102							
PBS1	1645	94		96							
LCS1	1650	92		94							
MF9L79	1655	84		84							
MF9L79S	1700	78		77							
MF9L79D	1704	81		81							
MF9L79L	1709	88		88							
MF9L79A	1714	82		81							
MF9L61	1719	80		76							
MF9L69	1724	82		82							
MF9L70	1728	79		78							
MF9L74	1733	81		80							
MF9L75	1738	80		78							
MF9L76	1743	81		80							
MF9L77	1747	80		80							
MF9L78	1752	82		84							
CCV2	1757	83		81							
CCB2	1802	95		96							
MF9M24	1807	81		79							

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICPM02 Start Date: 06/04/2019

Run Batch: MS219048 End Date: 06/04/2019

EPA Sample No.	Time	Internal Standards %RI For:									
		Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 115In	Q
MF9L62	1811	71		67		78		71		76	
MF9L63	1816	72		69		77		71		76	
MF9L64	1821	74		70		75		71		75	
MF9L65	1826	73		67		76		69		74	
MF9L66	1830	73		69		79		69		73	
MF9L67	1835	74		67		74		71		74	
MF9L71	1840	73		68		76		69		74	
MF9L72	1845	73		67		75		70		75	
MF9L73	1849	74		70		77		70		75	
MF9M33	1854	75		68		77		71		75	
CCV3	1859	70		76		74		75		79	
CCB3	1904	78		88		88		88		89	

FORM 14-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICPM02 Start Date: 06/04/2019

Run Batch: MS219048 End Date: 06/04/2019

EPA Sample No.	Time	Internal Standards %RI For:									
		Element 159Tb	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
MF9L62	1811	81		82							
MF9L63	1816	82		80							
MF9L64	1821	79		78							
MF9L65	1826	79		77							
MF9L66	1830	80		75							
MF9L67	1835	80		80							
MF9L71	1840	77		74							
MF9L72	1845	81		80							
MF9L73	1849	78		74							
MF9M33	1854	80		80							
CCV3	1859	81		79							
CCB3	1904	91		93							

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICPM02 Start Date: 06/04/2019

Analytical Method: ICP-MS Run Batch: MS219048

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum									
Antimony	0.0	0.0		2.0	1.9	-5	10.0	9.2	-8
Arsenic	0.0	0.0		1.0	1.0	5	10.0	10.8	8
Barium	0.0	0.0		10.0	10	0			
Beryllium	0.0	0.0		1.0	1.0	2	10.0	10.7	7
Cadmium	0.0	0.0		1.0	0.98	-2	10.0	10.2	2
Calcium									
Chromium	0.0	0.0		2.0	1.9	-6	10.0	10.1	1
Cobalt	0.0	0.0		1.0	0.99	-1	10.0	10	0
Copper	0.0	0.0		2.0	2.0	1	10.0	10.3	3
Iron									
Lead	0.0	0.0		1.0	0.91	-9	10.0	9.9	-1
Magnesium									
Manganese									
Nickel	0.0	0.0		1.0	1.1	7	10.0	10.8	8
Potassium									
Selenium	0.0	0.0		5.0	4.9	-1	10.0	10.3	3
Silver	0.0	0.0		1.0	0.96	-4	10.0	9.9	-1
Sodium									
Thallium	0.0	0.0		1.0	0.95	-5	10.0	9.8	-2
Vanadium	0.0	0.0		5.0	5.1	3	10.0	10	0
Zinc	0.0	0.0		2.0	1.8	-9	10.0	10.4	4

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICPM02 Start Date: 06/04/2019

Analytical Method: ICP-MS Run Batch: MS219048

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum									
Antimony	50.0	44.6	-11	200	187	-7	500	486	-3
Arsenic	50.0	52.8	6	200	207	4	500	528	6
Barium	50.0	50.3	1	200	198	-1	500	504	1
Beryllium	50.0	51.2	2	200	201	0	500	524	5
Cadmium	50.0	49.9	0	200	199	-1	500	511	2
Calcium									
Chromium	50.0	48.5	-3	200	193	-3	500	499	0
Cobalt	50.0	48.6	-3	200	195	-2	500	507	1
Copper	50.0	50.1	0	200	200	0	500	512	2
Iron									
Lead	50.0	48.3	-3	200	193	-4	500	500	0
Magnesium									
Manganese									
Nickel	50.0	52.2	4	200	206	3	500	526	5
Potassium									
Selenium	50.0	50.3	1	200	196	-2	500	502	0
Silver	50.0	48.4	-3	200	195	-3	500	502	0
Sodium									
Thallium	50.0	47.7	-5	200	191	-4	500	503	1
Vanadium	50.0	48.3	-3	200	193	-4	500	499	0
Zinc	50.0	51.2	2	200	204	2	500	521	4

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICPM02 Start Date: 06/04/2019

Analytical Method: ICP-MS Run Batch: MS219048

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum									
Antimony	2500	2510	0	5000	5000	0			
Arsenic	2500	2530	1	5000	4980	0			
Barium	2500	2470	-1	5000	5010	0			
Beryllium	2500	2590	3	5000	4950	-1			
Cadmium	2500	2490	0	5000	5000	0			
Calcium									
Chromium	2500	2500	0	5000	5000	0			
Cobalt	2500	2510	1	5000	4990	0			
Copper	2500	2540	2	5000	4980	0			
Iron									
Lead	2500	2480	-1	5000	5010	0			
Magnesium									
Manganese									
Nickel	2500	2640	6	5000	4930	-1			
Potassium									
Selenium									
Silver									
Sodium									
Thallium	2500	2480	-1	5000	5010	0			
Vanadium	2500	2490	0	5000	5010	0			
Zinc	2500	2550	2	5000	4970	-1			

FORM 16-IN
INITIAL CALIBRATION SUMMARY

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: ICPM02 Start Date: 06/04/2019

Analytical Method: ICP-MS Run Batch: MS219048

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Aluminum					
Antimony	1.000	1450	6.00	LR Blank	None
Arsenic	1.000	281	20.7	LR Blank	None
Barium	1.000	516	1.00	LR Blank	None
Beryllium	0.9998	316	27.5	LR Blank	None
Cadmium	1.000	474	0.750	LR Blank	None
Calcium					
Chromium	1.000	1980	537	LR Blank	None
Cobalt	1.000	2710	49.0	LR Blank	None
Copper	1.000	1410	79.5	LR Blank	None
Iron					
Lead	1.000	7160	331	LR Blank	None
Magnesium					
Manganese					
Nickel	0.9995	564	11.0	LR Blank	None
Potassium					
Selenium	1.000	34.8	21.7	LR Blank	None
Silver	0.9999	2450	11.3	LR Blank	None
Sodium					
Thallium	1.000	5360	206	LR Blank	None
Vanadium	1.000	1820	751	LR Blank	None
Zinc	0.9999	401	193	LR Blank	None

Run MS219048 Summary/Log		9Be	51V	52Cr	59Co	60Ni	63Cu	66Zn	75As	82Se	107Ag	111Cd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
S0	06/04/2019 15:39:16	0	0	0	0	0	0	0	0	0	0	0
S01	06/04/2019 15:44:03	1.0194	5.1496	1.8803	0.9857	1.0745	2.0163	1.8243	1.0474	4.9435	0.9574	0.9829
S02	06/04/2019 15:48:46	10.664	9.9623	10.072	9.9929	10.817	10.346	10.433	10.822	10.332	9.9021	10.236
S03	06/04/2019 15:53:32	51.198	48.256	48.45	48.607	52.162	50.142	51.204	52.821	50.307	48.423	49.935
S04	06/04/2019 15:58:17	200.89	192.66	193.11	195.19	206.16	200.38	204.13	207.3	195.96	194.82	198.96
S05	06/04/2019 16:03:02	524.03	499.42	498.83	506.94	525.99	511.88	521.11	527.78	501.58	502.23	511.44
S06	06/04/2019 16:07:47	2585.6	2487.5	2496.1	2513	2640.1	2541	2547.8	2532.3	0.1958	0.171	2493.9
S07	06/04/2019 16:12:32	4954.8	5006.6	5002.4	4993	4927.1	4978.3	4973.8	4980.7	0.6397	0.1993	5001.9
ICV	06/04/2019 16:17:19	104.19	99.248	99.543	102.24	107.79	104.37	213.65	213	204.75	99.096	102.48
ICB	06/04/2019 16:22:05	0.1105	0.0013	-0.0481	0.0076	0.0097	0.0918	-0.2318	0.0393	0.0537	0.0482	0.0354
ICSA	06/04/2019 16:26:51	0.3631	-2.2755	19.605	1.3653	6.4071	7.2802	11.101	-0.2404	-2.0174	0.0242	0.3868
ICSAB	06/04/2019 16:31:38	20.089	17.967	39.884	21.047	26.163	25.694	28.955	19.761	16.89	17.588	18.799
CCV1	06/04/2019 16:36:22	2392.6	2540.4	2484.2	2457.5	2473.4	2336.1	2375	2508.8	266.12	238.84	2420.6
CCB1	06/04/2019 16:41:07	0.1323	0.0628	0.0057	0.0398	0.046	0.3485	-0.1962	0.1322	0.2473	0.0245	0.0611
PBS1	06/04/2019 16:45:53	0.0982	-0.1257	0.3905	-0.001	0.0298	0.2098	-0.1767	0.0475	0.0926	0.0157	0.0242
LCS1	06/04/2019 16:50:38	2.2227	10.184	4.2214	1.9876	2.1169	4.1403	4.2601	2.205	10.33	1.9742	2.1224
MF9L79	06/04/2019 16:55:25	1.0954	37.43	39.622	9.4759	26.315	24.035	106.05	7.8226	0.5988	0.1253	0.4821
MF9L79S	06/04/2019 17:00:11	12.592	139.73	77.197	106.71	125.98	69.767	200.25	15.008	15.596	9.5573	10.893
MF9L79D	06/04/2019 17:04:56	1.1789	37.585	39.076	9.6917	26.218	24.133	109.72	8.0746	0.5461	0.1251	0.4716
MF9L79L	06/04/2019 17:09:43	0.244	7.9482	8.3546	2.0526	5.9815	5.5275	25.459	1.7014	0.1957	0.0256	0.1072
MF9L79A-Sb	06/04/2019 17:14:31	3.2497	47.667	43.393	11.381	28.551	27.632	110.25	10.116	10.145	1.9302	2.5049
MF9L61	06/04/2019 17:19:20	0.9134	38.186	23.032	9.3239	24.935	24.924	114.57	8.4678	0.4849	0.2929	0.5223
MF9L69	06/04/2019 17:24:06	1.0212	36.096	35.831	7.7907	23.764	18.977	121.56	5.299	0.5497	0.078	0.5998
MF9L70	06/04/2019 17:28:51	0.8816	26.788	42.44	6.5162	19.64	25.821	109.07	3.8225	0.5405	0.0942	0.4953
MF9L74	06/04/2019 17:33:38	0.8353	36.935	26.065	8.3819	23.149	17.955	81.831	8.1973	0.5939	0.1258	0.4881
MF9L75	06/04/2019 17:38:25	0.8893	33.305	37.814	6.4981	20.715	22.182	106.08	5.8821	0.8108	0.126	0.5849
MF9L76	06/04/2019 17:43:11	0.689	25.97	24.661	5.6035	17.172	20.646	86.851	3.9844	0.6477	0.0806	0.4421
MF9L77	06/04/2019 17:47:56	0.906	31.076	39.024	8.5239	22.793	23.038	105.65	6.5054	0.6212	0.1136	0.4961
MF9L78	06/04/2019 17:52:40	0.7178	25.798	23.083	5.7221	17.072	20.078	90.854	4.5322	0.7278	0.0999	0.4185
CCV2	06/04/2019 17:57:27	2455.2	2531.8	2459.6	2434	2453.7	2326	2330.6	2474	261.7	234.39	2365.1
CCB2	06/04/2019 18:02:13	0.091	-0.013	-0.0091	0.0128	0.0172	0.0857	-0.1952	0.0744	0.0794	0.0137	0.0269
MF9M24	06/04/2019 18:07:00	0.9821	35.223	41.844	7.0692	22.335	23.98	110.43	5.3244	0.4765	0.1436	0.5763
MF9L62	06/04/2019 18:11:45	0.9962	42.478	13.857	8.0123	21.828	18.381	68.623	6.3253	0.5358	0.0805	0.3301
MF9L63	06/04/2019 18:16:33	0.5936	15.93	39.372	6.3427	86.85	13.568	68.415	4.4907	0.5391	0.0369	0.3809
MF9L64	06/04/2019 18:21:20	0.6282	22.847	19.522	5.3747	17.295	23.782	124.74	4.5746	0.7063	0.0521	0.3579
MF9L65	06/04/2019 18:26:08	0.9724	28.501	14.574	5.5242	20.09	16.404	64.456	4.2188	0.391	0.0592	0.3848
MF9L66	06/04/2019 18:30:54	1.0351	41.765	26.493	11.033	29.378	48.581	240.12	7.7183	1.3766	0.1265	1.1992
MF9L67	06/04/2019 18:35:40	0.6519	22.165	11.608	4.9874	16.139	16.813	71.795	4.2201	0.6125	0.0617	0.3281
MF9L71	06/04/2019 18:40:25	0.8447	40.096	17.361	9.0731	24.015	17.389	83.455	9.5423	0.4344	0.0647	0.3512
MF9L72	06/04/2019 18:45:09	0.6696	34.164	15.324	7.5417	20.119	27.591	83.466	7.4597	0.3355	0.0878	0.3486
MF9L73	06/04/2019 18:49:56	0.6312	33.688	32.511	7.8397	22.717	16.952	76.154	6.8589	0.245	0.0725	0.4459
MF9M33	06/04/2019 18:54:42	1.0259	41.111	11.929	7.5235	21.618	16.848	58.82	6.6641	0.4458	0.0679	0.3332
CCV3	06/04/2019 18:59:27	2484	2525.6	2464.1	2457.6	2485	2378.6	2340	2476.4	262.05	234.47	2362.5
CCB3	06/04/2019 19:04:13	0.1139	0.0228	-0.0161	0.0055	0.019	0.0935	-0.2485	0.0223	0.0397	0.0098	0.0287

Run MS219048 Summary/Log		121Sb	137Ba	205Tl	208Pb	6Li	45Sc	89Y	103Rh	115In	159Tb	209Bi
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
S0	06/04/2019 15:39:16	0	0	0	0	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
S01	06/04/2019 15:44:03	1.9048	9.9856	0.9491	0.9058	99.89%	98.81%	100.02%	100.20%	101.31%	102.45%	103.22%
S02	06/04/2019 15:48:46	9.2268	10.495	9.778	9.8821	102.35%	101.50%	101.39%	101.22%	100.27%	99.92%	98.88%
S03	06/04/2019 15:53:32	44.602	50.335	47.682	48.303	100.45%	98.46%	100.00%	100.22%	101.74%	103.12%	104.34%
S04	06/04/2019 15:58:17	186.89	198.36	191.11	192.79	98.00%	95.99%	95.58%	95.33%	95.55%	95.64%	94.42%
S05	06/04/2019 16:03:02	485.53	503.76	503.31	500.43	91.90%	88.19%	88.38%	88.24%	89.34%	90.83%	91.20%
S06	06/04/2019 16:07:47	2505.2	2471.7	2479.6	2480.4	82.79%	80.58%	79.08%	79.97%	79.93%	81.39%	81.26%
S07	06/04/2019 16:12:32	4999.4	5013.8	5010.3	5010.1	78.33%	77.36%	75.37%	76.21%	77.55%	80.83%	81.88%
ICV	06/04/2019 16:17:19	194.37	100.17	203.43	200.9	78.95%	80.24%	77.33%	77.51%	77.41%	79.51%	79.47%
ICB	06/04/2019 16:22:05	0.3514	0.0134	0.0251	0.0104	81.47%	82.59%	80.68%	81.16%	81.14%	83.61%	86.24%
ICSA	06/04/2019 16:26:51	1.2911	1.5748	0.028	4.4562	62.26%	65.81%	65.17%	65.39%	70.86%	74.49%	70.89%
ICSAB	06/04/2019 16:31:38	20.289	22.457	21.51	25.605	61.43%	66.28%	66.81%	66.83%	72.64%	76.87%	72.51%
CCV1	06/04/2019 16:36:22	2501	2513.1	2572.3	2559.5	65.03%	75.01%	74.75%	74.74%	79.86%	83.72%	81.99%
CCB1	06/04/2019 16:41:07	0.7146	0.0325	0.0497	0.0385	74.01%	89.41%	90.33%	91.00%	93.18%	97.90%	102.24%
PBS1	06/04/2019 16:45:53	0.1961	0.0225	0.0057	0.0478	72.45%	83.57%	86.32%	86.91%	89.39%	93.65%	96.27%
LCS1	06/04/2019 16:50:38	4.0085	19.708	1.7898	1.9144	74.37%	82.79%	85.47%	86.09%	88.23%	92.07%	94.41%
MF9L79	06/04/2019 16:55:25	0.306	136.63	0.1321	83.287	69.68%	69.08%	81.05%	73.01%	78.44%	83.98%	84.31%
MF9L79S	06/04/2019 17:00:11	4.9628	548.59	9.8567	83.903	70.19%	68.37%	78.25%	71.16%	75.26%	78.42%	76.61%
MF9L79D	06/04/2019 17:04:56	0.2694	135.77	0.1344	82.224	70.25%	67.48%	78.30%	70.94%	76.11%	81.24%	81.33%
MF9L79L	06/04/2019 17:09:43	0.0654	28.666	0.0043	16.832	77.17%	83.86%	86.91%	85.36%	87.01%	88.41%	88.03%
MF9L79A-Sb	06/04/2019 17:14:31	3.9506	158.22	2.0567	85.198	72.95%	70.32%	80.75%	73.02%	77.61%	81.73%	81.01%
MF9L61	06/04/2019 17:19:20	0.3257	119.65	0.0924	84.21	73.12%	71.10%	79.87%	72.36%	76.18%	79.55%	75.85%
MF9L69	06/04/2019 17:24:06	0.3047	112.26	0.1042	37.983	73.14%	68.96%	78.54%	72.00%	76.92%	81.96%	81.53%
MF9L70	06/04/2019 17:28:51	0.2604	103.72	0.0781	61.515	72.83%	67.22%	75.59%	70.42%	74.72%	79.36%	78.49%
MF9L74	06/04/2019 17:33:38	0.2826	106.99	0.0852	106.72	72.55%	68.58%	78.49%	71.62%	76.08%	81.24%	79.59%
MF9L75	06/04/2019 17:38:25	0.3216	96.221	0.0852	127.43	72.85%	68.29%	77.00%	70.96%	75.59%	80.17%	78.24%
MF9L76	06/04/2019 17:43:11	0.337	82.092	0.0676	56.533	73.66%	68.84%	75.68%	71.52%	75.84%	80.77%	80.39%
MF9L77	06/04/2019 17:47:56	0.2997	118.29	0.0928	81.313	72.52%	66.12%	75.32%	69.39%	74.71%	80.44%	80.12%
MF9L78	06/04/2019 17:52:40	0.3212	90.298	0.0676	52.931	73.14%	66.94%	74.86%	70.79%	76.14%	82.40%	83.59%
CCV2	06/04/2019 17:57:27	2467.7	2470.7	2542.2	2526.5	69.24%	75.09%	74.78%	75.46%	80.01%	82.99%	81.36%
CCB2	06/04/2019 18:02:13	0.7067	0.0242	0.0136	0.0372	78.10%	89.03%	89.77%	90.16%	91.20%	94.64%	96.19%
MF9M24	06/04/2019 18:07:00	0.4919	100.46	0.107	137	71.07%	68.91%	78.17%	71.68%	76.23%	80.54%	79.30%
MF9L62	06/04/2019 18:11:45	0.2766	115.05	0.1127	29.44	71.22%	67.42%	77.79%	71.27%	75.96%	81.10%	81.84%
MF9L63	06/04/2019 18:16:33	0.2452	64.368	0.0369	31.03	71.84%	68.68%	76.81%	70.88%	76.26%	82.14%	79.77%
MF9L64	06/04/2019 18:21:20	0.4705	87.617	0.0634	52.974	73.52%	69.66%	75.33%	71.49%	75.03%	79.46%	78.44%
MF9L65	06/04/2019 18:26:08	0.1482	93.28	0.0932	26.665	72.78%	67.23%	75.52%	69.49%	74.09%	78.54%	77.03%
MF9L66	06/04/2019 18:30:54	0.5465	192.99	0.1899	61.723	73.13%	69.22%	79.03%	68.59%	72.66%	79.87%	75.27%
MF9L67	06/04/2019 18:35:40	0.2092	81.889	0.0611	26.752	73.47%	67.30%	74.49%	70.64%	74.46%	80.00%	79.76%
MF9L71	06/04/2019 18:40:25	0.2471	96.783	0.072	43.14	72.73%	67.79%	76.41%	69.06%	73.56%	77.32%	74.41%
MF9L72	06/04/2019 18:45:09	0.3045	90.34	0.0694	54.07	73.36%	67.29%	75.04%	70.08%	75.01%	80.50%	79.84%
MF9L73	06/04/2019 18:49:56	0.3538	69.332	0.0473	83.013	73.92%	69.65%	77.33%	70.24%	74.70%	78.10%	73.68%
MF9M33	06/04/2019 18:54:42	0.1777	109.53	0.0982	25.322	74.92%	67.55%	76.65%	70.80%	75.02%	79.73%	79.76%
CCV3	06/04/2019 18:59:27	2476.6	2481.1	2565	2544.7	69.59%	75.59%	74.01%	74.68%	78.66%	80.59%	78.63%
CCB3	06/04/2019 19:04:13	0.8008	0.0153	0.0024	0.0192	77.83%	87.94%	87.62%	88.31%	89.11%	91.38%	93.02%

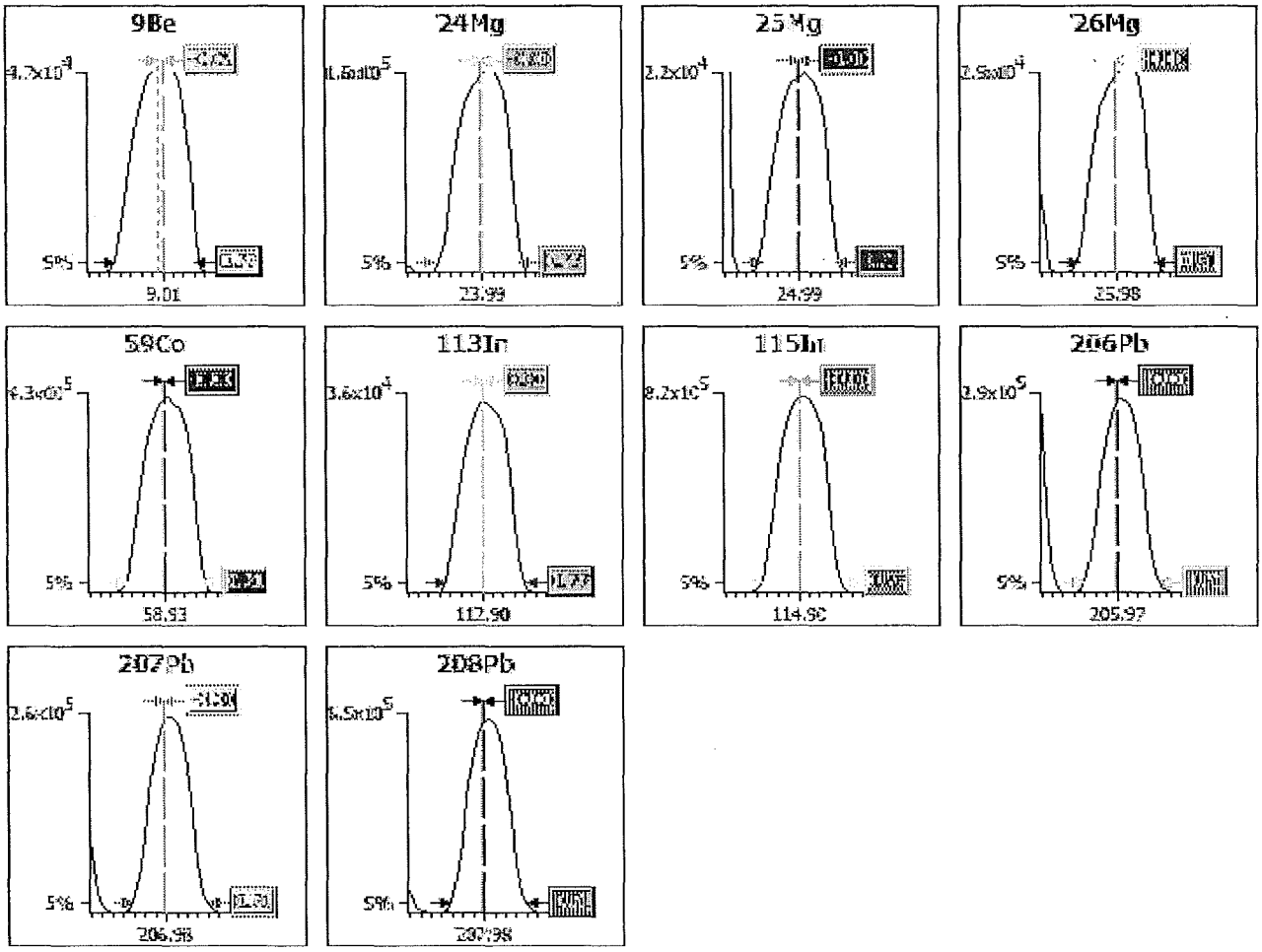
Tune - Run # m5219048

Performance Report

Sample details
Acquired at : 06/04/2019 14:45:52
Report name : CLP [10/19/2012 10:16:28]

Mass Calibration verification

Acquisition parameters
Sweeps : 10
Dwell : 5.0 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	-0.00
25Mg	0.85	0.65	0.11	0.71	-0.00
26Mg	0.85	0.65	0.11	0.71	-0.00
59Co	0.85	0.65	0.11	0.71	-0.00
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

Tune - Run #M5219048

ample details
cquired at : 06/04/2019 14:45:52
eport name : CLP [10/19/2012 10:16:28]

Tune conditions

Major	
Extraction	-125
Lens 1	4.7
Focus	22.4
D1	-29.8
Pole Bias	1.0
Hexapole Bias	-3.0
Nebuliser	0.77
Sampling Depth	130

Minor	
Lens 2	-36.9
Lens 3	-108.2
Forward power	1404
Horizontal	76
Vertical	515
D2	-160
DA	-80.0
Cool	13.0
Auxiliary	0.90

Global	
Standard resolution	120
High resolution	90
Analogue Detector	1853
PC Detector	3078

Add. Gases

Sensitivity and stability results

Acquisition parameters

Sweeps : 130

Run	Time	5Bkg	9Be	24Mg	25Mg	26Mg	56Ar O	59Co	138Ba++	101Bkg
Dwell (mSecs)		100.0	10.0	10.0	10.0	10.0	10.0	10.0	30.0	100.0
Limits	%RSD	-	5.0%	5.0%	5.0%	5.0%	-	5.0%	-	-
	Countrate	-	>3000	>10000	>10000	>10000	-	>10000	-	-
1	14:46:12	0.231	44988.805	154951.17	21907.991	25594.629	117686.72	424911.35	11114.073	0.462
2	14:47:25	0.154	45097.080	154742.73	22128.572	25505.125	118448.95	426345.75	11360.045	0.385
3	14:48:38	0.308	45701.127	155995.77	22059.158	25846.945	118503.56	428049.05	11374.681	0.308
4	14:49:50	0.462	45997.365	157401.06	22079.211	26171.803	120302.91	434383.78	11446.060	0.154
5	14:51:03	0.769	46967.369	160864.73	22634.544	26757.504	126123.41	446437.99	11679.461	0.385
x		0.385	45750.349	156791.09	22161.895	25975.201	120213.11	432025.58	11394.864	0.338
σ		0.24	798.64	2508.99	276.75	508.16	3440.83	8831.25	202.53	0.12
%RSD		63.246	1.746	1.600	1.249	1.956	2.862	2.044	1.777	34.468

Run	Time	113In	115In	138Ba	140Ce	156Ce O	206Pb	207Pb	208Pb	220Bkg
Dwell (mSecs)		10.0	10.0	10.0	10.0	30.0	10.0	10.0	10.0	100.0
Limits	%RSD	5.0%	5.0%	-	-	-	5.0%	5.0%	5.0%	-
	Countrate	>10000	>10000	-	-	-	>10000	>10000	>10000	<20
1	14:46:12	34312.032	826031.02	557334.22	833674.24	20167.451	294960.88	262737.58	649006.90	0.308
2	14:47:25	34980.959	838560.72	566674.41	844629.35	20389.529	301208.50	267636.77	658470.08	0.615
3	14:48:38	34797.887	838352.82	563321.20	840141.77	20452.503	293964.26	263201.89	644362.58	0.615
4	14:49:50	34740.726	833095.85	555997.68	833110.27	20420.116	284719.92	252560.07	624216.30	0.538
5	14:51:03	34712.918	827677.61	552688.86	824873.59	20378.476	279058.55	248805.78	609380.12	0.154
x		34708.904	832743.60	559203.27	835285.84	20361.615	290782.42	258988.42	637087.20	0.446
σ		245.19	5834.15	5678.51	7527.06	112.30	8810.36	7931.16	19909.67	0.21
%RSD		0.706	0.701	1.015	0.901	0.552	3.030	3.062	3.125	46.263

Ratio results

Run	Time	56Ar O/59Co	138Ba++/138Ba	115In/101Bkg	156Ce O/140Ce
Ratio limits		-	-	>10000.0000	<0.0300
1	14:46:12	0.277	0.020	1789733.8	0.024
2	14:47:25	0.278	0.020	2180257.8	0.024
3	14:48:38	0.277	0.020	2724646.6	0.024
4	14:49:50	0.277	0.021	5415123.0	0.025
5	14:51:03	0.283	0.021	2151961.7	0.025
x		0.2782	0.0204	2852344.6	0.0244
σ		0.00	0.00	1471013.10	0.00
%RSD		0.8737	2.3873	51.5721	0.9558

Result : The performance report passed.

:xperiment Details

Description	PlasmaLab Template BlankExperiment
Template Filename	C:\Program Files\Thermo Fisher\PlasmaLab\data\MS219045.tee
Created By User	Edwards
Analyte Database	ILM5.3.tea
Creation Timestamp	02/02/2005 10:10:19
Last Edited By	kristie.bitner
Last Edit Timestamp	06/05/2019 10:56:02
Instrument Detector	Simultaneous
Database Version	3.51
Acquisition Mode	Unknown

John Kershaw
06/05/2019
Run # MS219048
Anal. ICPM02
SDG: MF9L61
Case: 48266
ISM02.4

umerical Results report key (text indicates meaning)

lue text indicates that cell is a statistic.
nderlining indicates that a data warning flag is set.

Column headings
No flag
Semi Quant
Standard Addition
Multi Element

Result cells
Internal Standard
Excluded
QC Warning
QC Failure
Transient TRA only:
Peak Not Found
Manually Edited
Merged Peak

Data warning flags
I - Invalid calibration
T - Tripped
F - Interference correction failed
M - Result over max
V - Valley integration failed
D - Different method used

Setup

Survey Scan Setup

Sweeps	5
Dwell Time	600
Channels Per Mass	10
Acquisition Duration	6739

Main Run Setup

Main Run	Peak Jumping
Sweeps	40
Dwell Time	10000
Channels Per Mass	1
Acquisition Duration	40427
Channel Spacing	0.02

Survey Scan Regions

Start AMU	End AMU	Channels	Dwell ms	Resolution
4.59	11.50	69	600	Standard
12.50	13.50	10	600	
22.59	28.41	58	600	
30.59	31.50	9	600	
33.50	34.50	10	600	
36.50	37.50	10	600	
38.50	39.41	9	600	Standard
42.59	245.50	2029	600	Standard

Peak Jump Regions

Analyte	Channels	Dwell ms	Resolution
6Li	1	30000	Standard
7Li	1	10000	Standard
9Be	1	30000	Standard
13C	1	10000	
23Na	1	10000	
24Mg	1	5000	
25Mg	1	5000	
26Mg	1	5000	
27Al	1	10000	Standard
39K	1	10000	
43Ca	1	10000	
44Ca	1	10000	
45Sc	1	20000	Standard
47Ti	1	10000	Standard
51V	1	10000	Standard
52Cr	1	10000	Standard
53Cl O	1	10000	Standard
54Fe	1	10000	

55Mn	1	10000	Standard
56Fe	1	10000	
57Fe	1	10000	
59Co	1	10000	Standard
60Ni	1	10000	Standard
63Cu	1	10000	Standard
65Cu	1	10000	Standard
66Zn	1	10000	Standard
75As	1	30000	Standard
77Ar Cl	1	30000	Standard
78Se	1	30000	Standard
82Se	1	30000	Standard
83Kr	1	30000	Standard
86Sr	1	10000	Standard
88Sr	1	10000	Standard
89Y	1	10000	Standard
94Mo	1	10000	Standard
95Mo	1	10000	Standard
96Mo	1	10000	Standard
97Mo	1	10000	Standard
98Mo	1	10000	Standard
103Rh	1	10000	Standard
106Pd	1	10000	Standard
106Cd	1	10000	Standard
107Ag	1	20000	Standard
108Mo O	1	10000	Standard
109Ag	1	20000	Standard
111Cd	1	20000	Standard
114Cd	1	10000	Standard
115In	1	10000	Standard
118Sn	1	10000	Standard
121Sb	1	10000	Standard
135Ba	1	10000	Standard
137Ba	1	10000	Standard
150Sm	1	10000	Standard
150Nd	1	10000	Standard
156Gd	1	10000	Standard
156Dy	1	10000	Standard
159Tb	1	10000	Standard
160Dy	1	10000	Standard
160Gd	1	10000	Standard
164Dy	1	10000	Standard
164Er	1	10000	Standard
165Ho	1	10000	Standard
203Tl	1	20000	Standard
205Tl	1	20000	Standard
206Pb	1	10000	Standard
207Pb	1	10000	Standard
208Pb	1	10000	Standard
209Bi	1	20000	Standard
220Bkg	1	10000	Standard

Calibration Technique

Use External Drift Correction - No
Calibrate by - Element

Symbol	Interference Correction	RSF	Calibration Method	Line Fit	Weighting	Forcing	Use for Semi-Quant	Max Error	Minimum Correlation
6Li	Yes	1.00	None				No		
7Li	Yes	1.00	None				No		
9Be	Yes	0.75	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
13C	Yes	0.05	None				No		
23Na	Yes	1.00	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
24Mg	Yes	0.98	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
25Mg	Yes	0.98	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
26Mg	Yes	0.98	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
27Al	Yes	0.98	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
39K	Yes	1.00	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
43Ca	Yes	0.99	None				No		
44Ca	Yes	0.99	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
45Sc	Yes	1.00	None				No		
47Ti	Yes	0.99	Semi-Quantified				No		
51V	Yes	0.99	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
52Cr	Yes	0.98	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
55Mn	Yes	0.95	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
54Fe	Yes	0.96	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
56Fe	Yes	0.96	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
57Fe	Yes	0.96	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
59Co	Yes	0.93	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
60Ni	No	0.91	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
63Cu	Yes	0.90	Fully-Quantified	Linear	None	Through Blank	Yes		0.995000
65Cu	Yes	0.90	Fully-Quantified	Linear	Absolute SD	Through Blank	Yes		0.995000

66Zn	Yes	0.38	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
75As	Yes	0.07	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
78Se	Yes	0.10	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
82Se	Yes	0.10	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
83Kr	Yes	0.01	Semi-Quantified				No	
86Sr	Yes	0.96	None				No	
88Sr	Yes	0.96	None				No	
89Y	Yes	0.98	None				No	
94Mo	Yes	0.98	None				No	
95Mo	Yes	0.98	None				No	
96Mo	Yes	0.98	None				No	
97Mo	Yes	0.98	None				No	
98Mo	Yes	0.98	None				No	
103Rh	Yes	0.94	None				No	
106Pd	Yes	0.93	None				No	
107Ag	Yes	0.93	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
109Ag	Yes	0.93	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
106Cd	Yes	0.57	None				No	
111Cd	Yes	0.57	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
114Cd	Yes	0.57	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
115In	Yes	0.99	None				No	
118Sn	Yes	0.96	None				No	
121Sb	Yes	0.39	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
135Ba	Yes	0.91	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
137Ba	Yes	0.91	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
150Nd	Yes	0.99	None				No	
150Sm	Yes	0.97	None				No	
156Gd	Yes	0.93	None				No	
160Gd	Yes	0.93	None				No	
159Tb	Yes	0.99	None				No	
156Dy	Yes	1.00	None				No	
160Dy	Yes	1.00	None				No	
164Dy	Yes	1.00	None				No	
165Ho	Yes	1.00	None				No	
164Er	Yes	0.99	None				No	
203Tl	Yes	1.00	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
206Pb	Yes	0.97	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
207Pb	Yes	0.97	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
208Pb	Yes	0.97	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
209Bi	Yes	0.92	None				No	
205Tl	Yes	1.00	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
220Bkg	Yes		Semi-Quantified				No	
77Ar Cl	Yes		Semi-Quantified				No	
53Cl O	Yes		Semi-Quantified				No	
108Mo O	Yes		Semi-Quantified				No	

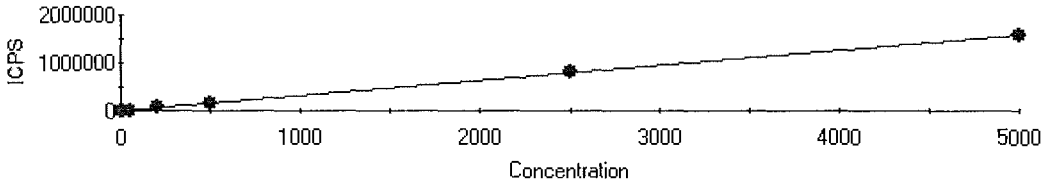
Sample List

No	Label	Type	Weight	Rack	Row	Col	Height
1	S0	Blank	1.000	1	1	1	144
2	S01	Fully Quant Standard	1.000	1	1	2	144
3	S02	Fully Quant Standard	1.000	1	1	3	144
4	S03	Fully Quant Standard	1.000	1	1	4	144
5	S04	Fully Quant Standard	1.000	1	1	5	144
6	S05	Fully Quant Standard	1.000	1	1	6	144
7	S06	Fully Quant Standard	1.000	1	1	7	144
8	S07	Fully Quant Standard	1.000	1	1	8	144
9	ICV	Unknown	1.000	1	1	9	144
10	ICB	Unknown	1.000	1	1	10	144
11	ICSA	Unknown	1.000	1	1	11	144
12	ICSAB	Unknown	1.000	1	1	12	144
13	CCV1	Unknown	1.000	1	2	1	144
14	CCB1	Unknown	1.000	1	2	2	144
15	PBS1	Unknown	1.000	1	2	3	144
16	LCS1	Unknown	1.000	1	2	4	144
17	MF9L79	Unknown	1.000	1	2	5	144
18	MF9L79S	Unknown	1.000	1	2	6	144
19	MF9L79D	Unknown	1.000	1	2	7	144
20	MF9L79L	Unknown	1.000	1	2	8	144
21	MF9L79A-Sb	Unknown	1.000	1	2	9	144
22	MF9L61	Unknown	1.000	1	2	10	144
23	MF9L69	Unknown	1.000	1	2	11	144
24	MF9L70	Unknown	1.000	1	2	12	144
25	MF9L74	Unknown	1.000	1	3	1	144
26	MF9L75	Unknown	1.000	1	3	2	144
27	MF9L76	Unknown	1.000	1	3	3	144
28	MF9L77	Unknown	1.000	1	3	4	144
29	MF9L78	Unknown	1.000	1	3	5	144
30	CCV2	Unknown	1.000	1	3	6	144
31	CCB2	Unknown	1.000	1	3	7	144
32	MF9M24	Unknown	1.000	1	3	8	144
33	MF9L62	Unknown	1.000	1	3	9	144
34	MF9L63	Unknown	1.000	1	3	10	144
35	MF9L64	Unknown	1.000	1	3	11	144

36	MF9L65	Unknown	1.000	1	3	12	144
37	MF9L66	Unknown	1.000	1	4	1	144
38	MF9L67	Unknown	1.000	1	4	2	144
39	MF9L71	Unknown	1.000	1	4	3	144
40	MF9L72	Unknown	1.000	1	4	4	144
41	MF9L73	Unknown	1.000	1	4	5	144
42	MF9M33	Unknown	1.000	1	4	6	144
43	CCV3	Unknown	1.000	1	4	7	144
44	CCB3	Unknown	1.000	1	4	8	144

ully Quant Calibration

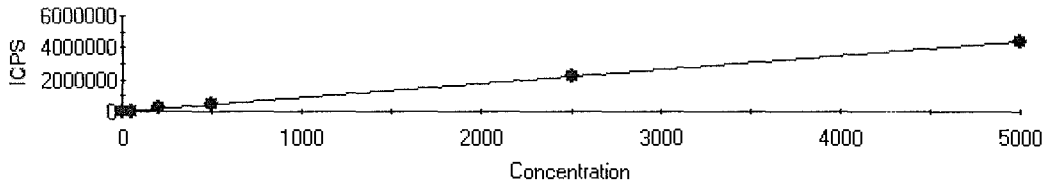
9Be FQ Block 1



Intercept CPS=27.563064 Intercept Conc=0.087089
Sensitivity=316.493688 Correlation Coeff=0.999799

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	27.56	0.00
S01	1.000	1.019	0.019	350.19	1.94
S02	10.000	10.664	0.664	3402.69	6.64
S03	50.000	51.198	1.198	16231.50	2.40
S04	200.000	200.893	0.893	63609.01	0.45
S05	500.000	524.030	24.030	165879.76	4.81
S06	2500.000	2585.570	85.570	818344.04	3.42
S07	5000.000	4954.763	45.237	1568178.82	0.90

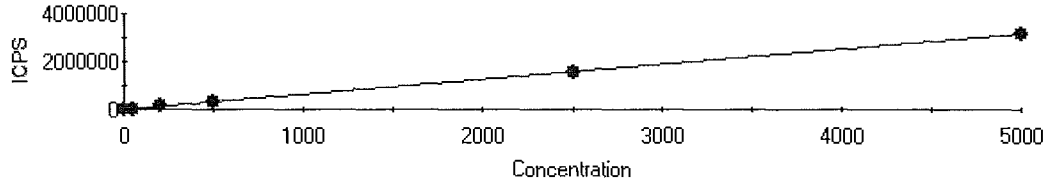
23Na FQ Block 1



Intercept CPS=3073.127133 Intercept Conc=3.533892
Sensitivity=869.615401 Correlation Coeff=0.999993

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	3073.13	0.00
S03	50.000	55.444	5.444	51287.97	10.89
S04	200.000	197.304	2.696	174651.99	1.35
S05	500.000	504.209	4.209	441540.91	0.84
S06	2500.000	2486.153	13.847	2165070.09	0.55
S07	5000.000	5006.556	6.556	4356851.32	0.13

24Mg FQ Block 1

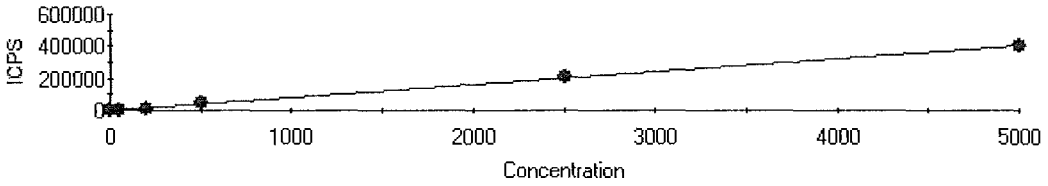


Intercept CPS=130.210330 Intercept Conc=0.208581
Sensitivity=624.266412 Correlation Coeff=0.999996

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	130.21	0.00
S03	50.000	50.959	0.959	31942.30	1.92
S04	200.000	197.923	2.077	123686.64	1.04
S05	500.000	505.436	5.436	315656.65	1.09
S06	2500.000	2489.015	10.985	1553938.67	0.44

S07	5000.000	5005.022	5.022	3124597.62	0.10

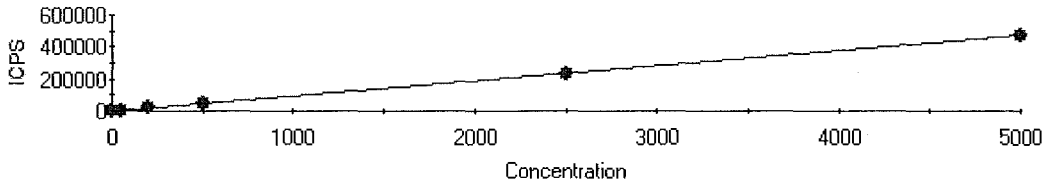
25Mg FQ Block 1



Intercept CPS=12.969187 Intercept Conc=0.159241
Sensitivity=81.443993 Correlation Coeff=0.999990

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	12.97	0.00
S03	50.000	51.853	1.853	4236.09	3.71
S04	200.000	198.614	1.386	16188.90	0.69
S05	500.000	507.306	7.306	41329.96	1.46
S06	2500.000	2483.360	16.640	202267.71	0.67
S07	5000.000	5007.626	7.626	407854.07	0.15

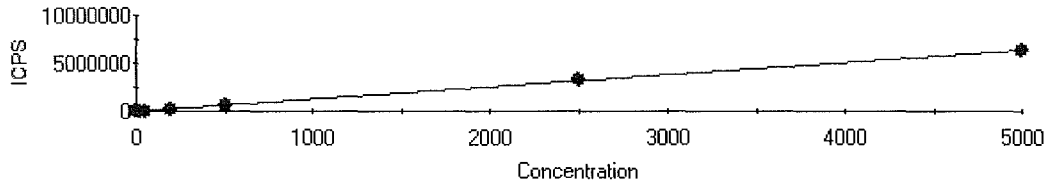
26Mg FQ Block 1



Intercept CPS=36.085147 Intercept Conc=0.379488
Sensitivity=95.088966 Correlation Coeff=0.999967

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	36.09	0.00
S03	50.000	51.739	1.739	4955.90	3.48
S04	200.000	196.802	3.198	18749.81	1.60
S05	500.000	508.582	8.582	48396.60	1.72
S06	2500.000	2467.632	32.368	234680.68	1.29
S07	5000.000	5015.436	15.436	476948.73	0.31

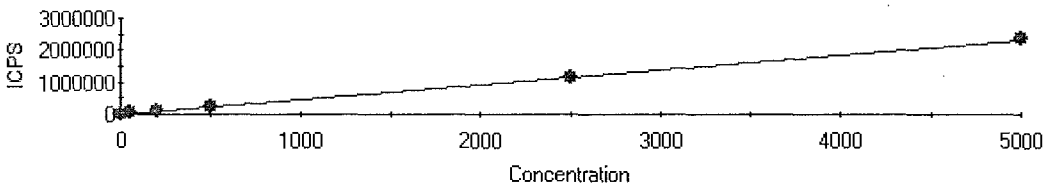
27Al FQ Block 1



Intercept CPS=1330.562391 Intercept Conc=1.042037
Sensitivity=1276.885839 Correlation Coeff=0.999998

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	1330.56	0.00
S01	20.000	23.663	3.663	31545.65	18.32
S03	50.000	54.644	4.644	71105.00	9.29
S04	200.000	200.298	0.298	257088.16	0.15
S05	500.000	509.980	9.980	652517.22	2.00
S06	2500.000	2505.069	5.069	3200017.21	0.20
S07	5000.000	4996.395	3.605	6381156.13	0.07

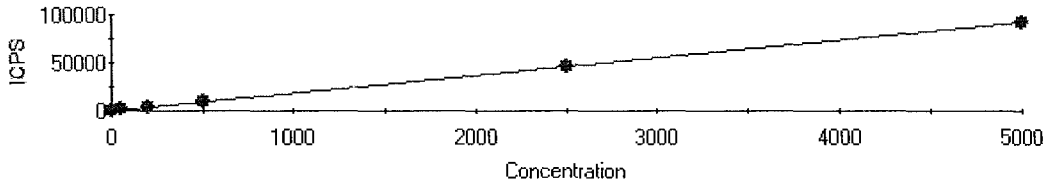
39K FQ Block 1



Intercept CPS=17887.430465 Intercept Conc=38.633247
Sensitivity=463.006140 Correlation Coeff=0.999920

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	17887.43	0.00
S03	50.000	52.103	2.103	42011.64	4.21
S04	200.000	190.921	9.079	106285.21	4.54
S05	500.000	495.318	4.682	247222.70	0.94
S06	2500.000	2447.346	52.654	1151023.80	2.11
S07	5000.000	5027.137	27.137	2345482.80	0.54

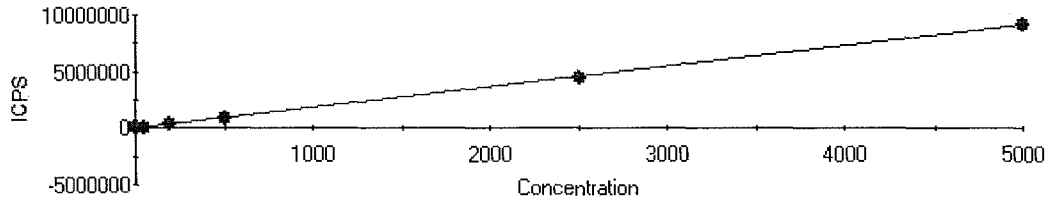
44Ca FQ Block 1



Intercept CPS=96.573066 Intercept Conc=5.213986
Sensitivity=18.521927 Correlation Coeff=0.999918

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	96.57	0.00
S03	50.000	54.522	4.522	1106.43	9.04
S04	200.000	194.869	5.131	3705.92	2.57
S05	500.000	497.654	2.346	9314.09	0.47
S06	2500.000	2447.233	52.767	45424.04	2.11
S07	5000.000	5026.778	26.778	93202.19	0.54

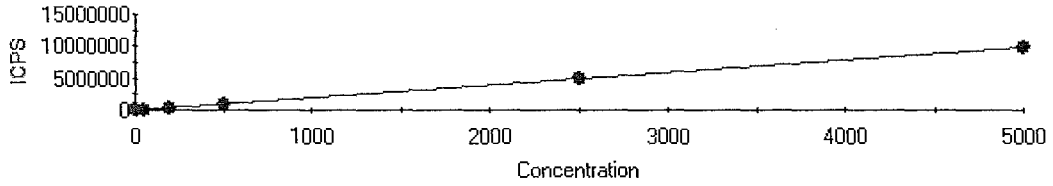
51V FQ Block 1



Intercept CPS=11.712359 Intercept Conc=0.006422
Sensitivity=1823.790561 Correlation Coeff=0.999995

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	11.71	0.00
S01	5.000	5.150	0.150	9403.52	2.99
S02	10.000	9.962	0.038	18180.79	0.38
S03	50.000	48.256	1.744	88019.87	3.49
S04	200.000	192.657	7.343	351376.92	3.67
S05	500.000	499.422	0.578	910853.62	0.12
S06	2500.000	2487.513	12.487	4536713.88	0.50
S07	5000.000	5006.613	6.613	9131024.37	0.13

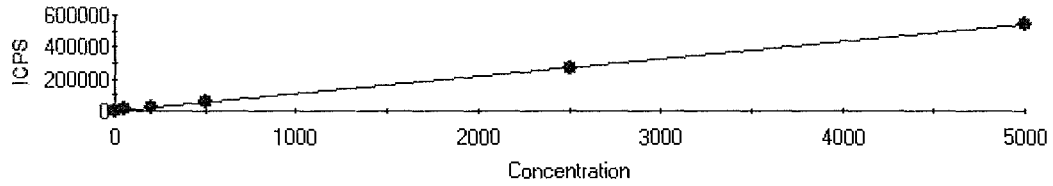
52Cr FQ Block 1



Intercept CPS=252.770602 Intercept Conc=0.127868
Sensitivity=1976.806395 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	252.77	0.00
S01	2.000	1.880	0.120	3969.70	5.99
S02	10.000	10.072	0.072	20162.74	0.72
S03	50.000	48.450	1.550	96028.82	3.10
S04	200.000	193.105	6.895	381984.47	3.45
S05	500.000	498.829	1.171	986340.41	0.23
S06	2500.000	2496.097	3.903	4934553.66	0.16
S07	5000.000	5002.360	2.360	9888949.49	0.05

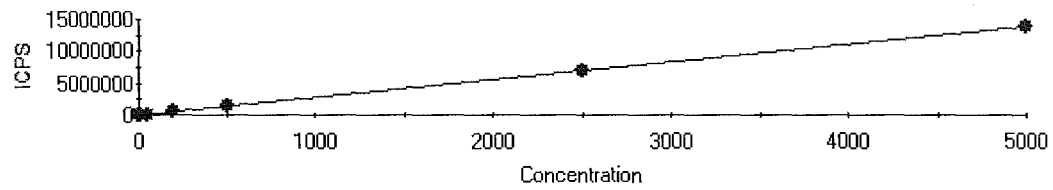
54Fe FQ Block 1



Intercept CPS=1706.560904 Intercept Conc=15.719932
Sensitivity=108.560322 Correlation Coeff=0.999951

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	1706.56	0.00
S03	50.000	51.196	1.196	7264.46	2.39
S04	200.000	193.186	6.814	22678.91	3.41
S05	500.000	496.914	3.086	55651.69	0.62
S06	2500.000	2458.989	41.011	268655.23	1.64
S07	5000.000	5021.075	21.075	546796.03	0.42

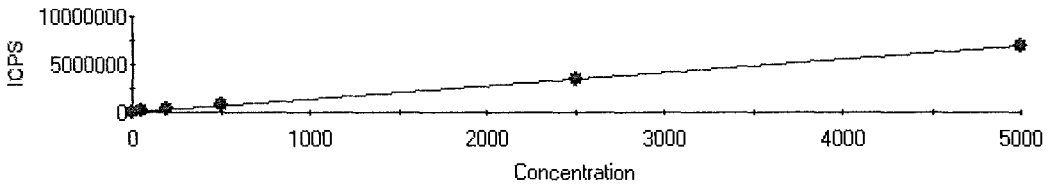
55Mn FQ Block 1



Intercept CPS=64.083264 Intercept Conc=0.023108
Sensitivity=2773.209951 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	64.08	0.00
S01	1.000	0.959	0.041	2722.72	4.13
S02	10.000	9.906	0.094	27536.15	0.94
S03	50.000	48.441	1.559	134401.62	3.12
S04	200.000	194.118	5.882	538393.92	2.94
S05	500.000	503.592	3.592	1396631.06	0.72
S06	2500.000	2497.895	2.105	6927250.51	0.08
S07	5000.000	5000.944	0.944	13868733.12	0.02

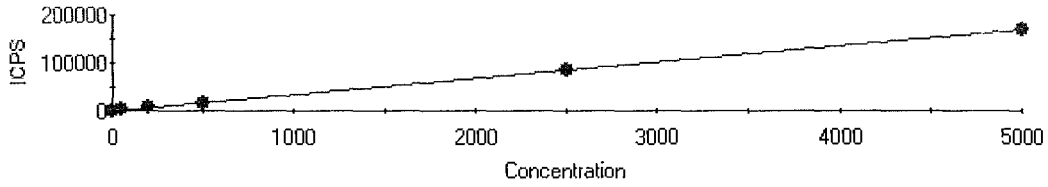
56Fe FQ Block 1



Intercept CPS=64251.806808 Intercept Conc=47.338426
Sensitivity=1357.286516 Correlation Coeff=0.999988

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	64251.81	0.00
S03	50.000	47.944	2.056	129325.20	4.11
S04	200.000	190.859	9.141	323302.22	4.57
S05	500.000	494.381	5.619	735268.91	1.12
S06	2500.000	2479.630	20.370	3429820.52	0.81
S07	5000.000	5011.133	11.133	6865794.97	0.22

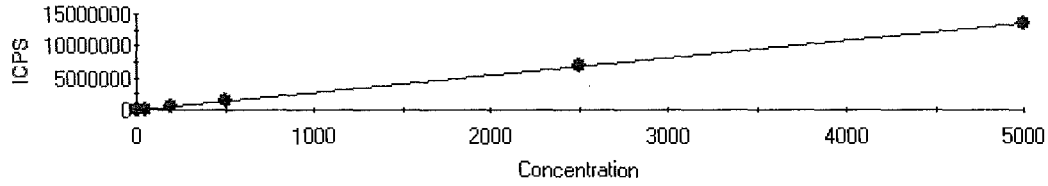
57Fe FQ Block 1



Intercept CPS=357.362430 Intercept Conc=10.631906
Sensitivity=33.612265 Correlation Coeff=0.999970

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	357.36	0.00
S03	50.000	47.378	2.622	1949.86	5.24
S04	200.000	191.333	8.667	6788.51	4.33
S05	500.000	501.830	1.830	17225.01	0.37
S06	2500.000	2467.729	32.271	83303.34	1.29
S07	5000.000	5016.325	16.325	168967.42	0.33

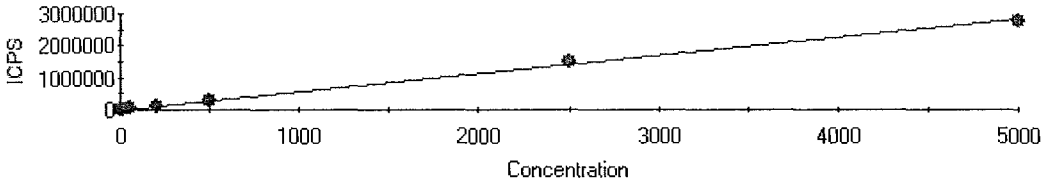
59Co FQ Block 1



Intercept CPS=49.050107 Intercept Conc=0.018080
Sensitivity=2712.985212 Correlation Coeff=0.999994

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	49.05	0.00
S01	1.000	0.986	0.014	2723.35	1.43
S02	10.000	9.993	0.007	27159.73	0.07
S03	50.000	48.607	1.393	131919.45	2.79
S04	200.000	195.187	4.813	529588.39	2.41
S05	500.000	506.937	6.937	1375360.59	1.39
S06	2500.000	2513.037	13.037	6817880.03	0.52
S07	5000.000	4992.995	7.005	13545969.38	0.14

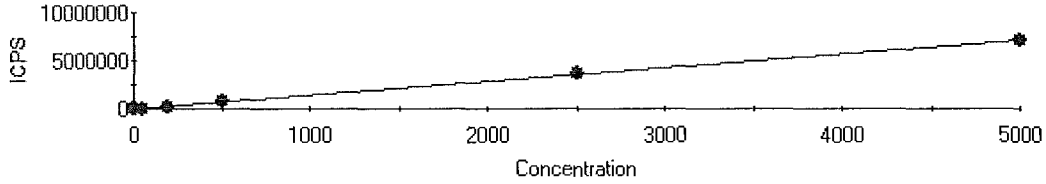
60Ni FQ Block 1



Intercept CPS=11.026693 Intercept Conc=0.019536
Sensitivity=564.427578 Correlation Coeff=0.999477

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	11.03	0.00
S01	1.000	1.074	0.074	617.49	7.45
S02	10.000	10.817	0.817	6116.54	8.17
S03	50.000	52.162	2.162	29452.87	4.32
S04	200.000	206.157	6.157	116371.69	3.08
S05	500.000	525.989	25.989	296893.84	5.20
S06	2500.000	2640.120	140.120	1490167.52	5.60
S07	5000.000	4927.072	72.928	2780986.10	1.46

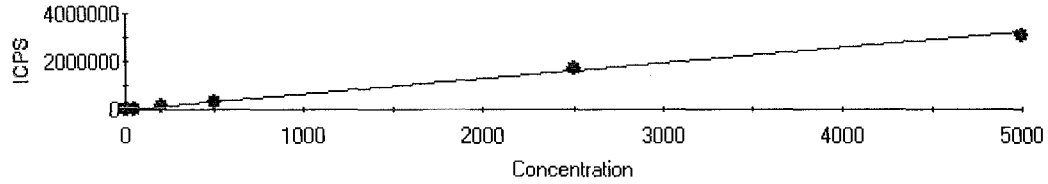
63Cu FQ Block 1



Intercept CPS=79.578845 Intercept Conc=0.056389
Sensitivity=1411.251820 Correlation Coeff=0.999954

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	79.58	0.00
S01	2.000	2.016	0.016	2925.08	0.81
S02	10.000	10.346	0.346	14679.85	3.46
S03	50.000	50.142	0.142	70841.95	0.28
S04	200.000	200.379	0.379	282864.93	0.19
S05	500.000	511.877	11.877	722466.56	2.38
S06	2500.000	2541.003	41.003	3586074.22	1.64
S07	5000.000	4978.294	21.706	7025705.64	0.43

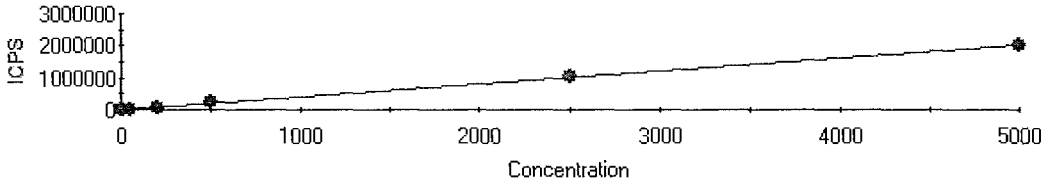
65Cu FQ Block 1



Intercept CPS=45.955637 Intercept Conc=0.071014
Sensitivity=647.133912 Correlation Coeff=0.999248

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	45.96	0.00
S01	2.000	1.992	0.008	1334.73	0.42
S02	10.000	10.521	0.521	6854.55	5.21
S03	50.000	50.742	0.742	32883.03	1.48
S04	200.000	202.751	2.751	131253.31	1.38
S05	500.000	517.268	17.268	334787.79	3.45
S06	2500.000	2571.495	71.495	1664147.36	2.86
S07	5000.000	4735.874	264.126	3064790.33	5.28

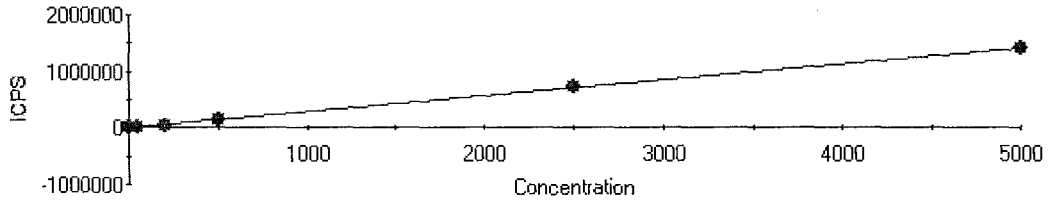
66Zn FQ Block 1



Intercept CPS=192.762332 Intercept Conc=0.480880
Sensitivity=400.853534 Correlation Coeff=0.999934

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	192.76	0.00
S01	2.000	1.824	0.176	924.04	8.79
S02	10.000	10.433	0.433	4375.00	4.33
S03	50.000	51.204	1.204	20718.09	2.41
S04	200.000	204.133	4.133	82020.11	2.07
S05	500.000	521.106	21.106	209080.01	4.22
S06	2500.000	2547.843	47.843	1021504.68	1.91
S07	5000.000	4973.790	26.210	1993953.93	0.52

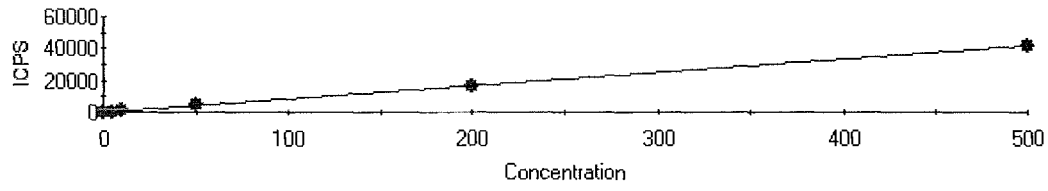
75As FQ Block 1



Intercept CPS=-18.349136 Intercept Conc=-0.065237
Sensitivity=281.268929 Correlation Coeff=0.999961

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	-18.35	0.00
S01	1.000	1.047	0.047	276.25	4.74
S02	10.000	10.822	0.822	3025.61	8.22
S03	50.000	52.821	2.821	14838.66	5.64
S04	200.000	207.297	7.297	58287.73	3.65
S05	500.000	527.782	27.782	148430.20	5.56
S06	2500.000	2532.304	32.304	712240.14	1.29
S07	5000.000	4980.748	19.252	1400911.31	0.39

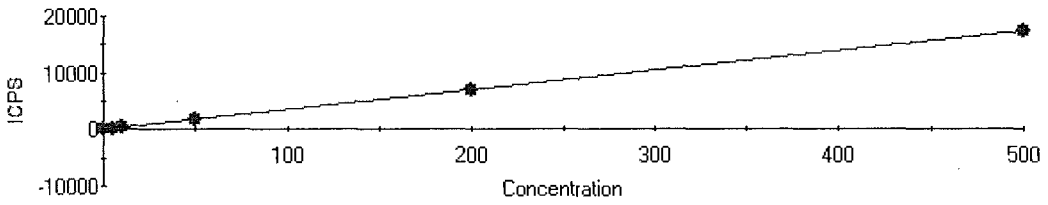
78Se FQ Block 1



Intercept CPS=155.488322 Intercept Conc=1.871002
Sensitivity=83.104313 Correlation Coeff=0.999988

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	155.49	0.00
S01	5.000	4.905	0.095	563.08	1.91
S02	10.000	10.349	0.349	1015.54	3.49
S03	50.000	50.323	0.323	4337.53	0.65
S04	200.000	197.974	2.026	16607.95	1.01
S05	500.000	500.772	0.772	41771.82	0.15

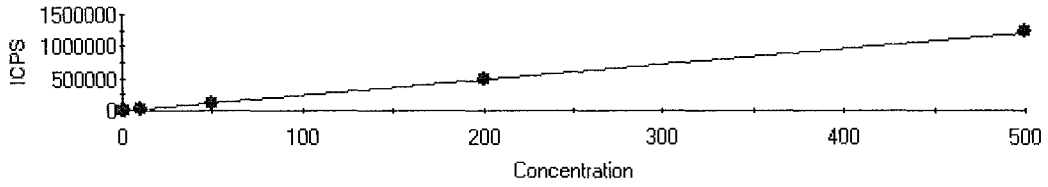
82Se FQ Block 1



Intercept CPS=-2.658626 Intercept Conc=-0.076367
Sensitivity=34.813834 Correlation Coeff=0.999954

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	-2.66	0.00
S01	5.000	4.944	0.056	169.44	1.13
S02	10.000	10.332	0.332	357.02	3.32
S03	50.000	50.307	0.307	1748.72	0.61
S04	200.000	195.960	4.040	6819.47	2.02
S05	500.000	501.579	1.579	17459.23	0.32

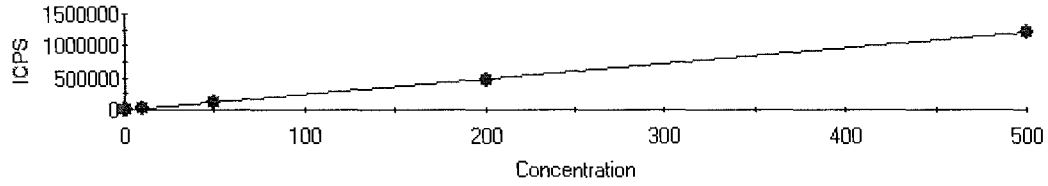
107Ag FQ Block 1



Intercept CPS=11.229045 Intercept Conc=0.004589
Sensitivity=2447.210606 Correlation Coeff=0.999927

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	11.23	0.00
S01	1.000	0.957	0.043	2354.14	4.26
S02	10.000	9.902	0.098	24243.70	0.98
S03	50.000	48.423	1.577	118512.86	3.15
S04	200.000	194.818	5.182	476771.57	2.59
S05	500.000	502.233	2.233	1229080.13	0.45

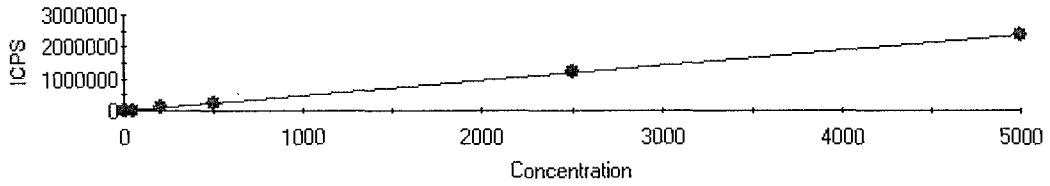
109Ag FQ Block 1



Intercept CPS=3.267851 Intercept Conc=0.001357
Sensitivity=2408.146496 Correlation Coeff=0.999900

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	3.27	0.00
S01	1.000	0.976	0.024	2353.34	2.41
S02	10.000	9.958	0.042	23983.14	0.42
S03	50.000	48.515	1.485	116833.54	2.97
S04	200.000	193.913	6.087	466973.20	3.04
S05	500.000	502.584	2.584	1210300.11	0.52

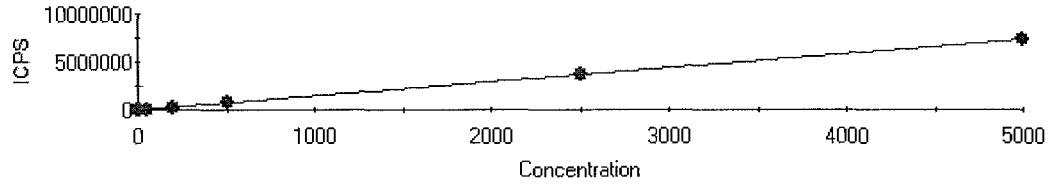
111Cd FQ Block 1



Intercept CPS=62.584724 Intercept Conc=0.131939
Sensitivity=474.346321 Correlation Coeff=0.999996

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	62.58	0.00
S01	1.000	0.983	0.017	528.81	1.71
S02	10.000	10.236	0.236	4918.05	2.36
S03	50.000	49.935	0.065	23748.84	0.13
S04	200.000	198.957	1.043	94437.11	0.52
S05	500.000	511.441	11.441	242662.71	2.29
S06	2500.000	2493.913	6.087	1183040.85	0.24
S07	5000.000	5001.942	1.942	2372715.14	0.04

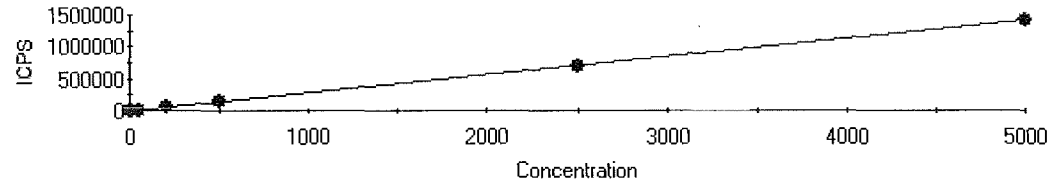
121Sb FQ Block 1



Intercept CPS=6.010609 Intercept Conc=0.004144
Sensitivity=1450.474378 Correlation Coeff=0.999994

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	6.01	0.00
S01	2.000	1.905	0.095	2768.94	4.76
S02	10.000	9.227	0.773	13389.30	7.73
S03	50.000	44.602	5.398	64700.53	10.80
S04	200.000	186.891	13.109	271087.18	6.55
S05	500.000	485.531	14.469	704255.93	2.89
S06	2500.000	2505.219	5.219	3633761.35	0.21
S07	5000.000	4999.418	0.582	7251533.06	0.01

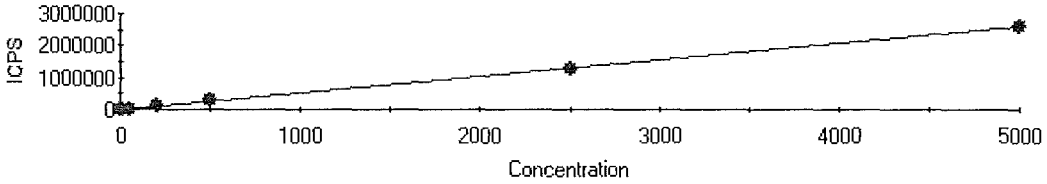
135Ba FQ Block 1



Intercept CPS=4.989939 Intercept Conc=0.017720
Sensitivity=281.603095 Correlation Coeff=0.999991

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	4.99	0.00
S01	10.000	9.929	0.071	2801.09	0.71
S03	50.000	51.172	1.172	14415.17	2.34
S04	200.000	201.378	1.378	56713.52	0.69
S05	500.000	513.758	13.758	144680.77	2.75
S06	2500.000	2486.539	13.461	700222.09	0.54
S07	5000.000	5005.288	5.288	1409509.58	0.11

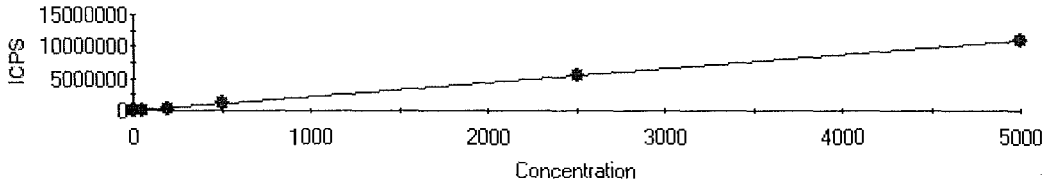
137Ba FQ Block 1



Intercept CPS=0.991218 Intercept Conc=0.001922
Sensitivity=515.757004 Correlation Coeff=0.999978

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	0.99	0.00
S01	10.000	9.986	0.014	5151.13	0.14
S03	50.000	50.335	0.335	25961.81	0.67
S04	200.000	198.361	1.639	102306.95	0.82
S05	500.000	503.759	3.759	259818.31	0.75
S06	2500.000	2471.746	28.254	1274821.06	1.13
S07	5000.000	5013.814	13.814	2585910.45	0.28

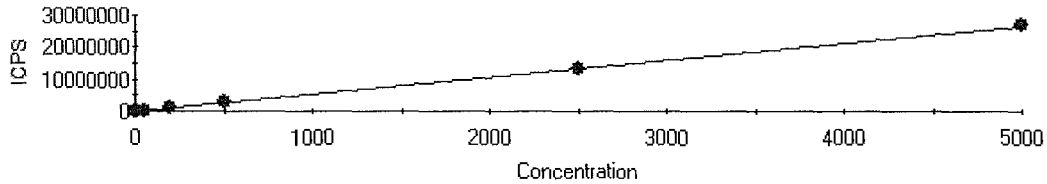
203Tl FQ Block 1



Intercept CPS=93.895490 Intercept Conc=0.042954
Sensitivity=2185.948291 Correlation Coeff=0.999988

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	93.90	0.00
S01	1.000	0.955	0.045	2180.84	4.53
S02	10.000	9.902	0.098	21739.45	0.98
S03	50.000	48.167	1.833	105384.84	3.67
S04	200.000	191.636	8.364	418999.33	4.18
S05	500.000	498.846	1.154	1090544.77	0.23
S06	2500.000	2479.316	20.684	5419751.08	0.83
S07	5000.000	5010.810	10.810	10953466.33	0.22

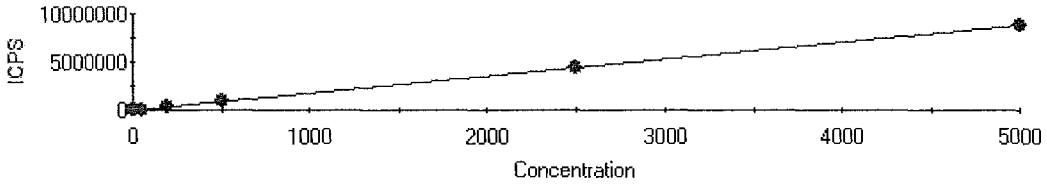
205Tl FQ Block 1



Intercept CPS=205.040186 Intercept Conc=0.038268
Sensitivity=5358.067379 Correlation Coeff=0.999988

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	205.04	0.00
S01	1.000	0.949	0.051	5290.19	5.09
S02	10.000	9.778	0.222	52596.10	2.22
S03	50.000	47.682	2.318	255690.11	4.64
S04	200.000	191.111	8.889	1024191.39	4.44
S05	500.000	503.314	3.314	2696993.61	0.66
S06	2500.000	2479.564	20.436	13285874.70	0.82
S07	5000.000	5010.266	10.266	26845547.55	0.21

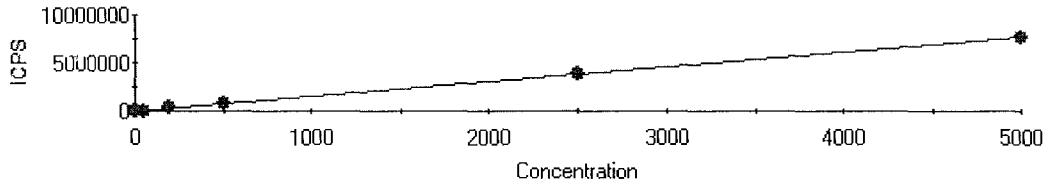
206Pb FQ Block 1



Intercept CPS=136.079817 Intercept Conc=0.076915
Sensitivity=1769.215338 Correlation Coeff=0.999994

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	136.08	0.00
S01	1.000	0.902	0.098	1731.52	9.82
S02	10.000	9.745	0.255	17377.00	2.55
S03	50.000	47.987	2.013	85035.50	4.03
S04	200.000	190.674	9.326	337479.06	4.66
S05	500.000	491.836	8.164	870300.19	1.63
S06	2500.000	2486.281	13.719	4398903.15	0.55
S07	5000.000	5008.069	8.069	8860489.32	0.16

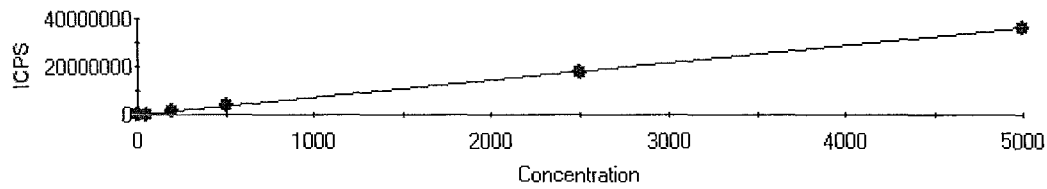
207Pb FQ Block 1



Intercept CPS=138.409608 Intercept Conc=0.090148
Sensitivity=1535.352283 Correlation Coeff=0.999987

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	138.41	0.00
S01	1.000	0.920	0.080	1551.03	7.99
S02	10.000	10.038	0.038	15549.93	0.38
S03	50.000	49.563	0.437	76235.79	0.87
S04	200.000	196.709	3.291	302156.49	1.65
S05	500.000	507.538	7.538	779388.58	1.51
S06	2500.000	2478.925	21.075	3806161.09	0.84
S07	5000.000	5009.920	9.920	7692130.14	0.20

208Pb FQ Block 1



Intercept CPS=605.565853 Intercept Conc=0.084556
Sensitivity=7161.725442 Correlation Coeff=0.999989

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	605.57	0.00
S01	1.000	0.906	0.094	7092.35	9.42
S02	10.000	9.882	0.118	71378.21	1.18
S03	50.000	48.303	1.697	346538.87	3.39
S04	200.000	192.789	7.211	1381310.46	3.61
S05	500.000	500.431	0.431	3584554.77	0.09
S06	2500.000	2480.365	19.635	17764296.95	0.79
S07	5000.000	5010.080	10.080	35881424.20	0.20

Dilution Corrected Concentrations

S0 06/04/2019 15:39:16

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:40:01	98.56%	0.0314	-0.2545	0.0606	-0.0967	0.2099	0.0057	0.6215	0.9990
2	15:40:47	99.84%	-0.0030	-0.0431	0.0157	0.0249	-0.1166	-0.0751	-0.0456	-0.3646
3	15:41:31	101.30%	0.0022	-0.1263	-0.0497	-0.0983	0.0380	-0.0020	-0.1383	-0.7721
4	15:42:17	100.35%	-0.0140	0.2800	-0.0254	0.0849	-0.1182	0.0379	-0.5234	-1.0662
5	15:43:01	99.95%	-0.0167	0.1438	-0.0012	0.0852	-0.0131	0.0335	0.0858	1.2039
X		100.00%	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000
%RSD		0.99	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:40:01	97.73%	-0.0086	0.0232	-0.0109	0.4053	0.0064	0.0477	-0.0698	0.0036
2	15:40:47	100.20%	-0.0063	-0.0031	-0.0087	1.1288	-0.0033	-0.7157	-1.1719	-0.0005
3	15:41:31	100.23%	-0.0039	0.0362	0.0103	-1.1075	-0.0025	-0.4229	-0.0358	-0.0016
4	15:42:17	100.87%	0.0106	-0.0035	-0.0085	-1.0150	-0.0017	0.9033	-0.1651	-0.0044
5	15:43:01	100.97%	0.0082	-0.0529	0.0177	0.5885	0.0010	0.1876	1.4427	0.0029
X		100.00%	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000
%RSD		1.32	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:40:01	0.0121	-0.0003	-0.0079	0.1175	-0.0473	-0.1130	0.0025	0.1291	98.23%
2	15:40:47	-0.0107	0.0236	-0.0089	-0.0111	0.0922	0.1305	0.2691	-0.6525	98.87%
3	15:41:31	-0.0019	-0.0000	0.0096	-0.0284	-0.1121	0.0184	-0.1616	0.4215	101.04%
4	15:42:17	0.0024	-0.0248	-0.0174	-0.0542	-0.0425	0.0082	-0.3042	0.3312	100.85%
5	15:43:01	-0.0020	0.0015	0.0246	-0.0239	0.1097	-0.0441	0.1942	-0.2292	101.00%
X		-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	100.00%
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.34

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:40:01	0.0000	0.0000	0.0000	0.0000	0.0000	98.55%	-0.0015	-0.1833	0.0018
2	15:40:47	0.0000	0.0000	0.0000	0.0000	0.0000	99.72%	-0.0010	0.5092	-0.0003
3	15:41:31	0.0000	0.0000	0.0000	0.0000	0.0000	100.90%	-0.0000	-0.5363	-0.0008
4	15:42:17	0.0000	0.0000	0.0000	0.0000	0.0000	100.62%	0.0010	0.0854	0.0007
5	15:43:01	0.0000	0.0000	0.0000	0.0000	0.0000	100.22%	0.0015	0.1251	-0.0014
X		0.0000	0.0000	0.0000	0.0000	0.0000	100.00%	0.0000	0.0000	-0.0000
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.93	0.0000	0.0000	0.0000

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:40:01	0.0079	98.08%	0.0000	0.0011	0.0005	-0.0019	0.0000	0.0000	0.0000
2	15:40:47	-0.0107	99.38%	0.0000	0.0011	-0.0088	-0.0019	0.0000	0.0000	0.0000
3	15:41:31	0.0061	100.32%	0.0000	-0.0024	-0.0000	0.0029	0.0000	0.0000	0.0000
4	15:42:17	0.0039	101.14%	0.0000	-0.0024	0.0085	0.0029	0.0000	0.0000	0.0000
5	15:43:01	-0.0071	101.09%	0.0000	0.0027	-0.0002	-0.0019	0.0000	0.0000	0.0000
X		-0.0000	100.00%	0.0000	0.0000	0.0000	-0.0000	0.0000	0.0000	0.0000
%RSD		0.0000	1.29	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:40:01	0.0000	96.98%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0114	-0.0100
2	15:40:47	0.0000	99.04%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0034	0.0005
3	15:41:31	0.0000	100.20%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0088	-0.0006
4	15:42:17	0.0000	101.90%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0023	0.0043
5	15:43:01	0.0000	101.88%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0145	0.0058
X		0.0000	100.00%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000
%RSD		0.0000	2.08	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	15:40:01	-0.0209	-0.0069	-0.0080	95.76%	0.0000
2	15:40:47	-0.0110	-0.0043	-0.0028	98.62%	0.0000
3	15:41:31	0.0300	0.0153	0.0159	100.42%	0.0000
4	15:42:17	0.0003	0.0020	-0.0015	102.52%	0.0000
5	15:43:01	0.0016	-0.0061	-0.0036	102.68%	0.0000
X		0.0000	0.0000	0.0000	100.00%	0.0000
%RSD		0.0000	0.0000	0.0000	2.90	0.0000

S01 06/04/2019 15:44:03

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:44:47	99.93%	1.0187	498.2500	508.0500	501.6100	504.1500	23.7610	500.7600	506.1800
2	15:45:32	99.96%	1.0482	498.1500	507.8400	506.6400	498.6200	23.3400	512.4400	524.5500
3	15:46:16	100.29%	0.9820	504.7500	510.5500	507.7000	508.9600	24.0410	510.5000	518.0700
4	15:47:00	99.31%	1.1011	502.4100	512.1700	504.1200	499.4800	23.7220	497.4000	497.8200
5	15:47:45	99.96%	0.9470	486.8900	495.7400	504.4300	497.6600	23.4510	474.7500	486.0400
x		99.89%	1.0194	498.0900	506.8700	504.9000	501.7700	23.6630	499.1700	506.5300
%RSD		0.36	5.8341	1.3780	1.2780	0.4698	0.9420	1.1668	3.0160	3.0478

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:44:47	97.87%	0.0015	5.1656	1.9628	141.8900	0.9943	196.9100	206.9100	1.0594
2	15:45:32	98.34%	0.0014	5.1319	1.8440	140.4200	0.9705	196.9500	192.3000	0.9273
3	15:46:16	98.52%	-0.0037	5.0896	1.8885	141.6700	0.8934	196.3000	195.3300	0.9784
4	15:47:00	99.50%	0.0085	5.3068	1.9130	142.1100	0.9762	191.5700	197.3600	1.0099
5	15:47:45	99.81%	0.0060	5.0541	1.7931	139.1200	0.9591	188.3400	196.0900	0.9537
x		98.81%	0.0027	5.1496	1.8803	141.0400	0.9587	194.0100	197.6000	0.9857
%RSD		0.83	171.5300	1.8932	3.4548	0.8925	4.0325	2.0029	2.7983	5.2003

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:44:47	1.1845	1.9895	1.9405	1.7638	1.0565	4.9196	5.2636	-0.2674	98.91%
2	15:45:32	0.9938	2.0706	2.0494	1.5673	0.9257	4.6102	4.5766	-0.2852	99.67%
3	15:46:16	1.1069	1.9645	2.0191	2.0043	1.1392	5.2404	5.1027	-0.6003	101.42%
4	15:47:00	1.0279	2.0194	1.9554	1.8161	1.0910	4.7663	4.9942	0.6289	100.39%
5	15:47:45	1.0593	2.0374	1.9932	1.9700	1.0247	4.9867	4.7806	0.1784	99.70%
x		1.0745	2.0163	1.9915	1.8243	1.0474	4.9046	4.9435	-0.0691	100.02%
%RSD		6.9140	2.0466	2.2483	9.6288	7.6576	4.8416	5.4612	692.5600	0.94

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:44:47	0.0000	0.0000	0.0000	0.0000	0.0000	99.81%	0.9672	-0.8821	0.9695
2	15:45:32	0.0000	0.0000	0.0000	0.0000	0.0000	100.00%	0.9632	-0.7607	0.9776
3	15:46:16	0.0000	0.0000	0.0000	0.0000	0.0000	101.25%	0.9693	-0.2984	1.0129
4	15:47:00	0.0000	0.0000	0.0000	0.0000	0.0000	100.83%	0.9438	-0.3025	0.9445
5	15:47:45	0.0000	0.0000	0.0000	0.0000	0.0000	99.14%	0.9434	-0.6168	0.9750
x		0.0000	0.0000	0.0000	0.0000	0.0000	100.20%	0.9574	-0.5721	0.9759
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.84	1.3310	46.3540	2.5100

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:44:47	1.0300	100.51%	0.0000	1.9375	9.7734	10.3430	0.0000	0.0000	0.0000
2	15:45:32	1.0019	102.19%	0.0000	1.8449	9.5018	9.5590	0.0000	0.0000	0.0000
3	15:46:16	1.0171	101.24%	0.0000	2.0033	10.4890	10.0980	0.0000	0.0000	0.0000
4	15:47:00	0.8858	102.14%	0.0000	1.8920	10.1810	10.1010	0.0000	0.0000	0.0000
5	15:47:45	0.9796	100.49%	0.0000	1.8466	9.7011	9.8265	0.0000	0.0000	0.0000
x		0.9829	101.31%	0.0000	1.9048	9.9292	9.9856	0.0000	0.0000	0.0000
%RSD		5.8441	0.82	0.0000	3.5129	4.0157	3.0088	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:44:47	0.0000	102.46%	0.0000	0.0000	0.0000	0.0000	0.0000	0.9474	0.9368
2	15:45:32	0.0000	103.52%	0.0000	0.0000	0.0000	0.0000	0.0000	0.9617	0.9415
3	15:46:16	0.0000	103.89%	0.0000	0.0000	0.0000	0.0000	0.0000	0.9549	0.9620
4	15:47:00	0.0000	102.50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.9695	0.9556
5	15:47:45	0.0000	99.90%	0.0000	0.0000	0.0000	0.0000	0.0000	0.9401	0.9494
x		0.0000	102.45%	0.0000	0.0000	0.0000	0.0000	0.0000	0.9547	0.9491
%RSD		0.0000	1.52	0.0000	0.0000	0.0000	0.0000	0.0000	1.2103	1.0761

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	15:44:47	0.9661	0.9030	0.8999	104.02%	0.0000
2	15:45:32	0.8894	0.9550	0.8991	105.57%	0.0000
3	15:46:16	0.9378	0.9424	0.9260	105.09%	0.6224
4	15:47:00	0.8698	0.8972	0.8864	102.08%	0.0000
5	15:47:45	0.8459	0.9028	0.9175	99.36%	0.0000
x		0.9018	0.9201	0.9058	103.22%	0.1245
%RSD		5.4699	2.8918	1.7480	2.46	223.6100

S02 06/04/2019 15:48:46

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:49:30	101.02%	11.1430	12.4290	10.8610	11.5240	9.8931	11.4320	9.5278	12.1090
2	15:50:16	101.26%	10.5770	12.5190	11.0150	9.4230	11.2560	11.7650	11.0330	11.1860
3	15:51:01	102.08%	10.8620	12.3820	11.4710	10.6130	11.0480	11.2500	10.0160	15.5980
4	15:51:45	103.29%	10.3750	12.4820	10.5030	9.7222	9.8834	11.3920	11.1020	10.4360
5	15:52:31	104.10%	10.3630	12.0700	10.3330	10.7560	8.9749	11.1170	10.6210	11.0920
x		102.35%	10.6640	12.3760	10.8370	10.4080	10.2110	11.3910	10.4600	12.0840
%RSD		1.29	3.1465	1.4440	4.1268	8.1102	9.1991	2.1332	6.4701	16.9860

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:49:30	99.69%	-0.0014	10.0940	10.2190	10.6610	10.0740	8.9336	9.5390	10.0230
2	15:50:16	101.21%	0.0057	10.5210	10.2550	9.7654	9.9363	9.7563	9.2974	10.0840
3	15:51:01	103.14%	-0.0019	9.9685	10.1180	10.2560	10.0260	9.5489	6.5185	10.2030
4	15:51:45	101.72%	0.0007	10.0750	10.0380	11.2730	10.0050	9.3762	6.0554	10.1040
5	15:52:31	101.74%	-0.0065	9.1533	9.7292	11.5890	9.4898	9.3584	7.8825	9.5509
x		101.50%	-0.0007	9.9623	10.0720	10.7090	9.9062	9.3947	7.8586	9.9929
%RSD		1.22	650.2000	5.0100	2.0820	6.9089	2.4029	3.2321	20.0610	2.5565

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:49:30	10.7800	10.4760	10.6660	10.9370	11.1110	10.2550	10.3570	0.6339	100.19%
2	15:50:16	11.1750	10.6090	10.5300	10.5950	11.3380	10.2800	10.6960	-0.4033	100.40%
3	15:51:01	10.5820	10.3340	10.7770	10.6020	10.7960	11.3590	10.6030	0.1245	101.36%
4	15:51:45	11.1190	10.2670	10.6200	10.2660	10.9400	9.5851	10.3370	0.2843	102.53%
5	15:52:31	10.4290	10.0410	10.0120	9.7668	9.9263	10.2660	9.6642	0.0115	102.47%
x		10.8170	10.3460	10.5210	10.4330	10.8220	10.3490	10.3320	0.1301	101.39%
%RSD		3.0197	2.0820	2.8343	4.2339	4.9903	6.1576	3.9093	291.6300	1.09

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:49:30	0.0000	0.0000	0.0000	0.0000	0.0000	99.77%	9.9626	-2.3709	10.1630
2	15:50:16	0.0000	0.0000	0.0000	0.0000	0.0000	99.80%	10.0650	-0.6864	9.9681
3	15:51:01	0.0000	0.0000	0.0000	0.0000	0.0000	102.27%	10.0440	-1.2677	10.0140
4	15:51:45	0.0000	0.0000	0.0000	0.0000	0.0000	101.95%	10.0450	0.7320	10.1820
5	15:52:31	0.0000	0.0000	0.0000	0.0000	0.0000	102.33%	9.3938	0.6764	9.4620
x		0.0000	0.0000	0.0000	0.0000	0.0000	101.22%	9.9021	-0.5833	9.9578
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	1.31	2.8970	226.6500	2.9340

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:49:30	10.1160	98.35%	0.0000	9.4237	10.3330	10.4350	0.0000	0.0000	0.0000
2	15:50:16	10.7050	99.25%	0.0000	9.2718	10.2720	10.6070	0.0000	0.0000	0.0000
3	15:51:01	10.3120	100.99%	0.0000	9.4223	10.4750	10.5550	0.0000	0.0000	0.0000
4	15:51:45	9.9661	100.86%	0.0000	9.2119	11.1210	10.6060	0.0000	0.0000	0.0000
5	15:52:31	10.0820	101.89%	0.0000	8.8045	10.1880	10.2740	0.0000	0.0000	0.0000
x		10.2360	100.27%	0.0000	9.2268	10.4780	10.4950	0.0000	0.0000	0.0000
%RSD		2.8319	1.43	0.0000	2.7501	3.5728	1.3562	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:49:30	0.0000	97.88%	0.0000	0.0000	0.0000	0.0000	0.0000	10.0030	9.7792
2	15:50:16	0.0000	98.29%	0.0000	0.0000	0.0000	0.0000	0.0000	10.0050	9.9103
3	15:51:01	0.0000	100.37%	0.0000	0.0000	0.0000	0.0000	0.0000	10.0460	9.8196
4	15:51:45	0.0000	101.18%	0.0000	0.0000	0.0000	0.0000	0.0000	10.0810	9.9323
5	15:52:31	0.0000	101.86%	0.0000	0.0000	0.0000	0.0000	0.0000	9.3753	9.4486
x		0.0000	99.92%	0.0000	0.0000	0.0000	0.0000	0.0000	9.9021	9.7780
%RSD		0.0000	1.76	0.0000	0.0000	0.0000	0.0000	0.0000	2.9923	1.9903

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	15:49:30	9.8401	10.3640	10.0240	95.81%	0.6826
2	15:50:16	9.8991	10.1810	10.0460	97.01%	0.0000
3	15:51:01	10.0020	10.0800	10.0540	99.28%	0.0000
4	15:51:45	9.7622	10.2100	9.9935	100.48%	0.0000
5	15:52:31	9.2218	9.3527	9.2936	101.81%	0.0000
x		9.7450	10.0380	9.8821	98.88%	0.1365
%RSD		3.1323	3.9473	3.3372	2.49	223.6100

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:54:17	101.97%	52.4810	56.2120	51.4340	48.8660	50.5680	55.8030	50.9800	53.7000
2	15:55:02	101.10%	52.1260	56.1170	51.2000	52.8600	54.5820	54.6810	54.2710	56.3880
3	15:55:47	100.18%	51.6920	55.7920	51.4990	53.4330	54.2050	55.2710	52.7860	55.0620
4	15:56:31	99.29%	50.3180	55.6840	52.2530	52.0070	51.6840	54.4340	51.8970	54.3940
5	15:57:17	99.71%	49.3740	53.4140	48.4100	52.1000	47.6570	53.0330	50.5820	53.0680
x		100.45%	51.1980	55.4440	50.9590	51.8530	51.7390	54.6440	52.1030	54.5220
%RSD		1.08	2.5564	2.0844	2.9017	3.4116	5.4836	1.9140	2.8440	2.3522

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:54:17	98.66%	0.0138	49.3830	49.5380	51.3130	49.3790	49.4560	49.3890	49.3460
2	15:55:02	98.08%	0.0089	48.7220	49.5090	53.1330	49.6050	49.0350	47.5180	49.3150
3	15:55:47	98.95%	0.0037	48.9940	48.9150	51.3040	48.8990	47.9280	46.2430	48.6900
4	15:56:31	98.94%	0.0161	48.2410	48.1050	48.1760	47.8750	47.3760	45.0510	48.9640
5	15:57:17	97.67%	0.0141	45.9370	46.1830	52.0570	46.4470	45.9240	48.6920	46.7190
x		98.46%	0.0113	48.2560	48.4500	51.1960	48.4410	47.9440	47.3780	48.6070
%RSD		0.57	44.1770	2.8206	2.8781	3.6064	2.6796	2.9277	3.7299	2.2408

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:54:17	53.1940	51.2500	51.3800	51.9810	54.9360	50.4520	53.9560	-0.5699	99.74%
2	15:55:02	53.2540	50.2010	52.2110	51.1990	52.9990	51.9870	49.6230	0.4583	100.04%
3	15:55:47	52.3190	50.8760	50.7200	52.0610	52.8440	49.6490	50.9610	-0.3960	100.40%
4	15:56:31	51.7600	49.7720	50.0880	51.2430	52.3040	50.3740	50.3410	-0.3844	99.82%
5	15:57:17	50.2850	48.6090	49.3130	49.5370	51.0250	49.1520	46.6540	0.7436	99.98%
x		52.1620	50.1420	50.7420	51.2040	52.8210	50.3230	50.3070	-0.0297	100.00%
%RSD		2.3417	2.0576	2.2110	1.9817	2.6768	2.1339	5.2170	1983.3000	0.25

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:54:17	0.0000	0.0000	0.0000	0.0000	0.0000	100.81%	48.4600	0.1226	48.6590
2	15:55:02	0.0000	0.0000	0.0000	0.0000	0.0000	99.99%	49.0390	-0.4458	48.9610
3	15:55:47	0.0000	0.0000	0.0000	0.0000	0.0000	100.58%	48.8300	-1.5203	49.2300
4	15:56:31	0.0000	0.0000	0.0000	0.0000	0.0000	100.03%	49.3400	-3.2715	49.1170
5	15:57:17	0.0000	0.0000	0.0000	0.0000	0.0000	99.71%	46.4470	-0.8369	46.6070
x		0.0000	0.0000	0.0000	0.0000	0.0000	100.22%	48.4230	-1.1904	48.5150
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.45	2.3750	109.8800	2.2418

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:54:17	50.7700	101.16%	0.0000	45.4950	51.7500	51.9830	0.0000	0.0000	0.0000
2	15:55:02	50.8200	101.74%	0.0000	45.2600	52.5740	50.8270	0.0000	0.0000	0.0000
3	15:55:47	50.3380	101.97%	0.0000	44.8980	51.3920	51.0640	0.0000	0.0000	0.0000
4	15:56:31	49.9990	102.15%	0.0000	44.7560	50.8450	50.2490	0.0000	0.0000	0.0000
5	15:57:17	47.7460	101.70%	0.0000	42.6010	49.3000	47.5540	0.0000	0.0000	0.0000
x		49.9350	101.74%	0.0000	44.6020	51.1720	50.3350	0.0000	0.0000	0.0000
%RSD		2.5408	0.37	0.0000	2.5917	2.3851	3.3289	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:54:17	0.0000	102.47%	0.0000	0.0000	0.0000	0.0000	0.0000	48.5400	48.0270
2	15:55:02	0.0000	102.73%	0.0000	0.0000	0.0000	0.0000	0.0000	48.7890	48.4590
3	15:55:47	0.0000	103.80%	0.0000	0.0000	0.0000	0.0000	0.0000	48.7410	48.1550
4	15:56:31	0.0000	103.45%	0.0000	0.0000	0.0000	0.0000	0.0000	48.2700	48.1430
5	15:57:17	0.0000	103.15%	0.0000	0.0000	0.0000	0.0000	0.0000	46.4960	45.6270
x		0.0000	103.12%	0.0000	0.0000	0.0000	0.0000	0.0000	48.1670	47.6820
%RSD		0.0000	0.52	0.0000	0.0000	0.0000	0.0000	0.0000	1.9856	2.4330

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	15:54:17	49.0170	49.9290	48.9300	103.26%	0.0000
2	15:55:02	48.6460	50.2550	48.9580	103.82%	0.0000
3	15:55:47	48.1620	49.8240	48.7600	104.88%	0.0000
4	15:56:31	48.0080	49.8070	48.3690	105.62%	0.0000
5	15:57:17	46.1030	48.0020	46.4980	104.14%	0.6280
x		47.9870	49.5630	48.3030	104.34%	0.1256
%RSD		2.3477	1.7977	2.1445	0.88	223.6100

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:59:02	97.45%	201.5000	198.6900	201.9700	202.3600	199.0700	200.7500	192.7200	195.6200
2	15:59:47	98.15%	203.2200	199.1100	200.3100	201.8100	204.8700	204.4500	193.4400	200.3700
3	16:00:32	96.94%	202.9700	202.2500	204.3400	198.3400	201.3100	203.1900	189.4600	196.3200
4	16:01:17	98.56%	201.4000	197.9500	195.2400	200.0300	196.1200	199.7300	193.8200	199.6800
5	16:02:01	98.91%	195.3800	188.5200	187.7500	190.5300	182.6400	193.3700	185.1700	182.3600
x		98.00%	200.8900	197.3000	197.9200	198.6100	196.8000	200.3000	190.9200	194.8700
%RSD		0.82	1.5879	2.6245	3.3311	2.4102	4.3376	2.1486	1.9108	3.7411

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:59:02	96.36%	0.0197	192.7100	193.4000	193.7000	192.1300	190.1800	194.3100	194.5200
2	15:59:47	95.20%	0.0356	194.0400	196.8400	195.4500	196.2800	192.7900	192.7200	199.3900
3	16:00:32	95.96%	0.0070	195.1800	194.4100	196.1700	198.4600	194.1700	192.5400	197.7400
4	16:01:17	96.34%	0.0171	195.0100	192.9300	193.3800	195.7500	193.4700	194.2100	195.5400
5	16:02:01	96.08%	0.0300	186.3400	187.9400	187.2300	187.9700	183.6900	182.8900	188.7500
x		95.99%	0.0219	192.6600	193.1100	193.1900	194.1200	190.8600	191.3300	195.1900
%RSD		0.49	51.2620	1.9018	1.6868	1.8267	2.1238	2.2440	2.5050	2.0835

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:59:02	206.4300	200.2900	202.0200	205.6800	209.0300	197.8800	198.1300	-0.7825	96.00%
2	15:59:47	206.3300	203.2100	204.1600	207.0800	207.5500	200.1100	196.4600	0.7933	95.66%
3	16:00:32	209.7400	203.0300	207.7800	207.3800	209.0400	200.0900	200.3400	0.2004	95.75%
4	16:01:17	209.3700	199.4900	203.4100	203.4900	210.5500	202.0000	198.6200	0.6966	95.44%
5	16:02:01	198.9200	195.8700	196.3900	197.0300	200.3200	189.7800	186.2500	0.1199	95.06%
x		206.1600	200.3800	202.7500	204.1300	207.3000	197.9700	195.9600	0.2055	95.58%
%RSD		2.1096	1.4997	2.0441	2.0863	1.9499	2.4274	2.8588	304.8200	0.37

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:59:02	0.0000	0.0000	0.0000	0.0000	0.0000	95.30%	195.0900	0.5649	194.7400
2	15:59:47	0.0000	0.0000	0.0000	0.0000	0.0000	95.60%	195.9800	-0.6826	194.9000
3	16:00:32	0.0000	0.0000	0.0000	0.0000	0.0000	95.20%	198.3300	-1.2126	196.2000
4	16:01:17	0.0000	0.0000	0.0000	0.0000	0.0000	95.24%	197.6000	0.4137	196.9000
5	16:02:01	0.0000	0.0000	0.0000	0.0000	0.0000	95.30%	187.1000	-1.3060	186.8100
x		0.0000	0.0000	0.0000	0.0000	0.0000	95.33%	194.8200	-0.4445	193.9100
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.17	2.3109	199.4500	2.0992

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:59:02	200.6900	96.00%	0.0000	189.2000	202.3300	199.4400	0.0000	0.0000	0.0000
2	15:59:47	203.0600	96.02%	0.0000	190.0000	202.8100	201.3600	0.0000	0.0000	0.0000
3	16:00:32	202.8700	95.34%	0.0000	190.4900	206.1600	202.2300	0.0000	0.0000	0.0000
4	16:01:17	196.7700	95.82%	0.0000	184.4400	202.8100	199.1900	0.0000	0.0000	0.0000
5	16:02:01	191.3900	94.57%	0.0000	180.3300	192.7900	189.5900	0.0000	0.0000	0.0000
x		198.9600	95.55%	0.0000	186.8900	201.3800	198.3600	0.0000	0.0000	0.0000
%RSD		2.4781	0.64	0.0000	2.3467	2.5035	2.5546	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:59:02	0.0000	97.38%	0.0000	0.0000	0.0000	0.0000	0.0000	191.8600	191.9400
2	15:59:47	0.0000	95.99%	0.0000	0.0000	0.0000	0.0000	0.0000	194.5500	193.0000
3	16:00:32	0.0000	94.96%	0.0000	0.0000	0.0000	0.0000	0.0000	194.6100	194.4600
4	16:01:17	0.0000	94.93%	0.0000	0.0000	0.0000	0.0000	0.0000	192.9900	192.5100
5	16:02:01	0.0000	94.96%	0.0000	0.0000	0.0000	0.0000	0.0000	184.1700	183.6500
x		0.0000	95.64%	0.0000	0.0000	0.0000	0.0000	0.0000	191.6400	191.1100
%RSD		0.0000	1.12	0.0000	0.0000	0.0000	0.0000	0.0000	2.2591	2.2370

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	15:59:02	192.6800	198.0200	194.5900	96.43%	0.0000
2	15:59:47	193.5300	199.1700	195.1300	94.70%	0.0000
3	16:00:32	194.8700	201.1300	196.9300	93.19%	0.0000
4	16:01:17	190.6500	196.7800	193.0900	93.61%	0.0000
5	16:02:01	181.6400	188.4400	184.2000	94.15%	0.0000
x		190.6700	196.7100	192.7900	94.42%	0.0000
%RSD		2.7684	2.4857	2.5893	1.33	0.0000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:03:46	93.92%	532.6100	515.0300	519.3700	520.1000	514.2600	524.1600	508.7700	518.6800
2	16:04:31	91.88%	533.6900	517.3300	516.2400	521.7700	519.2900	513.5500	507.6600	503.7800
3	16:05:15	90.69%	533.9300	513.2500	518.9400	523.5200	513.4400	522.3000	505.0100	507.7500
4	16:06:01	91.27%	528.3700	507.9100	508.7900	515.1000	521.9900	517.7400	500.0000	492.7500
5	16:06:45	91.73%	491.5400	467.5100	463.8400	456.0400	473.9300	472.1500	455.1500	465.3100
x		91.90%	524.0300	504.2100	505.4400	507.3100	508.5800	509.9800	495.3200	497.6500
%RSD		1.33	3.4923	4.1265	4.6764	5.6827	3.8716	4.2253	4.5850	4.0835

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:03:46	90.15%	0.0277	512.6200	508.9200	510.0300	514.3000	508.7300	508.6900	510.7900
2	16:04:31	88.47%	0.0064	509.4800	504.7200	510.0300	508.3800	501.2300	512.3100	516.1400
3	16:05:15	87.72%	0.0234	508.2700	509.8400	503.3200	514.8900	511.9000	517.9000	518.8500
4	16:06:01	87.25%	0.0011	506.5700	504.6900	497.1000	510.1300	492.9100	503.7500	510.3200
5	16:06:45	87.37%	0.0321	460.1600	465.9800	464.0900	470.2600	457.1400	466.4900	478.5700
x		88.19%	0.0181	499.4200	498.8300	496.9100	503.5900	494.3800	501.8300	506.9400
%RSD		1.36	75.0880	4.4169	3.7115	3.8481	3.7399	4.4652	4.0691	3.2076

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:03:46	535.2800	522.6700	531.7000	529.9700	536.6200	M 504.3600	M 502.5300	-0.5712	91.13%
2	16:04:31	532.5800	517.0100	522.9400	529.1300	541.1200	M 509.9700	M 515.3700	-0.7359	89.22%
3	16:05:15	533.5700	522.6400	527.7500	529.5300	539.0700	M 513.1500	M 509.3200	-0.5975	87.73%
4	16:06:01	531.8000	519.7800	522.0900	528.3900	530.0500	M 503.7800	M 505.8900	0.6859	87.71%
5	16:06:45	496.7100	477.2900	481.8700	488.5200	492.0500	472.6000	474.7800	0.1978	86.10%
x		525.9900	511.8800	517.2700	521.1100	527.7800	M 500.7700	M 501.5800	-0.2042	88.38%
%RSD		3.1220	3.8050	3.8986	3.4975	3.8662	M 3.2404	M 3.1331	302.5100	2.14

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:03:46	0.0000	0.0000	0.0000	0.0000	0.0000	90.32%	M 509.1500	-3.5699	M 505.1000
2	16:04:31	0.0000	0.0000	0.0000	0.0000	0.0000	89.58%	M 504.9400	-3.8993	M 506.2300
3	16:05:15	0.0000	0.0000	0.0000	0.0000	0.0000	88.31%	M 512.0300	-1.3380	M 512.9100
4	16:06:01	0.0000	0.0000	0.0000	0.0000	0.0000	87.36%	M 515.4200	-7.9680	M 517.4000
5	16:06:45	0.0000	0.0000	0.0000	0.0000	0.0000	85.65%	469.6300	-1.7591	471.2800
x		0.0000	0.0000	0.0000	0.0000	0.0000	88.24%	M 502.2300	-3.7069	M 502.5800
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	2.09	M 3.7094	70.8860	M 3.6225

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:03:46	516.8900	92.50%	0.0000	490.5700	519.9500	511.9600	0.0000	0.0000	0.0000
2	16:04:31	517.4700	91.20%	0.0000	490.4500	522.9600	509.8900	0.0000	0.0000	0.0000
3	16:05:15	521.7000	89.05%	0.0000	497.2200	522.2000	512.7200	0.0000	0.0000	0.0000
4	16:06:01	521.5500	87.04%	0.0000	495.1100	520.6200	511.2400	0.0000	0.0000	0.0000
5	16:06:45	479.5900	86.92%	0.0000	454.3000	483.0600	472.9900	0.0000	0.0000	0.0000
x		511.4400	89.34%	0.0000	485.5300	513.7600	503.7600	0.0000	0.0000	0.0000
%RSD		3.5084	2.78	0.0000	3.6453	3.3488	3.4207	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:03:46	0.0000	92.82%	0.0000	0.0000	0.0000	0.0000	0.0000	504.3900	508.6200
2	16:04:31	0.0000	92.84%	0.0000	0.0000	0.0000	0.0000	0.0000	503.6800	509.7400
3	16:05:15	0.0000	91.48%	0.0000	0.0000	0.0000	0.0000	0.0000	507.7000	514.2000
4	16:06:01	0.0000	89.74%	0.0000	0.0000	0.0000	0.0000	0.0000	505.0100	508.7600
5	16:06:45	0.0000	87.27%	0.0000	0.0000	0.0000	0.0000	0.0000	473.4500	475.2600
x		0.0000	90.83%	0.0000	0.0000	0.0000	0.0000	0.0000	498.8500	503.3100
%RSD		0.0000	2.60	0.0000	0.0000	0.0000	0.0000	0.0000	2.8624	3.1485

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	16:03:46	498.8200	515.9700	508.1000	93.55%	0.0000
2	16:04:31	500.2500	515.2900	509.3900	94.28%	0.6937
3	16:05:15	502.5300	519.0200	511.5300	92.05%	0.0000
4	16:06:01	493.0300	510.7000	503.7100	89.50%	0.0000
5	16:06:45	464.5500	476.7100	469.4200	86.60%	0.7552
x		491.8400	507.5400	500.4300	91.20%	0.2898
%RSD		3.1817	3.4454	3.5106	3.46	137.1400

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:08:31	84.25%	2623.0000	T2480.4000	T2501.5000	2496.2000	2480.1000	T2509.5000	2385.5000	2425.7000
2	16:09:16	84.21%	2614.8000	T2480.7000	T2490.4000	2508.3000	2513.9000	T2552.0000	T2438.3000	2441.4000
3	16:10:01	82.40%	2586.4000	T2522.3000	2526.7000	2495.1000	2517.1000	T2526.9000	2487.0000	2436.9000
4	16:10:46	81.78%	2612.6000	T2542.0000	T2520.8000	2506.8000	2452.4000	T2526.2000	2526.5000	2538.9000
5	16:11:30	81.29%	2491.1000	T2405.4000	T2405.7000	2410.4000	2374.6000	T2410.6000	T2399.4000	2393.4000
x		82.79%	2585.6000	T2486.2000	T2489.0000	2483.4000	2467.6000	T2505.1000	T2447.3000	2447.2000
%RSD		1.66	2.1111	T2.1101	T1.9607	1.6590	2.3657	T2.1937	T2.4211	2.2294

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:08:31	81.81%	0.0475	T2506.8000	T2503.7000	2466.0000	T2520.6000	T2464.0000	2454.1000	T2528.2000
2	16:09:16	81.26%	0.0571	T2531.6000	T2554.1000	2479.6000	T2520.1000	T2511.4000	2487.4000	T2551.1000
3	16:10:01	80.61%	0.0638	T2521.9000	T2517.7000	2488.0000	T2532.9000	T2517.4000	2545.6000	T2547.5000
4	16:10:46	79.57%	0.0741	T2502.9000	T2511.4000	2464.9000	T2515.6000	T2504.1000	2497.3000	T2535.9000
5	16:11:30	79.64%	0.0339	T2374.4000	T2393.5000	2396.4000	T2400.3000	T2401.4000	2354.3000	T2402.5000
x		80.58%	0.0553	T2487.5000	T2496.1000	2459.0000	T2497.9000	T2479.6000	2467.7000	T2513.0000
%RSD		1.22	27.8360	T2.5831	T2.4238	1.4760	T2.1988	T1.9552	2.8923	T2.4865

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:08:31	2645.9000	T2585.3000	2607.5000	2569.6000	2569.5000	-0.0432	0.2242	0.4089	80.27%
2	16:09:16	2685.6000	T2567.5000	2601.1000	2568.5000	2570.5000	-0.0476	0.3765	0.0936	79.25%
3	16:10:01	2694.0000	T2563.0000	2600.9000	2590.9000	2568.6000	-0.1071	0.1666	0.8326	78.50%
4	16:10:46	2646.3000	T2546.7000	2575.2000	2566.8000	2538.2000	0.0435	0.1667	-0.4808	78.93%
5	16:11:30	2528.9000	T2442.6000	2472.8000	2443.4000	2414.8000	-0.0372	0.0451	0.4834	78.45%
x		2640.1000	T2541.0000	2571.5000	2547.8000	2532.3000	-0.0383	0.1958	0.2675	79.08%
%RSD		2.4986	T2.2312	2.1983	2.3235	2.6489	140.0700	61.4320	184.6600	0.93

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:08:31	0.0000	0.0000	0.0000	0.0000	0.0000	80.81%	0.1176	-12.0960	0.1204
2	16:09:16	0.0000	0.0000	0.0000	0.0000	0.0000	80.75%	0.1377	-11.3170	0.1377
3	16:10:01	0.0000	0.0000	0.0000	0.0000	0.0000	79.68%	0.1837	-10.3370	0.1771
4	16:10:46	0.0000	0.0000	0.0000	0.0000	0.0000	79.65%	0.2738	-10.9440	0.2923
5	16:11:30	0.0000	0.0000	0.0000	0.0000	0.0000	78.98%	0.1421	-5.2566	0.1421
x		0.0000	0.0000	0.0000	0.0000	0.0000	79.97%	0.1710	-9.9900	0.1739
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.98	36.4370	27.2430	39.8560

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:08:31	2526.7000	80.36%	0.0000	T2538.7000	2526.1000	2515.8000	0.0000	0.0000	0.0000
2	16:09:16	2514.6000	79.76%	0.0000	T2542.4000	2532.9000	2503.0000	0.0000	0.0000	0.0000
3	16:10:01	2544.1000	79.16%	0.0000	T2549.1000	2527.4000	2511.2000	0.0000	0.0000	0.0000
4	16:10:46	2483.4000	80.14%	0.0000	T2499.5000	2491.4000	2473.9000	0.0000	0.0000	0.0000
5	16:11:30	2400.8000	80.24%	0.0000	T2396.4000	2354.9000	2354.8000	0.0000	0.0000	0.0000
x		2493.9000	79.93%	0.0000	T2505.2000	2486.5000	2471.7000	0.0000	0.0000	0.0000
%RSD		2.2691	0.61	0.0000	T2.5490	3.0314	2.7260	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:08:31	0.0000	81.51%	0.0000	0.0000	0.0000	0.0000	0.0000	T2482.9000	T2486.0000
2	16:09:16	0.0000	80.76%	0.0000	0.0000	0.0000	0.0000	0.0000	T2513.2000	T2505.8000
3	16:10:01	0.0000	80.84%	0.0000	0.0000	0.0000	0.0000	0.0000	T2512.4000	T2514.9000
4	16:10:46	0.0000	81.31%	0.0000	0.0000	0.0000	0.0000	0.0000	T2519.2000	T2521.2000
5	16:11:30	0.0000	82.56%	0.0000	0.0000	0.0000	0.0000	0.0000	T2368.9000	T2369.9000
x		0.0000	81.40%	0.0000	0.0000	0.0000	0.0000	0.0000	T2479.3000	T2479.6000
%RSD		0.0000	0.88	0.0000	0.0000	0.0000	0.0000	0.0000	T2.5542	T2.5292

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	16:08:31	T2500.4000	T2491.0000	T2496.9000	80.11%	3.2658
2	16:09:16	T2519.7000	T2508.4000	T2509.8000	79.97%	0.0000
3	16:10:01	T2531.8000	T2516.8000	T2520.6000	80.96%	0.8078
4	16:10:46	T2502.9000	T2505.1000	T2503.0000	81.92%	0.7984
5	16:11:30	T2376.6000	T2373.2000	T2371.6000	83.34%	0.7848
x		T2486.3000	T2478.9000	T2480.4000	81.26%	1.1314
%RSD		T2.5194	T2.4130	T2.4763	1.72	109.7900

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:17	80.14%	TM 5033.2000	TM 5009.0000	TM 5010.6000	M 5012.8000	M 5043.5000	TM 5017.8000	T 4998.3000	M 5034.5000
2	16:14:04	78.58%	TM 5072.1000	TM 5014.5000	TM 5053.6000	M 5059.7000	M 5082.1000	TM 5077.9000	TM 5081.7000	M 5073.1000
3	16:14:49	77.58%	T 4972.6000	TM 5100.7000	TM 5100.7000	M 5144.8000	M 5090.2000	TM 5070.6000	TM 5087.1000	M 5096.7000
4	16:15:34	77.45%	T 4910.5000	TM 5110.3000	TM 5050.4000	M 5029.0000	M 5022.5000	T 4959.9000	TM 5074.7000	M 5089.6000
5	16:16:18	77.90%	T 4785.4000	T 4798.2000	T 4809.8000	4791.9000	4838.9000	T 4855.7000	T 4893.9000	4840.0000
X		78.33%	TM 4954.8000	TM 5006.6000	TM 5005.0000	M 5007.6000	M 5015.4000	TM 4996.4000	TM 5027.1000	M 5026.8000
%RSD		1.41	TM 2.2766	TM 2.5086	TM 2.2723	M 2.6138	M 2.0437	TM 1.8382	TM 1.6475	M 2.1318

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:17	77.73%	0.0035	TM 5033.7000	TM 5053.6000	M 5007.3000	TM 5069.6000	TM 5082.6000	M 5095.3000	TM 5044.9000
2	16:14:04	77.54%	0.0195	TM 5087.4000	TM 5109.4000	M 5066.7000	TM 5035.3000	TM 5019.0000	M 5091.9000	TM 5067.0000
3	16:14:49	77.26%	0.0069	TM 5069.8000	TM 5050.6000	M 5075.9000	TM 5077.7000	TM 5090.8000	M 5024.1000	TM 5013.6000
4	16:15:34	76.95%	0.0070	T 4971.6000	T 4975.4000	M 5054.9000	T 4987.9000	T 4956.8000	4918.3000	T 4980.8000
5	16:16:18	77.34%	0.0005	T 4870.6000	T 4822.8000	4900.6000	T 4834.2000	T 4906.5000	4952.1000	T 4858.7000
X		77.36%	0.0075	TM 5006.6000	TM 5002.4000	M 5021.1000	TM 5000.9000	TM 5011.1000	M 5016.3000	TM 4993.0000
%RSD		0.38	96.7610	TM 1.7573	TM 2.2211	M 1.4411	TM 1.9937	TM 1.5907	M 1.5997	TM 1.6388

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:17	T 4959.2000	TM 5028.1000	T 4790.2000	M 5015.9000	M 5020.1000	-0.2333	0.2006	1.6812	76.15%
2	16:14:04	T 4990.5000	T 4984.6000	T 4802.1000	M 5009.1000	M 5030.8000	0.0313	0.8980	-1.1232	75.37%
3	16:14:49	T 4953.7000	TM 5063.7000	T 4782.6000	M 5045.7000	M 5045.8000	0.0067	0.4232	1.7243	75.37%
4	16:15:34	T 4948.5000	T 4968.0000	T 4699.6000	4953.7000	4983.1000	-0.3970	0.7745	0.3761	75.05%
5	16:16:18	T 4783.6000	T 4847.1000	T 4604.9000	4844.5000	4823.9000	-0.1051	0.9023	-0.6170	74.93%
X		T 4927.1000	TM 4978.3000	T 4735.9000	M 4973.8000	M 4980.7000	-0.1395	0.6397	0.4083	75.37%
%RSD		T 1.6616	TM 1.6546	T 1.7659	M 1.5993	M 1.8210	127.7000	49.0300	318.1700	0.63

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:17	0.0000	0.0000	0.0000	0.0000	0.0000	76.52%	0.1596	-25.1440	0.1733
2	16:14:04	0.0000	0.0000	0.0000	0.0000	0.0000	75.86%	0.1793	-26.7360	0.1882
3	16:14:49	0.0000	0.0000	0.0000	0.0000	0.0000	76.31%	0.2112	-12.7450	0.2068
4	16:15:34	0.0000	0.0000	0.0000	0.0000	0.0000	76.47%	0.2763	-20.4830	0.2967
5	16:16:18	0.0000	0.0000	0.0000	0.0000	0.0000	75.89%	0.1701	-15.4080	0.1402
X		0.0000	0.0000	0.0000	0.0000	0.0000	76.21%	0.1993	-20.1030	0.2010
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.41	23.6670	30.0260	29.2320

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:17	5091.1000	77.47%	0.0000	TM 5080.2000	M 5081.0000	M 5084.3000	0.0000	0.0000	0.0000
2	16:14:04	5072.5000	77.49%	0.0000	TM 5055.1000	M 5057.8000	M 5073.1000	0.0000	0.0000	0.0000
3	16:14:49	5066.8000	76.79%	0.0000	TM 5094.4000	M 5088.5000	M 5108.3000	0.0000	0.0000	0.0000
4	16:15:34	4952.7000	77.86%	0.0000	T 4963.2000	4951.2000	4998.6000	0.0000	0.0000	0.0000
5	16:16:18	4826.7000	78.13%	0.0000	T 4804.2000	4848.0000	4804.8000	0.0000	0.0000	0.0000
X		5001.9000	77.55%	0.0000	TM 4999.4000	M 5005.3000	M 5013.8000	0.0000	0.0000	0.0000
%RSD		2.2414	0.65	0.0000	TM 2.4096	M 2.0730	M 2.4699	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:17	0.0000	80.42%	0.0000	0.0000	0.0000	0.0000	0.0000	TM 5066.5000	T 5062.3000
2	16:14:04	0.0000	80.83%	0.0000	0.0000	0.0000	0.0000	0.0000	TM 5042.7000	T 5040.2000
3	16:14:49	0.0000	80.62%	0.0000	0.0000	0.0000	0.0000	0.0000	TM 5075.3000	T 5081.6000
4	16:15:34	0.0000	80.84%	0.0000	0.0000	0.0000	0.0000	0.0000	TM 5046.3000	T 5038.9000
5	16:16:18	0.0000	81.44%	0.0000	0.0000	0.0000	0.0000	0.0000	T 4823.3000	T 4828.3000
X		0.0000	80.83%	0.0000	0.0000	0.0000	0.0000	0.0000	TM 5010.8000	T 5010.3000
%RSD		0.0000	0.47	0.0000	0.0000	0.0000	0.0000	0.0000	TM 2.1100	T 2.0599

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:17	T 5079.7000	T 5085.7000	T 5089.9000	80.98%	1.6153
2	16:14:04	T 5042.8000	T 5060.9000	T 5054.1000	81.64%	0.8012
3	16:14:49	T 5056.2000	T 5074.2000	T 5075.1000	81.67%	1.6017
4	16:15:34	T 5012.1000	T 4995.3000	T 5000.1000	82.31%	1.5891
5	16:16:18	T 4849.6000	T 4833.5000	T 4831.1000	82.79%	2.3698
X		T 5008.1000	T 5009.9000	T 5010.1000	81.88%	1.5954
%RSD		T 1.8349	T 2.0887	T 2.1096	0.85	34.7730

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:18:04	78.10%	105.3500	T 2089.9000	1254.1000	1246.1000	1241.7000	531.2900	2052.7000	2084.1000
2	16:18:49	77.96%	106.1100	T 2113.1000	1253.0000	1250.3000	1275.4000	543.6400	2029.9000	2033.2000
3	16:19:34	78.33%	105.0100	T 2106.0000	1253.6000	1264.5000	1255.6000	553.0400	2043.0000	2050.8000
4	16:20:19	78.92%	103.0000	T 2101.6000	1234.9000	1254.7000	1244.4000	543.4400	2037.1000	1977.7000
5	16:21:04	81.45%	101.4800	T 1984.7000	1171.7000	1196.7000	1176.8000	522.6600	1934.8000	1939.8000
x		78.95%	104.1900	T 2079.1000	1233.5000	1242.5000	1238.8000	538.8100	2019.5000	2017.1000
%RSD		1.83	1.8236	T 2.5687	2.8752	2.1304	2.9946	2.2049	2.3808	2.8695

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:18:04	78.22%	0.0286	101.1000	99.9690	755.1000	101.3100	1048.7000	1029.9000	103.4400
2	16:18:49	79.83%	0.0061	100.4000	101.2100	766.2200	102.6200	1044.9000	1028.3000	102.5500
3	16:19:34	79.87%	0.0091	101.2600	100.8300	767.2900	101.4000	1038.9000	1034.9000	103.5400
4	16:20:19	81.07%	0.0148	98.5670	99.6000	741.5100	101.3100	1018.4000	1065.0000	103.3700
5	16:21:04	82.21%	-0.0036	94.9150	96.1110	727.6400	98.1040	992.9600	998.3500	98.2870
x		80.24%	0.0110	99.2480	99.5430	751.5500	100.9500	1028.8000	1031.3000	102.2400
%RSD		1.86	108.1900	2.6674	2.0333	2.2543	1.6694	2.2524	2.2990	2.1945

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:18:04	108.6000	105.9100	106.1400	213.8300	214.0800	210.4800	205.1300	0.4476	76.29%
2	16:18:49	106.9200	104.7400	105.1700	213.2500	214.0400	207.9000	205.7100	0.2909	77.06%
3	16:19:34	109.9000	105.2200	106.5900	219.5200	216.7300	210.1000	208.3300	-0.0718	77.05%
4	16:20:19	109.6800	105.1100	107.9500	216.6500	213.6500	203.8300	206.3900	-0.2133	77.60%
5	16:21:04	103.8700	100.8400	100.9500	205.0300	206.5100	194.8500	198.2200	-0.0107	78.66%
x		107.7900	104.3700	105.3600	213.6500	213.0000	205.4300	204.7500	0.0885	77.33%
%RSD		2.3108	1.9297	2.5246	2.5419	1.7984	3.1544	1.8786	307.4900	1.13

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:18:04	0.0000	0.0000	0.0000	0.0000	0.0000	76.70%	99.0820	-0.1322	99.6140
2	16:18:49	0.0000	0.0000	0.0000	0.0000	0.0000	77.76%	99.1000	-1.7150	100.3900
3	16:19:34	0.0000	0.0000	0.0000	0.0000	0.0000	77.09%	100.2400	0.0281	100.8400
4	16:20:19	0.0000	0.0000	0.0000	0.0000	0.0000	77.59%	101.2800	-0.2938	101.3400
5	16:21:04	0.0000	0.0000	0.0000	0.0000	0.0000	78.42%	95.7760	0.2330	95.6380
x		0.0000	0.0000	0.0000	0.0000	0.0000	77.51%	99.0960	-0.3760	99.5630
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.85	2.0870	205.7200	2.2935

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:18:04	104.8000	76.97%	0.0000	196.7500	104.1800	102.3400	0.0000	0.0000	0.0000
2	16:18:49	102.9500	77.46%	0.0000	197.3900	104.2500	99.7380	0.0000	0.0000	0.0000
3	16:19:34	104.3900	77.27%	0.0000	196.1600	103.8700	101.3900	0.0000	0.0000	0.0000
4	16:20:19	101.9400	77.53%	0.0000	192.4300	102.4200	100.3500	0.0000	0.0000	0.0000
5	16:21:04	98.3370	77.82%	0.0000	189.1200	99.1670	97.0420	0.0000	0.0000	0.0000
x		102.4800	77.41%	0.0000	194.3700	102.7800	100.1700	0.0000	0.0000	0.0000
%RSD		2.5205	0.41	0.0000	1.8069	2.0915	2.0093	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:18:04	0.0000	80.20%	0.0000	0.0000	0.0000	0.0000	0.0000	205.3400	204.0600
2	16:18:49	0.0000	79.17%	0.0000	0.0000	0.0000	0.0000	0.0000	205.5100	205.6000
3	16:19:34	0.0000	79.17%	0.0000	0.0000	0.0000	0.0000	0.0000	206.8700	207.2300
4	16:20:19	0.0000	79.45%	0.0000	0.0000	0.0000	0.0000	0.0000	206.0600	204.5100
5	16:21:04	0.0000	79.54%	0.0000	0.0000	0.0000	0.0000	0.0000	196.8400	195.7600
x		0.0000	79.51%	0.0000	0.0000	0.0000	0.0000	0.0000	204.1200	203.4300
%RSD		0.0000	0.53	0.0000	0.0000	0.0000	0.0000	0.0000	2.0154	2.1923

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	16:18:04	204.7700	203.8800	202.9200	80.99%	0.0000
2	16:18:49	204.3500	203.0600	202.6700	79.98%	0.0000
3	16:19:34	206.3600	204.6600	204.4800	78.60%	0.0000
4	16:20:19	202.5100	199.9400	201.0700	78.35%	0.0000
5	16:21:04	195.9800	193.7500	193.3500	79.42%	0.0000
x		202.7900	201.0600	200.9000	79.47%	0.0000
%RSD		1.9968	2.2197	2.1844	1.35	0.0000

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:50	81.25%	0.1055	0.6594	-0.0025	0.2920	-0.0575	0.4394	-2.6520	0.5451
2	16:23:35	81.03%	0.0719	0.9868	-0.0226	-0.0093	-0.1870	0.5081	-1.6680	-0.3226
3	16:24:20	81.37%	0.1691	0.7070	-0.0527	0.2139	-0.1879	0.4033	-0.7228	-0.5095
4	16:25:04	81.98%	0.1079	0.8690	-0.0429	-0.0098	-0.1876	0.4611	-1.4323	0.0285
5	16:25:49	81.70%	0.0981	0.4937	-0.0231	0.0652	-0.0592	0.3173	-1.5135	0.3522
x		81.47%	0.1105	0.7432	-0.0288	0.1104	-0.1358	0.4259	-1.5977	0.0187
%RSD		0.46	32.3520	25.6840	68.0300	123.6400	52.0600	16.8070	43.3220	2365.0000

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:50	82.05%	-0.0066	-0.0214	-0.0733	-1.9791	0.0012	-8.8862	-0.1347	0.0091
2	16:23:35	82.80%	-0.0008	0.0538	-0.0036	-1.9660	0.0032	-9.1083	-1.1933	0.0078
3	16:24:20	83.25%	0.0021	-0.0000	-0.0450	-0.9608	0.0020	-8.6250	0.8225	0.0020
4	16:25:04	82.39%	0.0053	0.0312	-0.0730	0.6114	0.0109	-7.7993	-1.4857	0.0201
5	16:25:49	82.46%	-0.0126	-0.0569	-0.0455	-1.6271	0.0087	-7.7822	-1.1243	-0.0012
x		82.59%	-0.0025	0.0013	-0.0481	-1.1843	0.0052	-8.4402	-0.6231	0.0076
%RSD		0.55	281.7500	3252.5000	59.3300	91.6570	83.1830	7.3111	153.2800	108.0600

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:50	0.0131	0.1138	0.0528	-0.1577	0.0383	-0.2642	-0.0139	0.5332	80.00%
2	16:23:35	0.0238	0.0803	0.0807	-0.2358	0.1988	-0.3300	0.5522	-1.4504	80.01%
3	16:24:20	0.0020	0.0838	0.0938	-0.2451	0.0725	-0.1562	0.2532	-1.4601	80.65%
4	16:25:04	0.0020	0.0796	0.0468	-0.2527	-0.1469	-0.1663	-0.4813	0.8212	81.56%
5	16:25:49	0.0075	0.1014	0.1036	-0.2675	0.0340	-0.4562	-0.0419	-0.2007	81.20%
x		0.0097	0.0918	0.0755	-0.2318	0.0393	-0.2746	0.0537	-0.3514	80.68%
%RSD		94.2660	16.5260	33.0290	18.5460	314.5500	45.3020	714.5300	305.7900	0.87

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:50	0.0000	0.0000	0.0000	0.0000	0.0000	80.19%	0.0356	-1.1261	0.0331
2	16:23:35	0.0000	0.0000	0.0000	0.0000	0.0000	81.29%	0.0414	-1.1089	0.0396
3	16:24:20	0.0000	0.0000	0.0000	0.0000	0.0000	80.73%	0.0416	-0.9617	0.0571
4	16:25:04	0.0000	0.0000	0.0000	0.0000	0.0000	81.63%	0.0891	-0.6238	0.0810
5	16:25:49	0.0000	0.0000	0.0000	0.0000	0.0000	81.99%	0.0334	-0.9571	0.0265
x		0.0000	0.0000	0.0000	0.0000	0.0000	81.16%	0.0482	-0.9555	0.0475
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.88	47.9460	21.1040	46.2590

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:50	0.0368	79.61%	0.0000	0.4818	0.0044	0.0283	0.0000	0.0000	0.0000
2	16:23:35	0.0391	80.89%	0.0000	0.4015	0.0040	0.0040	0.0000	0.0000	0.0000
3	16:24:20	0.0322	80.86%	0.0000	0.3079	0.0039	0.0040	0.0000	0.0000	0.0000
4	16:25:04	0.0241	82.22%	0.0000	0.2795	-0.0177	0.0097	0.0000	0.0000	0.0000
5	16:25:49	0.0449	82.12%	0.0000	0.2862	-0.0177	0.0213	0.0000	0.0000	0.0000
x		0.0354	81.14%	0.0000	0.3514	-0.0046	0.0134	0.0000	0.0000	0.0000
%RSD		22.0430	1.32	0.0000	24.9880	258.4800	81.0420	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:50	0.0000	81.03%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0147	0.0174
2	16:23:35	0.0000	82.96%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0257	0.0272
3	16:24:20	0.0000	83.47%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0310	0.0286
4	16:25:04	0.0000	85.39%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0295	0.0253
5	16:25:49	0.0000	85.20%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0143	0.0272
x		0.0000	83.61%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0230	0.0251
%RSD		0.0000	2.14	0.0000	0.0000	0.0000	0.0000	0.0000	34.8500	17.7780

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:50	0.0146	0.0074	0.0279	83.57%	0.0000
2	16:23:35	0.0193	-0.0003	0.0149	85.30%	0.0000
3	16:24:20	0.0102	-0.0030	0.0079	86.10%	0.0000
4	16:25:04	0.0084	-0.0123	-0.0039	87.95%	0.0000
5	16:25:49	0.0225	0.0077	0.0053	88.29%	0.0000
x		0.0150	-0.0001	0.0104	86.24%	0.0000
%RSD		39.7010	7676.5000	113.9900	2.26	0.0000

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:27:36	63.25%	0.3650	TM 108840.0000	TM 104820.0000	TM 103610.0000	TM 103450.0000	TM 102030.0000	TM 104190.0000	TM 109370.0000
2	16:28:21	62.56%	0.3658	TM 111040.0000	TM 104910.0000	TM 105870.0000	TM 105690.0000	TM 103530.0000	TM 104570.0000	M 109120.0000
3	16:29:05	62.42%	0.3004	TM 109820.0000	TM 106460.0000	TM 105770.0000	TM 106130.0000	TM 103550.0000	TM 103570.0000	M 108920.0000
4	16:29:50	61.73%	0.3752	TM 110130.0000	TM 106540.0000	TM 106360.0000	TM 106240.0000	TM 102740.0000	TM 103120.0000	M 105600.0000
5	16:30:35	61.35%	0.4093	TM 107310.0000	TM 104250.0000	TM 104400.0000	TM 103570.0000	TM 101770.0000	TM 98910.0000	M 103490.0000
X		62.26%	0.3631	TM 109430.0000	TM 105400.0000	TM 105200.0000	TM 105020.0000	TM 102720.0000	TM 102870.0000	TM 107300.0000
%RSD		1.19	10.8710	TM 1.2986	TM 0.9879	TM 1.0932	TM 1.3245	TM 0.8038	TM 2.2190	TM 2.4479

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:27:36	65.81%	271.7200	-1.7375	19.7530	TM 72716.0000	8.0474	TM 101540.0000	TM 104510.0000	1.4352
2	16:28:21	65.70%	272.5600	-2.6677	19.9330	TM 72879.0000	8.0060	TM 100380.0000	TM 102740.0000	1.3184
3	16:29:05	65.24%	272.9200	-2.3348	19.4800	TM 73288.0000	8.0485	TM 100630.0000	TM 103970.0000	1.3153
4	16:29:50	65.49%	270.1400	-2.4546	19.7340	TM 71626.0000	8.1667	TM 99583.0000	TM 102230.0000	1.3720
5	16:30:35	66.83%	264.7900	-2.1832	19.1280	TM 69723.0000	7.7721	TM 96712.0000	TM 99280.0000	1.3853
X		65.81%	270.4300	-2.2755	19.6050	TM 72047.0000	8.0081	TM 99770.0000	TM 102540.0000	1.3653
%RSD		0.92	1.2298	15.3390	1.5903	TM 1.9943	1.8099	TM 1.8511	TM 1.9914	3.6675

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:27:36	6.4130	7.2992	8.3616	10.8270	-0.3232	0.3360	-2.0466	9.4902	64.10%
2	16:28:21	6.4470	7.2231	8.0675	10.9230	-0.3457	0.4398	-2.6513	9.9396	64.89%
3	16:29:05	6.6696	7.1852	8.5120	10.9700	0.0899	0.5228	-1.4386	7.6543	64.83%
4	16:29:50	6.3371	7.4422	7.6570	11.2240	-0.3876	0.0939	-2.2526	10.6220	65.95%
5	16:30:35	6.1689	7.2513	7.8851	11.5590	-0.2357	0.7469	-1.6981	7.7335	66.08%
X		6.4071	7.2802	8.0966	11.1010	-0.2404	0.4279	-2.0174	9.0879	65.17%
%RSD		2.8370	1.3692	4.2858	2.6622	80.2030	56.1490	23.4450	14.6910	1.28

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:27:36	0.0000	0.0000	0.0000	0.0000	0.0000	64.51%	0.0256	8.6446	0.1650
2	16:28:21	0.0000	0.0000	0.0000	0.0000	0.0000	64.92%	0.0276	9.3710	0.0332
3	16:29:05	0.0000	0.0000	0.0000	0.0000	0.0000	65.70%	0.0219	8.2248	0.0358
4	16:29:50	0.0000	0.0000	0.0000	0.0000	0.0000	66.00%	0.0271	11.3620	0.0288
5	16:30:35	0.0000	0.0000	0.0000	0.0000	0.0000	65.80%	0.0188	9.4786	0.0327
X		0.0000	0.0000	0.0000	0.0000	0.0000	65.39%	0.0242	9.4162	0.0591
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.97	15.4240	12.7950	100.1800

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:27:36	0.4445	69.24%	0.0000	1.2712	1.6597	1.5594	0.0000	0.0000	0.0000
2	16:28:21	0.7766	70.42%	0.0000	1.3253	1.4840	1.6809	0.0000	0.0000	0.0000
3	16:29:05	0.5148	71.30%	0.0000	1.2881	1.8462	1.5378	0.0000	0.0000	0.0000
4	16:29:50	-0.2200	71.71%	0.0000	1.3485	1.6093	1.6125	0.0000	0.0000	0.0000
5	16:30:35	0.4183	71.61%	0.0000	1.2224	1.6667	1.4833	0.0000	0.0000	0.0000
X		0.3868	70.86%	0.0000	1.2911	1.6531	1.5748	0.0000	0.0000	0.0000
%RSD		95.0490	1.46	0.0000	3.7908	7.8887	4.7788	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:27:36	0.0000	73.05%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0537	0.0473
2	16:28:21	0.0000	74.28%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0226	0.0427
3	16:29:05	0.0000	74.87%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0098	0.0209
4	16:29:50	0.0000	74.88%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0074	0.0176
5	16:30:35	0.0000	75.36%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0034	0.0116
X		0.0000	74.49%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0180	0.0280
%RSD		0.0000	1.19	0.0000	0.0000	0.0000	0.0000	0.0000	122.0400	56.9200

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	16:27:36	4.8595	4.2239	4.4407	70.74%	0.9246
2	16:28:21	4.9085	4.3456	4.5200	71.19%	0.0000
3	16:29:05	4.9297	4.1492	4.5167	71.05%	0.9206
4	16:29:50	4.9738	4.1777	4.4941	71.19%	0.0000
5	16:30:35	4.7384	4.1992	4.3097	70.29%	0.9305
X		4.8820	4.2191	4.4562	70.89%	0.5551
%RSD		1.8473	1.7978	1.9715	0.54	91.2890

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:32:23	62.26%	20.5100	TM 109870.0000	TM 105570.0000	TM 105940.0000	TM 105670.0000	TM 104950.0000	TM 101850.0000	M 108260.0000
2	16:33:07	61.37%	20.2530	TM 110120.0000	TM 107170.0000	TM 106460.0000	TM 105640.0000	TM 104480.0000	TM 101910.0000	M 107390.0000
3	16:33:52	60.91%	20.0740	TM 111270.0000	TM 108470.0000	TM 107780.0000	TM 106520.0000	TM 104050.0000	TM 103090.0000	M 107610.0000
4	16:34:38	60.76%	20.1180	TM 111490.0000	TM 106770.0000	TM 105990.0000	TM 104920.0000	TM 102580.0000	TM 104410.0000	M 108550.0000
5	16:35:22	61.84%	19.4900	TM 107660.0000	TM 104770.0000	TM 103920.0000	TM 102840.0000	TM 101080.0000	TM 102140.0000	M 106510.0000
X		61.43%	20.0890	TM 110080.0000	TM 106550.0000	TM 106020.0000	TM 105120.0000	TM 103430.0000	TM 102680.0000	M 107670.0000
%RSD		1.02	1.8688	TM 1.3842	TM 1.3460	TM 1.3095	TM 1.3248	TM 1.5316	TM 1.0601	M 0.7411

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:32:23	65.95%	272.4100	17.8120	40.3670	TM 72902.0000	28.9550	TM 100940.0000	TM 104240.0000	21.4720
2	16:33:07	66.26%	272.0800	18.4530	40.3840	TM 72405.0000	28.2350	TM 99873.0000	TM 102630.0000	21.2320
3	16:33:52	66.45%	273.8700	17.7950	40.1280	TM 72674.0000	28.3820	TM 99607.0000	TM 102190.0000	21.0880
4	16:34:38	66.17%	273.4500	17.9700	39.8090	TM 71176.0000	28.3060	TM 99608.0000	TM 102150.0000	21.0090
5	16:35:22	66.59%	263.2400	17.8030	38.7340	TM 69437.0000	27.3020	TM 96820.0000	TM 99099.0000	20.4330
X		66.28%	271.0100	17.9670	39.8840	TM 71719.0000	28.2360	TM 99370.0000	TM 102060.0000	21.0470
%RSD		0.37	1.6255	1.5663	1.7151	TM 2.0066	2.1066	TM 1.5379	TM 1.8254	1.8322

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:32:23	27.3680	25.9170	26.7770	29.1030	19.5570	18.0320	16.8990	8.8037	65.68%
2	16:33:07	26.0890	25.9750	26.7990	29.6720	19.8490	19.1760	16.9450	8.4520	66.09%
3	16:33:52	26.7360	25.9820	26.1550	28.5410	20.4070	19.0360	17.3880	9.4350	67.00%
4	16:34:38	25.6200	25.8290	26.6590	29.4280	19.5220	20.4720	17.5930	9.3125	66.94%
5	16:35:22	25.0010	24.7700	26.5810	28.0320	19.4680	17.9870	15.6260	9.7807	68.31%
X		26.1630	25.6940	26.5940	28.9550	19.7610	18.9410	16.8900	9.1568	66.81%
%RSD		3.5403	2.0257	0.9824	2.3052	1.9750	5.3737	4.5320	5.7588	1.51

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:32:23	0.0000	0.0000	0.0000	0.0000	0.0000	65.78%	17.6770	9.9070	17.7580
2	16:33:07	0.0000	0.0000	0.0000	0.0000	0.0000	66.26%	17.6830	11.2690	17.4220
3	16:33:52	0.0000	0.0000	0.0000	0.0000	0.0000	66.83%	17.6670	9.3485	17.7290
4	16:34:38	0.0000	0.0000	0.0000	0.0000	0.0000	67.48%	17.8680	10.2110	17.7830
5	16:35:22	0.0000	0.0000	0.0000	0.0000	0.0000	67.79%	17.0460	9.6304	17.0660
X		0.0000	0.0000	0.0000	0.0000	0.0000	66.83%	17.5880	10.0730	17.5510
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	1.25	1.7881	7.3578	1.7557

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:32:23	19.0810	71.23%	0.0000	20.1670	22.5980	22.5860	0.0000	0.0000	0.0000
2	16:33:07	19.3970	72.32%	0.0000	20.6010	22.3700	22.6760	0.0000	0.0000	0.0000
3	16:33:52	18.8980	72.49%	0.0000	20.9290	22.8800	22.8480	0.0000	0.0000	0.0000
4	16:34:38	18.8610	72.71%	0.0000	19.9990	23.0670	22.2590	0.0000	0.0000	0.0000
5	16:35:22	17.7600	74.47%	0.0000	19.7510	22.5420	21.9160	0.0000	0.0000	0.0000
X		18.7990	72.64%	0.0000	20.2890	22.6910	22.4570	0.0000	0.0000	0.0000
%RSD		3.2894	1.61	0.0000	2.3317	1.2280	1.6512	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:32:23	0.0000	74.23%	0.0000	0.0000	0.0000	0.0000	0.0000	21.9930	21.8400
2	16:33:07	0.0000	75.89%	0.0000	0.0000	0.0000	0.0000	0.0000	21.7240	21.6810
3	16:33:52	0.0000	76.90%	0.0000	0.0000	0.0000	0.0000	0.0000	21.8340	21.5580
4	16:34:38	0.0000	78.35%	0.0000	0.0000	0.0000	0.0000	0.0000	21.8410	21.6960
5	16:35:22	0.0000	78.96%	0.0000	0.0000	0.0000	0.0000	0.0000	20.8740	20.7770
X		0.0000	76.87%	0.0000	0.0000	0.0000	0.0000	0.0000	21.6530	21.5100
%RSD		0.0000	2.48	0.0000	0.0000	0.0000	0.0000	0.0000	2.0587	1.9625

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	16:32:23	26.7000	25.5540	25.9410	69.03%	0.9474
2	16:33:07	26.4930	25.5600	25.7140	71.64%	0.0000
3	16:33:52	26.5770	25.6900	25.7630	72.42%	0.0000
4	16:34:38	26.7360	25.6640	25.7410	73.70%	0.8874
5	16:35:22	25.7700	24.4200	24.8660	75.77%	0.0000
X		26.4550	25.3770	25.6050	72.51%	0.3670
%RSD		1.4938	2.1236	1.6494	3.44	137.0500

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:37:07	64.57%	2452.5000	TM 54698.0000	TM 53728.0000	TM 53488.0000	TM 53296.0000	TM 53278.0000	TM 52177.0000	M 52639.0000
2	16:37:53	64.72%	2424.7000	TM 54421.0000	TM 54012.0000	TM 53873.0000	TM 53763.0000	TM 53973.0000	TM 52155.0000	M 52067.0000
3	16:38:37	64.23%	2434.4000	TM 55683.0000	TM 54485.0000	TM 53862.0000	TM 53890.0000	TM 54337.0000	TM 52849.0000	M 52886.0000
4	16:39:23	65.40%	2373.7000	TM 55363.0000	TM 53306.0000	TM 53004.0000	TM 52581.0000	TM 53301.0000	TM 52942.0000	M 52033.0000
5	16:40:07	66.21%	2277.8000	TM 52799.0000	TM 51448.0000	TM 51292.0000	TM 51453.0000	TM 52330.0000	TM 50779.0000	M 50219.0000
X		65.03%	2392.6000	TM 54593.0000	TM 53396.0000	TM 53104.0000	TM 52997.0000	TM 53444.0000	TM 52180.0000	M 51969.0000
%RSD		1.21	2.9482	TM 2.0565	TM 2.1921	TM 2.0207	TM 1.8936	TM 1.4387	TM 1.6575	M 2.0101

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:37:07	72.99%	0.0285	T 2579.5000	T 2512.0000	TM 36738.0000	T 2509.8000	TM 50219.0000	M 51442.0000	T 2463.2000
2	16:37:53	74.09%	0.0179	T 2570.5000	T 2511.0000	TM 37114.0000	T 2486.3000	TM 50580.0000	M 52163.0000	T 2508.0000
3	16:38:37	74.99%	0.0306	T 2574.9000	T 2542.5000	TM 37175.0000	T 2496.2000	TM 50553.0000	M 52247.0000	T 2513.9000
4	16:39:23	75.87%	0.0105	T 2527.3000	T 2464.8000	TM 36126.0000	T 2466.5000	TM 50151.0000	M 50881.0000	T 2438.0000
5	16:40:07	77.14%	0.0101	T 2449.8000	T 2390.7000	TM 35433.0000	T 2392.5000	TM 48044.0000	M 48834.0000	T 2364.6000
X		75.01%	0.0195	T 2540.4000	T 2484.2000	TM 36518.0000	T 2470.2000	TM 49909.0000	M 51114.0000	T 2457.5000
%RSD		2.13	49.6310	T 2.1564	T 2.3817	TM 2.0155	T 1.8714	TM 2.1243	M 2.7224	T 2.4739

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:37:07	2484.5000	T 2324.6000	2381.9000	2395.3000	2532.3000	271.2200	263.5500	4.2993	73.25%
2	16:37:53	2510.1000	T 2375.8000	2384.7000	2420.9000	2561.1000	268.4200	270.8700	4.0220	73.35%
3	16:38:37	2508.0000	T 2379.0000	2401.5000	2403.7000	2537.8000	274.8100	268.2900	4.7800	74.73%
4	16:39:23	2471.2000	T 2343.5000	2351.0000	2364.3000	2498.3000	266.9400	267.4400	4.1834	75.79%
5	16:40:07	2393.4000	T 2257.6000	2275.5000	2290.7000	2414.4000	253.5600	260.4500	2.6376	76.64%
X		2473.4000	T 2336.1000	2358.9000	2375.0000	2508.8000	266.9900	266.1200	3.9844	74.75%
%RSD		1.9261	T 2.1151	2.1223	2.1637	2.2862	3.0280	1.5475	20.1840	1.99

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:37:07	0.0000	0.0000	0.0000	0.0000	0.0000	73.20%	240.8800	-8.5005	237.3200
2	16:37:53	0.0000	0.0000	0.0000	0.0000	0.0000	73.77%	240.5800	-7.6786	238.2700
3	16:38:37	0.0000	0.0000	0.0000	0.0000	0.0000	74.91%	240.9800	-11.2380	239.3900
4	16:39:23	0.0000	0.0000	0.0000	0.0000	0.0000	75.61%	243.1900	-6.6370	240.8300
5	16:40:07	0.0000	0.0000	0.0000	0.0000	0.0000	76.20%	228.5600	2.7662	227.1400
X		0.0000	0.0000	0.0000	0.0000	0.0000	74.74%	238.8400	-6.2575	236.5900
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	1.67	2.4447	85.0980	2.3000

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:37:07	2462.8000	77.84%	0.0000	T 2552.1000	2573.1000	2550.0000	0.0000	0.0000	0.0000
2	16:37:53	2450.8000	79.16%	0.0000	T 2517.9000	2568.4000	2548.0000	0.0000	0.0000	0.0000
3	16:38:37	2454.9000	79.81%	0.0000	T 2530.9000	2559.3000	2534.7000	0.0000	0.0000	0.0000
4	16:39:23	2417.9000	80.30%	0.0000	T 2505.6000	2536.0000	2520.8000	0.0000	0.0000	0.0000
5	16:40:07	2316.5000	82.19%	0.0000	T 2398.3000	2428.3000	2412.2000	0.0000	0.0000	0.0000
X		2420.6000	79.86%	0.0000	T 2501.0000	2533.0000	2513.1000	0.0000	0.0000	0.0000
%RSD		2.5052	2.00	0.0000	T 2.3956	2.3788	2.2943	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:37:07	0.0000	82.57%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2581.9000	T 2586.8000
2	16:37:53	0.0000	82.99%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2587.4000	T 2596.4000
3	16:38:37	0.0000	83.33%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2609.2000	T 2606.2000
4	16:39:23	0.0000	84.73%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2589.0000	T 2588.7000
5	16:40:07	0.0000	84.99%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2486.7000	T 2483.3000
X		0.0000	83.72%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2570.8000	T 2572.3000
%RSD		0.0000	1.29	0.0000	0.0000	0.0000	0.0000	0.0000	T 1.8724	T 1.9562

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	16:37:07	T 2587.4000	T 2589.4000	T 2590.9000	80.70%	0.0000
2	16:37:53	T 2589.3000	T 2575.5000	T 2583.4000	81.39%	3.2145
3	16:38:37	T 2591.7000	T 2609.8000	T 2597.7000	81.70%	1.6010
4	16:39:23	T 2563.8000	T 2554.7000	T 2558.5000	82.63%	0.7916
5	16:40:07	T 2462.5000	T 2472.8000	T 2467.1000	83.54%	0.7829
X		T 2558.9000	T 2560.5000	T 2559.5000	81.99%	1.2780
%RSD		T 2.1526	T 2.0683	T 2.1003	1.35	95.5880

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:41:52	72.00%	0.1679	37.3240	1.0320	1.4832	0.8206	0.7641	13.5350	1.8245
2	16:42:37	73.20%	0.1298	27.9790	0.6267	0.9922	0.4711	0.5169	8.7640	-1.0792
3	16:43:22	74.25%	0.1191	22.4330	0.7460	0.3717	0.3318	0.5827	7.4919	-0.8139
4	16:44:07	74.72%	0.1139	19.6350	1.5665	1.2700	1.1593	1.1628	7.8432	-0.1106
5	16:44:53	75.88%	0.1307	17.5410	2.1893	1.5438	1.5139	1.5985	7.9282	0.2504
x		74.01%	0.1323	24.9820	1.2321	1.1322	0.8593	0.9250	9.1124	0.0143
%RSD		2.00	16.0010	31.7560	52.4580	42.1170	56.6810	48.9390	27.6090	8023.2000

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:41:52	86.73%	-0.0073	0.0263	-0.0048	-1.2566	0.0278	-6.7511	0.4143	0.0361
2	16:42:37	88.62%	-0.0158	0.0503	-0.0315	0.7094	0.0176	-6.8369	3.5643	0.0183
3	16:43:22	89.41%	-0.0049	0.0394	0.0022	0.2089	0.0331	-5.4377	1.6940	0.0311
4	16:44:07	90.40%	-0.0077	0.0785	0.0111	1.0533	0.0523	-4.1201	1.4013	0.0538
5	16:44:53	91.88%	-0.0079	0.1194	0.0512	1.4718	0.0621	-3.6017	-0.0594	0.0599
x		89.41%	-0.0087	0.0628	0.0057	0.4374	0.0386	-5.3495	1.4029	0.0398
%RSD		2.16	47.6040	59.0110	531.1300	241.0300	47.2490	27.6500	99.9980	42.6300

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:41:52	0.0264	0.5006	0.0802	-0.2008	0.1524	0.4709	0.2961	-0.7938	86.99%
2	16:42:37	0.0055	0.3336	0.1035	-0.1851	0.1600	0.4394	0.3733	-0.7226	88.52%
3	16:43:22	0.0395	0.3503	0.1130	-0.1839	0.1449	0.2712	0.3389	-0.5720	91.29%
4	16:44:07	0.0389	0.2819	0.0560	-0.1938	0.0701	0.5662	-0.0284	-0.2886	92.21%
5	16:44:53	0.1199	0.2760	0.0965	-0.2172	0.1337	0.7211	0.2568	-0.3042	92.65%
x		0.0460	0.3485	0.0899	-0.1962	0.1322	0.4938	0.2473	-0.5362	90.33%
%RSD		94.5890	26.0800	24.9010	6.9457	27.2600	33.5740	64.8010	43.4860	2.73

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:41:52	0.0000	0.0000	0.0000	0.0000	0.0000	87.65%	0.0167	0.4141	0.0161
2	16:42:37	0.0000	0.0000	0.0000	0.0000	0.0000	89.56%	0.0237	-0.6595	0.0215
3	16:43:22	0.0000	0.0000	0.0000	0.0000	0.0000	91.92%	0.0253	-0.0819	0.0211
4	16:44:07	0.0000	0.0000	0.0000	0.0000	0.0000	92.43%	0.0431	-1.2775	0.0447
5	16:44:53	0.0000	0.0000	0.0000	0.0000	0.0000	93.43%	0.0139	-0.1983	0.0289
x		0.0000	0.0000	0.0000	0.0000	0.0000	91.00%	0.0245	-0.3606	0.0265
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	2.58	46.5410	177.2400	42.2540

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:41:52	0.0696	90.50%	0.0000	1.0170	0.0206	0.0241	0.0000	0.0000	0.0000
2	16:42:37	0.0327	92.11%	0.0000	0.8809	-0.0083	0.0443	0.0000	0.0000	0.0000
3	16:43:22	0.0283	93.26%	0.0000	0.5999	0.0009	0.0032	0.0000	0.0000	0.0000
4	16:44:07	0.0917	94.54%	0.0000	0.5669	0.0283	0.0483	0.0000	0.0000	0.0000
5	16:44:53	0.0834	95.49%	0.0000	0.5086	0.0459	0.0426	0.0000	0.0000	0.0000
x		0.0611	93.18%	0.0000	0.7146	0.0175	0.0325	0.0000	0.0000	0.0000
%RSD		47.5820	2.12	0.0000	31.0130	123.7900	58.0100	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:41:52	0.0000	95.56%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0567	0.0419
2	16:42:37	0.0000	96.73%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0314	0.0357
3	16:43:22	0.0000	97.98%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0290	0.0311
4	16:44:07	0.0000	98.68%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0560	0.0517
5	16:44:53	0.0000	100.53%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0859	0.0881
x		0.0000	97.90%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0518	0.0497
%RSD		0.0000	1.94	0.0000	0.0000	0.0000	0.0000	0.0000	44.6990	45.9520

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	16:41:52	0.0749	0.0536	0.0617	99.86%	0.0000
2	16:42:37	0.0252	-0.0016	0.0161	101.36%	0.6453
3	16:43:22	0.0297	0.0039	0.0094	102.31%	0.0000
4	16:44:07	0.0595	0.0272	0.0378	102.83%	0.6361
5	16:44:53	0.0663	0.0935	0.0678	104.82%	0.0000
x		0.0511	0.0353	0.0385	102.24%	0.2563
%RSD		43.7450	110.8500	67.9890	1.80	136.9400

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:46:38	72.34%	0.0933	14.5490	1.1026	1.4303	1.1127	0.4277	9.1746	1.7853
2	16:47:23	71.57%	0.0808	12.1960	1.0483	1.9200	1.2581	0.4108	6.1662	1.3058
3	16:48:08	71.40%	0.1248	10.2760	1.1120	0.8009	0.7810	0.4113	5.0984	1.9460
4	16:48:53	73.30%	0.1070	9.3203	0.8297	0.3904	0.4247	0.4101	3.9322	1.7119
5	16:49:38	73.63%	0.0850	7.4527	1.0214	1.0934	0.6898	0.3840	3.9173	0.7388
x		72.45%	0.0982	10.7590	1.0228	1.1270	0.8533	0.4088	5.6577	1.4976
%RSD		1.38	18.2720	25.3120	11.1770	51.9460	39.1740	3.8415	38.4670	32.4100

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:46:38	83.19%	-0.0127	-0.1924	0.3451	0.4020	0.0133	-6.1628	1.6100	0.0037
2	16:47:23	83.13%	-0.0127	-0.1013	0.3588	-0.4849	0.0146	-5.3743	-0.3242	0.0061
3	16:48:08	83.26%	-0.0098	-0.1752	0.4156	0.6805	0.0081	-5.2963	0.5210	-0.0028
4	16:48:53	84.11%	0.0077	-0.2142	0.3823	0.1075	0.0217	-6.0343	0.7859	-0.0018
5	16:49:38	84.18%	-0.0069	0.0547	0.4507	0.0920	0.0036	-5.3624	-0.2468	-0.0105
x		83.57%	-0.0069	-0.1257	0.3905	0.1594	0.0122	-5.6460	0.4692	-0.0010
%RSD		0.62	123.0200	87.0340	11.0100	272.0800	56.0830	7.3798	170.0500	617.7000

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:46:38	0.0170	0.2392	0.2006	-0.1378	0.1235	0.1628	0.0207	0.4832	88.04%
2	16:47:23	0.0438	0.2365	0.1585	-0.1921	-0.0670	0.0194	0.1321	-0.5328	85.47%
3	16:48:08	0.0120	0.2164	0.1483	-0.2155	0.0454	-0.1568	0.1314	0.5435	86.14%
4	16:48:53	0.0327	0.1500	0.1379	-0.1365	0.0957	0.0826	0.1873	-0.5539	86.27%
5	16:49:38	0.0432	0.2069	0.1157	-0.2017	0.0398	-0.0841	-0.0084	0.2252	85.68%
x		0.0298	0.2098	0.1522	-0.1767	0.0475	0.0048	0.0926	0.0331	86.32%
%RSD		49.3960	17.1960	20.6270	20.9740	153.6600	2674.9000	89.3980	1632.6000	1.18

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:46:38	0.0000	0.0000	0.0000	0.0000	0.0000	88.09%	0.0137	-0.1424	0.0264
2	16:47:23	0.0000	0.0000	0.0000	0.0000	0.0000	86.64%	0.0199	-0.2701	0.0145
3	16:48:08	0.0000	0.0000	0.0000	0.0000	0.0000	86.04%	0.0136	-0.7268	0.0123
4	16:48:53	0.0000	0.0000	0.0000	0.0000	0.0000	87.07%	0.0193	-0.0602	0.0158
5	16:49:38	0.0000	0.0000	0.0000	0.0000	0.0000	86.73%	0.0118	0.6077	0.0141
x		0.0000	0.0000	0.0000	0.0000	0.0000	86.91%	0.0157	-0.1184	0.0166
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.87	23.4520	406.1000	33.7310

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:46:38	0.0346	91.55%	0.0000	0.2106	0.0011	0.0186	0.0000	0.0000	0.0000
2	16:47:23	0.0292	89.87%	0.0000	0.2321	0.0209	0.0086	0.0000	0.0000	0.0000
3	16:48:08	0.0432	88.61%	0.0000	0.1735	0.0507	0.0300	0.0000	0.0000	0.0000
4	16:48:53	0.0222	88.46%	0.0000	0.1858	0.0217	0.0464	0.0000	0.0000	0.0000
5	16:49:38	-0.0080	88.46%	0.0000	0.1784	0.0021	0.0089	0.0000	0.0000	0.0000
x		0.0242	89.39%	0.0000	0.1961	0.0193	0.0225	0.0000	0.0000	0.0000
%RSD		80.8330	1.51	0.0000	12.5830	104.1800	70.9870	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:46:38	0.0000	97.44%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0179	0.0228
2	16:47:23	0.0000	94.45%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0007	0.0101
3	16:48:08	0.0000	93.51%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0088	-0.0016
4	16:48:53	0.0000	92.12%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0080	0.0017
5	16:49:38	0.0000	90.71%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0179	-0.0043
x		0.0000	93.65%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0032	0.0057
%RSD		0.0000	2.72	0.0000	0.0000	0.0000	0.0000	0.0000	420.5600	191.1700

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	16:46:38	0.0759	0.0714	0.0685	102.02%	0.0000
2	16:47:23	0.0636	0.0304	0.0456	98.82%	0.0000
3	16:48:08	0.0741	0.0088	0.0371	95.57%	0.0000
4	16:48:53	0.0533	0.0389	0.0459	93.42%	0.0000
5	16:49:38	0.0637	0.0362	0.0421	91.51%	0.0000
x		0.0661	0.0371	0.0478	96.27%	0.0000
%RSD		13.8600	60.6290	25.2710	4.37	0.0000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:51:23	74.48%	2.1138	1080.9000	1094.0000	1082.2000	1085.1000	41.6550	993.2300	1016.0000
2	16:52:08	73.61%	2.3125	1080.7000	1087.6000	1075.7000	1055.6000	42.8950	1008.4000	1043.0000
3	16:52:54	74.03%	2.3698	1087.5000	1104.6000	1081.8000	1080.7000	42.4300	1030.1000	1040.8000
4	16:53:38	74.46%	2.1437	1070.9000	1063.6000	1059.1000	1048.0000	42.1360	1030.4000	1030.8000
5	16:54:22	75.27%	2.1736	1028.3000	1040.2000	1038.5000	1016.0000	40.1620	998.0100	970.7700
X		74.37%	2.2227	1069.7000	1078.0000	1067.4000	1057.1000	41.8560	1012.0000	1020.3000
%RSD		0.83	5.0411	2.2301	2.4068	1.7537	2.6384	2.5048	1.7322	2.9057

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:51:23	82.91%	-0.0008	10.6370	4.2917	285.2000	1.9654	391.9100	400.0100	2.0690
2	16:52:08	83.29%	0.0020	9.9464	4.1522	283.5600	1.9077	389.0600	404.1200	2.0509
3	16:52:54	82.41%	0.0112	10.3600	4.4282	286.4000	2.0377	396.7400	398.9000	1.9787
4	16:53:38	82.74%	-0.0038	10.1390	4.2159	282.8700	1.9355	388.4900	406.1000	1.8820
5	16:54:22	82.58%	-0.0038	9.8373	4.0193	268.6300	1.7945	374.5700	383.7300	1.9575
X		82.79%	0.0010	10.1840	4.2214	281.3300	1.9282	388.1500	398.5700	1.9876
%RSD		0.40	643.6600	3.1630	3.6186	2.5709	4.6200	2.1296	2.2087	3.7958

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:51:23	1.9808	4.1737	4.3047	4.3515	1.9337	11.3210	9.3800	-0.0872	85.29%
2	16:52:08	2.0907	4.0799	3.9494	4.0642	2.6192	10.4430	10.0420	-1.0907	85.95%
3	16:52:54	2.0665	4.2332	4.4073	4.1762	2.2474	10.6030	11.2400	-0.2955	84.88%
4	16:53:38	2.2668	4.0604	3.8975	4.6077	1.8862	11.1020	10.7040	-1.3033	85.61%
5	16:54:22	2.1797	4.1542	4.1460	4.1008	2.3384	9.8445	10.2860	-0.8633	85.60%
X		2.1169	4.1403	4.1410	4.2601	2.2050	10.6630	10.3300	-0.7280	85.47%
%RSD		5.1831	1.7067	5.3148	5.2485	13.7250	5.4452	6.7685	71.3230	0.47

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:51:23	0.0000	0.0000	0.0000	0.0000	0.0000	86.04%	2.0458	-0.7546	1.9586
2	16:52:08	0.0000	0.0000	0.0000	0.0000	0.0000	86.21%	1.9907	-0.4987	2.0247
3	16:52:54	0.0000	0.0000	0.0000	0.0000	0.0000	86.66%	2.0006	-1.2192	2.0017
4	16:53:38	0.0000	0.0000	0.0000	0.0000	0.0000	85.68%	1.9856	0.0032	1.9354
5	16:54:22	0.0000	0.0000	0.0000	0.0000	0.0000	85.87%	1.8482	-0.3146	1.8784
X		0.0000	0.0000	0.0000	0.0000	0.0000	86.09%	1.9742	-0.5568	1.9597
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.43	3.7654	82.9660	2.9303

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:51:23	2.0565	87.87%	0.0000	4.0478	19.7650	19.8530	0.0000	0.0000	0.0000
2	16:52:08	2.1922	87.55%	0.0000	4.1088	19.6100	19.7960	0.0000	0.0000	0.0000
3	16:52:54	2.1951	88.27%	0.0000	4.0697	21.1310	19.9710	0.0000	0.0000	0.0000
4	16:53:38	2.1266	88.40%	0.0000	3.9412	19.9570	19.9040	0.0000	0.0000	0.0000
5	16:54:22	2.0417	89.08%	0.0000	3.8751	19.4930	19.0180	0.0000	0.0000	0.0000
X		2.1224	88.23%	0.0000	4.0085	19.9910	19.7080	0.0000	0.0000	0.0000
%RSD		3.4167	0.66	0.0000	2.4212	3.3038	1.9849	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:51:23	0.0000	90.74%	0.0000	0.0000	0.0000	0.0000	0.0000	1.7676	1.7866
2	16:52:08	0.0000	91.21%	0.0000	0.0000	0.0000	0.0000	0.0000	1.8467	1.8003
3	16:52:54	0.0000	92.24%	0.0000	0.0000	0.0000	0.0000	0.0000	1.8150	1.8207
4	16:53:38	0.0000	92.78%	0.0000	0.0000	0.0000	0.0000	0.0000	1.8096	1.8305
5	16:54:22	0.0000	93.39%	0.0000	0.0000	0.0000	0.0000	0.0000	1.7331	1.7109
X		0.0000	92.07%	0.0000	0.0000	0.0000	0.0000	0.0000	1.7944	1.7898
%RSD		0.0000	1.19	0.0000	0.0000	0.0000	0.0000	0.0000	2.4729	2.6450

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	16:51:23	1.9611	1.8149	1.9330	91.59%	0.0000
2	16:52:08	1.9548	1.9279	1.9212	93.13%	0.0000
3	16:52:54	1.9967	1.9674	1.9533	94.69%	0.6907
4	16:53:38	1.9585	1.9047	1.9079	95.81%	0.0000
5	16:54:22	1.7717	1.9610	1.8566	96.85%	0.0000
X		1.9286	1.9152	1.9144	94.41%	0.1381
%RSD		4.6285	3.2136	1.8987	2.22	223.6100

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:09	70.13%	1.0610	186.4500	2954.9000	2873.2000	2864.0000	TM 10540.0000	1635.1000	TM 218370.0000
2	16:56:54	69.65%	1.1014	183.9700	2962.5000	2859.0000	2866.1000	TM 10460.0000	1635.4000	TM 218720.0000
3	16:57:39	69.38%	1.1230	184.9200	T 2924.5000	2845.1000	2836.1000	TM 10408.0000	1636.3000	TM 220370.0000
4	16:58:24	69.01%	1.1784	183.7800	T 2931.9000	2928.5000	2815.7000	TM 10316.0000	1636.3000	TM 219880.0000
5	16:59:09	70.23%	1.0135	175.0000	T 2838.1000	2773.0000	2705.3000	TM 9915.3000	1561.6000	TM 210980.0000
X		69.68%	1.0954	182.8200	T 2922.4000	2855.8000	2817.5000	TM 10328.0000	1621.0000	TM 217660.0000
%RSD		0.73	5.6975	2.4607	T 1.6985	1.9631	2.3462	TM 2.3677	2.0466	TM 1.7569

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:09	69.95%	2.7038	37.9520	40.0020	M 10544.0000	T 1040.4000	TM 14667.0000	M 15644.0000	9.5807
2	16:56:54	69.34%	2.9482	37.3340	40.1580	M 10505.0000	T 1030.2000	TM 14509.0000	M 15748.0000	9.5438
3	16:57:39	68.76%	2.7116	37.9760	40.2240	M 10529.0000	T 1041.3000	TM 14657.0000	M 15727.0000	9.5530
4	16:58:24	68.66%	2.5873	37.6620	39.6920	M 10444.0000	T 1028.4000	TM 14564.0000	M 15484.0000	9.5112
5	16:59:09	68.66%	2.4590	36.2240	38.0320	M 9959.3000	T 992.0900	TM 13874.0000	M 15000.0000	9.1906
X		69.08%	2.6820	37.4300	39.6220	M 10396.0000	T 1026.5000	TM 14454.0000	M 15521.0000	9.4759
%RSD		0.82	6.7455	1.9304	2.3022	M 2.3779	T 1.9551	TM 2.2874	M 1.9902	1.7034

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:09	26.2530	24.2460	24.9040	104.8300	7.6692	0.3686	-0.0151	1.7250	81.63%
2	16:56:54	26.4670	23.7110	25.0410	106.6500	8.1859	0.3692	0.7372	0.6655	81.88%
3	16:57:39	27.2650	24.4580	25.0690	107.0400	7.8010	0.4528	0.5333	0.8357	80.56%
4	16:58:24	25.8020	24.4720	24.7470	108.5300	7.8850	0.0655	0.9008	-0.1127	80.48%
5	16:59:09	25.7850	23.2900	24.5060	103.1800	7.5720	0.2688	0.8376	0.4744	80.72%
X		26.3150	24.0350	24.8530	106.0500	7.8226	0.3050	0.5988	0.7176	81.05%
%RSD		2.3069	2.1556	0.9350	1.9583	3.0163	48.8230	61.8460	92.9620	0.80

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:09	0.0000	0.0000	0.0000	0.0000	0.0000	73.96%	0.1369	-0.5105	0.1171
2	16:56:54	0.0000	0.0000	0.0000	0.0000	0.0000	73.34%	0.1417	-0.0642	0.1258
3	16:57:39	0.0000	0.0000	0.0000	0.0000	0.0000	72.52%	0.1176	-0.9987	0.1240
4	16:58:24	0.0000	0.0000	0.0000	0.0000	0.0000	72.36%	0.1122	-0.3833	0.1329
5	16:59:09	0.0000	0.0000	0.0000	0.0000	0.0000	72.85%	0.1183	-0.4271	0.1188
X		0.0000	0.0000	0.0000	0.0000	0.0000	73.01%	0.1254	-0.4767	0.1237
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.89	10.4310	70.7440	5.0609

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:09	0.5466	78.64%	0.0000	0.3134	137.9300	138.2900	0.0000	0.0000	0.0000
2	16:56:54	0.4968	78.72%	0.0000	0.3062	139.9700	136.2400	0.0000	0.0000	0.0000
3	16:57:39	0.4419	78.43%	0.0000	0.2810	140.9500	138.2000	0.0000	0.0000	0.0000
4	16:58:24	0.4435	78.69%	0.0000	0.3191	138.2300	137.7500	0.0000	0.0000	0.0000
5	16:59:09	0.4816	77.70%	0.0000	0.3101	134.9500	132.7000	0.0000	0.0000	0.0000
X		0.4821	78.44%	0.0000	0.3060	138.4100	136.6300	0.0000	0.0000	0.0000
%RSD		8.9734	0.54	0.0000	4.8152	1.6579	1.7203	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:09	0.0000	83.34%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1497	0.1398
2	16:56:54	0.0000	84.10%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1163	0.1332
3	16:57:39	0.0000	84.33%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1449	0.1283
4	16:58:24	0.0000	84.63%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1256	0.1324
5	16:59:09	0.0000	83.49%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1120	0.1268
X		0.0000	83.98%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1297	0.1321
%RSD		0.0000	0.66	0.0000	0.0000	0.0000	0.0000	0.0000	13.0270	3.8533

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:09	87.3430	83.0950	84.1560	83.75%	0.0000
2	16:56:54	86.9310	81.7350	83.7600	84.83%	0.0000
3	16:57:39	87.6460	83.9480	84.6230	84.32%	0.7757
4	16:58:24	85.8450	82.2210	83.3290	85.23%	0.0000
5	16:59:09	83.7880	79.6610	80.5680	83.41%	0.0000
X		86.3110	82.1320	83.2870	84.31%	0.1551
%RSD		1.8148	1.9724	1.9132	0.89	223.6100

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:00:55	69.96%	12.4980	168.9300	T 2744.4000	2665.9000	2599.1000	TM 10234.0000	1463.5000	TM 198470.0000
2	17:01:40	69.88%	12.6060	172.5100	2757.3000	2653.9000	2663.5000	TM 10328.0000	1496.5000	TM 200590.0000
3	17:02:25	70.81%	12.8750	177.3000	T 2780.3000	2735.1000	2728.8000	TM 10586.0000	1532.2000	TM 203540.0000
4	17:03:10	69.34%	12.7510	175.8600	2818.1000	2776.4000	2724.6000	TM 10616.0000	1541.6000	TM 202420.0000
5	17:03:54	70.99%	12.2290	169.1900	2685.7000	2593.3000	2594.8000	TM 10152.0000	1498.5000	TM 196790.0000
X		70.20%	12.5920	172.7600	T 2757.2000	2684.9000	2662.2000	TM 10383.0000	1506.5000	TM 200360.0000
%RSD		0.98	1.9700	2.1989	T 1.7698	2.6728	2.4386	TM 2.0080	2.0730	TM 1.3832

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:00:55	69.10%	2.7863	138.6000	75.6380	M 9319.5000	T 1070.2000	TM 12993.0000	M 14036.0000	105.4600
2	17:01:40	68.30%	2.9617	139.7300	77.8480	M 9544.1000	T 1092.5000	TM 13249.0000	M 14393.0000	108.0900
3	17:02:25	67.86%	2.8855	142.1900	79.7010	M 9554.2000	T 1100.0000	TM 13476.0000	M 14347.0000	107.9200
4	17:03:10	67.96%	2.8463	144.6200	78.5750	M 9646.7000	T 1100.1000	TM 13397.0000	M 14444.0000	108.0700
5	17:03:54	68.63%	2.6456	133.5300	74.2220	M 9222.9000	T 1052.8000	TM 12825.0000	M 14048.0000	104.0200
X		68.37%	2.8250	139.7300	77.1970	M 9457.5000	T 1083.1000	TM 13188.0000	M 14254.0000	106.7100
%RSD		0.74	4.2065	2.9862	2.8873	M 1.8821	T 1.9319	TM 2.0778	M 1.3753	1.7542

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:00:55	123.2800	69.2390	69.9200	197.3800	15.2380	15.1450	15.9210	0.5451	78.57%
2	17:01:40	129.0100	70.6900	72.3660	200.9900	14.4560	15.7650	15.1170	0.6957	77.94%
3	17:02:25	128.0900	70.9850	71.6260	202.1200	15.3750	16.9720	16.2980	0.9079	78.86%
4	17:03:10	128.1700	70.8800	71.9960	205.2200	15.4960	16.3490	16.1130	1.1745	78.27%
5	17:03:54	121.3400	67.0410	68.6970	195.5300	14.4760	16.4000	14.5300	1.8111	77.59%
X		125.9800	69.7670	70.9210	200.2500	15.0080	16.1260	15.5960	1.0269	78.25%
%RSD		2.7289	2.4077	2.1943	1.9223	3.3538	4.3099	4.7904	48.5160	0.64

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:00:55	0.0000	0.0000	0.0000	0.0000	0.0000	70.73%	9.4135	-0.6038	9.4805
2	17:01:40	0.0000	0.0000	0.0000	0.0000	0.0000	71.30%	9.4769	-1.3703	9.5281
3	17:02:25	0.0000	0.0000	0.0000	0.0000	0.0000	71.48%	9.7991	-1.0585	9.5279
4	17:03:10	0.0000	0.0000	0.0000	0.0000	0.0000	70.94%	9.7140	-0.7836	9.5841
5	17:03:54	0.0000	0.0000	0.0000	0.0000	0.0000	71.34%	9.3829	-0.5639	9.3130
X		0.0000	0.0000	0.0000	0.0000	0.0000	71.16%	9.5573	-0.8760	9.4867
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.44	1.9618	38.6120	1.0945

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:00:55	11.1630	75.82%	0.0000	5.0070	553.9100	541.3800	0.0000	0.0000	0.0000
2	17:01:40	10.9000	75.40%	0.0000	4.9111	557.6500	552.2000	0.0000	0.0000	0.0000
3	17:02:25	10.6960	75.20%	0.0000	5.1421	561.6100	558.9400	0.0000	0.0000	0.0000
4	17:03:10	11.3150	74.66%	0.0000	4.8481	568.9700	556.9000	0.0000	0.0000	0.0000
5	17:03:54	10.3900	75.25%	0.0000	4.9057	541.0300	533.5200	0.0000	0.0000	0.0000
X		10.8930	75.26%	0.0000	4.9628	556.6400	548.5900	0.0000	0.0000	0.0000
%RSD		3.3833	0.55	0.0000	2.3236	1.8602	1.9727	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:00:55	0.0000	78.80%	0.0000	0.0000	0.0000	0.0000	0.0000	9.8775	9.8020
2	17:01:40	0.0000	78.47%	0.0000	0.0000	0.0000	0.0000	0.0000	10.0490	9.8339
3	17:02:25	0.0000	77.60%	0.0000	0.0000	0.0000	0.0000	0.0000	10.2120	10.0830
4	17:03:10	0.0000	77.85%	0.0000	0.0000	0.0000	0.0000	0.0000	9.9550	9.9038
5	17:03:54	0.0000	79.35%	0.0000	0.0000	0.0000	0.0000	0.0000	9.8785	9.6609
X		0.0000	78.42%	0.0000	0.0000	0.0000	0.0000	0.0000	9.9944	9.8567
%RSD		0.0000	0.90	0.0000	0.0000	0.0000	0.0000	0.0000	1.4063	1.5652

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:00:55	86.8690	83.3060	84.3840	77.26%	0.0000
2	17:01:40	87.5250	82.6870	84.0010	76.46%	0.0000
3	17:02:25	89.6060	83.8380	85.4380	75.25%	0.8692
4	17:03:10	87.1710	83.4650	84.2410	76.48%	0.0000
5	17:03:54	84.5230	80.8150	81.4510	77.58%	0.0000
X		87.1390	82.8220	83.9030	76.61%	0.1738
%RSD		2.0809	1.4448	1.7601	1.18	223.6100

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:41	70.64%	1.1314	174.1200	2993.5000	2882.8000	2834.0000	TM 10761.0000	1629.9000	TM 214900.0000
2	17:06:26	69.78%	1.2022	179.3500	T 2943.4000	2898.4000	2864.7000	TM 10689.0000	1690.0000	TM 216050.0000
3	17:07:11	70.09%	1.1933	181.8300	T 2987.6000	2932.1000	2846.5000	TM 10813.0000	1685.0000	TM 217750.0000
4	17:07:56	70.54%	1.2811	178.2800	2967.1000	2912.0000	2887.5000	TM 10750.0000	1701.0000	TM 217970.0000
5	17:08:41	70.18%	1.0864	173.3900	T 2898.4000	2814.4000	2783.6000	TM 10446.0000	1638.3000	TM 208130.0000
X		70.25%	1.1789	177.3900	T 2958.0000	2887.9000	2843.2000	TM 10692.0000	1668.9000	TM 214960.0000
%RSD		0.50	6.2925	2.0137	T 1.3072	1.5551	1.3703	TM 1.3489	1.9395	TM 1.8705

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:41	67.85%	2.6567	38.1550	39.5530	M 10558.0000	T 1007.1000	TM 14611.0000	M 15681.0000	9.6309
2	17:06:26	67.39%	2.6802	37.6660	39.6330	M 10434.0000	T 1003.1000	TM 14698.0000	M 15610.0000	9.7544
3	17:07:11	67.25%	2.7842	38.0440	39.8170	M 10540.0000	T 1009.9000	TM 14615.0000	M 15841.0000	9.8785
4	17:07:56	67.17%	2.7916	37.7780	39.2510	M 10593.0000	T 1023.3000	TM 14594.0000	M 15711.0000	9.7742
5	17:08:41	67.76%	2.5297	36.2810	37.1270	M 10035.0000	T 962.4300	TM 14037.0000	M 15001.0000	9.4204
X		67.48%	2.6885	37.5850	39.0760	M 10432.0000	T 1001.1000	TM 14511.0000	M 15569.0000	9.6917
%RSD		0.46	3.9922	2.0087	2.8370	M 2.2047	T 2.2900	TM 1.8487	M 2.1079	1.8088

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:41	26.3060	24.5220	24.9200	110.8400	8.4844	0.5473	0.7684	-0.2773	77.80%
2	17:06:26	26.9400	24.0000	25.2480	111.0300	8.0362	0.0533	0.5125	0.4300	78.74%
3	17:07:11	27.0600	23.9810	25.1210	109.8200	8.3874	0.2314	0.5136	1.0482	78.52%
4	17:07:56	25.8990	24.5880	25.1830	111.8400	7.7930	0.6123	0.7039	-0.0389	78.19%
5	17:08:41	24.8840	23.5720	23.9350	105.1000	7.6721	0.4316	0.2319	1.9093	78.26%
X		26.2180	24.1330	24.8810	109.7200	8.0746	0.3752	0.5461	0.6143	78.30%
%RSD		3.3684	1.7507	2.1834	2.4463	4.4157	61.5560	38.3300	143.8000	0.45

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:41	0.0000	0.0000	0.0000	0.0000	0.0000	70.84%	0.1272	-0.1238	0.1147
2	17:06:26	0.0000	0.0000	0.0000	0.0000	0.0000	70.74%	0.1254	-0.4480	0.1165
3	17:07:11	0.0000	0.0000	0.0000	0.0000	0.0000	70.45%	0.1270	-0.6790	0.1336
4	17:07:56	0.0000	0.0000	0.0000	0.0000	0.0000	71.24%	0.1303	-0.4460	0.1146
5	17:08:41	0.0000	0.0000	0.0000	0.0000	0.0000	71.43%	0.1154	-0.7488	0.1246
X		0.0000	0.0000	0.0000	0.0000	0.0000	70.94%	0.1251	-0.4891	0.1208
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.55	4.5621	50.1280	6.8445

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:41	0.5209	76.06%	0.0000	0.2524	136.6400	136.9200	0.0000	0.0000	0.0000
2	17:06:26	0.5244	75.66%	0.0000	0.2420	139.5800	136.9000	0.0000	0.0000	0.0000
3	17:07:11	0.4410	75.89%	0.0000	0.3017	139.3700	136.7800	0.0000	0.0000	0.0000
4	17:07:56	0.4685	75.77%	0.0000	0.3000	141.7500	137.2100	0.0000	0.0000	0.0000
5	17:08:41	0.4034	77.15%	0.0000	0.2508	133.4100	131.0600	0.0000	0.0000	0.0000
X		0.4716	76.11%	0.0000	0.2694	138.1500	135.7700	0.0000	0.0000	0.0000
%RSD		11.0210	0.79	0.0000	10.7770	2.3250	1.9460	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:41	0.0000	80.25%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1426	0.1324
2	17:06:26	0.0000	80.90%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1382	0.1358
3	17:07:11	0.0000	81.77%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0915	0.1260
4	17:07:56	0.0000	81.44%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1248	0.1468
5	17:08:41	0.0000	81.84%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1262	0.1308
X		0.0000	81.24%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1247	0.1344
%RSD		0.0000	0.82	0.0000	0.0000	0.0000	0.0000	0.0000	16.0740	5.7820

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:41	85.3370	81.3630	82.5350	79.78%	0.8198
2	17:06:26	86.3750	80.8490	82.7310	80.80%	0.8095
3	17:07:11	85.9410	82.5280	83.1520	81.64%	0.0000
4	17:07:56	85.7510	81.4630	83.3980	81.87%	0.0000
5	17:08:41	82.3450	78.7070	79.3020	82.56%	0.0000
X		85.1500	80.9820	82.2240	81.33%	0.3259
%RSD		1.8927	1.7422	2.0289	1.32	136.9400

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:28	75.11%	0.2686	37.7240	605.5000	606.3500	597.9000	T 2243.7000	321.9200	M 41836.0000
2	17:11:13	77.79%	0.2868	38.3770	624.1600	609.7500	602.4200	T 2290.8000	329.0700	M 42270.0000
3	17:11:58	77.30%	0.2564	39.4730	621.5200	629.2600	618.6300	T 2342.7000	330.2200	M 42880.0000
4	17:12:43	77.64%	0.2025	38.6850	625.6300	619.5200	622.4200	T 2406.8000	329.4000	M 42180.0000
5	17:13:29	78.01%	0.2059	37.8300	593.1000	586.1500	579.7500	T 2256.7000	326.5000	M 41401.0000
X		77.17%	0.2440	38.4180	613.9800	610.2100	604.2200	T 2308.1000	327.4200	M 42113.0000
%RSD		1.53	15.5470	1.8465	2.3090	2.6470	2.8436	T 2.9085	1.0309	M 1.3014

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:28	79.21%	0.4983	7.9892	8.0442	2126.8000	207.2500	T 3012.2000	3210.3000	1.9853
2	17:11:13	83.11%	0.5540	8.2070	8.1050	2160.8000	214.3700	T 3129.6000	3345.3000	2.0098
3	17:11:58	84.33%	0.5458	8.0839	8.6734	2184.6000	216.7200	T 3113.2000	3346.0000	2.1788
4	17:12:43	86.38%	0.5326	7.8219	8.6323	2198.2000	218.0700	T 3155.9000	3377.9000	2.0846
5	17:13:29	86.26%	0.5248	7.6388	8.3181	2121.3000	209.0600	T 3013.2000	3196.4000	2.0045
X		83.86%	0.5311	7.9482	8.3546	2158.4000	213.0900	T 3084.8000	3295.2000	2.0526
%RSD		3.50	4.0601	2.8044	3.4832	1.5806	2.2264	T 2.1908	2.5793	3.8988

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:28	5.9487	5.5627	5.7091	25.3830	1.6643	0.3815	0.1623	0.6575	83.46%
2	17:11:13	5.9934	5.4258	5.8676	25.4120	1.6377	0.0977	0.1871	0.2085	86.43%
3	17:11:58	6.1899	5.5940	5.9550	25.9400	1.6916	-0.3766	-0.2278	0.8224	87.33%
4	17:12:43	6.0258	5.6312	5.7371	26.4010	1.8434	0.4707	0.3736	-0.8277	88.84%
5	17:13:29	5.7495	5.4238	5.5576	24.1570	1.6700	0.2621	0.4834	-0.8203	88.47%
X		5.9815	5.5275	5.7653	25.4590	1.7014	0.1671	0.1957	0.0081	86.91%
%RSD		2.6490	1.7519	2.6522	3.2993	4.8012	200.2100	138.7300	9786.6000	2.47

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:28	0.0000	0.0000	0.0000	0.0000	0.0000	82.00%	0.0206	0.1646	0.0279
2	17:11:13	0.0000	0.0000	0.0000	0.0000	0.0000	84.49%	0.0260	-0.4215	0.0289
3	17:11:58	0.0000	0.0000	0.0000	0.0000	0.0000	85.71%	0.0280	-0.3739	0.0329
4	17:12:43	0.0000	0.0000	0.0000	0.0000	0.0000	86.95%	0.0258	-0.3681	0.0241
5	17:13:29	0.0000	0.0000	0.0000	0.0000	0.0000	87.64%	0.0274	-0.3210	0.0258
X		0.0000	0.0000	0.0000	0.0000	0.0000	85.36%	0.0256	-0.2640	0.0279
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	2.61	11.3810	91.7440	11.9320

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:28	0.0903	84.99%	0.0000	0.0544	27.5420	28.3180	0.0000	0.0000	0.0000
2	17:11:13	0.1171	86.94%	0.0000	0.0888	28.8590	28.4300	0.0000	0.0000	0.0000
3	17:11:58	0.0800	87.02%	0.0000	0.0710	28.8540	28.7610	0.0000	0.0000	0.0000
4	17:12:43	0.1470	88.13%	0.0000	0.0428	29.2180	30.2380	0.0000	0.0000	0.0000
5	17:13:29	0.1019	87.95%	0.0000	0.0702	29.0680	27.5860	0.0000	0.0000	0.0000
X		0.1072	87.01%	0.0000	0.0654	28.7080	28.6660	0.0000	0.0000	0.0000
%RSD		24.3780	1.43	0.0000	26.8670	2.3333	3.4101	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:28	0.0000	87.85%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0055	-0.0011
2	17:11:13	0.0000	88.40%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0021	0.0001
3	17:11:58	0.0000	88.26%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0087	0.0052
4	17:12:43	0.0000	88.60%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0083	0.0054
5	17:13:29	0.0000	88.94%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0086	0.0117
X		0.0000	88.41%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0045	0.0043
%RSD		0.0000	0.46	0.0000	0.0000	0.0000	0.0000	0.0000	139.7600	119.3200

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:28	17.3180	16.3560	16.7090	88.62%	0.0000
2	17:11:13	17.6980	16.9640	17.1150	87.46%	0.0000
3	17:11:58	17.9190	16.8870	17.0340	87.35%	0.0000
4	17:12:43	17.7900	16.7910	16.8820	88.02%	0.0000
5	17:13:29	17.4540	15.9540	16.4190	88.68%	0.0000
X		17.6360	16.5900	16.8320	88.03%	0.0000
%RSD		1.3946	2.5707	1.6501	0.71	0.0000

MF9L79A-Sb 06/04/2019 17:14:31

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:15:16	73.38%	3.3335	1184.2000	T 3940.9000	3886.5000	3871.2000	TM 10569.0000	2558.9000	TM 211930.0000
2	17:16:01	72.99%	3.2077	1200.4000	T 3926.7000	3858.5000	3793.0000	TM 10631.0000	T 2606.9000	TM 214090.0000
3	17:16:46	73.20%	3.2763	1205.6000	T 3970.2000	3886.1000	3867.6000	TM 10515.0000	2641.7000	TM 216730.0000
4	17:17:31	72.45%	3.2885	1191.0000	T 3960.0000	3879.8000	3860.1000	TM 10547.0000	2645.0000	TM 215650.0000
5	17:18:17	72.73%	3.1425	1151.1000	T 3814.5000	3740.1000	3697.9000	TM 10238.0000	2516.5000	TM 206230.0000
X		72.95%	3.2497	1186.4000	T 3922.5000	3850.2000	3818.0000	TM 10500.0000	T 2593.8000	TM 212930.0000
%RSD		0.50	2.3077	1.8077	T 1.5971	1.6265	1.9471	TM 1.4524	T 2.1360	TM 1.9520

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:15:16	71.74%	2.6287	47.9950	43.1790	M 10927.0000	T 1047.8000	TM 15099.0000	M 16134.0000	11.3760
2	17:16:01	71.29%	2.5142	48.0030	43.9840	M 10791.0000	T 1024.6000	TM 15034.0000	M 16234.0000	11.4320
3	17:16:46	69.75%	2.4288	47.7520	44.4190	M 10941.0000	T 1053.2000	TM 15333.0000	M 16337.0000	11.6620
4	17:17:31	69.35%	2.5977	48.3670	43.2990	M 10731.0000	T 1030.6000	TM 15022.0000	M 16043.0000	11.3600
5	17:18:17	69.47%	2.5667	46.2190	42.0830	M 10438.0000	T 1007.3000	TM 14531.0000	TM 16072.0000	11.0770
X		70.32%	2.5472	47.6670	43.3930	M 10766.0000	T 1032.7000	TM 15004.0000	TM 16164.0000	11.3810
%RSD		1.58	3.0835	1.7593	2.0522	M 1.8928	T 1.7887	TM 1.9498	TM 0.7504	1.8351

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:15:16	28.7620	27.9920	29.5410	110.6300	10.5640	9.9622	9.8225	0.0833	81.25%
2	17:16:01	28.5840	27.5170	28.8820	111.8100	9.3932	9.2369	10.3300	0.7743	81.69%
3	17:16:46	28.4450	28.0700	28.6920	110.4300	10.1400	10.0650	10.3550	1.0606	80.67%
4	17:17:31	29.1560	27.6830	28.7380	112.6800	10.4150	9.2600	9.7603	1.5402	80.63%
5	17:18:17	27.8070	26.9000	27.3470	105.6800	10.0660	9.7216	10.4560	0.5100	79.50%
X		28.5510	27.6320	28.6400	110.2500	10.1160	9.6491	10.1450	0.7937	80.75%
%RSD		1.7308	1.6910	2.7903	2.4609	4.4643	4.0054	3.2195	69.4120	1.02

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:15:16	0.0000	0.0000	0.0000	0.0000	0.0000	73.36%	1.9500	-1.3216	1.8861
2	17:16:01	0.0000	0.0000	0.0000	0.0000	0.0000	73.63%	1.9718	-0.9753	1.9329
3	17:16:46	0.0000	0.0000	0.0000	0.0000	0.0000	72.71%	1.9748	-0.8661	1.9727
4	17:17:31	0.0000	0.0000	0.0000	0.0000	0.0000	72.84%	1.9100	-1.8258	1.9354
5	17:18:17	0.0000	0.0000	0.0000	0.0000	0.0000	72.55%	1.8443	-0.5615	1.8844
X		0.0000	0.0000	0.0000	0.0000	0.0000	73.02%	1.9302	-1.1101	1.9223
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.63	2.8263	43.5700	1.9418

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:15:16	2.4865	78.14%	0.0000	3.9964	160.5600	158.0500	0.0000	0.0000	0.0000
2	17:16:01	2.5405	77.54%	0.0000	3.9090	162.0800	160.0400	0.0000	0.0000	0.0000
3	17:16:46	2.5116	77.74%	0.0000	4.0421	161.5300	159.5900	0.0000	0.0000	0.0000
4	17:17:31	2.5928	77.53%	0.0000	3.9208	162.1400	159.4100	0.0000	0.0000	0.0000
5	17:18:17	2.3933	77.09%	0.0000	3.8844	153.3600	154.0000	0.0000	0.0000	0.0000
X		2.5049	77.61%	0.0000	3.9506	159.9300	158.2200	0.0000	0.0000	0.0000
%RSD		2.9500	0.49	0.0000	1.6730	2.3309	1.5642	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:15:16	0.0000	81.06%	0.0000	0.0000	0.0000	0.0000	0.0000	1.9968	2.0439
2	17:16:01	0.0000	81.95%	0.0000	0.0000	0.0000	0.0000	0.0000	2.1109	2.0856
3	17:16:46	0.0000	82.14%	0.0000	0.0000	0.0000	0.0000	0.0000	2.0540	2.0436
4	17:17:31	0.0000	82.27%	0.0000	0.0000	0.0000	0.0000	0.0000	2.0056	2.1192
5	17:18:17	0.0000	81.26%	0.0000	0.0000	0.0000	0.0000	0.0000	1.9618	1.9909
X		0.0000	81.73%	0.0000	0.0000	0.0000	0.0000	0.0000	2.0258	2.0567
%RSD		0.0000	0.66	0.0000	0.0000	0.0000	0.0000	0.0000	2.8557	2.3576

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:15:16	88.5550	84.1480	85.4750	79.92%	0.0000
2	17:16:01	88.9110	84.1870	85.8290	80.71%	0.0000
3	17:16:46	89.6290	85.0490	86.2530	81.79%	0.0000
4	17:17:31	88.4570	84.6950	85.7110	82.19%	0.0000
5	17:18:17	86.2300	81.9850	82.7200	80.44%	0.0000
X		88.3560	84.0130	85.1980	81.01%	0.0000
%RSD		1.4423	1.4205	1.6590	1.17	0.0000

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Jser Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:20:05	72.71%	0.8707	226.8300	T 3317.9000	3294.7000	3226.6000	TM 7672.6000	1201.1000	TM 250400.0000
2	17:20:49	72.34%	0.9564	224.7600	T 3279.3000	3305.7000	3241.3000	TM 7691.7000	1189.2000	TM 245410.0000
3	17:21:35	72.73%	0.8253	227.5600	T 3327.4000	3267.2000	3246.4000	TM 7777.1000	1204.2000	TM 249460.0000
4	17:22:19	73.81%	1.0464	226.4100	T 3283.7000	3221.5000	3184.8000	TM 7557.0000	1183.9000	TM 247330.0000
5	17:23:04	73.99%	0.8684	216.3300	T 3225.6000	3132.1000	3043.6000	TM 7402.2000	1168.4000	TM 239640.0000
X		73.12%	0.9135	224.3800	T 3286.8000	3244.2000	3188.5000	TM 7620.1000	1189.4000	TM 246450.0000
%RSD		1.00	9.6620	2.0575	T 1.2201	2.1758	2.6515	TM 1.9018	1.2091	TM 1.7321

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:20:05	70.10%	2.6144	38.8570	22.9640	M 9115.7000	T 1058.9000	TM 12920.0000	M 14047.0000	9.3002
2	17:20:49	71.16%	2.5448	38.3640	23.2270	M 9286.2000	T 1060.3000	TM 12772.0000	M 14131.0000	9.3591
3	17:21:35	71.57%	2.6918	38.3150	23.0790	M 9263.1000	T 1071.0000	TM 13025.0000	M 14236.0000	9.4604
4	17:22:19	71.31%	2.4255	38.2800	23.3570	M 9163.1000	T 1060.7000	TM 12905.0000	M 13870.0000	9.3376
5	17:23:04	71.38%	2.3249	37.1150	22.5330	M 9010.9000	T 1024.5000	TM 12576.0000	M 13802.0000	9.1620
X		71.10%	2.5203	38.1860	23.0320	M 9167.8000	T 1055.1000	TM 12840.0000	M 14017.0000	9.3239
%RSD		0.81	5.8190	1.6836	1.3715	M 1.2248	T 1.6830	TM 1.3457	M 1.2825	1.1603

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:20:05	25.0420	25.6060	26.1300	114.0300	8.3320	0.2092	0.2300	0.3987	79.11%
2	17:20:49	25.1410	25.2340	26.0680	115.1300	8.2032	0.0283	0.4722	0.0043	80.03%
3	17:21:35	24.7060	25.1170	25.9580	117.1700	8.8385	0.0962	0.9935	-1.2999	79.68%
4	17:22:19	25.2540	24.5710	25.0000	115.3400	8.6022	0.3652	0.4092	0.3429	80.56%
5	17:23:04	24.5310	24.0910	25.1840	111.1900	8.3630	0.4154	0.3195	1.0755	79.97%
X		24.9350	24.9240	25.6680	114.5700	8.4678	0.2229	0.4849	0.1043	79.87%
%RSD		1.2218	2.3876	2.0774	1.9230	2.9813	74.8760	61.6120	839.7100	0.66

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:20:05	0.0000	0.0000	0.0000	0.0000	0.0000	71.70%	0.2960	-0.2944	0.3080
2	17:20:49	0.0000	0.0000	0.0000	0.0000	0.0000	72.04%	0.3279	-0.6843	0.3048
3	17:21:35	0.0000	0.0000	0.0000	0.0000	0.0000	72.51%	0.2577	-0.7240	0.3007
4	17:22:19	0.0000	0.0000	0.0000	0.0000	0.0000	72.91%	0.2785	-0.5339	0.2949
5	17:23:04	0.0000	0.0000	0.0000	0.0000	0.0000	72.63%	0.3047	-0.2857	0.2550
X		0.0000	0.0000	0.0000	0.0000	0.0000	72.36%	0.2930	-0.5045	0.2927
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.67	9.0683	41.2720	7.3890

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:20:05	0.5684	75.41%	0.0000	0.3295	122.5500	120.8300	0.0000	0.0000	0.0000
2	17:20:49	0.5609	75.93%	0.0000	0.3074	125.0400	118.8100	0.0000	0.0000	0.0000
3	17:21:35	0.4528	75.36%	0.0000	0.3389	125.2700	121.8200	0.0000	0.0000	0.0000
4	17:22:19	0.4969	76.82%	0.0000	0.3533	122.6400	120.2600	0.0000	0.0000	0.0000
5	17:23:04	0.5324	77.38%	0.0000	0.2993	116.8700	116.5100	0.0000	0.0000	0.0000
X		0.5223	76.18%	0.0000	0.3257	122.4800	119.6500	0.0000	0.0000	0.0000
%RSD		9.1809	1.17	0.0000	6.8341	2.7631	1.7225	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:20:05	0.0000	79.40%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0966	0.0872
2	17:20:49	0.0000	79.06%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0804	0.0885
3	17:21:35	0.0000	79.27%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0854	0.0909
4	17:22:19	0.0000	79.33%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0812	0.0913
5	17:23:04	0.0000	80.71%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0857	0.1041
X		0.0000	79.55%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0858	0.0924
%RSD		0.0000	0.83	0.0000	0.0000	0.0000	0.0000	0.0000	7.5437	7.3160

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:20:05	88.1060	83.1030	84.8030	75.80%	0.0000
2	17:20:49	88.7630	82.7400	84.7290	75.14%	0.0000
3	17:21:35	89.5760	82.5380	85.0430	74.80%	0.8744
4	17:22:19	88.6660	83.4020	85.2220	76.09%	0.0000
5	17:23:04	83.9600	80.0560	81.2560	77.42%	0.0000
X		87.8140	82.3680	84.2100	75.85%	0.1749
%RSD		2.5251	1.6201	1.9749	1.34	223.6100

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:24:51	73.55%	1.0526	176.6100	2508.8000	2454.6000	2408.6000	TM 8516.6000	1216.5000	TM 205560.0000
2	17:25:35	73.16%	1.0343	179.4600	2561.1000	2484.4000	2482.0000	TM 8625.3000	1250.1000	TM 210640.0000
3	17:26:19	72.71%	1.0392	180.8300	2576.9000	2486.0000	2432.3000	TM 8485.1000	1235.9000	TM 209480.0000
4	17:27:04	73.38%	1.0828	183.3000	2598.6000	2549.1000	2483.4000	TM 8643.9000	1277.7000	TM 215440.0000
5	17:27:48	72.92%	0.8971	178.6400	2508.3000	2484.9000	2447.8000	TM 8413.6000	1265.2000	TM 207090.0000
X		73.14%	1.0212	179.7700	2550.7000	2491.8000	2450.8000	TM 8536.9000	1249.1000	TM 209640.0000
%RSD		0.46	7.0406	1.3904	1.5981	1.3917	1.3173	TM 1.1350	1.9265	TM 1.8129

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:24:51	69.77%	2.4585	37.3580	35.5540	M 7842.0000	637.5300	TM 11001.0000	M 12042.0000	7.8035
2	17:25:35	69.74%	2.4670	36.5350	36.0550	M 7874.6000	644.9800	TM 11112.0000	M 12032.0000	7.7988
3	17:26:19	69.20%	2.4219	36.7300	36.0120	M 7969.8000	643.7600	TM 11037.0000	M 12018.0000	7.8150
4	17:27:04	68.42%	2.4487	34.8200	35.8150	M 7962.5000	652.0400	TM 11140.0000	M 12164.0000	7.9049
5	17:27:48	67.69%	2.4929	35.0370	35.7210	M 7771.6000	634.8100	TM 10889.0000	M 11847.0000	7.6311
X		68.96%	2.4578	36.0960	35.8310	M 7884.1000	642.6200	TM 11036.0000	M 12021.0000	7.7907
%RSD		1.30	1.0546	3.0778	0.5790	M 1.0611	1.0512	TM 0.8994	M 0.9416	1.2726

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:24:51	23.1430	19.2690	19.2470	121.2500	5.5912	0.3750	0.5095	0.2898	78.82%
2	17:25:35	23.8420	19.3440	20.3070	123.3900	5.1356	0.0254	0.2621	0.2988	78.55%
3	17:26:19	23.9970	18.6580	19.8130	120.9900	5.3628	0.3454	0.4489	0.5439	78.58%
4	17:27:04	24.3600	19.0280	19.2540	121.4500	5.2144	0.5513	0.6680	0.7932	78.57%
5	17:27:48	23.4790	18.5880	19.2860	120.7500	5.1912	0.3407	0.8599	0.2025	78.18%
X		23.7640	18.9770	19.5820	121.5600	5.2990	0.3276	0.5497	0.4257	78.54%
%RSD		1.9771	1.8179	2.4037	0.8656	3.4659	57.9480	41.1540	56.7530	0.29

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:24:51	0.0000	0.0000	0.0000	0.0000	0.0000	72.25%	0.0882	-0.4165	0.0787
2	17:25:35	0.0000	0.0000	0.0000	0.0000	0.0000	72.56%	0.0810	-0.6737	0.0709
3	17:26:19	0.0000	0.0000	0.0000	0.0000	0.0000	71.68%	0.0847	0.0723	0.0793
4	17:27:04	0.0000	0.0000	0.0000	0.0000	0.0000	71.64%	0.0664	-0.8966	0.0818
5	17:27:48	0.0000	0.0000	0.0000	0.0000	0.0000	71.86%	0.0698	-0.5485	0.0846
X		0.0000	0.0000	0.0000	0.0000	0.0000	72.00%	0.0780	-0.4926	0.0790
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.55	12.1400	73.4710	6.4719

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:24:51	0.5883	77.00%	0.0000	0.2893	110.8600	113.4600	0.0000	0.0000	0.0000
2	17:25:35	0.5411	77.01%	0.0000	0.3157	114.0100	112.9800	0.0000	0.0000	0.0000
3	17:26:19	0.6189	76.57%	0.0000	0.2835	114.5500	113.4600	0.0000	0.0000	0.0000
4	17:27:04	0.6236	77.07%	0.0000	0.2797	114.8100	113.0100	0.0000	0.0000	0.0000
5	17:27:48	0.6275	76.96%	0.0000	0.3553	110.8800	108.4000	0.0000	0.0000	0.0000
X		0.5998	76.92%	0.0000	0.3047	113.0200	112.2600	0.0000	0.0000	0.0000
%RSD		6.0556	0.26	0.0000	10.3670	1.7557	1.9342	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:24:51	0.0000	81.13%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0909	0.1129
2	17:25:35	0.0000	81.56%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0972	0.1032
3	17:26:19	0.0000	82.27%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0709	0.1077
4	17:27:04	0.0000	82.19%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0906	0.0936
5	17:27:48	0.0000	82.64%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1152	0.1037
X		0.0000	81.96%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0930	0.1042
%RSD		0.0000	0.74	0.0000	0.0000	0.0000	0.0000	0.0000	17.0540	6.8201

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:24:51	39.4890	37.1440	37.8310	80.19%	0.0000
2	17:25:35	40.1610	37.3570	38.0890	81.13%	0.0000
3	17:26:19	39.9390	37.6240	38.2860	81.78%	0.0000
4	17:27:04	40.6270	37.9190	38.7020	81.72%	0.0000
5	17:27:48	38.3180	36.0760	37.0080	82.85%	0.0000
X		39.7070	37.2240	37.9830	81.53%	0.0000
%RSD		2.2108	1.8920	1.6616	1.19	0.0000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:29:35	71.78%	0.9591	154.2600	2326.3000	2259.9000	2254.4000	TM 6974.8000	1123.1000	TM 170430.0000
2	17:30:20	72.67%	0.8648	151.5200	2319.1000	2246.5000	2258.2000	TM 7038.9000	1106.8000	TM 167420.0000
3	17:31:05	72.29%	0.8643	152.4100	2321.2000	2254.7000	2230.6000	TM 7024.8000	1104.3000	TM 166950.0000
4	17:31:51	73.18%	0.8339	150.3100	2280.2000	2263.6000	2220.0000	TM 7001.9000	1080.3000	TM 163640.0000
5	17:32:36	74.24%	0.8857	145.4900	2202.8000	2173.7000	2141.7000	TM 6677.1000	1043.9000	TM 158610.0000
X		72.83%	0.8816	150.8000	2289.9000	2239.7000	2221.0000	TM 6943.5000	1091.7000	TM 165410.0000
%RSD		1.29	5.3438	2.1885	2.2725	1.6712	2.1203	TM 2.1729	2.8160	TM 2.7205

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:29:35	66.19%	2.5761	26.3380	42.5900	M 6706.1000	588.0300	TM 9482.2000	M 10047.0000	6.4594
2	17:30:20	66.66%	2.6553	27.5660	42.5500	M 6767.1000	598.7300	TM 9568.6000	M 10166.0000	6.4802
3	17:31:05	67.25%	2.5371	27.5030	42.8010	M 6695.4000	591.0500	TM 9369.2000	M 10052.0000	6.6551
4	17:31:51	68.04%	2.6061	27.0410	42.5150	M 6578.3000	587.1500	TM 9157.3000	M 9873.0000	6.5495
5	17:32:36	67.94%	2.5735	25.4910	41.7440	M 6416.2000	574.5400	TM 8959.0000	M 9752.8000	6.4368
X		67.22%	2.5896	26.7880	42.4400	M 6632.6000	587.9000	TM 9307.2000	M 9978.3000	6.5162
%RSD		1.19	1.7045	3.2677	0.9535	M 2.0948	1.4885	TM 2.6674	M 1.6426	1.3563

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:29:35	19.1320	25.7520	26.3610	110.7100	3.8995	0.2366	0.6557	1.4156	75.98%
2	17:30:20	19.9470	26.6970	26.8660	109.8100	3.9034	0.1449	0.4993	0.7011	74.86%
3	17:31:05	19.6110	26.0810	26.8700	109.7100	3.9386	0.1496	0.4944	0.7868	75.78%
4	17:31:51	19.4520	25.7930	27.0030	109.6600	3.6148	0.3667	0.5596	-0.3410	75.51%
5	17:32:36	20.0570	24.7800	25.7410	105.4500	3.7564	0.3881	0.4937	0.0274	75.82%
X		19.6400	25.8210	26.5680	109.0700	3.8225	0.2572	0.5405	0.5180	75.59%
%RSD		1.9094	2.6873	1.9701	1.8940	3.5457	45.0750	12.9690	132.7100	0.59

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:29:35	0.0000	0.0000	0.0000	0.0000	0.0000	71.01%	0.0932	0.6049	0.1083
2	17:30:20	0.0000	0.0000	0.0000	0.0000	0.0000	70.64%	0.1005	-0.6461	0.1059
3	17:31:05	0.0000	0.0000	0.0000	0.0000	0.0000	69.55%	0.0959	0.0460	0.1025
4	17:31:51	0.0000	0.0000	0.0000	0.0000	0.0000	70.34%	0.0968	0.1633	0.1030
5	17:32:36	0.0000	0.0000	0.0000	0.0000	0.0000	70.55%	0.0843	0.0458	0.0832
X		0.0000	0.0000	0.0000	0.0000	0.0000	70.42%	0.0942	0.0428	0.1006
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.77	6.4623	1048.6000	9.9446

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:29:35	0.5420	75.93%	0.0000	0.2726	108.1000	102.7300	0.0000	0.0000	0.0000
2	17:30:20	0.4829	74.68%	0.0000	0.2246	107.7900	103.4100	0.0000	0.0000	0.0000
3	17:31:05	0.4834	74.51%	0.0000	0.2532	105.5400	105.2600	0.0000	0.0000	0.0000
4	17:31:51	0.4602	74.00%	0.0000	0.2568	106.4000	104.2300	0.0000	0.0000	0.0000
5	17:32:36	0.5078	74.48%	0.0000	0.2947	101.9500	102.9400	0.0000	0.0000	0.0000
X		0.4953	74.72%	0.0000	0.2604	105.9500	103.7200	0.0000	0.0000	0.0000
%RSD		6.2768	0.97	0.0000	9.9285	2.3291	1.0016	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:29:35	0.0000	81.23%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0551	0.0772
2	17:30:20	0.0000	79.96%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0821	0.0764
3	17:31:05	0.0000	78.43%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0757	0.0759
4	17:31:51	0.0000	78.92%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0673	0.0835
5	17:32:36	0.0000	78.27%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0760	0.0773
X		0.0000	79.37%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0713	0.0781
%RSD		0.0000	1.56	0.0000	0.0000	0.0000	0.0000	0.0000	14.6430	3.9973

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:29:35	65.3390	60.8510	61.9930	81.67%	0.0000
2	17:30:20	64.9200	60.3670	61.7920	79.51%	0.0000
3	17:31:05	64.5140	60.1080	62.0270	78.05%	0.0000
4	17:31:51	64.2300	60.9720	61.8720	77.04%	0.0000
5	17:32:36	61.7370	58.9740	59.8900	76.16%	0.0000
X		64.1480	60.2540	61.5150	78.49%	0.0000
%RSD		2.2002	1.3234	1.4841	2.77	0.0000

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:34:23	71.60%	0.8868	221.0200	2548.2000	2476.0000	2495.6000	TM 7664.3000	1110.9000	TM 250750.0000
2	17:35:09	73.29%	0.7627	218.7400	T 2538.1000	2525.6000	2461.4000	TM 7521.4000	1138.5000	TM 251360.0000
3	17:35:54	73.15%	0.8997	220.2700	2572.9000	2491.5000	2476.0000	TM 7561.6000	1152.1000	TM 255480.0000
4	17:36:40	72.47%	0.8119	220.6800	2566.2000	2531.9000	2463.3000	TM 7562.7000	1144.0000	TM 254990.0000
5	17:37:24	72.23%	0.8154	215.6900	2533.5000	2444.4000	2449.4000	TM 7417.5000	1128.5000	TM 250710.0000
X		72.55%	0.8353	219.2800	T 2551.8000	2493.9000	2469.1000	TM 7545.5000	1134.8000	TM 252660.0000
%RSD		0.96	6.8308	0.9989	T 0.6760	1.4492	0.7107	TM 1.1787	1.3961	TM 0.9392

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:34:23	68.40%	2.3149	37.2570	26.4040	M 8807.6000	T 923.4200	TM 12410.0000	M 13415.0000	8.4624
2	17:35:09	68.79%	2.2726	37.4350	26.3060	M 8920.4000	T 927.4400	TM 12501.0000	M 13902.0000	8.5763
3	17:35:54	68.31%	2.0769	36.8250	26.1300	M 8902.8000	908.7700	TM 12497.0000	M 13559.0000	8.2751
4	17:36:40	69.12%	2.2052	37.0410	25.8810	M 8846.7000	T 910.5600	TM 12168.0000	M 13361.0000	8.2274
5	17:37:24	68.27%	2.1420	36.1170	25.6060	M 8709.4000	T 901.1500	TM 12211.0000	M 13535.0000	8.3683
X		68.58%	2.2023	36.9350	26.0650	M 8837.4000	T 914.2700	TM 12357.0000	M 13554.0000	8.3819
%RSD		0.53	4.3665	1.3840	1.2452	M 0.9555	T 1.1899	TM 1.2815	M 1.5573	1.6845

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:34:23	23.2640	17.6530	18.5160	82.0650	8.3602	0.3089	0.6120	-0.0253	77.47%
2	17:35:09	24.0490	18.0690	18.6650	82.0790	7.8095	0.0590	0.8237	-0.6665	78.55%
3	17:35:54	22.7620	18.3560	18.0290	82.4840	8.2256	0.1790	0.8234	-0.5464	78.70%
4	17:36:40	22.9650	18.2210	18.5550	81.5300	8.5957	0.1987	0.6660	0.9037	78.70%
5	17:37:24	22.7050	17.4750	18.6360	80.9990	7.9953	0.0942	0.0444	0.8982	79.02%
X		23.1490	17.9550	18.4800	81.8310	8.1973	0.1679	0.5939	0.1128	78.49%
%RSD		2.3701	2.0958	1.4040	0.7033	3.7465	58.2230	54.1020	673.0100	0.76

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:34:23	0.0000	0.0000	0.0000	0.0000	0.0000	70.83%	0.1203	-0.7214	0.1246
2	17:35:09	0.0000	0.0000	0.0000	0.0000	0.0000	71.25%	0.1361	-0.0935	0.1211
3	17:35:54	0.0000	0.0000	0.0000	0.0000	0.0000	71.43%	0.1185	0.1569	0.1146
4	17:36:40	0.0000	0.0000	0.0000	0.0000	0.0000	71.77%	0.1390	-0.5414	0.1234
5	17:37:24	0.0000	0.0000	0.0000	0.0000	0.0000	72.82%	0.1149	-0.5568	0.1029
X		0.0000	0.0000	0.0000	0.0000	0.0000	71.62%	0.1258	-0.3512	0.1173
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	1.05	8.7274	104.6100	7.6160

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:34:23	0.4065	74.32%	0.0000	0.2419	110.0100	107.8600	0.0000	0.0000	0.0000
2	17:35:09	0.5222	75.49%	0.0000	0.2677	107.4400	108.5100	0.0000	0.0000	0.0000
3	17:35:54	0.4829	76.43%	0.0000	0.3110	111.5600	107.3900	0.0000	0.0000	0.0000
4	17:36:40	0.4894	76.48%	0.0000	0.2927	110.9200	107.0200	0.0000	0.0000	0.0000
5	17:37:24	0.5396	77.68%	0.0000	0.2995	105.9200	104.1400	0.0000	0.0000	0.0000
X		0.4881	76.08%	0.0000	0.2826	109.1700	106.9900	0.0000	0.0000	0.0000
%RSD		10.5000	1.65	0.0000	9.8086	2.1956	1.5751	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:34:23	0.0000	79.19%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0709	0.0758
2	17:35:09	0.0000	80.14%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0914	0.0926
3	17:35:54	0.0000	81.74%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0711	0.0720
4	17:36:40	0.0000	82.41%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1224	0.0956
5	17:37:24	0.0000	82.71%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0863	0.0901
X		0.0000	81.24%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0884	0.0852
%RSD		0.0000	1.87	0.0000	0.0000	0.0000	0.0000	0.0000	23.8060	12.4650

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:34:23	111.9000	105.6400	107.7800	76.50%	0.0000
2	17:35:09	111.8200	105.0200	107.6100	78.09%	0.8375
3	17:35:54	110.3900	104.6900	106.8000	80.55%	0.0000
4	17:36:40	111.3500	105.3000	107.0900	81.10%	0.8064
5	17:37:24	108.1900	101.6000	104.3100	81.72%	0.0000
X		110.7300	104.4500	106.7200	79.59%	0.3288
%RSD		1.3916	1.5607	1.3132	2.78	136.9700

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:39:09	72.15%	0.8456	191.4700	2448.8000	2367.5000	2339.6000	TM 7512.8000	1180.6000	TM 213820.0000
2	17:39:55	72.43%	0.9257	192.5700	2399.6000	2341.2000	2313.4000	TM 7625.2000	1154.5000	TM 211240.0000
3	17:40:40	72.73%	1.0233	193.0800	2441.9000	2381.7000	2341.4000	TM 7606.8000	1159.7000	TM 208900.0000
4	17:41:24	73.55%	0.7989	191.2500	2400.4000	2357.0000	2327.5000	TM 7592.4000	1148.6000	TM 206630.0000
5	17:42:10	73.40%	0.8530	185.6600	2363.6000	2314.8000	2303.6000	TM 7477.6000	1131.4000	TM 199860.0000
X		72.85%	0.8893	190.8100	2410.9000	2352.5000	2325.1000	TM 7563.0000	1155.0000	TM 208090.0000
%RSD		0.83	9.8454	1.5589	1.4481	1.0924	0.7067	TM 0.8484	1.5482	TM 2.5568

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:39:09	67.19%	2.6149	34.1940	38.2590	M 7710.9000	531.5500	TM 10686.0000	M 11650.0000	6.3869
2	17:39:55	67.86%	2.7625	33.4410	38.2450	M 7619.1000	530.3600	TM 10660.0000	M 11720.0000	6.5333
3	17:40:40	68.30%	2.8123	33.0530	37.9640	M 7603.4000	534.3500	TM 10845.0000	M 11720.0000	6.5594
4	17:41:24	68.65%	2.7417	33.6120	37.2010	M 7593.5000	530.4500	TM 10604.0000	M 11554.0000	6.5924
5	17:42:10	69.46%	2.6510	32.2270	37.3980	M 7420.9000	519.4100	TM 10483.0000	M 11567.0000	6.4186
X		68.29%	2.7165	33.3050	37.8140	M 7589.6000	529.2200	TM 10656.0000	M 11642.0000	6.4981
%RSD		1.25	2.9989	2.1902	1.2926	M 1.3858	1.0801	TM 1.2335	M 0.6879	1.3888

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:39:09	20.6420	22.1500	22.3100	106.0200	5.6558	0.3414	0.6518	0.2633	76.42%
2	17:39:55	21.3720	22.2570	22.2940	107.6900	5.8507	0.2880	0.6487	0.4961	76.75%
3	17:40:40	20.4850	22.2560	22.9510	107.3400	5.9856	0.2158	0.8645	0.0979	77.48%
4	17:41:24	20.4660	22.4340	23.2670	105.3200	5.7352	0.2035	0.8339	-0.0212	77.28%
5	17:42:10	20.6130	21.8120	22.4680	104.0200	6.1834	0.2672	1.0550	-0.2670	77.10%
X		20.7150	22.1820	22.6580	106.0800	5.8821	0.2632	0.8108	0.1138	77.00%
%RSD		1.8091	1.0385	1.9067	1.4128	3.5591	21.2940	20.8820	253.1100	0.55

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:39:09	0.0000	0.0000	0.0000	0.0000	0.0000	70.79%	0.1291	-0.8004	0.1138
2	17:39:55	0.0000	0.0000	0.0000	0.0000	0.0000	70.57%	0.1400	-1.0581	0.1390
3	17:40:40	0.0000	0.0000	0.0000	0.0000	0.0000	70.82%	0.1055	-0.5972	0.1255
4	17:41:24	0.0000	0.0000	0.0000	0.0000	0.0000	71.17%	0.1371	0.0619	0.1264
5	17:42:10	0.0000	0.0000	0.0000	0.0000	0.0000	71.46%	0.1184	-0.8134	0.1360
X		0.0000	0.0000	0.0000	0.0000	0.0000	70.96%	0.1260	-0.6415	0.1281
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.49	11.2800	66.3750	7.7734

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:39:09	0.5633	76.42%	0.0000	0.3180	100.4800	95.2320	0.0000	0.0000	0.0000
2	17:39:55	0.5906	75.28%	0.0000	0.3202	98.5250	98.0260	0.0000	0.0000	0.0000
3	17:40:40	0.6187	75.81%	0.0000	0.3527	100.7300	96.2430	0.0000	0.0000	0.0000
4	17:41:24	0.5329	75.21%	0.0000	0.3279	97.9000	96.9610	0.0000	0.0000	0.0000
5	17:42:10	0.6189	75.25%	0.0000	0.2893	96.4600	94.6450	0.0000	0.0000	0.0000
X		0.5849	75.59%	0.0000	0.3216	98.8200	96.2210	0.0000	0.0000	0.0000
%RSD		6.3385	0.69	0.0000	7.0693	1.8184	1.4008	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:39:09	0.0000	81.27%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0752	0.0881
2	17:39:55	0.0000	80.79%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0720	0.0857
3	17:40:40	0.0000	79.72%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0655	0.0772
4	17:41:24	0.0000	79.72%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0849	0.0942
5	17:42:10	0.0000	79.35%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0894	0.0808
X		0.0000	80.17%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0774	0.0852
%RSD		0.0000	1.02	0.0000	0.0000	0.0000	0.0000	0.0000	12.5270	7.7134

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:39:09	132.8600	125.4200	127.9700	80.80%	0.0000
2	17:39:55	133.2100	125.6700	128.1500	78.90%	0.0000
3	17:40:40	133.4300	125.9100	128.2200	77.81%	0.8405
4	17:41:24	133.3600	125.2100	127.8800	77.10%	0.0000
5	17:42:10	130.4200	122.0600	124.9400	76.58%	0.0000
X		132.6500	124.8500	127.4300	78.24%	0.1681
%RSD		0.9579	1.2686	1.0996	2.14	223.6100

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Jser Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:43:56	73.30%	0.7463	129.7500	1929.9000	1896.7000	1833.3000	TM 6249.0000	950.9500	TM 139950.0000
2	17:44:40	74.03%	0.7068	128.8900	1899.3000	1876.4000	1870.9000	TM 6171.7000	945.3800	TM 140450.0000
3	17:45:25	74.28%	0.7031	129.7700	1916.1000	1887.5000	1869.4000	TM 6174.3000	964.5400	TM 141190.0000
4	17:46:10	73.66%	0.6118	131.5400	1924.2000	1893.0000	1858.9000	TM 6229.7000	983.1000	TM 142980.0000
5	17:46:55	73.01%	0.6771	127.1000	1870.6000	1847.1000	1830.6000	TM 6040.1000	958.4100	TM 139240.0000
x		73.66%	0.6890	129.4100	1908.0000	1880.1000	1852.6000	TM 6173.0000	960.4800	TM 140760.0000
%RSD		0.70	7.2187	1.2463	1.2517	1.0631	1.0503	TM 1.3221	1.5189	TM 1.0156

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:43:56	69.20%	2.4959	26.9190	25.2030	M 5895.2000	467.7900	TM 8302.8000	M 8897.2000	5.6147
2	17:44:40	69.65%	2.5054	25.9870	24.8380	M 5859.9000	459.9600	TM 8256.7000	M 8987.4000	5.5127
3	17:45:25	69.31%	2.5028	24.8120	24.4950	M 5882.8000	463.5700	TM 8277.7000	M 8994.1000	5.6347
4	17:46:10	67.82%	2.5496	26.8520	24.9590	M 5837.1000	460.8000	TM 8257.5000	M 9017.8000	5.7387
5	17:46:55	68.22%	2.4387	25.2810	23.8120	M 5755.6000	449.1500	TM 7953.8000	M 8676.9000	5.5170
x		68.84%	2.4985	25.9700	24.6610	M 5846.1000	460.2600	TM 8209.7000	M 8914.7000	5.6035
%RSD		1.14	1.5844	3.5994	2.1872	M 0.9454	1.5026	TM 1.7578	M 1.5773	1.6716

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:43:56	17.7620	20.4560	21.4530	86.7090	3.9875	0.0036	0.7138	-0.2422	76.25%
2	17:44:40	17.4050	20.6840	20.9100	86.8600	3.8761	0.1870	0.5887	0.3977	75.66%
3	17:45:25	17.1850	20.9770	21.2080	87.1760	4.3011	0.3320	0.5555	0.0143	75.98%
4	17:46:10	16.7130	21.1340	21.0810	88.3610	4.0429	0.2613	0.6571	0.1666	75.42%
5	17:46:55	16.7940	19.9810	20.6070	85.1470	3.7143	0.1276	0.7234	-0.3308	75.10%
x		17.1720	20.6460	21.0520	86.8510	3.9844	0.1823	0.6477	0.0011	75.68%
%RSD		2.5301	2.2028	1.5095	1.3268	5.4472	69.1670	11.4960	26594.0000	0.60

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:43:56	0.0000	0.0000	0.0000	0.0000	0.0000	72.21%	0.0779	-0.4589	0.0981
2	17:44:40	0.0000	0.0000	0.0000	0.0000	0.0000	71.76%	0.0848	-0.6158	0.0781
3	17:45:25	0.0000	0.0000	0.0000	0.0000	0.0000	71.30%	0.0951	0.1080	0.0826
4	17:46:10	0.0000	0.0000	0.0000	0.0000	0.0000	71.16%	0.0657	-0.3226	0.0707
5	17:46:55	0.0000	0.0000	0.0000	0.0000	0.0000	71.20%	0.0796	0.5983	0.0881
x		0.0000	0.0000	0.0000	0.0000	0.0000	71.52%	0.0806	-0.1382	0.0835
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.63	13.2940	355.9200	12.3920

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:43:56	0.4713	74.98%	0.0000	0.3309	84.4800	82.1960	0.0000	0.0000	0.0000
2	17:44:40	0.5138	75.95%	0.0000	0.3089	85.4620	81.7950	0.0000	0.0000	0.0000
3	17:45:25	0.4319	75.91%	0.0000	0.3516	83.5030	82.7060	0.0000	0.0000	0.0000
4	17:46:10	0.4485	75.98%	0.0000	0.3580	83.6220	83.2920	0.0000	0.0000	0.0000
5	17:46:55	0.3450	76.40%	0.0000	0.3357	82.2360	80.4720	0.0000	0.0000	0.0000
x		0.4421	75.85%	0.0000	0.3370	83.8610	82.0920	0.0000	0.0000	0.0000
%RSD		14.1090	0.69	0.0000	5.7136	1.4322	1.2978	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:43:56	0.0000	79.92%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0702	0.0778
2	17:44:40	0.0000	80.42%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0659	0.0689
3	17:45:25	0.0000	80.84%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0577	0.0615
4	17:46:10	0.0000	80.93%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0726	0.0627
5	17:46:55	0.0000	81.74%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0607	0.0672
x		0.0000	80.77%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0654	0.0676
%RSD		0.0000	0.83	0.0000	0.0000	0.0000	0.0000	0.0000	9.5888	9.5921

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:43:56	58.8750	55.8020	56.7100	78.67%	0.8314
2	17:44:40	58.5730	56.0170	56.4920	79.81%	0.0000
3	17:45:25	59.3330	56.1190	56.9790	80.66%	0.0000
4	17:46:10	59.5790	56.3820	57.2040	81.16%	0.0000
5	17:46:55	57.2380	55.0100	55.2800	81.64%	0.0000
x		58.7200	55.8660	56.5330	80.39%	0.1663
%RSD		1.5598	0.9348	1.3271	1.46	223.6100

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:48:40	72.55%	0.9580	192.9800	2513.4000	2443.2000	2416.3000	TM 8289.2000	1307.1000	TM 211900.0000
2	17:49:25	72.56%	0.9379	195.0100	2562.8000	2510.0000	2434.6000	TM 8389.9000	1319.3000	TM 216450.0000
3	17:50:10	72.16%	0.9177	197.3900	2595.9000	2491.5000	2515.0000	TM 8327.5000	1318.4000	TM 215620.0000
4	17:50:54	72.72%	0.8296	195.1300	2560.8000	2482.5000	2485.1000	TM 8369.7000	1330.7000	TM 216530.0000
5	17:51:40	72.59%	0.8866	186.3700	2462.9000	2371.7000	2366.0000	TM 8019.3000	1283.6000	TM 205190.0000
X		72.52%	0.9060	193.3800	2539.2000	2459.8000	2443.4000	TM 8279.1000	1311.8000	TM 213140.0000
%RSD		0.29	5.5379	2.1805	2.0388	2.2330	2.3926	TM 1.8162	1.3611	TM 2.2665

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:48:40	66.01%	2.8922	30.7020	39.6290	M 9374.6000	T 928.6500	TM 13163.0000	M 13970.0000	8.4399
2	17:49:25	66.28%	2.6987	31.9850	39.2070	M 9354.0000	921.1300	TM 13137.0000	M 13976.0000	8.6762
3	17:50:10	66.56%	2.6951	31.9040	39.4950	M 9388.9000	T 935.2300	TM 13208.0000	M 14176.0000	8.6354
4	17:50:54	65.49%	2.6032	30.9120	39.4020	M 9482.8000	T 929.4600	TM 13159.0000	M 14124.0000	8.5609
5	17:51:40	66.25%	2.5049	29.8740	37.3850	M 8951.5000	T 881.9500	TM 12462.0000	M 13369.0000	8.3071
X		66.12%	2.6788	31.0760	39.0240	M 9310.4000	T 919.2800	TM 13026.0000	M 13923.0000	8.5239
%RSD		0.61	5.3494	2.8429	2.3804	M 2.2189	T 2.3349	TM 2.4302	M 2.3167	1.7699

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:48:40	22.6070	23.3320	23.8490	107.7200	6.6833	0.3757	0.5009	0.5855	74.68%
2	17:49:25	23.3510	23.3040	23.3070	105.5700	6.6574	0.2017	0.7875	0.2958	75.63%
3	17:50:10	22.7900	23.2790	24.5470	107.5700	6.6492	0.2841	0.3017	2.4438	75.51%
4	17:50:54	23.9160	23.4180	23.8610	105.9900	6.6019	0.3165	0.7884	-0.5857	75.74%
5	17:51:40	21.3020	21.8570	22.3250	101.3900	5.9353	0.3522	0.7273	-0.4452	75.02%
X		22.7930	23.0380	23.5780	105.6500	6.5054	0.3060	0.6212	0.4588	75.32%
%RSD		4.2932	2.8755	3.5072	2.4228	4.9196	22.2020	34.4750	264.4900	0.60

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:48:40	0.0000	0.0000	0.0000	0.0000	0.0000	68.82%	0.1165	0.1460	0.1093
2	17:49:25	0.0000	0.0000	0.0000	0.0000	0.0000	69.43%	0.1062	0.0554	0.1020
3	17:50:10	0.0000	0.0000	0.0000	0.0000	0.0000	69.03%	0.1231	-0.5250	0.1079
4	17:50:54	0.0000	0.0000	0.0000	0.0000	0.0000	69.78%	0.0999	0.4143	0.1094
5	17:51:40	0.0000	0.0000	0.0000	0.0000	0.0000	69.88%	0.1222	-0.6368	0.0994
X		0.0000	0.0000	0.0000	0.0000	0.0000	69.39%	0.1136	-0.1092	0.1056
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.66	8.9690	413.8600	4.3436

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:48:40	0.5098	74.01%	0.0000	0.2864	119.1600	121.3200	0.0000	0.0000	0.0000
2	17:49:25	0.4572	74.42%	0.0000	0.2665	120.0900	119.1200	0.0000	0.0000	0.0000
3	17:50:10	0.5375	74.74%	0.0000	0.2950	121.9300	119.2200	0.0000	0.0000	0.0000
4	17:50:54	0.5087	74.79%	0.0000	0.3883	121.7800	119.6200	0.0000	0.0000	0.0000
5	17:51:40	0.4672	75.61%	0.0000	0.2625	114.8400	112.1500	0.0000	0.0000	0.0000
X		0.4961	74.71%	0.0000	0.2997	119.5600	118.2900	0.0000	0.0000	0.0000
%RSD		6.6934	0.79	0.0000	17.1300	2.4118	2.9947	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:48:40	0.0000	79.89%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0909	0.0843
2	17:49:25	0.0000	80.14%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0777	0.0975
3	17:50:10	0.0000	80.60%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0994	0.1014
4	17:50:54	0.0000	80.65%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0885	0.0966
5	17:51:40	0.0000	80.94%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0894	0.0841
X		0.0000	80.44%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0892	0.0928
%RSD		0.0000	0.52	0.0000	0.0000	0.0000	0.0000	0.0000	8.6602	8.6496

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:48:40	84.4580	80.4590	82.0900	78.94%	0.0000
2	17:49:25	85.3420	80.9640	82.0100	80.09%	0.0000
3	17:50:10	85.6270	80.5080	82.2900	80.33%	0.0000
4	17:50:54	85.8490	80.5910	82.1190	80.43%	0.8132
5	17:51:40	80.6570	77.1430	78.0550	80.79%	0.0000
X		84.3870	79.9330	81.3130	80.12%	0.1626
%RSD		2.5485	1.9669	2.2434	0.88	223.6100

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:53:26	73.65%	0.7774	122.4400	1955.2000	1891.1000	1901.9000	TM 6396.2000	1060.4000	TM 137110.0000
2	17:54:10	72.77%	0.7039	125.5600	1985.3000	1948.7000	1903.4000	TM 6440.4000	1056.4000	TM 136290.0000
3	17:54:54	72.61%	0.7284	124.3600	1974.0000	1934.8000	1891.6000	TM 6432.6000	1058.6000	TM 137510.0000
4	17:55:40	74.56%	0.7388	125.3000	1960.0000	1945.0000	1917.4000	TM 6429.8000	1068.5000	TM 139600.0000
5	17:56:25	72.11%	0.6408	123.9600	1905.3000	1884.2000	1850.4000	TM 6193.8000	1049.5000	TM 133310.0000
X		73.14%	0.7178	124.3200	1956.0000	1920.8000	1893.0000	TM 6378.6000	1058.7000	TM 136760.0000
%RSD		1.32	7.0453	0.9984	1.5702	1.5990	1.3459	TM 1.6412	0.6500	TM 1.6706

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:53:26	66.70%	2.6688	25.7350	23.5270	M 6341.2000	694.3700	TM 8994.5000	M 9431.7000	5.6702
2	17:54:10	67.24%	2.7570	25.9570	23.0500	M 6346.7000	686.3400	TM 8841.7000	M 9524.1000	5.9227
3	17:54:54	67.16%	2.3707	25.4890	23.5130	M 6347.0000	694.9700	TM 8878.6000	M 9477.8000	5.8495
4	17:55:40	66.32%	2.6503	26.5040	23.2170	M 6463.9000	700.2700	TM 8881.7000	M 9452.6000	5.7638
5	17:56:25	67.29%	2.5655	25.3060	22.1070	M 6104.3000	677.6900	TM 8542.2000	M 9066.5000	5.4041
X		66.94%	2.6025	25.7980	23.0830	M 6320.6000	690.7300	TM 8827.8000	M 9390.5000	5.7221
%RSD		0.63	5.6221	1.8026	2.5198	M 2.0799	1.2777	TM 1.9209	M 1.9638	3.5171

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:53:26	17.2530	20.2590	20.5700	90.0150	4.6646	0.1487	0.6310	0.4542	74.65%
2	17:54:10	17.4360	20.2810	21.0430	91.3070	4.9043	-0.2042	1.0848	0.1888	74.86%
3	17:54:54	16.8560	20.1480	20.0910	92.1190	4.7634	0.1316	1.2837	-0.8214	74.62%
4	17:55:40	17.0170	20.2460	20.6140	92.4190	4.2538	0.4933	0.4669	1.3396	74.86%
5	17:56:25	16.7960	19.4560	20.5290	88.4090	4.0746	0.2402	0.1727	0.5516	75.33%
X		17.0720	20.0780	20.5700	90.8540	4.5322	0.1619	0.7278	0.3425	74.86%
%RSD		1.5805	1.7502	1.6429	1.8196	7.7728	154.7500	62.2890	227.4900	0.38

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:53:26	0.0000	0.0000	0.0000	0.0000	0.0000	70.29%	0.0956	-1.0379	0.0979
2	17:54:10	0.0000	0.0000	0.0000	0.0000	0.0000	70.63%	0.0958	-0.3585	0.0974
3	17:54:54	0.0000	0.0000	0.0000	0.0000	0.0000	70.67%	0.1195	-1.4691	0.0955
4	17:55:40	0.0000	0.0000	0.0000	0.0000	0.0000	70.99%	0.1022	-0.2871	0.1072
5	17:56:25	0.0000	0.0000	0.0000	0.0000	0.0000	71.37%	0.0862	-0.4956	0.0912
X		0.0000	0.0000	0.0000	0.0000	0.0000	70.79%	0.0999	-0.7296	0.0978
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.58	12.3690	69.5550	5.9814

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:53:26	0.4647	75.27%	0.0000	0.3265	91.8180	90.9630	0.0000	0.0000	0.0000
2	17:54:10	0.3825	75.73%	0.0000	0.3404	91.8170	91.4760	0.0000	0.0000	0.0000
3	17:54:54	0.3988	76.34%	0.0000	0.3357	90.7970	90.7190	0.0000	0.0000	0.0000
4	17:55:40	0.4175	76.50%	0.0000	0.2903	93.3000	91.5700	0.0000	0.0000	0.0000
5	17:56:25	0.4291	76.86%	0.0000	0.3132	88.8000	86.7610	0.0000	0.0000	0.0000
X		0.4185	76.14%	0.0000	0.3212	91.3060	90.2980	0.0000	0.0000	0.0000
%RSD		7.4927	0.84	0.0000	6.2835	1.8195	2.2243	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:53:26	0.0000	81.88%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0530	0.0721
2	17:54:10	0.0000	82.12%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0540	0.0593
3	17:54:54	0.0000	82.15%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0646	0.0746
4	17:55:40	0.0000	82.64%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0719	0.0604
5	17:56:25	0.0000	83.23%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0712	0.0718
X		0.0000	82.40%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0630	0.0676
%RSD		0.0000	0.65	0.0000	0.0000	0.0000	0.0000	0.0000	14.4580	10.6240

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:53:26	55.2370	52.0880	53.0260	82.96%	0.0000
2	17:54:10	54.9880	52.3280	52.9030	83.33%	0.0000
3	17:54:54	55.2440	52.6280	53.2090	83.66%	0.0000
4	17:55:40	56.0530	53.2130	53.9710	83.76%	0.0000
5	17:56:25	53.9130	50.4200	51.5480	84.25%	0.0000
X		55.0870	52.1360	52.9310	83.59%	0.0000
%RSD		1.3963	2.0082	1.6582	0.58	0.0000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:58:11	68.81%	2515.3000	TM 52401.0000	TM 51891.0000	TM 51423.0000	TM 51116.0000	TM 50851.0000	TM 51540.0000	M 51665.0000
2	17:58:56	69.09%	2495.2000	TM 53230.0000	TM 52962.0000	TM 52411.0000	TM 51640.0000	TM 51418.0000	TM 52038.0000	M 52185.0000
3	17:59:41	69.00%	2449.2000	TM 53799.0000	TM 52469.0000	TM 52237.0000	TM 52074.0000	TM 51754.0000	TM 52388.0000	M 52098.0000
4	18:00:26	69.60%	2438.3000	TM 54537.0000	TM 52837.0000	TM 52805.0000	TM 52679.0000	TM 52298.0000	TM 53330.0000	M 52386.0000
5	18:01:11	69.70%	2378.2000	TM 52720.0000	TM 52409.0000	TM 52131.0000	TM 51723.0000	TM 51541.0000	TM 52153.0000	M 51539.0000
x		69.24%	2455.2000	TM 53337.0000	TM 52514.0000	TM 52201.0000	TM 51846.0000	TM 51572.0000	TM 52290.0000	M 51975.0000
%RSD		0.56	2.1805	TM 1.6025	TM 0.8004	TM 0.9676	TM 1.1148	TM 1.0188	TM 1.2595	M 0.6899

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:58:11	71.26%	0.0193	T 2557.5000	T 2488.8000	TM 36361.0000	T 2456.5000	TM 49867.0000	M 50398.0000	T 2439.9000
2	17:58:56	73.86%	0.0014	T 2552.2000	T 2469.8000	TM 36271.0000	T 2420.8000	TM 49093.0000	M 49996.0000	T 2432.9000
3	17:59:41	76.07%	0.0105	T 2538.3000	T 2450.3000	TM 36388.0000	T 2472.0000	TM 49796.0000	M 50956.0000	T 2440.5000
4	18:00:26	77.13%	0.0069	T 2518.7000	T 2454.3000	TM 36323.0000	T 2442.6000	TM 49223.0000	M 50514.0000	T 2445.1000
5	18:01:11	77.14%	-0.0090	T 2492.4000	T 2434.8000	TM 36057.0000	T 2416.5000	TM 49184.0000	M 50072.0000	T 2411.5000
x		75.09%	0.0058	T 2531.8000	T 2459.6000	TM 36280.0000	T 2441.7000	TM 49433.0000	M 50387.0000	T 2434.0000
%RSD		3.36	182.0700	T 1.0531	T 0.8342	TM 0.3645	T 0.9629	TM 0.7446	M 0.7635	T 0.5459

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:58:11	2473.8000	T 2344.2000	2329.4000	2327.0000	2477.3000	259.3400	258.1400	3.9134	71.93%
2	17:58:56	2456.4000	T 2328.2000	2362.4000	2335.8000	2481.8000	262.2300	265.4700	2.4717	73.73%
3	17:59:41	2446.4000	T 2349.1000	2354.7000	2356.9000	2494.9000	262.4700	264.5500	4.7340	75.09%
4	18:00:26	2486.9000	T 2313.9000	2318.9000	2329.3000	2486.8000	259.4000	263.3600	3.2735	76.25%
5	18:01:11	2405.1000	T 2294.7000	2302.2000	2303.7000	2429.3000	260.3700	256.9900	4.3251	76.89%
x		2453.7000	T 2326.0000	2333.5000	2330.6000	2474.0000	260.7600	261.7000	3.7435	74.78%
%RSD		1.2765	T 0.9605	1.0706	0.8181	1.0443	0.5787	1.4789	23.8420	2.67

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:58:11	0.0000	0.0000	0.0000	0.0000	0.0000	73.03%	229.4400	-18.1170	228.3100
2	17:58:56	0.0000	0.0000	0.0000	0.0000	0.0000	75.01%	233.8000	4.7587	232.8600
3	17:59:41	0.0000	0.0000	0.0000	0.0000	0.0000	75.46%	237.8800	-7.0223	236.8500
4	18:00:26	0.0000	0.0000	0.0000	0.0000	0.0000	75.90%	240.7000	-12.0100	238.8700
5	18:01:11	0.0000	0.0000	0.0000	0.0000	0.0000	77.91%	230.1400	-10.8790	229.2100
x		0.0000	0.0000	0.0000	0.0000	0.0000	75.46%	234.3900	-8.6539	233.2200
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	2.32	2.0780	98.1060	1.9805

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:58:11	2356.9000	77.13%	0.0000	T 2477.4000	2467.0000	2442.7000	0.0000	0.0000	0.0000
2	17:58:56	2367.1000	78.98%	0.0000	T 2464.7000	2496.5000	2476.7000	0.0000	0.0000	0.0000
3	17:59:41	2395.3000	79.98%	0.0000	T 2504.0000	2535.8000	2520.8000	0.0000	0.0000	0.0000
4	18:00:26	2388.4000	81.47%	0.0000	T 2476.2000	2518.2000	2485.1000	0.0000	0.0000	0.0000
5	18:01:11	2317.8000	82.51%	0.0000	T 2416.2000	2457.9000	2428.2000	0.0000	0.0000	0.0000
x		2365.1000	80.01%	0.0000	T 2467.7000	2495.1000	2470.7000	0.0000	0.0000	0.0000
%RSD		1.2958	2.63	0.0000	T 1.3037	1.3240	1.4792	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:58:11	0.0000	80.77%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2512.5000	T 2518.2000
2	17:58:56	0.0000	82.24%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2552.1000	T 2541.7000
3	17:59:41	0.0000	82.84%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2575.3000	T 2570.8000
4	18:00:26	0.0000	83.88%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2570.2000	T 2580.1000
5	18:01:11	0.0000	85.23%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2497.6000	T 2500.1000
x		0.0000	82.99%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2541.5000	T 2542.2000
%RSD		0.0000	2.03	0.0000	0.0000	0.0000	0.0000	0.0000	T 1.3708	T 1.3353

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	17:58:11	T 2523.2000	T 2511.5000	T 2517.9000	78.91%	0.8289
2	17:58:56	T 2505.2000	T 2523.4000	T 2525.7000	80.76%	0.8098
3	17:59:41	T 2548.6000	T 2548.6000	T 2557.2000	81.26%	0.8049
4	18:00:26	T 2550.4000	T 2543.5000	T 2553.7000	82.17%	1.5919
5	18:01:11	T 2486.8000	T 2475.8000	T 2478.2000	83.71%	0.7813
x		T 2522.8000	T 2520.6000	T 2526.5000	81.36%	0.9634
%RSD		T 1.0913	T 1.1568	T 1.2653	2.18	36.5160

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:02:57	76.18%	0.1109	9.6857	0.4772	0.3723	0.5281	0.2092	4.1792	-0.0447
2	18:03:43	77.37%	0.1074	6.9117	0.1531	0.2142	-0.2520	0.0110	2.9289	0.1734
3	18:04:27	77.11%	0.0341	5.8641	0.3272	-0.0105	0.0014	-0.1212	3.0075	-0.6535
4	18:05:13	79.61%	0.0991	4.9130	0.2095	0.2763	-0.0077	-0.0577	1.4073	0.1706
5	18:05:58	80.23%	0.1037	4.2759	0.1877	0.4174	0.1744	-0.1010	1.2900	1.1789
X		78.10%	0.0910	6.3301	0.2709	0.2539	0.0888	-0.0120	2.5626	0.1650
%RSD		2.22	35.3270	33.5520	48.9300	66.1060	324.9800	1116.9000	47.3940	400.0800

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:02:57	86.43%	0.0013	0.0030	0.0084	1.3739	0.0175	-5.2086	0.7851	0.0233
2	18:03:43	87.98%	-0.0047	-0.0101	-0.0383	0.0949	0.0137	-4.5828	1.1607	0.0215
3	18:04:27	89.12%	-0.0131	-0.0194	-0.0103	1.2700	0.0183	-3.8988	0.5412	0.0119
4	18:05:13	90.53%	0.0004	0.0301	-0.0085	0.3609	0.0047	-4.1972	-2.3438	0.0043
5	18:05:58	91.07%	0.0003	-0.0683	0.0030	-0.7361	0.0204	-3.3795	1.1179	0.0031
X		89.03%	-0.0032	-0.0130	-0.0091	0.4728	0.0149	-4.2534	0.2522	0.0128
%RSD		2.12	190.6400	278.8700	197.9400	185.1400	41.5450	16.2610	584.1300	73.3760

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:02:57	0.0162	0.1374	0.0579	-0.2584	0.0551	-0.0309	-0.0338	-0.6945	87.45%
2	18:03:43	0.0155	0.0857	0.0424	-0.1782	0.0167	-0.0789	-0.0048	-0.7358	89.30%
3	18:04:27	0.0152	0.0964	0.0069	-0.1736	0.0721	0.0243	-0.0045	-0.5342	89.51%
4	18:05:13	0.0195	0.0704	0.0353	-0.1719	0.0922	0.2887	0.1284	-0.4705	91.17%
5	18:05:58	0.0193	0.0388	0.0052	-0.1938	0.1361	0.2697	0.3116	-0.7854	91.44%
X		0.0172	0.0857	0.0295	-0.1952	0.0744	0.0946	0.0794	-0.6441	89.77%
%RSD		12.2380	42.1440	77.7670	18.6440	59.4640	182.4100	181.7600	20.9930	1.80

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:02:57	0.0000	0.0000	0.0000	0.0000	0.0000	87.93%	0.0110	-0.0609	0.0103
2	18:03:43	0.0000	0.0000	0.0000	0.0000	0.0000	89.69%	0.0090	0.2158	0.0107
3	18:04:27	0.0000	0.0000	0.0000	0.0000	0.0000	90.15%	0.0151	-0.8091	0.0083
4	18:05:13	0.0000	0.0000	0.0000	0.0000	0.0000	91.56%	0.0172	-0.8189	0.0224
5	18:05:58	0.0000	0.0000	0.0000	0.0000	0.0000	91.51%	0.0161	-0.8540	0.0163
X		0.0000	0.0000	0.0000	0.0000	0.0000	90.16%	0.0137	-0.4654	0.0136
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	1.66	25.6220	108.5900	42.2390

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:02:57	0.0223	90.00%	0.0000	1.0922	0.0015	0.0295	0.0000	0.0000	0.0000
2	18:03:43	0.0101	91.08%	0.0000	0.8312	0.0110	0.0241	0.0000	0.0000	0.0000
3	18:04:27	0.0272	92.00%	0.0000	0.6381	0.0014	0.0293	0.0000	0.0000	0.0000
4	18:05:13	0.0342	91.63%	0.0000	0.4887	0.0206	0.0242	0.0000	0.0000	0.0000
5	18:05:58	0.0409	91.28%	0.0000	0.4831	0.0207	0.0138	0.0000	0.0000	0.0000
X		0.0269	91.20%	0.0000	0.7067	0.0110	0.0242	0.0000	0.0000	0.0000
%RSD		43.6980	0.83	0.0000	36.5160	87.2040	26.3360	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:02:57	0.0000	95.55%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0082	0.0180
2	18:03:43	0.0000	95.17%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0087	0.0141
3	18:04:27	0.0000	94.39%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0053	0.0091
4	18:05:13	0.0000	94.21%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0151	0.0180
5	18:05:58	0.0000	93.91%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0032	0.0088
X		0.0000	94.65%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0068	0.0136
%RSD		0.0000	0.72	0.0000	0.0000	0.0000	0.0000	0.0000	97.8850	33.2580

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	18:02:57	0.0649	0.0649	0.0571	98.88%	1.3229
2	18:03:43	0.0607	0.0450	0.0509	97.72%	0.0000
3	18:04:27	0.0393	0.0250	0.0323	96.20%	0.0000
4	18:05:13	0.0351	0.0476	0.0169	94.61%	0.0000
5	18:05:58	0.0394	0.0177	0.0289	93.55%	0.0000
X		0.0479	0.0400	0.0372	96.19%	0.2646
%RSD		28.8320	47.0530	44.3170	2.27	223.6100

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:07:45	71.23%	1.0441	200.9100	2566.5000	2547.4000	2556.3000	TM 8846.7000	1339.8000	TM 210460.0000
2	18:08:30	71.51%	0.9289	201.8800	2580.3000	2537.7000	2554.0000	TM 8773.6000	1347.6000	TM 212170.0000
3	18:09:15	70.96%	0.9210	200.4200	2652.9000	2571.4000	2524.6000	TM 8832.6000	1360.4000	TM 215540.0000
4	18:09:59	70.91%	0.9827	199.1000	2604.9000	2546.9000	2527.7000	TM 8852.0000	1366.3000	TM 215870.0000
5	18:10:44	70.73%	1.0336	188.2900	2498.0000	2404.1000	2397.3000	TM 8284.9000	1331.1000	TM 208700.0000
x		71.07%	0.9821	198.1200	2580.5000	2521.5000	2512.0000	TM 8717.9000	1349.1000	TM 212550.0000
%RSD		0.43	5.8193	2.8200	2.1959	2.6502	2.6181	TM 2.7999	1.0730	TM 1.4744

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:07:45	70.53%	2.6577	35.8130	41.9950	M 8192.2000	547.6600	TM 11672.0000	M 12484.0000	7.0969
2	18:08:30	69.97%	2.6513	35.5450	41.8650	M 8130.6000	546.6300	TM 11440.0000	M 12454.0000	6.9920
3	18:09:15	68.70%	3.1447	35.0880	42.4210	M 8262.2000	552.9400	TM 11432.0000	M 12426.0000	7.2314
4	18:09:59	68.18%	2.8308	36.0310	42.5810	M 8144.6000	555.1900	TM 11477.0000	M 12598.0000	7.2423
5	18:10:44	67.19%	2.5701	33.6390	40.3580	M 7877.8000	522.8600	TM 11184.0000	M 12040.0000	6.7832
x		68.91%	2.7709	35.2230	41.8440	M 8121.5000	545.0600	TM 11441.0000	M 12400.0000	7.0692
%RSD		1.96	8.2840	2.7051	2.1062	M 1.7930	2.3686	TM 1.5169	M 1.7073	2.6913

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:07:45	22.4620	24.2210	24.8030	113.2700	4.7977	0.4091	0.3216	0.6266	79.38%
2	18:08:30	23.0080	23.9590	24.2120	109.3600	5.7703	0.1805	0.3549	1.0219	78.60%
3	18:09:15	21.6780	24.5230	24.2110	111.1300	5.4645	0.5377	0.8607	-0.6508	77.87%
4	18:09:59	22.5330	24.0770	24.5980	111.7900	5.6881	0.3430	0.4211	1.5577	77.85%
5	18:10:44	21.9970	23.1180	24.4220	106.6100	4.9016	0.2853	0.4245	1.7232	77.17%
x		22.3350	23.9800	24.4490	110.4300	5.3244	0.3511	0.4765	0.8557	78.18%
%RSD		2.2988	2.1926	1.0446	2.3143	8.4352	38.1260	45.9930	110.7900	1.08

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:07:45	0.0000	0.0000	0.0000	0.0000	0.0000	72.92%	0.1566	-0.9891	0.1458
2	18:08:30	0.0000	0.0000	0.0000	0.0000	0.0000	71.67%	0.1444	0.1249	0.1374
3	18:09:15	0.0000	0.0000	0.0000	0.0000	0.0000	71.41%	0.1391	0.2464	0.1452
4	18:09:59	0.0000	0.0000	0.0000	0.0000	0.0000	71.32%	0.1391	-0.9437	0.1332
5	18:10:44	0.0000	0.0000	0.0000	0.0000	0.0000	71.08%	0.1387	-0.1510	0.1517
x		0.0000	0.0000	0.0000	0.0000	0.0000	71.68%	0.1436	-0.3425	0.1427
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	1.01	5.3291	171.5800	5.1546

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:07:45	0.6405	76.78%	0.0000	0.5579	102.8900	99.8980	0.0000	0.0000	0.0000
2	18:08:30	0.5784	75.85%	0.0000	0.5278	103.1700	102.2300	0.0000	0.0000	0.0000
3	18:09:15	0.5162	76.04%	0.0000	0.4616	102.7700	101.4400	0.0000	0.0000	0.0000
4	18:09:59	0.6028	76.23%	0.0000	0.4877	102.2800	102.0500	0.0000	0.0000	0.0000
5	18:10:44	0.5437	76.25%	0.0000	0.4243	100.3300	96.7020	0.0000	0.0000	0.0000
x		0.5763	76.23%	0.0000	0.4919	102.2900	100.4600	0.0000	0.0000	0.0000
%RSD		8.4573	0.46	0.0000	10.7340	1.1156	2.2836	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:07:45	0.0000	80.62%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1095	0.1143
2	18:08:30	0.0000	80.67%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1174	0.1129
3	18:09:15	0.0000	80.46%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1071	0.1120
4	18:09:59	0.0000	80.17%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0807	0.1031
5	18:10:44	0.0000	80.79%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0827	0.0924
x		0.0000	80.54%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0995	0.1070
%RSD		0.0000	0.30	0.0000	0.0000	0.0000	0.0000	0.0000	16.7790	8.6226

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	18:07:45	142.0200	134.2200	136.7800	78.93%	0.0000
2	18:08:30	144.8900	136.0800	138.8600	78.55%	0.0000
3	18:09:15	143.9600	137.1300	139.0400	79.08%	0.0000
4	18:09:59	144.3800	135.7500	138.4700	79.47%	0.0000
5	18:10:44	137.2000	130.1800	131.8300	80.49%	0.0000
x		142.4900	134.6700	137.0000	79.30%	0.0000
%RSD		2.2102	2.0170	2.2078	0.93	0.0000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:12:30	70.65%	0.9912	143.2900	2504.9000	2420.4000	2390.1000	TM 9274.5000	1275.0000	TM 181690.0000
2	18:13:15	71.28%	0.9570	142.1700	2463.4000	2408.6000	2369.9000	TM 9223.3000	1284.3000	TM 180910.0000
3	18:14:00	71.49%	1.0736	142.9400	2509.9000	2413.6000	2375.9000	TM 9257.3000	1282.1000	TM 178940.0000
4	18:14:45	70.77%	0.9979	142.9300	2443.8000	2432.3000	2396.5000	TM 9214.2000	1297.3000	TM 180490.0000
5	18:15:31	71.90%	0.9613	138.0000	2368.1000	2329.1000	2297.0000	TM 8836.5000	1267.3000	TM 176850.0000
X		71.22%	0.9962	141.8700	2458.0000	2400.8000	2365.9000	TM 9161.2000	1281.2000	TM 179780.0000
%RSD		0.72	4.6993	1.5512	2.3362	1.7096	1.6887	TM 1.9989	0.8759	TM 1.0669

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:12:30	66.91%	2.3724	43.5620	14.0580	M 8267.4000	717.9100	TM 11549.0000	M 12394.0000	8.1015
2	18:13:15	67.58%	2.3381	42.9450	13.8190	M 8209.6000	723.4000	TM 11701.0000	M 12440.0000	8.0916
3	18:14:00	67.38%	2.2506	42.8450	13.9560	M 8142.9000	715.2800	TM 11505.0000	M 12180.0000	8.2151
4	18:14:45	67.95%	2.3505	41.6310	13.7660	M 8137.9000	710.7300	TM 11190.0000	M 11967.0000	7.9425
5	18:15:31	67.31%	2.2311	41.4060	13.6860	M 7991.5000	694.4400	TM 11155.0000	M 11974.0000	7.7110
X		67.42%	2.3085	42.4780	13.8570	M 8149.9000	712.3500	TM 11420.0000	M 12191.0000	8.0123
%RSD		0.57	2.7451	2.1686	1.0768	M 1.2671	1.5457	TM 2.0821	M 1.8372	2.4249

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:12:30	22.2930	18.5310	19.4240	68.2450	6.5055	-0.1872	0.6148	0.3582	77.35%
2	18:13:15	22.4700	18.5640	19.7570	67.5900	6.2060	0.1238	0.5486	0.4643	77.70%
3	18:14:00	21.8770	18.7160	19.2650	70.6460	6.3641	0.2299	0.1385	0.7062	77.85%
4	18:14:45	21.5660	18.3610	18.8970	69.4780	6.2637	0.1524	0.6713	0.5681	78.16%
5	18:15:31	20.9350	17.7310	18.0820	67.1560	6.2871	0.0024	0.7058	-0.1536	77.88%
X		21.8280	18.3810	19.0850	68.6230	6.3253	0.0642	0.5358	0.3887	77.79%
%RSD		2.8028	2.0907	3.3558	2.0844	1.8280	253.1400	42.9170	84.7240	0.38

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:12:30	0.0000	0.0000	0.0000	0.0000	0.0000	70.51%	0.0818	-0.1706	0.0825
2	18:13:15	0.0000	0.0000	0.0000	0.0000	0.0000	71.17%	0.0834	-0.2675	0.0737
3	18:14:00	0.0000	0.0000	0.0000	0.0000	0.0000	71.27%	0.0803	0.6765	0.0656
4	18:14:45	0.0000	0.0000	0.0000	0.0000	0.0000	71.98%	0.0860	-0.5819	0.0772
5	18:15:31	0.0000	0.0000	0.0000	0.0000	0.0000	71.43%	0.0710	-0.5216	0.0690
X		0.0000	0.0000	0.0000	0.0000	0.0000	71.27%	0.0805	-0.1730	0.0736
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.74	7.0883	291.7400	9.0501

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:12:30	0.3882	75.70%	0.0000	0.3099	117.7100	115.3100	0.0000	0.0000	0.0000
2	18:13:15	0.2828	75.65%	0.0000	0.2667	118.1400	115.4800	0.0000	0.0000	0.0000
3	18:14:00	0.3219	76.11%	0.0000	0.2854	118.1600	116.2900	0.0000	0.0000	0.0000
4	18:14:45	0.3307	76.07%	0.0000	0.2811	116.4200	115.8600	0.0000	0.0000	0.0000
5	18:15:31	0.3267	76.26%	0.0000	0.2401	114.8900	112.3300	0.0000	0.0000	0.0000
X		0.3301	75.96%	0.0000	0.2766	117.0600	115.0500	0.0000	0.0000	0.0000
%RSD		11.4310	0.35	0.0000	9.2793	1.2025	1.3650	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:12:30	0.0000	80.19%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1165	0.1193
2	18:13:15	0.0000	81.20%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1040	0.1030
3	18:14:00	0.0000	81.50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1119	0.1228
4	18:14:45	0.0000	81.28%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1036	0.1079
5	18:15:31	0.0000	81.34%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0965	0.1107
X		0.0000	81.10%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1065	0.1127
%RSD		0.0000	0.64	0.0000	0.0000	0.0000	0.0000	0.0000	7.3445	7.2445

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	18:12:30	31.5050	28.9110	29.7670	80.77%	0.0000
2	18:13:15	31.3220	28.6610	29.3900	81.80%	0.0000
3	18:14:00	31.0350	29.1670	29.6520	82.02%	0.7974
4	18:14:45	30.6710	28.2380	29.4080	82.47%	0.0000
5	18:15:31	30.2020	28.5520	28.9850	82.12%	0.0000
X		30.9470	28.7060	29.4400	81.84%	0.1595
%RSD		1.6876	1.2307	1.0220	0.79	223.6100

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:17:19	71.23%	0.5402	232.9900	TM 22435.0000	M 22200.0000	TM 21799.0000	T 4783.3000	874.6500	TM 280170.0000
2	18:18:04	71.26%	0.6099	228.2400	TM 22731.0000	M 22211.0000	TM 21983.0000	T 4771.8000	874.0600	TM 284570.0000
3	18:18:49	71.55%	0.5993	227.8500	TM 22849.0000	TM 22296.0000	TM 21925.0000	T 4774.7000	879.1000	TM 286510.0000
4	18:19:33	71.89%	0.5887	234.0700	TM 22809.0000	TM 22342.0000	TM 21996.0000	T 4803.3000	871.4900	TM 284990.0000
5	18:20:17	73.27%	0.6297	221.1600	TM 21601.0000	TM 21431.0000	TM 21068.0000	T 4649.5000	842.0500	TM 270300.0000
X		71.84%	0.5936	228.8600	TM 22485.0000	TM 22096.0000	TM 21754.0000	T 4756.5000	868.2700	TM 281310.0000
%RSD		1.17	5.6375	2.2385	TM 2.3129	TM 1.7039	TM 1.7994	T 1.2843	1.7173	TM 2.3424

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:17:19	68.00%	4.9844	16.3220	39.2390	M 7695.9000	T 1001.0000	TM 10772.0000	M 12001.0000	6.5111
2	18:18:04	68.00%	4.9670	15.8230	39.7230	M 7628.3000	T 995.3100	TM 10699.0000	M 11972.0000	6.3212
3	18:18:49	68.66%	5.0561	15.7500	39.8780	M 7622.6000	T 983.2200	TM 10633.0000	M 12033.0000	6.3839
4	18:19:33	68.58%	5.1233	15.6380	40.3650	M 7694.9000	T 1005.0000	TM 10769.0000	M 12075.0000	6.5151
5	18:20:17	70.17%	4.8325	16.1160	37.6550	M 7354.9000	T 971.0200	TM 10318.0000	M 11517.0000	5.9820
X		68.68%	4.9927	15.9300	39.3720	M 7599.3000	T 991.1100	TM 10638.0000	M 11920.0000	6.3427
%RSD		1.29	2.1823	1.7692	2.6430	M 1.8562	T 1.4037	TM 1.7667	M 1.9173	3.4389

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:17:19	87.6860	13.7500	14.4190	68.1710	4.5071	-0.0796	0.2679	0.5187	76.09%
2	18:18:04	85.7550	13.3760	14.3910	69.1860	4.7182	0.2211	0.5571	-0.2283	75.98%
3	18:18:49	87.0480	13.4160	13.9980	69.1760	4.4158	0.3506	0.3284	-0.0213	77.28%
4	18:19:33	89.0720	13.9410	13.8470	69.2690	4.7918	0.1140	1.2157	-0.1383	77.08%
5	18:20:17	84.6880	13.3590	14.1530	66.2750	4.0204	0.1982	0.3265	0.4497	77.61%
X		86.8500	13.5680	14.1610	68.4150	4.4907	0.1608	0.5391	0.1161	76.81%
%RSD		1.9566	1.9357	1.7471	1.8696	6.7682	98.8190	73.1030	297.0000	0.95

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:17:19	0.0000	0.0000	0.0000	0.0000	0.0000	70.44%	0.0308	0.2396	0.0335
2	18:18:04	0.0000	0.0000	0.0000	0.0000	0.0000	70.53%	0.0463	-0.7024	0.0334
3	18:18:49	0.0000	0.0000	0.0000	0.0000	0.0000	70.76%	0.0362	-1.0176	0.0374
4	18:19:33	0.0000	0.0000	0.0000	0.0000	0.0000	71.00%	0.0390	-0.4470	0.0403
5	18:20:17	0.0000	0.0000	0.0000	0.0000	0.0000	71.67%	0.0324	-0.7487	0.0338
X		0.0000	0.0000	0.0000	0.0000	0.0000	70.88%	0.0369	-0.5352	0.0357
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.69	16.5630	89.3310	8.6835

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:17:19	0.3853	75.82%	0.0000	0.2457	66.2770	65.6430	0.0000	0.0000	0.0000
2	18:18:04	0.4059	76.21%	0.0000	0.2332	64.3070	64.6230	0.0000	0.0000	0.0000
3	18:18:49	0.3681	76.90%	0.0000	0.2598	66.8690	64.3480	0.0000	0.0000	0.0000
4	18:19:33	0.3752	76.13%	0.0000	0.2582	66.8330	64.4400	0.0000	0.0000	0.0000
5	18:20:17	0.3699	76.25%	0.0000	0.2289	63.5320	62.7880	0.0000	0.0000	0.0000
X		0.3809	76.26%	0.0000	0.2452	65.5640	64.3680	0.0000	0.0000	0.0000
%RSD		4.0677	0.52	0.0000	5.7505	2.3542	1.5907	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:17:19	0.0000	81.83%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0331	0.0497
2	18:18:04	0.0000	82.30%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0370	0.0392
3	18:18:49	0.0000	83.17%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0391	0.0299
4	18:19:33	0.0000	81.87%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0223	0.0359
5	18:20:17	0.0000	81.53%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0321	0.0297
X		0.0000	82.14%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0327	0.0369
%RSD		0.0000	0.78	0.0000	0.0000	0.0000	0.0000	0.0000	19.7520	22.3050

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	18:17:19	32.9540	30.7120	31.1850	80.27%	0.0000
2	18:18:04	32.7230	30.7050	31.2440	80.57%	0.0000
3	18:18:49	32.7860	30.5480	31.3230	80.55%	0.0000
4	18:19:33	32.9120	30.6220	31.2620	79.40%	0.0000
5	18:20:17	31.4480	29.6650	30.1350	78.04%	0.0000
X		32.5650	30.4500	31.0300	79.77%	0.0000
%RSD		1.9378	1.4587	1.6204	1.35	0.0000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:22:06	72.81%	0.6089	154.2700	2121.1000	2074.2000	2044.7000	TM 6140.8000	978.5000	TM 124290.0000
2	18:22:51	73.23%	0.6823	154.4100	2092.2000	2072.7000	2050.9000	TM 6055.6000	970.7700	TM 125360.0000
3	18:23:36	74.29%	0.6686	151.3400	2111.2000	2074.6000	2071.0000	TM 6063.8000	983.8700	TM 126880.0000
4	18:24:21	73.68%	0.5663	151.4600	2042.1000	2052.0000	2008.5000	TM 5909.3000	974.9100	TM 125180.0000
5	18:25:06	73.59%	0.6149	144.7500	1968.1000	1941.8000	1916.1000	TM 5600.3000	947.3500	TM 120010.0000
X		73.52%	0.6282	151.2400	2066.9000	2043.1000	2018.3000	TM 5953.9000	971.0800	TM 124340.0000
%RSD		0.75	7.5236	2.5918	3.0515	2.8092	3.0419	TM 3.6060	1.4531	TM 2.0864

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:22:06	69.61%	3.0167	23.4410	19.2640	M 5721.1000	478.3700	TM 8141.7000	M 8552.5000	5.4239
2	18:22:51	70.16%	3.1309	23.0380	19.9450	M 5775.8000	483.5900	TM 8128.4000	M 8712.1000	5.5201
3	18:23:36	69.34%	3.1209	23.5030	19.9130	M 5765.7000	480.7300	TM 8239.2000	M 8825.4000	5.5271
4	18:24:21	70.52%	3.0255	22.9510	19.8120	M 5734.0000	475.9200	TM 8135.2000	M 8640.1000	5.2615
5	18:25:06	68.64%	2.9414	21.3040	18.6770	M 5423.5000	453.3500	TM 7687.6000	M 8138.2000	5.1407
X		69.66%	3.0471	22.8470	19.5220	M 5684.0000	474.3900	TM 8066.4000	M 8573.7000	5.3747
%RSD		1.05	2.5954	3.9204	2.8010	M 2.5920	2.5506	TM 2.6845	M 3.0693	3.1459

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:22:06	17.1390	24.0730	24.6530	127.7500	4.7571	0.5645	0.7484	0.7702	75.74%
2	18:22:51	17.5690	24.5470	24.8620	127.7100	5.0361	0.3496	0.8141	-0.3503	75.46%
3	18:23:36	17.8520	23.9420	25.7530	126.4600	4.2295	0.2667	0.3655	2.0524	75.20%
4	18:24:21	17.3680	23.8090	24.1730	123.6600	4.4720	0.2727	0.9130	-0.8456	75.11%
5	18:25:06	16.5460	22.5390	23.4590	118.1200	4.3781	0.1644	0.6902	-0.5866	75.15%
X		17.2950	23.7820	24.5800	124.7400	4.5746	0.3236	0.7063	0.2080	75.33%
%RSD		2.8577	3.1472	3.4545	3.2499	7.0369	46.3290	29.4110	577.4100	0.35

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:22:06	0.0000	0.0000	0.0000	0.0000	0.0000	71.34%	0.0509	0.2471	0.0468
2	18:22:51	0.0000	0.0000	0.0000	0.0000	0.0000	70.86%	0.0514	-0.9415	0.0551
3	18:23:36	0.0000	0.0000	0.0000	0.0000	0.0000	72.13%	0.0541	0.5599	0.0558
4	18:24:21	0.0000	0.0000	0.0000	0.0000	0.0000	71.25%	0.0525	0.1247	0.0490
5	18:25:06	0.0000	0.0000	0.0000	0.0000	0.0000	71.87%	0.0515	1.4694	0.0623
X		0.0000	0.0000	0.0000	0.0000	0.0000	71.49%	0.0521	0.2919	0.0538
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.71	2.4294	297.1500	11.4150

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:22:06	0.4085	75.45%	0.0000	0.4634	91.1550	89.0300	0.0000	0.0000	0.0000
2	18:22:51	0.4464	74.62%	0.0000	0.4386	90.4580	89.5220	0.0000	0.0000	0.0000
3	18:23:36	0.3216	75.04%	0.0000	0.5095	88.6590	88.8400	0.0000	0.0000	0.0000
4	18:24:21	0.3370	75.18%	0.0000	0.5097	89.2220	88.6500	0.0000	0.0000	0.0000
5	18:25:06	0.2760	74.86%	0.0000	0.4313	85.1980	82.0430	0.0000	0.0000	0.0000
X		0.3579	75.03%	0.0000	0.4705	88.9380	87.6170	0.0000	0.0000	0.0000
%RSD		19.1820	0.42	0.0000	8.0021	2.5988	3.5754	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:22:06	0.0000	79.28%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0585	0.0719
2	18:22:51	0.0000	78.63%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0641	0.0631
3	18:23:36	0.0000	78.59%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0833	0.0675
4	18:24:21	0.0000	80.03%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0569	0.0629
5	18:25:06	0.0000	80.76%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0472	0.0515
X		0.0000	79.46%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0620	0.0634
%RSD		0.0000	1.17	0.0000	0.0000	0.0000	0.0000	0.0000	21.5560	11.9800

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	18:22:06	56.6000	52.4700	53.4190	77.60%	1.6857
2	18:22:51	57.1370	53.2230	54.1840	76.70%	0.8527
3	18:23:36	56.6010	51.9610	53.6520	77.84%	0.8403
4	18:24:21	55.6220	52.6460	53.5330	79.50%	0.0000
5	18:25:06	52.0670	49.1700	50.0810	80.56%	0.0000
X		55.6050	51.8940	52.9740	78.44%	0.6757
%RSD		3.6904	3.0600	3.1026	1.99	104.4300

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Jser Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:26:53	72.25%	0.9206	101.4700	2520.4000	2479.3000	2389.4000	TM 8096.9000	1491.5000	TM 212090.0000
2	18:27:39	72.73%	0.9635	105.1500	2571.9000	2505.0000	2475.2000	TM 8260.1000	1516.8000	TM 213790.0000
3	18:28:24	71.93%	0.9292	105.7700	2695.7000	2605.9000	2550.1000	TM 8570.6000	1547.0000	TM 219080.0000
4	18:29:10	72.91%	1.0203	107.5200	2651.1000	2576.3000	2599.3000	TM 8757.0000	1563.1000	TM 218500.0000
5	18:29:55	74.10%	1.0284	103.3500	2527.6000	2480.5000	2493.6000	TM 8328.1000	1499.6000	TM 209920.0000
X		72.79%	0.9724	104.6500	2593.3000	2529.4000	2501.5000	TM 8402.5000	1523.6000	TM 214680.0000
%RSD		1.14	5.1549	2.2179	2.9810	2.3001	3.1755	TM 3.1098	2.0137	TM 1.8648

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:26:53	66.63%	2.2122	27.4800	13.9880	M 6423.3000	637.5800	TM 9178.2000	M 9948.9000	5.3430
2	18:27:39	66.92%	2.1369	28.6350	14.4370	M 6598.8000	653.3800	TM 9287.4000	M 10286.0000	5.4959
3	18:28:24	66.84%	2.4834	28.4800	14.6130	M 6796.5000	678.5000	TM 9530.1000	M 10684.0000	5.7410
4	18:29:10	67.29%	2.1975	29.3730	15.0610	M 6800.2000	680.2700	TM 9466.2000	M 10391.0000	5.4555
5	18:29:55	68.45%	2.2689	28.5350	14.7730	M 6478.2000	650.8100	TM 9209.5000	M 10225.0000	5.5854
X		67.23%	2.2598	28.5010	14.5740	M 6619.4000	660.1100	TM 9334.3000	M 10307.0000	5.5242
%RSD		1.08	5.9085	2.3683	2.7463	M 2.6480	2.8178	TM 1.6761	M 2.5869	2.7017

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:26:53	19.7890	16.0380	16.4770	62.7330	3.9555	0.2344	-0.0872	1.8267	75.22%
2	18:27:39	20.1570	16.3380	16.8860	62.6280	4.2976	0.4329	0.4640	0.4237	75.45%
3	18:28:24	20.9330	16.8480	17.4030	66.4300	4.3060	0.2051	0.2373	2.4575	75.22%
4	18:29:10	20.3100	16.6450	17.7540	66.1020	4.3937	0.3910	0.5261	-0.9759	75.96%
5	18:29:55	19.2600	16.1490	16.8570	64.3890	4.1412	0.3854	0.8150	-0.2238	75.73%
X		20.0900	16.4040	17.0750	64.4560	4.2188	0.3298	0.3910	0.7016	75.52%
%RSD		3.0920	2.0632	2.9408	2.7882	4.1009	31.1140	86.3050	202.7800	0.43

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:26:53	0.0000	0.0000	0.0000	0.0000	0.0000	69.09%	0.0575	-0.2276	0.0544
2	18:27:39	0.0000	0.0000	0.0000	0.0000	0.0000	69.81%	0.0654	-1.0582	0.0725
3	18:28:24	0.0000	0.0000	0.0000	0.0000	0.0000	69.24%	0.0575	-0.4960	0.0582
4	18:29:10	0.0000	0.0000	0.0000	0.0000	0.0000	69.91%	0.0593	-1.3101	0.0573
5	18:29:55	0.0000	0.0000	0.0000	0.0000	0.0000	69.41%	0.0562	-0.6035	0.0664
X		0.0000	0.0000	0.0000	0.0000	0.0000	69.49%	0.0592	-0.7391	0.0617
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.51	6.1760	59.2490	12.0940

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:26:53	0.4435	74.46%	0.0000	0.1541	91.9320	91.0720	0.0000	0.0000	0.0000
2	18:27:39	0.3864	75.24%	0.0000	0.1437	91.1850	92.4690	0.0000	0.0000	0.0000
3	18:28:24	0.3910	73.86%	0.0000	0.1743	95.9010	94.4110	0.0000	0.0000	0.0000
4	18:29:10	0.3069	73.67%	0.0000	0.1306	97.1390	96.5610	0.0000	0.0000	0.0000
5	18:29:55	0.3963	73.23%	0.0000	0.1383	94.5630	91.8880	0.0000	0.0000	0.0000
X		0.3848	74.09%	0.0000	0.1482	94.1440	93.2800	0.0000	0.0000	0.0000
%RSD		12.7940	1.05	0.0000	11.3970	2.7020	2.3678	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:26:53	0.0000	80.04%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1065	0.0863
2	18:27:39	0.0000	79.57%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0924	0.0993
3	18:28:24	0.0000	77.93%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0869	0.0958
4	18:29:10	0.0000	77.56%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0921	0.0883
5	18:29:55	0.0000	77.60%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0850	0.0962
X		0.0000	78.54%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0926	0.0932
%RSD		0.0000	1.50	0.0000	0.0000	0.0000	0.0000	0.0000	9.0894	5.9686

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	18:26:53	27.0200	25.3900	25.8740	79.96%	0.0000
2	18:27:39	27.4660	26.2320	26.3290	78.44%	0.0000
3	18:28:24	28.6440	27.1030	27.3710	76.43%	0.8557
4	18:29:10	28.4840	26.8840	27.3240	75.58%	0.0000
5	18:29:55	27.7520	26.2530	26.4300	74.74%	0.8751
X		27.8730	26.3720	26.6650	77.03%	0.3462
%RSD		2.4568	2.5390	2.4647	2.78	136.9500

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:31:39	73.34%	0.9265	305.7200	T 3751.1000	3670.6000	3642.7000	TM 10234.0000	2078.7000	TM 236920.0000
2	18:32:25	74.10%	1.1169	312.3600	T 3800.5000	3694.0000	3654.2000	TM 10215.0000	2148.0000	TM 240340.0000
3	18:33:09	72.78%	1.0585	323.8200	T 3917.7000	3810.6000	3758.4000	TM 10322.0000	2199.3000	TM 248430.0000
4	18:33:55	71.89%	1.0662	324.4700	T 3889.7000	3831.9000	3777.4000	TM 10361.0000	2216.3000	TM 250800.0000
5	18:34:40	73.57%	1.0073	290.7800	T 3413.8000	3359.5000	3300.4000	TM 8872.9000	2014.7000	TM 223400.0000
X		73.14%	1.0351	311.4300	T 3754.5000	3673.3000	3626.6000	TM 10001.0000	2131.4000	TM 239980.0000
%RSD		1.15	6.9605	4.4936	T 5.3788	5.1456	5.2950	TM 6.3340	3.9593	TM 4.5301

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:31:39	69.10%	4.1120	40.9720	26.7440	M 9315.9000	T 1470.2000	TM 13176.0000	M 14309.0000	11.1540
2	18:32:25	69.55%	4.1212	42.7800	27.0590	M 9466.9000	T 1500.8000	TM 13241.0000	M 14347.0000	11.3400
3	18:33:09	69.18%	4.4558	44.0790	27.6200	M 9514.2000	T 1521.7000	TM 13497.0000	M 14602.0000	11.2650
4	18:33:55	68.72%	4.1550	43.3070	27.2560	M 9566.0000	T 1531.7000	TM 13470.0000	M 14485.0000	11.4160
5	18:34:40	69.53%	3.6875	37.6840	23.7860	M 8103.6000	T 1336.0000	TM 11515.0000	M 12527.0000	9.9900
X		69.22%	4.1063	41.7650	26.4930	M 9193.3000	T 1472.1000	TM 12980.0000	M 14054.0000	11.0330
%RSD		0.49	6.6716	6.1097	5.8364	M 6.7037	T 5.4085	TM 6.4006	M 6.1295	5.3570

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:31:39	29.4550	49.1720	49.8090	243.0000	7.8031	0.9175	1.0369	-0.1936	78.96%
2	18:32:25	29.9730	48.9930	49.5830	243.6300	7.9612	0.9334	1.8680	-0.3223	79.17%
3	18:33:09	30.5630	51.0640	51.3170	247.4800	7.8111	0.8911	1.0007	0.9948	79.44%
4	18:33:55	30.0790	49.4150	51.0970	246.8600	7.8973	1.0639	1.4706	0.5307	79.06%
5	18:34:40	26.8200	44.2600	45.5110	219.6400	7.1187	0.6343	1.5070	0.5444	78.50%
X		29.3780	48.5810	49.4630	240.1200	7.7183	0.8881	1.3766	0.3108	79.03%
%RSD		5.0489	5.2528	4.7261	4.8369	4.4240	17.6460	26.2930	178.1100	0.44

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:31:39	0.0000	0.0000	0.0000	0.0000	0.0000	67.98%	0.1257	-0.6935	0.1438
2	18:32:25	0.0000	0.0000	0.0000	0.0000	0.0000	68.55%	0.1404	-0.4802	0.1137
3	18:33:09	0.0000	0.0000	0.0000	0.0000	0.0000	68.92%	0.1306	-1.1677	0.1237
4	18:33:55	0.0000	0.0000	0.0000	0.0000	0.0000	68.56%	0.1299	-0.4769	0.1068
5	18:34:40	0.0000	0.0000	0.0000	0.0000	0.0000	68.95%	0.1060	-0.3033	0.1115
X		0.0000	0.0000	0.0000	0.0000	0.0000	68.59%	0.1265	-0.6243	0.1199
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.57	10.0250	53.4600	12.2680

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:31:39	1.1985	72.36%	0.0000	0.5663	196.4800	189.6000	0.0000	0.0000	0.0000
2	18:32:25	1.2511	72.28%	0.0000	0.5614	201.3500	199.2700	0.0000	0.0000	0.0000
3	18:33:09	1.2955	73.15%	0.0000	0.5849	205.0800	199.8900	0.0000	0.0000	0.0000
4	18:33:55	1.3019	72.64%	0.0000	0.5649	206.7200	198.7500	0.0000	0.0000	0.0000
5	18:34:40	0.9490	72.89%	0.0000	0.4552	183.7300	177.4300	0.0000	0.0000	0.0000
X		1.1992	72.66%	0.0000	0.5465	198.6700	192.9900	0.0000	0.0000	0.0000
%RSD		12.1670	0.50	0.0000	9.4946	4.6472	5.0103	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:31:39	0.0000	78.37%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1757	0.1910
2	18:32:25	0.0000	79.18%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1859	0.1881
3	18:33:09	0.0000	80.15%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1909	0.1992
4	18:33:55	0.0000	80.38%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1814	0.1899
5	18:34:40	0.0000	81.29%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1865	0.1813
X		0.0000	79.87%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1841	0.1899
%RSD		0.0000	1.41	0.0000	0.0000	0.0000	0.0000	0.0000	3.1205	3.3761

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	18:31:39	64.0630	60.0270	61.3740	72.86%	0.0000
2	18:32:25	65.4870	61.8160	63.0180	74.13%	0.0000
3	18:33:09	65.4830	62.4180	63.2620	75.81%	0.8628
4	18:33:55	67.2610	63.5850	64.6070	75.96%	0.0000
5	18:34:40	58.4950	55.1310	56.3520	77.59%	0.0000
X		64.1580	60.5950	61.7230	75.27%	0.1726
%RSD		5.2415	5.4689	5.2078	2.42	223.6100

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:36:25	73.45%	0.5597	76.6320	1828.3000	1794.8000	1805.9000	TM 5516.3000	1261.0000	TM 140960.0000
2	18:37:10	73.14%	0.6627	80.5750	1928.2000	1938.0000	1864.7000	TM 5859.5000	1334.7000	TM 149170.0000
3	18:37:56	72.90%	0.7170	82.1100	1990.0000	1938.0000	1921.5000	TM 6027.5000	1356.1000	TM 151650.0000
4	18:38:40	73.20%	0.6932	81.1020	1954.0000	1909.0000	1917.4000	TM 5928.9000	1329.9000	TM 146840.0000
5	18:39:25	74.66%	0.6269	73.8610	1719.3000	1710.2000	1681.2000	TM 5171.9000	1236.6000	TM 131590.0000
X		73.47%	0.6519	78.8560	1883.9000	1858.0000	1838.1000	TM 5700.8000	1303.7000	TM 144040.0000
%RSD		0.94	9.4550	4.4152	5.8329	5.4655	5.4138	TM 6.1874	3.9699	TM 5.5604

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:36:25	67.58%	2.5339	21.2830	11.1770	M 5070.3000	506.8100	TM 7228.8000	M 7753.8000	4.7728
2	18:37:10	66.72%	2.4190	22.8370	11.6090	M 5331.0000	535.4000	TM 7521.2000	M 8272.6000	5.0190
3	18:37:56	66.15%	2.5099	23.1920	12.3960	M 5492.2000	553.4800	TM 7741.8000	M 8430.2000	5.2708
4	18:38:40	67.83%	2.5723	23.1690	12.4080	M 5397.5000	552.3500	TM 7735.2000	M 8381.8000	5.2262
5	18:39:25	68.23%	2.2274	20.3450	10.4490	4738.4000	489.3700	TM 6762.8000	M 7185.3000	4.6482
X		67.30%	2.4525	22.1650	11.6080	M 5205.9000	527.4800	TM 7397.9000	M 8004.8000	4.9874
%RSD		1.26	5.6220	5.7972	7.1947	M 5.8521	5.3927	TM 5.5701	M 6.6380	5.4857

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:36:25	15.9370	16.2530	17.0190	68.2330	3.8682	0.0584	0.4668	0.0658	74.67%
2	18:37:10	15.6620	17.2650	17.8410	73.8930	4.4310	0.5242	0.9587	0.2023	74.55%
3	18:37:56	17.1290	17.3660	18.5590	75.4510	4.4626	0.3556	1.0947	-1.5781	74.27%
4	18:38:40	16.6920	17.6430	17.8870	74.7210	4.3463	0.1987	0.0756	0.1986	74.45%
5	18:39:25	15.2780	15.5380	16.3180	66.6760	3.9924	0.1120	0.4667	0.8308	74.49%
X		16.1390	16.8130	17.5250	71.7950	4.2201	0.2498	0.6125	-0.0561	74.49%
%RSD		4.6937	5.2688	4.9522	5.6244	6.4341	76.1440	67.4710	1606.3000	0.20

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:36:25	0.0000	0.0000	0.0000	0.0000	0.0000	71.39%	0.0679	0.7820	0.0511
2	18:37:10	0.0000	0.0000	0.0000	0.0000	0.0000	70.53%	0.0564	0.2201	0.0557
3	18:37:56	0.0000	0.0000	0.0000	0.0000	0.0000	70.26%	0.0597	-0.0910	0.0555
4	18:38:40	0.0000	0.0000	0.0000	0.0000	0.0000	69.88%	0.0736	-0.6788	0.0695
5	18:39:25	0.0000	0.0000	0.0000	0.0000	0.0000	71.12%	0.0507	-0.2793	0.0530
X		0.0000	0.0000	0.0000	0.0000	0.0000	70.64%	0.0617	-0.0094	0.0570
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.88	14.8240	5828.1000	12.7050

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:36:25	0.3226	75.03%	0.0000	0.1960	80.9930	78.6090	0.0000	0.0000	0.0000
2	18:37:10	0.2983	75.28%	0.0000	0.1908	84.1190	82.3160	0.0000	0.0000	0.0000
3	18:37:56	0.3776	74.15%	0.0000	0.2145	85.2680	86.8740	0.0000	0.0000	0.0000
4	18:38:40	0.3743	73.89%	0.0000	0.2178	84.3180	85.1870	0.0000	0.0000	0.0000
5	18:39:25	0.2675	73.98%	0.0000	0.2269	76.7340	76.4610	0.0000	0.0000	0.0000
X		0.3281	74.46%	0.0000	0.2092	82.2870	81.8890	0.0000	0.0000	0.0000
%RSD		14.6010	0.86	0.0000	7.2715	4.2481	5.3272	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:36:25	0.0000	80.97%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0626	0.0647
2	18:37:10	0.0000	81.14%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0642	0.0580
3	18:37:56	0.0000	79.88%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0559	0.0602
4	18:38:40	0.0000	79.11%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0671	0.0703
5	18:39:25	0.0000	78.94%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0446	0.0524
X		0.0000	80.00%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0589	0.0611
%RSD		0.0000	1.28	0.0000	0.0000	0.0000	0.0000	0.0000	15.2440	11.0670

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	18:36:25	26.6870	25.4550	25.8630	81.34%	0.0000
2	18:37:10	28.5330	26.8930	27.5500	81.72%	0.0000
3	18:37:56	29.0660	27.1450	27.8410	79.80%	0.0000
4	18:38:40	28.8340	27.3010	27.7020	78.39%	0.0000
5	18:39:25	26.0430	24.2400	24.8020	77.57%	0.0000
X		27.8330	26.2070	26.7520	79.76%	0.0000
%RSD		4.9298	5.0408	5.0568	2.26	0.0000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:41:10	72.43%	0.9634	243.8700	T 4342.4000	4261.9000	4201.5000	TM 7036.7000	930.6000	TM 282060.0000
2	18:41:55	72.32%	0.7893	258.2900	T 4569.8000	4407.9000	4390.3000	TM 7303.5000	974.1800	TM 296700.0000
3	18:42:40	72.58%	0.7986	260.2500	T 4689.3000	4541.5000	4513.6000	TM 7573.6000	998.7400	TM 307790.0000
4	18:43:24	73.67%	0.8729	258.4800	T 4622.8000	4466.8000	4437.0000	TM 7437.9000	1018.1000	TM 307850.0000
5	18:44:09	72.63%	0.7992	249.6700	T 4388.8000	4148.7000	4168.3000	TM 6978.3000	959.6700	TM 287870.0000
x		72.73%	0.8447	254.1100	T 4522.6000	4365.3000	4342.2000	TM 7266.0000	976.2500	TM 296450.0000
%RSD		0.75	8.8098	2.7735	T 3.3249	3.6358	3.4689	TM 3.5151	3.4802	TM 3.9169

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:41:10	67.42%	2.2559	38.9960	16.9870	M 11402.0000	T 967.4000	TM 16102.0000	M 17400.0000	8.7936
2	18:41:55	68.20%	2.6600	40.4750	17.4620	M 12010.0000	T 1012.3000	TM 16915.0000	M 18319.0000	9.2343
3	18:42:40	68.08%	2.4880	41.3620	17.6340	M 12378.0000	T 1030.6000	TM 17389.0000	M 18687.0000	9.3106
4	18:43:24	67.20%	2.6469	41.9550	18.2730	M 12308.0000	T 1016.9000	TM 17298.0000	M 18822.0000	9.2559
5	18:44:09	68.03%	2.3671	37.6950	16.4530	M 11488.0000	942.1000	TM 15974.0000	M 17374.0000	8.7711
x		67.79%	2.4836	40.0960	17.3610	M 11917.0000	T 993.8600	TM 16736.0000	M 18120.0000	9.0731
%RSD		0.66	7.0667	4.3508	3.9487	M 3.8077	T 3.7652	TM 3.9597	M 3.8317	2.9428

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:41:10	23.3100	17.0890	17.9300	80.0180	9.5415	0.1045	0.5940	0.9345	75.21%
2	18:41:55	25.1400	17.4400	17.8720	83.5780	10.1310	-0.0600	0.4268	-0.1176	76.44%
3	18:42:40	24.7220	17.9610	18.9460	86.7430	9.6932	0.0307	0.4576	0.2477	76.70%
4	18:43:24	24.8850	17.5890	19.2730	88.2960	9.7476	0.1329	0.5862	0.7525	76.67%
5	18:44:09	22.0170	16.8680	17.3290	78.6420	8.5984	0.1466	0.1073	0.3617	77.01%
x		24.0150	17.3890	18.2700	83.4550	9.5423	0.0709	0.4344	0.4358	76.41%
%RSD		5.5116	2.4585	4.4332	4.9851	5.9797	120.9500	45.4790	95.7300	0.92

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:41:10	0.0000	0.0000	0.0000	0.0000	0.0000	67.94%	0.0618	-0.4873	0.0647
2	18:41:55	0.0000	0.0000	0.0000	0.0000	0.0000	69.34%	0.0612	-0.4051	0.0664
3	18:42:40	0.0000	0.0000	0.0000	0.0000	0.0000	68.48%	0.0691	-0.6554	0.0698
4	18:43:24	0.0000	0.0000	0.0000	0.0000	0.0000	68.82%	0.0700	-0.3356	0.0561
5	18:44:09	0.0000	0.0000	0.0000	0.0000	0.0000	70.69%	0.0613	-0.3484	0.0542
x		0.0000	0.0000	0.0000	0.0000	0.0000	69.06%	0.0647	-0.4464	0.0622
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	1.52	6.8986	29.4120	10.8450

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:41:10	0.3103	72.01%	0.0000	0.2716	94.7320	93.8730	0.0000	0.0000	0.0000
2	18:41:55	0.3441	73.27%	0.0000	0.2180	99.2230	95.6450	0.0000	0.0000	0.0000
3	18:42:40	0.3940	73.24%	0.0000	0.3231	102.5800	100.3700	0.0000	0.0000	0.0000
4	18:43:24	0.3658	74.19%	0.0000	0.2220	101.3400	100.5900	0.0000	0.0000	0.0000
5	18:44:09	0.3416	75.10%	0.0000	0.2010	93.2550	93.4360	0.0000	0.0000	0.0000
x		0.3512	73.56%	0.0000	0.2471	98.2250	96.7830	0.0000	0.0000	0.0000
%RSD		8.8536	1.57	0.0000	20.2010	4.1515	3.5919	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:41:10	0.0000	75.82%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0699	0.0640
2	18:41:55	0.0000	76.53%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0745	0.0754
3	18:42:40	0.0000	77.12%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0702	0.0750
4	18:43:24	0.0000	77.98%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0559	0.0696
5	18:44:09	0.0000	79.15%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0756	0.0761
x		0.0000	77.32%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0692	0.0720
%RSD		0.0000	1.67	0.0000	0.0000	0.0000	0.0000	0.0000	11.3780	7.1948

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	18:41:10	42.9190	40.2930	41.3190	72.04%	0.0000
2	18:41:55	44.9370	42.4450	43.1450	73.64%	0.0000
3	18:42:40	46.6850	44.2410	44.9800	73.94%	0.0000
4	18:43:24	46.7280	43.5480	44.7060	75.51%	0.0000
5	18:44:09	43.6320	40.8270	41.5510	76.93%	0.0000
x		44.9800	42.2710	43.1400	74.41%	0.0000
%RSD		3.8552	4.0181	3.9609	2.52	0.0000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:45:54	73.48%	0.6373	179.4300	T 2662.9000	2602.4000	2552.1000	TM 6235.6000	849.8900	TM 213550.0000
2	18:46:39	73.12%	0.6232	189.7800	2799.6000	2724.3000	2705.2000	TM 6589.1000	918.7200	TM 232060.0000
3	18:47:25	73.02%	0.6927	196.2900	T 2909.3000	2851.4000	2781.1000	TM 6772.4000	940.0100	TM 238380.0000
4	18:48:09	73.29%	0.7066	202.3800	T 3014.5000	2887.2000	2838.8000	TM 6903.2000	941.8900	TM 239780.0000
5	18:48:54	73.88%	0.6884	186.9600	T 2742.3000	2676.8000	2642.8000	TM 6393.3000	892.4000	TM 222820.0000
X		73.36%	0.6697	190.9700	T 2825.7000	2748.4000	2704.0000	TM 6578.7000	908.5800	TM 229320.0000
%RSD		0.47	5.5115	4.6032	T 4.9026	4.3398	4.1731	TM 4.1285	4.2289	TM 4.8267

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:45:54	67.25%	2.5969	32.4420	14.5270	M 7784.7000	611.7300	TM 11074.0000	M 12043.0000	7.0803
2	18:46:39	67.09%	2.5658	34.3750	15.4430	M 8285.2000	654.0000	TM 11748.0000	M 12666.0000	7.7392
3	18:47:25	67.19%	2.4489	34.6710	15.7200	M 8492.2000	665.2700	TM 11944.0000	M 12963.0000	7.6398
4	18:48:09	67.35%	2.7378	35.6280	16.1490	M 8806.0000	684.9900	TM 12146.0000	M 13184.0000	7.9130
5	18:48:54	67.56%	2.5161	33.7060	14.7800	M 8083.0000	643.5200	TM 11313.0000	M 12192.0000	7.3362
X		67.29%	2.5731	34.1640	15.3240	M 8290.2000	651.9000	TM 11645.0000	M 12610.0000	7.5417
%RSD		0.27	4.1866	3.4686	4.3578	M 4.6925	4.1744	TM 3.8100	M 3.8721	4.4058

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:45:54	19.0800	26.5290	27.5120	78.6490	7.0926	-0.0245	0.4992	-0.8261	74.82%
2	18:46:39	19.5340	27.2680	27.7600	82.7490	7.3938	0.0696	0.3033	-0.0688	75.01%
3	18:47:25	21.1300	28.1370	29.0190	86.4510	8.3283	0.2003	0.2697	1.4374	75.31%
4	18:48:09	21.4150	28.9990	30.3650	87.6510	7.6362	0.0650	0.5298	-0.0745	75.15%
5	18:48:54	19.4370	27.0210	27.4840	81.8270	6.8475	-0.1384	0.0756	0.3119	74.91%
X		20.1190	27.5910	28.4280	83.4660	7.4597	0.0344	0.3355	0.1560	75.04%
%RSD		5.3228	3.5502	4.4068	4.3541	7.6408	364.9600	55.2600	530.0700	0.26

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:45:54	0.0000	0.0000	0.0000	0.0000	0.0000	70.43%	0.1027	0.2525	0.0830
2	18:46:39	0.0000	0.0000	0.0000	0.0000	0.0000	69.98%	0.0897	-0.3396	0.0898
3	18:47:25	0.0000	0.0000	0.0000	0.0000	0.0000	70.33%	0.0920	-0.0488	0.0764
4	18:48:09	0.0000	0.0000	0.0000	0.0000	0.0000	69.64%	0.0813	0.3526	0.0956
5	18:48:54	0.0000	0.0000	0.0000	0.0000	0.0000	70.02%	0.0733	-0.7912	0.0862
X		0.0000	0.0000	0.0000	0.0000	0.0000	70.08%	0.0878	-0.1149	0.0862
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.45	12.7070	404.9200	8.3504

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:45:54	0.3296	74.97%	0.0000	0.3054	86.1810	83.3110	0.0000	0.0000	0.0000
2	18:46:39	0.3890	74.81%	0.0000	0.2835	91.3590	90.9480	0.0000	0.0000	0.0000
3	18:47:25	0.2897	75.37%	0.0000	0.2881	95.7370	93.3490	0.0000	0.0000	0.0000
4	18:48:09	0.3787	75.16%	0.0000	0.3412	97.4540	94.5400	0.0000	0.0000	0.0000
5	18:48:54	0.3562	74.75%	0.0000	0.3045	90.1310	89.5530	0.0000	0.0000	0.0000
X		0.3486	75.01%	0.0000	0.3045	92.1720	90.3400	0.0000	0.0000	0.0000
%RSD		11.4950	0.34	0.0000	7.4567	4.8923	4.8592	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:45:54	0.0000	80.81%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0801	0.0546
2	18:46:39	0.0000	80.34%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0632	0.0806
3	18:47:25	0.0000	81.01%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0818	0.0705
4	18:48:09	0.0000	80.59%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0569	0.0766
5	18:48:54	0.0000	79.77%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0574	0.0644
X		0.0000	80.50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0679	0.0694
%RSD		0.0000	0.59	0.0000	0.0000	0.0000	0.0000	0.0000	17.9990	14.8070

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	18:45:54	52.1800	49.5770	50.2760	80.33%	0.0000
2	18:46:39	56.7970	53.5080	54.4000	80.26%	0.0000
3	18:47:25	58.0310	54.4530	55.9330	80.63%	0.0000
4	18:48:09	58.8300	55.9720	57.0070	79.51%	0.0000
5	18:48:54	54.5530	52.0440	52.7350	78.49%	0.0000
X		56.0780	53.1110	54.0700	79.84%	0.0000
%RSD		4.8367	4.5904	4.9266	1.08	0.0000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:50:40	73.37%	0.6274	348.6700	TM 12750.0000	M 12496.0000	M 12538.0000	T 4335.4000	620.8600	TM 331670.0000
2	18:51:26	73.37%	0.6667	355.5800	TM 13243.0000	M 13039.0000	M 12848.0000	T 4464.7000	641.9800	TM 340800.0000
3	18:52:11	75.04%	0.6431	351.2500	TM 12987.0000	M 12963.0000	M 12853.0000	T 4396.3000	645.3700	TM 342220.0000
4	18:52:57	72.75%	0.6568	358.2600	TM 13405.0000	M 13111.0000	M 13099.0000	T 4472.0000	658.1400	TM 343300.0000
5	18:53:41	75.07%	0.5624	338.3200	TM 12480.0000	M 12366.0000	M 12195.0000	T 4182.1000	627.8000	TM 325470.0000
X		73.92%	0.6313	350.4200	TM 12973.0000	M 12795.0000	M 12707.0000	T 4370.1000	638.8300	TM 336690.0000
%RSD		1.44	6.5331	2.2026	TM 2.8658	M 2.6528	M 2.7424	T 2.7208	2.3087	TM 2.3120

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:50:40	68.92%	3.0133	33.6830	31.4460	M 10662.0000	680.5400	TM 14947.0000	M 16524.0000	7.7038
2	18:51:26	69.17%	2.8599	34.2200	33.0190	M 11267.0000	723.2100	TM 15822.0000	M 17396.0000	7.7759
3	18:52:11	70.32%	2.8946	33.8250	32.8790	M 11265.0000	722.2100	TM 15959.0000	M 17502.0000	8.0188
4	18:52:57	69.73%	2.9239	34.3790	33.4870	M 11317.0000	727.6000	TM 15908.0000	M 17726.0000	8.0811
5	18:53:41	70.14%	2.8203	32.3340	31.7250	M 10714.0000	682.8600	TM 15003.0000	M 16613.0000	7.6189
X		69.65%	2.9024	33.6880	32.5110	M 11045.0000	707.2900	TM 15528.0000	M 17152.0000	7.8397
%RSD		0.87	2.5182	2.3997	2.7076	M 2.9595	3.3163	TM 3.2655	M 3.1877	2.5642

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:50:40	21.9600	16.5190	18.1910	75.7470	6.8397	0.0190	0.1711	1.5023	76.25%
2	18:51:26	23.1950	17.3940	18.2840	76.1210	6.8795	0.3495	0.2649	1.5830	77.12%
3	18:52:11	23.6070	17.5720	18.5630	78.4120	7.0098	0.1640	0.1067	1.5662	77.25%
4	18:52:57	23.1080	16.8320	18.2920	76.5700	7.1653	0.2343	0.5450	-0.7797	77.97%
5	18:53:41	21.7150	16.4430	17.4180	73.9210	6.3999	0.0048	0.1375	2.3824	78.05%
X		22.7170	16.9520	18.1500	76.1540	6.8589	0.1544	0.2450	1.2509	77.33%
%RSD		3.6498	3.0091	2.3781	2.1201	4.1761	94.5930	72.5890	95.2360	0.95

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:50:40	0.0000	0.0000	0.0000	0.0000	0.0000	69.88%	0.0628	-1.0351	0.0657
2	18:51:26	0.0000	0.0000	0.0000	0.0000	0.0000	69.76%	0.0687	-0.7827	0.0680
3	18:52:11	0.0000	0.0000	0.0000	0.0000	0.0000	70.15%	0.0824	-1.1237	0.0711
4	18:52:57	0.0000	0.0000	0.0000	0.0000	0.0000	70.44%	0.0772	-0.2215	0.0838
5	18:53:41	0.0000	0.0000	0.0000	0.0000	0.0000	70.95%	0.0715	-0.5439	0.0659
X		0.0000	0.0000	0.0000	0.0000	0.0000	70.24%	0.0725	-0.7414	0.0709
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.68	10.4790	49.7200	10.6020

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:50:40	0.4885	74.21%	0.0000	0.3721	69.0770	68.1320	0.0000	0.0000	0.0000
2	18:51:26	0.4098	74.03%	0.0000	0.3521	72.9500	69.4370	0.0000	0.0000	0.0000
3	18:52:11	0.4921	74.69%	0.0000	0.3676	72.3300	71.1740	0.0000	0.0000	0.0000
4	18:52:57	0.4770	74.79%	0.0000	0.3743	74.0890	71.6800	0.0000	0.0000	0.0000
5	18:53:41	0.3619	75.80%	0.0000	0.3032	68.8270	66.2370	0.0000	0.0000	0.0000
X		0.4459	74.70%	0.0000	0.3538	71.4550	69.3320	0.0000	0.0000	0.0000
%RSD		12.9200	0.92	0.0000	8.3685	3.3193	3.2202	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:50:40	0.0000	77.71%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0342	0.0443
2	18:51:26	0.0000	77.78%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0448	0.0453
3	18:52:11	0.0000	77.98%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0434	0.0540
4	18:52:57	0.0000	77.59%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0484	0.0605
5	18:53:41	0.0000	79.43%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0437	0.0326
X		0.0000	78.10%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0429	0.0473
%RSD		0.0000	0.97	0.0000	0.0000	0.0000	0.0000	0.0000	12.2040	22.4060

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	18:50:40	82.8680	80.0860	81.5420	72.80%	0.0000
2	18:51:26	86.0920	82.1380	83.7980	73.11%	0.0000
3	18:52:11	87.4780	83.9950	85.3910	72.92%	0.0000
4	18:52:57	86.8420	83.5160	84.6970	74.12%	0.0000
5	18:53:41	81.4790	78.1590	79.6370	75.43%	0.0000
X		84.9520	81.5790	83.0130	73.68%	0.0000
%RSD		3.0955	2.9916	2.8676	1.51	0.0000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:55:27	75.85%	0.9173	128.4100	2074.7000	2026.7000	2052.8000	TM 7675.8000	1072.2000	TM 171120.0000
2	18:56:12	74.99%	0.9837	132.9200	2166.2000	2136.3000	2081.7000	TM 8017.2000	1128.7000	TM 175060.0000
3	18:56:56	74.66%	1.1614	131.5400	2207.6000	2139.3000	2104.3000	TM 7892.4000	1102.7000	TM 178270.0000
4	18:57:41	74.51%	1.0542	133.3000	2176.1000	2152.6000	2165.7000	TM 7987.7000	1135.1000	TM 181650.0000
5	18:58:26	74.57%	1.0128	129.7500	2154.6000	2084.3000	2060.3000	TM 7638.8000	1095.9000	TM 172940.0000
X		74.92%	1.0259	131.1800	2155.8000	2107.8000	2092.9000	TM 7842.4000	1106.9000	TM 175810.0000
%RSD		0.74	8.8431	1.5900	2.2926	2.4794	2.1665	TM 2.2397	2.3090	TM 2.3950
Run	**Time**	**45Sc**	**47Ti**	**51V**	**52Cr**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:55:27	68.43%	1.8613	39.3540	11.6710	M 7321.6000	687.9100	TM 10279.0000	M 11089.0000	7.3986
2	18:56:12	68.36%	2.0561	41.1800	11.6830	M 7434.3000	698.1700	TM 10523.0000	M 11199.0000	7.5866
3	18:56:56	67.49%	2.0311	42.2620	12.3460	M 7725.5000	717.0300	TM 10792.0000	M 11558.0000	7.6105
4	18:57:41	66.68%	1.9489	41.9560	12.1550	M 7623.4000	718.4700	TM 10786.0000	M 11503.0000	7.5860
5	18:58:26	66.79%	1.9566	40.8020	11.7920	M 7421.8000	684.5200	TM 10417.0000	M 11052.0000	7.4357
X		67.55%	1.9708	41.1110	11.9290	M 7505.3000	701.2200	TM 10560.0000	M 11280.0000	7.5235
%RSD		1.23	3.8959	2.7801	2.5542	M 2.1912	2.2693	TM 2.1458	M 2.0893	1.3085
Run	**Time**	**60Ni**	**63Cu**	**65Cu**	**66Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**89Y**
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:55:27	21.4530	16.7060	17.6210	57.5750	6.5800	0.1790	0.4259	0.8713	76.56%
2	18:56:12	22.1080	16.6100	17.2700	57.5740	6.5067	0.1493	0.2664	0.2449	76.73%
3	18:56:56	21.9990	17.2140	17.6290	60.0560	7.2644	0.1289	0.3941	0.9952	76.76%
4	18:57:41	21.6970	16.9420	17.2470	60.7230	6.3828	0.0848	0.6194	1.0098	76.57%
5	18:58:26	20.8340	16.7690	17.2290	58.1720	6.5868	0.2317	0.5231	0.1338	76.65%
X		21.6180	16.8480	17.3990	58.8200	6.6641	0.1547	0.4458	0.6510	76.65%
%RSD		2.3504	1.4093	1.1875	2.5032	5.1837	35.5640	29.9640	65.5370	0.12
Run	**Time**	**94Mo**	**95Mo**	**96Mo**	**97Mo**	**98Mo**	**103Rh**	**107Ag**	**108Mo O**	**109Ag**
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:55:27	0.0000	0.0000	0.0000	0.0000	0.0000	71.16%	0.0751	-0.1416	0.0754
2	18:56:12	0.0000	0.0000	0.0000	0.0000	0.0000	70.99%	0.0647	-0.8109	0.0698
3	18:56:56	0.0000	0.0000	0.0000	0.0000	0.0000	70.46%	0.0700	-0.6427	0.0750
4	18:57:41	0.0000	0.0000	0.0000	0.0000	0.0000	71.09%	0.0639	0.0163	0.0591
5	18:58:26	0.0000	0.0000	0.0000	0.0000	0.0000	70.32%	0.0658	-0.6077	0.0673
X		0.0000	0.0000	0.0000	0.0000	0.0000	70.81%	0.0679	-0.4373	0.0693
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.55	6.8998	81.1650	9.6661
Run	**Time**	**111Cd**	**115In**	**118Sn**	**121Sb**	**135Ba**	**137Ba**	**150Sm**	**150Nd**	**156Gd**
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:55:27	0.3231	74.97%	0.0000	0.1806	107.2800	109.8700	0.0000	0.0000	0.0000
2	18:56:12	0.3296	75.03%	0.0000	0.1440	113.1000	109.9500	0.0000	0.0000	0.0000
3	18:56:56	0.3764	75.07%	0.0000	0.2100	112.3900	110.9300	0.0000	0.0000	0.0000
4	18:57:41	0.3393	75.09%	0.0000	0.1803	112.8900	111.9900	0.0000	0.0000	0.0000
5	18:58:26	0.2978	74.94%	0.0000	0.1736	110.1900	104.8900	0.0000	0.0000	0.0000
X		0.3332	75.02%	0.0000	0.1777	111.1700	109.5300	0.0000	0.0000	0.0000
%RSD		8.5760	0.08	0.0000	13.2190	2.2175	2.4918	0.0000	0.0000	0.0000
Run	**Time**	**156Dy**	**159Tb**	**160Dy**	**160Gd**	**164Dy**	**164Er**	**165Ho**	**203Tl**	**205Tl**
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	18:55:27	0.0000	79.45%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0879	0.1001
2	18:56:12	0.0000	79.48%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0961	0.0918
3	18:56:56	0.0000	79.66%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0935	0.0930
4	18:57:41	0.0000	79.71%	0.0000	0.0000	0.0000	0.0000	0.0000	0.1066	0.1046
5	18:58:26	0.0000	80.37%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0964	0.1015
X		0.0000	79.73%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0961	0.0982
%RSD		0.0000	0.47	0.0000	0.0000	0.0000	0.0000	0.0000	7.0667	5.6568

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	18:55:27	25.9120	24.3320	24.8810	79.05%	0.0000
2	18:56:12	26.6970	25.0130	25.5960	79.83%	0.0000
3	18:56:56	26.6660	25.3240	25.6330	79.63%	0.8214
4	18:57:41	26.6910	25.2780	25.5990	80.37%	0.0000
5	18:58:26	26.0610	24.0120	24.9010	79.95%	0.0000
X		26.4060	24.7920	25.3220	79.76%	0.1643
%RSD		1.4621	2.3767	1.5556	0.61	223.6100

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	19:00:12	68.66%	2533.7000	TM 52594.0000	TM 51535.0000	TM 51256.0000	TM 51271.0000	TM 50851.0000	TM 51059.0000	M 50696.0000
2	19:00:57	69.78%	2531.2000	TM 53507.0000	TM 52064.0000	TM 52504.0000	TM 51831.0000	TM 52294.0000	TM 53639.0000	M 52687.0000
3	19:01:41	69.41%	2519.9000	TM 55197.0000	TM 53837.0000	TM 53573.0000	TM 52977.0000	TM 53375.0000	TM 53388.0000	M 52308.0000
4	19:02:27	70.09%	2461.5000	TM 54967.0000	TM 53091.0000	TM 52178.0000	TM 52247.0000	TM 52992.0000	TM 52908.0000	M 52164.0000
5	19:03:12	70.00%	2373.9000	TM 52174.0000	TM 51311.0000	TM 50993.0000	TM 50761.0000	TM 51242.0000	TM 51487.0000	M 50730.0000
X		69.59%	2484.0000	TM 53687.0000	TM 52368.0000	TM 52101.0000	TM 51817.0000	TM 52151.0000	TM 52496.0000	M 51717.0000
%RSD		0.84	2.7456	TM 2.5395	TM 2.0441	TM 1.9849	TM 1.6552	TM 2.0875	TM 2.2038	M 1.8106

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	19:00:12	71.92%	-0.0015	T 2484.3000	T 2430.8000	TM 35892.0000	T 2432.1000	TM 49239.0000	M 49966.0000	T 2427.4000
2	19:00:57	74.04%	-0.0120	T 2572.6000	T 2509.0000	TM 36686.0000	T 2469.2000	TM 50447.0000	M 51047.0000	T 2508.2000
3	19:01:41	76.07%	0.0202	T 2559.0000	T 2504.4000	TM 37142.0000	T 2478.8000	TM 50389.0000	M 51266.0000	T 2488.6000
4	19:02:27	77.71%	0.0036	T 2551.1000	T 2474.1000	TM 36703.0000	T 2485.1000	TM 50603.0000	M 51179.0000	T 2470.6000
5	19:03:12	78.20%	0.0097	T 2460.7000	T 2402.2000	TM 35900.0000	T 2381.4000	TM 49041.0000	M 49680.0000	T 2393.0000
X		75.59%	0.0040	T 2525.6000	T 2464.1000	TM 36464.0000	T 2449.3000	TM 49944.0000	M 50627.0000	T 2457.6000
%RSD		3.46	301.3200	T 1.9688	T 1.8899	TM 1.5089	T 1.7625	TM 1.4838	M 1.4727	T 1.9056

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	19:00:12	2448.0000	T 2353.4000	2346.1000	2296.8000	2458.2000	259.6200	254.1600	3.2194	70.60%
2	19:00:57	2498.4000	T 2405.5000	2378.3000	2370.5000	2491.8000	265.0700	269.8000	2.8940	73.08%
3	19:01:41	2528.7000	T 2419.0000	2389.6000	2372.0000	2518.5000	265.5500	259.7000	1.5106	74.85%
4	19:02:27	2514.1000	T 2396.2000	2380.7000	2362.4000	2492.9000	263.1700	271.0100	2.8192	75.60%
5	19:03:12	2435.8000	T 2318.8000	2330.8000	2298.2000	2420.7000	257.3600	255.6000	3.6527	75.93%
X		2485.0000	T 2378.6000	2365.1000	2340.0000	2476.4000	262.1500	262.0500	2.8192	74.01%
%RSD		1.6506	T 1.7437	1.0697	1.6640	1.5258	1.3542	3.0146	28.4490	2.98

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	19:00:12	0.0000	0.0000	0.0000	0.0000	0.0000	71.91%	229.8600	-4.4692	228.8900
2	19:00:57	0.0000	0.0000	0.0000	0.0000	0.0000	73.77%	233.5600	-13.4280	231.7800
3	19:01:41	0.0000	0.0000	0.0000	0.0000	0.0000	74.96%	239.4500	-3.8345	238.0500
4	19:02:27	0.0000	0.0000	0.0000	0.0000	0.0000	76.08%	239.0800	2.6044	238.8500
5	19:03:12	0.0000	0.0000	0.0000	0.0000	0.0000	76.67%	230.4200	-8.7727	229.5300
X		0.0000	0.0000	0.0000	0.0000	0.0000	74.68%	234.4700	-5.5800	233.4200
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	2.55	1.9604	107.1700	2.0225

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	19:00:12	2337.6000	75.51%	0.0000	T 2448.1000	2452.6000	2445.0000	0.0000	0.0000	0.0000
2	19:00:57	2368.9000	78.11%	0.0000	T 2475.0000	2520.8000	2493.4000	0.0000	0.0000	0.0000
3	19:01:41	2410.2000	78.62%	0.0000	T 2530.3000	2538.2000	2528.1000	0.0000	0.0000	0.0000
4	19:02:27	2381.4000	80.35%	0.0000	T 2507.1000	2543.7000	2512.5000	0.0000	0.0000	0.0000
5	19:03:12	2314.2000	80.68%	0.0000	T 2422.5000	2457.3000	2426.4000	0.0000	0.0000	0.0000
X		2362.5000	78.66%	0.0000	T 2476.6000	2502.5000	2481.1000	0.0000	0.0000	0.0000
%RSD		1.5877	2.63	0.0000	T 1.7545	1.7692	1.7613	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	19:00:12	0.0000	78.08%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2514.5000	T 2512.5000
2	19:00:57	0.0000	79.34%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2578.2000	T 2577.5000
3	19:01:41	0.0000	80.93%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2598.7000	T 2600.2000
4	19:02:27	0.0000	81.66%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2614.6000	T 2625.6000
5	19:03:12	0.0000	82.97%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2522.8000	T 2509.0000
X		0.0000	80.59%	0.0000	0.0000	0.0000	0.0000	0.0000	T 2565.7000	T 2565.0000
%RSD		0.0000	2.39	0.0000	0.0000	0.0000	0.0000	0.0000	T 1.7541	T 2.0422

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	19:00:12	T 2495.8000	T 2502.3000	T 2497.5000	76.41%	0.0000
2	19:00:57	T 2566.7000	T 2571.0000	T 2559.2000	77.71%	0.0000
3	19:01:41	T 2579.2000	T 2577.0000	T 2579.3000	78.83%	0.8297
4	19:02:27	T 2580.2000	T 2593.0000	T 2596.1000	79.47%	1.6459
5	19:03:12	T 2488.7000	T 2484.4000	T 2491.3000	80.74%	1.6201
X		T 2542.1000	T 2545.5000	T 2544.7000	78.63%	0.8191
%RSD		T 1.8057	T 1.9144	T 1.8774	2.11	99.6870

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	19:04:58	76.85%	0.1552	8.5988	0.5893	0.3746	0.7281	0.0082	2.9431	-0.7452
2	19:05:42	76.61%	0.1058	6.5347	0.3772	0.2960	0.2685	-0.2049	3.3168	-1.1241
3	19:06:28	77.24%	0.0989	4.4787	0.2126	0.2149	0.0038	-0.2146	2.5614	-1.2044
4	19:07:13	79.53%	0.1213	4.0203	0.2304	0.2783	0.3054	-0.2631	1.5389	0.6688
5	19:07:59	78.93%	0.0885	3.5610	0.2097	0.1311	0.0541	-0.1988	2.6957	4.4119
X		77.83%	0.1139	5.4387	0.3238	0.2590	0.2720	-0.1746	2.6112	0.4014
%RSD		1.68	22.7980	38.6200	50.6160	35.2810	105.3800	60.3050	25.4580	589.2400

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	19:04:58	84.75%	-0.0099	0.1453	0.0139	2.8547	0.0259	-2.4820	0.1676	0.0124
2	19:05:42	85.99%	-0.0015	0.0177	-0.0102	0.2038	0.0198	-2.1872	0.9434	0.0119
3	19:06:28	87.78%	-0.0102	-0.0036	-0.0416	1.4549	0.0036	-3.1185	1.9006	-0.0003
4	19:07:13	89.73%	-0.0077	-0.0173	-0.0193	-0.3554	0.0291	-2.7604	0.3860	-0.0047
5	19:07:59	91.47%	0.0002	-0.0283	-0.0233	-0.1068	0.0195	-1.8965	1.9731	0.0083
X		87.94%	-0.0058	0.0228	-0.0161	0.8102	0.0196	-2.4889	1.0741	0.0055
%RSD		3.09	83.8880	310.4000	125.9900	165.1600	50.1980	19.1860	77.9400	138.5900

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	19:04:58	0.0223	0.1781	0.0477	-0.1860	-0.0414	0.2646	-0.2927	0.2599	84.44%
2	19:05:42	0.0371	0.0979	0.0501	-0.2058	0.0126	0.4317	-0.0074	-0.6698	86.30%
3	19:06:28	0.0158	0.0766	0.0477	-0.3106	0.0744	0.3061	0.3207	-0.7106	88.04%
4	19:07:13	0.0199	0.0540	-0.0022	-0.3074	0.0280	-0.2100	0.1557	-0.7551	90.03%
5	19:07:59	-0.0000	0.0610	0.0187	-0.2326	0.0380	0.2278	0.0224	-0.4327	89.29%
X		0.0190	0.0935	0.0324	-0.2485	0.0223	0.2040	0.0397	-0.4616	87.62%
%RSD		70.0740	53.6560	71.9010	23.2180	189.4000	119.5200	570.5600	91.4450	2.59

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	19:04:58	0.0000	0.0000	0.0000	0.0000	0.0000	85.69%	0.0108	0.0845	0.0118
2	19:05:42	0.0000	0.0000	0.0000	0.0000	0.0000	86.83%	0.0094	-0.3865	0.0081
3	19:06:28	0.0000	0.0000	0.0000	0.0000	0.0000	87.93%	0.0047	-0.1435	0.0086
4	19:07:13	0.0000	0.0000	0.0000	0.0000	0.0000	90.13%	0.0090	-0.7846	0.0044
5	19:07:59	0.0000	0.0000	0.0000	0.0000	0.0000	90.95%	0.0152	-0.8817	0.0079
X		0.0000	0.0000	0.0000	0.0000	0.0000	88.31%	0.0098	-0.4223	0.0082
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	2.50	38.4580	97.4950	32.2540

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	19:04:58	0.0217	88.08%	0.0000	1.1855	0.0219	0.0251	0.0000	0.0000	0.0000
2	19:05:42	0.0445	88.74%	0.0000	0.9408	0.0019	-0.0019	0.0000	0.0000	0.0000
3	19:06:28	0.0156	88.93%	0.0000	0.7820	0.0415	0.0250	0.0000	0.0000	0.0000
4	19:07:13	0.0394	90.35%	0.0000	0.5827	-0.0079	0.0194	0.0000	0.0000	0.0000
5	19:07:59	0.0222	89.47%	0.0000	0.5131	0.0020	0.0088	0.0000	0.0000	0.0000
X		0.0287	89.11%	0.0000	0.8008	0.0119	0.0153	0.0000	0.0000	0.0000
%RSD		43.7250	0.95	0.0000	34.0970	166.5300	76.3620	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	19:04:58	0.0000	91.53%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0095	0.0008
2	19:05:42	0.0000	92.19%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0095	0.0041
3	19:06:28	0.0000	91.29%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0060	0.0045
4	19:07:13	0.0000	91.16%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0076
5	19:07:59	0.0000	90.75%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0059	-0.0052
X		0.0000	91.38%	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0023	0.0024
%RSD		0.0000	0.58	0.0000	0.0000	0.0000	0.0000	0.0000	321.0500	206.0600

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
		ug/L	ug/L	ug/L	ug/L	ug/L
1	19:04:58	0.0406	0.0332	0.0274	95.22%	0.0000
2	19:05:42	0.0417	0.0309	0.0329	94.26%	0.0000
3	19:06:28	0.0205	-0.0288	0.0150	92.96%	0.0000
4	19:07:13	0.0249	0.0040	0.0054	91.64%	0.0000
5	19:07:59	0.0255	0.0029	0.0151	91.04%	0.0000
X		0.0306	0.0084	0.0192	93.02%	0.0000
%RSD		31.9480	299.4100	57.1880	1.88	0.0000

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	15:40:01	135313.9100	36.6667	2800.4705	165.0016	5.0000	55.0002	1312.6034	17786.4610	112.5008
2	15:40:47	137071.4500	26.6667	3035.5528	140.0012	15.0000	25.0000	1235.0915	17891.6860	90.0005
3	15:41:31	139070.8400	28.3334	2988.0356	100.0006	5.0000	40.0001	1337.6073	17894.1920	82.5004
4	15:42:17	137759.3200	23.3334	3335.6675	115.0008	20.0000	25.0000	1387.6155	17783.9560	77.5004
5	15:43:01	137226.4700	22.5000	3210.6184	130.0010	20.0000	35.0001	1380.1143	18072.0750	120.0009
x		137288.4000	27.5000	3074.0689	130.0010	13.0000	36.0001	1330.6064	17885.6740	96.5006
%RSD		0.9873	20.5526	6.7224	19.0376	58.3298	34.5831	4.6324	0.6559	19.4388

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	15:40:01	228618.5500	10.0000	907.5494	522.5164	1712.6760	80.0004	62939.2870	347.5073	57.5002
2	15:40:47	234376.4800	12.5000	717.5309	525.0165	1827.7004	55.0002	63193.7020	317.5061	47.5001
3	15:41:31	234463.8900	15.0000	552.5183	550.0181	1592.6522	57.5002	63954.4720	357.5077	45.0001
4	15:42:17	235944.8200	30.0001	505.0153	517.5161	1610.1555	60.0002	66043.1690	355.0076	37.5001
5	15:43:01	236177.5300	27.5000	1072.5690	570.0195	1787.6917	67.5003	65136.0710	410.0101	57.5002
x		233916.2500	19.0000	751.0366	537.0173	1706.1752	64.0003	64253.3400	357.5077	49.0001
%RSD		1.3143	47.9858	31.8543	4.1563	6.1165	15.7709	2.0473	9.3431	17.5261

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	15:40:01	17.5000	77.5004	40.0001	235.0033	21.6667	143.3346	22.5000	25.0000	463163.1900
2	15:40:47	5.0000	112.5008	40.0001	187.5021	18.3334	165.0016	25.0000	18.3334	466195.4600
3	15:41:31	10.0000	80.0004	52.5002	182.5020	15.8333	158.3348	20.0000	28.3334	476428.0300
4	15:42:17	12.5000	45.0001	35.0001	172.5018	18.3334	157.5015	14.1667	27.5000	475515.5600
5	15:43:01	10.0000	82.5004	62.5002	185.0021	29.1667	153.3347	26.6667	22.5000	476232.3000
x		11.0000	79.5004	46.0001	192.5023	20.6667	155.5015	21.6667	24.3334	471506.9100
%RSD		41.2862	30.1134	24.4868	12.6916	25.0844	5.1347	22.5911	16.6722	1.3432

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	15:40:01	10.0000	0.0000	7.5000	0.0000	0.0000	618444.8700	7.5000	0.0000	7.5000
2	15:40:47	7.5000	2.5000	7.5000	2.5000	2.5000	625772.7500	8.7500	2.5000	2.5000
3	15:41:31	12.5000	7.5000	0.0000	2.5000	7.5000	633184.9500	11.2500	5.0000	1.2500
4	15:42:17	15.0000	0.0000	2.5000	0.0000	10.0000	631437.0000	13.7500	0.0000	5.0000
5	15:43:01	17.5000	7.5000	7.5000	5.0000	2.5000	628943.6300	15.0000	5.0000	0.0000
x		12.5000	3.5000	5.0000	2.0000	4.5000	627556.6400	11.2500	2.5000	3.2500
%RSD		31.6228	108.3268	70.7107	104.5825	91.2871	0.9253	28.3279	100.0000	92.6277

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	15:40:01	0.0000	630241.3800	12.5000	7.5000	5.0000	0.0000	0.0000	0.0000	0.0000
2	15:40:47	1.2500	638611.4900	2.5000	7.5000	2.5000	0.0000	0.0000	0.0000	5.0000
3	15:41:31	0.0000	644683.3300	12.5000	2.5000	5.0000	2.5000	0.0000	0.0000	2.5000
4	15:42:17	1.2500	649906.5800	27.5000	2.5000	7.5000	2.5000	0.0000	0.0000	0.0000
5	15:43:01	1.2500	649612.4200	2.5000	10.0000	5.0000	0.0000	0.0000	0.0000	0.0000
x		0.7500	642611.0400	11.5000	6.0000	5.0000	1.0000	0.0000	0.0000	1.5000
%RSD		91.2871	1.2916	89.1040	55.9017	35.3553	136.9306	0.0000	0.0000	149.0712

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	15:40:01	0.0000	983836.3900	25.0000	25.0000	10.0000	10.0000	1004811.7000	66.2503	145.0013
2	15:40:47	5.0000	1004713.4000	42.5001	42.5001	7.5000	7.5000	1020961.7000	100.0006	205.0025
3	15:41:31	2.5000	1016545.1000	52.5002	52.5002	2.5000	2.5000	1037361.3000	75.0003	202.5025
4	15:42:17	0.0000	1033776.7000	60.0002	60.0002	10.0000	10.0000	1057443.5000	101.2506	233.7533
5	15:43:01	0.0000	1033548.3000	37.5001	37.5001	15.0000	15.0000	1052454.7000	128.7510	242.5035
x		1.5000	1014484.0000	43.5001	43.5001	9.0000	9.0000	1034606.6000	94.2506	205.7526
%RSD		149.0712	2.0763	31.1090	31.1090	50.4609	50.4609	2.1185	26.1345	18.5653

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	15:40:01	95.0005	122.5009	307.5057	712962.8000	0.0000
2	15:40:47	115.0008	130.0010	332.5066	734232.2300	0.0000
3	15:41:31	190.0022	162.5016	370.0082	747691.1100	0.0000
4	15:42:17	140.0012	145.0013	325.0063	763341.5400	0.0000
5	15:43:01	142.5012	132.5011	320.0061	764484.5300	0.0000
x		136.5012	138.5012	331.0066	744542.4500	0.0000
%RSD		26.1465	11.3159	7.1375	2.8998	0.0000

S01 06/04/2019 15:44:03

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	15:44:47	137189.2000	342.5070	432088.9700	314016.9900	40422.8030	47429.5910	31293.6470	245200.0800	9275.1588
2	15:45:32	137242.5700	353.3408	432983.6700	314634.6500	40930.2710	47032.3490	30846.9870	251537.3200	9653.0877
3	15:46:16	137680.5400	333.3400	439846.9500	317142.0600	41121.2080	48128.5810	31813.1090	251166.3800	9552.9724
4	15:47:00	136348.9100	374.1751	437295.2800	317926.1000	40824.7550	47248.5670	31434.1750	246870.8400	9270.1533
5	15:47:45	137236.6400	326.6731	426047.0000	309274.4900	41050.8620	47303.8790	31238.4410	237309.0000	9082.4468
x		137139.5700	346.0072	433652.3800	314598.8600	40869.9800	47428.5940	31325.2720	246416.7200	9366.7638
%RSD		0.3535	5.3948	1.2223	1.0806	0.6717	0.8788	1.1140	2.3437	2.4764

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	15:44:47	228933.2700	20.0000	10108.6270	4321.1200	16781.8810	2767.9596	325359.9300	7208.1161	2870.4943
2	15:45:32	230026.5100	20.0000	10011.0100	4111.0138	16714.2450	2717.9432	327194.7100	6762.7430	2532.8849
3	15:46:16	230451.7700	15.0000	10006.0040	4221.0688	16932.1840	2520.3811	328198.0300	6905.3599	2687.9334
4	15:47:00	232746.7500	27.5000	10361.4380	4296.1071	17079.9860	2762.9580	323426.8200	7005.4433	2782.9646
5	15:47:45	233479.3200	25.0000	10456.5560	4063.4905	16774.3660	2717.9432	319242.5200	6962.9077	2630.4151
x		231127.5200	21.5000	10188.7270	4202.5600	16856.5320	2697.4370	324684.4000	6968.9140	2700.9385
%RSD		0.8276	22.6670	2.0408	2.6834	0.8810	3.7741	1.0922	2.3264	4.8579

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	15:44:47	667.5267	2837.9832	1280.0983	885.0470	282.5048	556.6853	200.0024	21.6667	466356.6100
2	15:45:32	565.0192	2968.0285	1357.6106	812.5396	291.6718	535.0172	177.5019	21.6667	469942.3700
3	15:46:16	632.5240	2842.9849	1350.1094	995.0594	315.0060	595.0212	195.8356	19.1667	478224.1500
4	15:47:00	590.0209	2925.5134	1310.1030	920.0508	267.5043	552.5183	201.6691	30.0001	473365.7000
5	15:47:45	607.5221	2948.0214	1332.6065	980.0576	300.8388	568.3527	189.1688	25.8334	470085.0900
x		612.5226	2904.5063	1326.1056	918.5509	291.5051	561.5189	192.8356	23.6667	471594.7900
%RSD		6.4345	2.0786	2.3798	8.0738	6.1760	3.9580	5.1006	18.0576	0.9455

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	15:44:47	20.0000	0.0000	7.5000	0.0000	0.0000	626329.8500	2379.0896	25.0000	2341.5789
2	15:45:32	10.0000	0.0000	2.5000	2.5000	0.0000	627557.2300	2385.3413	50.0001	2382.8406
3	15:46:16	12.5000	0.0000	2.5000	0.0000	0.0000	635383.1800	2412.8493	20.0000	2472.8668
4	15:47:00	15.0000	0.0000	2.5000	0.0000	2.5000	632791.7000	2350.3314	52.5002	2311.5706
5	15:47:45	7.5000	5.0000	2.5000	0.0000	2.5000	622129.5500	2310.3202	35.0001	2346.5803
x		13.0000	1.0000	3.5000	0.5000	1.0000	628838.3000	2367.5864	36.5001	2371.0875
%RSD		36.9912	223.6068	63.8877	223.6068	136.9306	0.8392	1.6458	39.8205	2.6263

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	15:44:47	502.5152	645891.7400	20.0000	2837.9832	2795.4688	5414.2583	0.0000	0.0000	0.0000
2	15:45:32	520.0162	656661.5400	17.5000	2745.4522	2755.4555	5071.5428	5.0000	5.0000	0.0000
3	15:46:16	502.5152	650551.6100	0.0000	2958.0249	3030.5510	5341.7115	0.0000	0.0000	0.0000
4	15:47:00	472.5134	656342.8500	12.5000	2810.4738	2938.0178	5331.7051	0.0000	0.0000	2.5000
5	15:47:45	490.0144	645767.6500	12.5000	2695.4359	2742.9514	5079.0473	5.0000	5.0000	0.0000
x		497.5149	651043.0800	12.5000	2809.4740	2852.4889	5247.6530	2.0000	2.0000	0.5000
%RSD		3.5356	0.8209	61.6441	3.5587	4.4235	3.0596	136.9306	136.9306	223.6068

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	15:44:47	0.0000	1039463.1000	22.5000	22.5000	10.0000	10.0000	1066246.4000	2247.8031	5428.0172
2	15:45:32	0.0000	1050174.6000	55.0002	55.0002	7.5000	7.5000	1073619.0000	2312.8209	5533.0863
3	15:46:16	0.0000	1053929.8000	55.0002	55.0002	5.0000	5.0000	1069229.8000	2289.0643	5626.8991
4	15:47:00	2.5000	1039894.8000	25.0000	25.0000	2.5000	2.5000	1054953.0000	2260.3065	5438.0237
5	15:47:45	0.0000	1013506.2000	25.0000	25.0000	7.5000	7.5000	1032990.0000	2136.5238	5260.4098
x		0.5000	1039393.7000	36.5001	36.5001	6.5000	6.5000	1059407.6000	2249.3037	5457.2872
%RSD		223.6068	1.5196	46.3533	46.3533	43.8529	43.8529	1.5387	3.0200	2.5008

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	15:44:47	1917.7206	1585.1507	3828.3792	774477.0400	0.0000
2	15:45:32	1802.6950	1692.6719	3938.4305	785989.9900	0.0000
3	15:46:16	1885.2132	1665.1664	4053.4856	782437.9200	2.5000
4	15:47:00	1710.1755	1547.6437	3840.8849	760031.0000	0.0000
5	15:47:45	1622.6580	1515.1377	3993.4566	739776.9000	0.0000
x		1787.6924	1601.1541	3930.9274	768542.5700	0.5000
%RSD		6.8446	4.7350	2.4668	2.4625	223.6068

S02 06/04/2019 15:48:46

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	15:49:30	138697.1900	3543.2531	13941.6520	6937.8869	955.0547	980.0576	15975.2980	22274.7300	320.0061
2	15:50:16	139019.1500	3415.6999	14131.9730	7093.0174	790.0375	1120.0753	16553.9260	23274.9580	307.5057
3	15:51:01	140149.5200	3574.0996	14192.0750	7478.3540	900.0486	1115.0746	16110.5580	23194.7350	397.5095
4	15:51:45	141810.6000	3368.1805	14289.7410	6857.8206	825.0408	1000.0600	16263.3540	23478.0270	295.0052
5	15:52:31	142914.2200	3364.8459	13984.2240	6777.7552	915.0502	915.0502	15962.7740	23282.4790	307.5057
x		140518.1400	3453.2158	14107.9330	7028.9668	877.0464	1026.0635	16173.1820	23100.9860	325.5064
%RSD		1.2884	2.8656	1.0251	3.9397	7.7192	8.7004	1.5160	2.0497	12.6603

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	15:49:30	233190.1400	17.5000	21412.4740	20690.6540	2857.9900	27946.7830	76237.1380	677.5275	27199.3160
2	15:50:16	236735.5300	25.0000	21394.9290	21036.5190	2795.4688	27901.6320	78273.3850	677.5275	27665.8480
3	15:51:01	241252.3300	17.5000	21407.4610	21111.7080	2898.0038	28629.0930	79287.9080	592.5211	28440.9510
4	15:51:45	237933.9400	20.0000	21282.1410	20758.3220	2985.5347	28338.1010	78457.6050	572.5197	28004.4760
5	15:52:31	237978.9500	12.5000	20307.2130	20131.7880	3020.5473	26883.2930	78432.3690	635.0242	26471.9790
x		237418.1800	18.5000	21160.8440	20745.7980	2911.5089	27939.7800	78137.6810	631.0240	27556.5140
%RSD		1.2212	24.5485	2.2692	1.8647	3.1610	2.3684	1.4511	7.6192	2.7510

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	15:49:30	6087.2224	14848.2160	6942.8910	4573.7548	3085.5711	1008.3943	388.3424	30.0001	472419.1900
2	15:50:16	6377.4394	15183.8200	6917.8702	4476.2019	3172.2703	1015.8953	392.5092	20.8334	473405.3600
3	15:51:01	6134.7573	15016.0170	7183.0945	4543.7384	3109.7468	1119.2418	398.3429	25.8334	477911.9900
4	15:51:45	6412.4662	14868.2520	7062.9919	4398.6606	3096.4085	974.2236	393.3426	27.5000	483455.9500
5	15:52:31	6014.6698	14540.1740	6660.1604	4193.5549	2929.6816	1031.7305	366.6747	25.0000	483167.4200
x		6205.3110	14891.2960	6953.4016	4437.1821	3078.7357	1029.8971	387.8424	25.8334	478071.9800
%RSD		2.8806	1.5990	2.8047	3.4247	2.9182	5.2611	3.1856	13.1033	1.0905

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	15:49:30	17.5000	2.5000	7.5000	7.5000	25.0000	626090.3200	24218.8920	352.5075	24246.4720
2	15:50:16	15.0000	5.0000	10.0000	5.0000	17.5000	626267.9500	24547.3510	352.5075	23892.9530
3	15:51:01	15.0000	2.5000	10.0000	2.5000	10.0000	641789.7800	25042.5710	322.5062	24509.7410
4	15:51:45	25.0000	10.0000	2.5000	5.0000	15.0000	639821.7400	24983.6450	372.5083	24867.0470
5	15:52:31	22.5000	10.0000	10.0000	2.5000	12.5000	642183.4400	23501.8440	325.0063	23269.9440
x		19.0000	6.0000	8.0000	4.5000	16.0000	635230.6400	24458.8610	345.0072	24157.2310
%RSD		23.9025	63.1906	40.7450	46.4811	35.9715	1.3084	2.5837	6.1060	2.5292

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	15:49:30	5050.2799	632029.4900	22.5000	13440.8310	2860.4909	5281.6732	2.5000	2.5000	0.0000
2	15:50:16	5375.4832	637786.7800	32.5001	13335.6620	2862.9917	5404.2518	0.0000	0.0000	0.0000
3	15:51:01	5251.6543	648964.7600	35.0001	13796.4110	2975.5311	5481.8024	7.5000	7.5000	0.0000
4	15:51:45	5146.5888	648136.3600	20.0000	13488.4070	3168.1021	5526.8321	2.5000	2.5000	2.5000
5	15:52:31	5195.3690	654749.5300	32.5001	13017.6600	2928.0143	5399.2485	0.0000	0.0000	0.0000
x		5203.8750	644333.3800	28.5001	13415.7940	2959.0260	5418.7616	2.5000	2.5000	0.5000
%RSD		2.3274	1.4280	23.7005	2.0941	4.2707	1.7272	122.4745	122.4745	223.6068

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	15:49:30	0.0000	993006.9800	20.0000	20.0000	7.5000	7.5000	1010535.8000	21092.9110	50484.9620
2	15:50:16	0.0000	997088.9800	45.0001	45.0001	10.0000	10.0000	1013731.3000	21341.0410	51764.0230
3	15:51:01	0.0000	1018242.2000	32.5001	32.5001	12.5000	12.5000	1036650.5000	21923.8010	52483.5020
4	15:51:45	2.5000	1026456.8000	25.0000	25.0000	2.5000	2.5000	1042358.5000	22255.9300	53708.7720
5	15:52:31	0.0000	1033401.7000	25.0000	25.0000	5.0000	5.0000	1048279.3000	20961.3300	51752.7030
x		0.5000	1013639.3000	29.5001	29.5001	7.5000	7.5000	1030311.1000	21515.0030	52038.7920
%RSD		223.6068	1.7618	33.0400	33.0400	52.7046	52.7046	1.6629	2.5785	2.2652

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	15:49:30	16831.9820	15391.7010	37165.1910	713361.0700	2.5000
2	15:50:16	17135.0990	15306.5450	37958.7560	722266.2800	0.0000
3	15:51:01	17713.8070	15509.4190	38875.4670	739170.1900	0.0000
4	15:51:45	17498.3520	15895.1450	39139.1970	748114.1700	0.0000
5	15:52:31	16749.3150	14760.5610	36868.8790	758001.8300	0.0000
x		17185.7110	15372.6740	38001.4980	736182.7100	0.5000
%RSD		2.4250	2.6645	2.6453	2.4879	223.6068

S03 06/04/2019 15:53:32

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	15:54:17	139989.3600	16414.4840	52215.5770	32372.7580	4005.9626	4856.4147	72700.7470	41141.3060	1077.5697
2	15:55:02	138796.3200	16208.2470	51750.1880	31991.2890	4301.1097	5201.6229	70761.6630	42385.0160	1120.0753
3	15:55:47	137527.2000	16214.9270	51403.0490	32151.9050	4346.1330	5166.6011	71553.3800	41960.3750	1105.0733
4	15:56:31	136305.7100	15783.2660	51050.8940	32463.1080	4211.0637	4906.4440	70196.9160	41493.0440	1092.5716
5	15:57:17	136898.6500	15289.8470	48933.2470	29973.8090	4201.0587	4506.2180	68081.9780	40473.0460	1055.0668
X		137903.4500	15982.1540	51070.5910	31790.5740	4213.0655	4927.4601	70658.9370	41490.5570	1090.0713
%RSD		1.0787	2.8175	2.4868	3.2472	3.1061	5.6977	2.4342	1.7785	2.2995

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	15:54:17	230783.2600	32.5001	99072.9470	97304.7960	7195.6053	135502.7800	129978.3200	2000.2400	132588.9700
2	15:55:02	229429.1300	27.5000	98556.8810	96809.0720	7360.7494	135591.7000	128932.2500	1930.2235	132096.2300
3	15:55:47	231447.5600	22.5000	98756.7260	96417.0670	7220.6269	134682.1300	128409.2700	1902.7172	131354.6500
4	15:56:31	231429.5700	35.0001	97259.2690	94737.9730	6875.3350	131684.8000	127477.6300	1860.2076	131847.3400
5	15:57:17	228472.1200	32.5001	93587.5840	90003.4260	7220.6269	126535.9400	124358.5300	1962.7311	124761.9900
X		230312.3300	30.0001	97446.6820	95054.4670	7174.5887	132799.4700	127831.2000	1931.2239	130529.8400
%RSD		0.5713	16.6667	2.3244	3.1391	2.5020	2.8950	1.6751	2.7900	2.4936

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	15:54:17	29742.9840	71755.1030	33012.7610	20856.0660	15006.8330	4325.2889	1886.8803	19.1667	470301.8200
2	15:55:02	29690.2970	70126.3260	33482.1280	20510.2090	14868.2520	4455.3574	1748.5168	28.3334	471697.4800
3	15:55:47	29374.1790	71543.2940	32736.6750	20983.8860	14827.3460	4282.7669	1795.1933	20.8334	473370.9900
4	15:56:31	29002.8820	69826.3220	32244.7630	20600.4310	14530.9910	4324.4551	1765.1869	20.8334	470674.5000
5	15:57:17	27951.8000	67719.0390	31544.5910	19800.9970	14203.7610	4214.3987	1645.9959	30.8334	471401.4100
X		29152.4280	70194.0170	32604.1840	20550.3180	14687.4370	4320.4534	1768.3546	24.0000	471489.2400
%RSD		2.5155	2.3107	2.2783	2.2393	2.1870	2.0345	4.9091	21.7396	0.2524

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	15:54:17	80.0004	10.0000	12.5000	2.5000	12.5000	632624.7100	119698.5300	1687.6709	118331.7200
2	15:55:02	60.0002	7.5000	22.5000	7.5000	10.0000	627463.0200	120695.2600	1610.1555	118914.9400
3	15:55:47	85.0004	5.0000	17.5000	7.5000	15.0000	631224.2600	120752.3200	1662.6659	120062.4600
4	15:56:31	60.0002	7.5000	15.0000	2.5000	10.0000	627742.9700	121633.7500	1625.1585	119559.0500
5	15:57:17	60.0002	10.0000	17.5000	0.0000	10.0000	625724.3000	114090.6900	1545.1432	113020.0000
X		69.0003	8.0000	17.0000	4.0000	11.5000	628955.8500	119374.1100	1626.1588	117977.6300
%RSD		18.0434	26.1456	21.8124	83.8526	19.4441	0.4549	2.5399	3.3594	2.4135

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	15:54:17	25941.5650	650057.7100	130.0010	66877.2820	14833.1900	27297.1350	5.0000	5.0000	2.5000
2	15:55:02	25911.4720	653788.2800	132.5011	66884.8420	15133.7290	26800.5270	2.5000	2.5000	0.0000
3	15:55:47	25802.3840	655243.7000	137.5011	66569.8350	14880.7740	27093.9740	10.0000	10.0000	2.5000
4	15:56:31	25567.9130	656429.2700	152.5014	66433.7550	14715.4810	26642.5210	2.5000	2.5000	0.0000
5	15:57:17	24343.0030	653539.8900	130.0010	62969.5140	14214.6130	25120.3050	2.5000	2.5000	0.0000
X		25513.2670	653811.7700	136.5011	65947.0460	14755.5580	26590.8920	4.5000	4.5000	1.0000
%RSD		2.6279	0.3673	6.9259	2.5414	2.2956	3.2357	72.4356	72.4356	136.9306

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	15:54:17	2.5000	1039576.0000	52.5002	52.5002	5.0000	5.0000	1057386.9000	109559.2400	265765.1000
2	15:55:02	0.0000	1042177.9000	32.5001	32.5001	5.0000	5.0000	1060367.4000	110681.4200	269553.9200
3	15:55:47	2.5000	1052985.9000	25.0000	25.0000	0.0000	0.0000	1070736.1000	111708.7500	270609.8300
4	15:56:31	0.0000	1049530.6000	40.0001	40.0001	5.0000	5.0000	1072324.7000	111265.3700	272213.3100
5	15:57:17	0.0000	1046404.1000	30.0001	30.0001	12.5000	12.5000	1062211.6000	105822.6700	254614.9500
X		1.0000	1046134.9000	36.0001	36.0001	5.5000	5.5000	1064605.3000	109807.4900	266551.4200
%RSD		136.9306	0.5175	29.7074	29.7074	81.3116	81.3116	0.6177	2.1572	2.6570

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	15:54:17	89647.1170	79275.2890	193487.9800	768799.4400	0.0000
2	15:55:02	89437.3810	80216.7340	194915.6800	772993.3100	0.0000
3	15:55:47	89457.5960	80345.4650	197021.8500	780913.1000	0.0000
4	15:56:31	89740.6150	80847.7890	195772.9200	786391.6100	0.0000
5	15:57:17	85036.6720	76867.8930	185461.0400	775381.9100	2.5000
X		88663.8760	79510.6340	193331.8900	776895.8700	0.5000
%RSD		2.2915	1.9909	2.3711	0.8857	223.6068

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	15:59:02	133790.4400	61478.4420	170534.7500	122356.7200	15985.3170	18375.2370	249572.0400	103397.5100	3585.7713
2	15:59:47	134743.1100	61258.4980	170657.2200	121128.9800	15905.1640	18856.3100	253312.3900	102769.8100	3628.2897
3	16:00:32	133101.2000	61673.2070	172711.4000	123209.1500	15594.5780	18495.5020	251429.1300	101504.4500	3583.2702
4	16:01:17	135311.3700	61430.5920	170968.5100	118983.4000	15890.1350	18199.8520	249559.1600	104045.5000	3658.3028
5	16:02:01	135791.5900	59438.7240	163092.9900	114501.2700	15143.7470	16957.2350	241702.6000	99996.3780	3340.6695
X		134547.5400	61055.8930	169592.9700	120035.9000	15703.7880	18176.8270	249115.0600	102342.7300	3559.2607
%RSD		0.8171	1.5003	2.2040	2.8976	2.2062	3.9772	1.7763	1.5757	3.5437

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	15:59:02	225405.2700	37.5001	377744.2000	368694.6200	21891.2160	513064.9500	310376.8600	6642.6464	507979.6700
2	15:59:47	222696.3900	52.5002	376484.0500	371251.9900	21846.0980	518833.6900	310685.5500	6527.5555	515814.6500
3	16:00:32	224474.4000	25.0000	382415.1700	369185.6600	22064.1710	527953.0600	314403.6700	6562.5830	514472.9000
4	16:01:17	225342.3600	35.0001	378981.0000	367394.0300	21826.0450	521906.9700	314151.9400	6627.6345	509588.5800
5	16:02:01	224741.4500	47.5001	361843.9300	356855.5900	21121.7340	499669.1200	300489.1800	6244.8390	490359.8300
X		224531.9700	39.5001	375493.6700	366676.3800	21749.8530	516285.5600	310021.4400	6521.0517	507643.1200
%RSD		0.4897	27.3694	2.1156	1.5444	1.6710	2.0787	1.8225	2.4751	2.0090

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	15:59:02	112142.0100	272031.2500	125810.0800	79492.3420	56030.2320	15951.0850	6640.1444	16.6667	452658.9400
2	15:59:47	111062.7000	273637.5800	126096.8600	79391.3870	55758.4180	16037.9180	6565.0850	30.0001	451036.9400
3	16:00:32	113528.0900	274776.6600	128942.4100	79873.4600	56265.1400	16078.8300	6702.6945	25.0000	451445.7100
4	16:01:17	113490.0700	270260.0000	126317.6700	78414.7040	56147.6850	16208.2470	6635.9745	29.1667	450016.4300
5	16:02:01	107488.7900	264502.1000	121555.1200	75679.5910	53625.3200	15180.4810	6195.6356	24.1667	448202.4800
X		111542.3300	271041.5200	125744.4300	78570.2970	55565.3590	15891.3120	6547.9068	25.0000	450672.1000
%RSD		2.2304	1.4878	2.1129	2.1677	1.9809	2.5676	3.0981	21.2132	0.3714

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	15:59:02	95.0005	97.5006	127.5010	80.0004	165.0016	598030.1100	456074.0400	6432.4817	448545.2000
2	15:59:47	120.0009	105.0007	125.0009	72.5003	132.5011	599929.6100	459169.7900	6467.5087	449696.0600
3	16:00:32	140.0012	115.0008	137.5011	70.0003	182.5020	597431.9000	462306.2700	6369.9336	450144.3100
4	16:01:17	97.5006	107.5007	135.0011	47.5001	145.0013	597670.6400	461475.8400	6352.4203	452966.2300
5	16:02:01	87.5005	92.5005	110.0007	60.0002	152.5014	598051.5700	435230.0200	5974.6410	427067.2800
X		108.0007	103.5007	127.0010	66.0003	155.5015	598222.7700	454851.1900	6319.3971	445683.8200
%RSD		20.0069	8.4714	8.5126	19.0528	12.3178	0.1653	2.4693	3.1373	2.3634

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	15:59:02	97298.4730	616893.4700	1182.5839	263957.7500	55053.7560	99447.3670	20.0000	20.0000	5.0000
2	15:59:47	98508.8180	617070.9100	1190.0850	264618.2000	54837.3360	99705.4230	7.5000	7.5000	10.0000
3	16:00:32	97762.6080	612708.5000	1237.5919	263294.7600	55255.0820	99244.9760	15.0000	15.0000	0.0000
4	16:01:17	95309.4340	615761.6900	1130.0766	256015.6500	54495.1020	97980.1400	20.0000	20.0000	2.5000
5	16:02:01	91752.3440	607706.4000	1010.0612	247501.6400	51440.7810	92662.3300	20.0000	20.0000	7.5000
X		96126.3350	614028.1900	1150.0797	259077.6000	54216.4120	97808.0470	16.5000	16.5000	5.0000
%RSD		2.8264	0.6421	7.5703	2.8343	2.9087	3.0183	33.1953	33.1953	79.0570

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	15:59:02	5.0000	987849.6300	17.5000	17.5000	5.0000	5.0000	1001260.0000	404973.0100	992640.7000
2	15:59:47	10.0000	973793.0700	45.0001	45.0001	5.0000	5.0000	991617.7400	403495.1000	980598.5300
3	16:00:32	0.0000	963380.7200	35.0001	35.0001	12.5000	12.5000	979925.8700	397409.1000	972625.2700
4	16:01:17	2.5000	963022.6600	15.0000	15.0000	2.5000	2.5000	976961.2000	395649.5200	966794.1700
5	16:02:01	7.5000	963363.9300	35.0001	35.0001	5.0000	5.0000	980892.8300	379523.6300	927301.5300
X		5.0000	970282.0000	29.5001	29.5001	6.0000	6.0000	986131.5200	396210.0700	967992.0400
%RSD		79.0570	1.1161	43.3780	43.3780	63.1907	63.1907	1.0254	2.5554	2.5542

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	15:59:02	329029.8900	293411.0400	722221.3800	717933.5700	0.0000
2	15:59:47	324660.9400	289893.5900	709856.1500	705114.0700	0.0000
3	16:00:32	321772.0700	288121.1900	705468.5100	693843.1600	0.0000
4	16:01:17	316137.4500	283100.9500	696151.7900	696949.5100	0.0000
5	16:02:01	302849.8700	272638.1100	667387.9700	701016.5700	0.0000
X		318890.0400	285432.9800	700217.1600	702971.3800	0.0000
%RSD		3.1721	2.8241	2.9433	1.3342	0.0000

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:03:46	128944.1000	151989.3500	415955.8800	298869.9800	39001.0520	44996.1520	615987.5000	229905.7500	8757.0988
2	16:04:31	126150.1600	149464.2900	409311.1900	291055.5600	38337.9860	44523.6240	591468.2100	225068.8600	8349.1804
3	16:05:15	124499.7800	148258.8800	401635.9400	289389.0000	38051.6780	43553.5180	595181.6200	221918.5400	8341.6729
4	16:06:01	125294.0500	145922.3400	397926.6900	283962.0200	37459.0020	44287.3700	589935.0500	219067.0700	8056.3924
5	16:06:45	125935.2800	135936.4200	367730.9100	259735.6400	33271.2860	40337.3910	539706.2800	201207.5900	7623.4855
x		126164.6800	146314.2600	398512.1200	284602.4400	37224.2010	43539.6110	586455.7300	219433.5600	8225.5660
%RSD		1.3327	4.2375	4.6583	5.2320	6.1206	4.2820	4.8010	4.9917	5.0945

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:03:46	210874.7500	42.5001	936151.3100	908966.9500	51566.5540	1288956.0000	682279.4000	15812.4880	1253585.2000
2	16:04:31	206953.2600	22.5000	915766.9900	884372.2800	50583.0540	1249785.4000	660170.7000	15614.6150	1242236.8000
3	16:05:15	205190.4600	37.5001	908327.5500	884566.3500	49428.6580	1252637.3000	665898.0700	15609.6060	1234861.8000
4	16:06:01	204082.5000	17.5000	894003.1600	871639.8000	48623.9450	1235790.5000	640635.8600	15131.2250	1209988.6000
5	16:06:45	204360.4400	45.0001	817891.8000	803368.2900	45370.6750	1135628.0000	596058.6000	13979.2150	1129084.3000
x		206292.2800	33.0001	894428.1600	870582.7400	49114.5770	1232559.4000	649008.5300	15229.4300	1213951.3000
%RSD		1.3552	37.2679	5.0767	4.5867	4.8316	4.6759	5.1048	4.8758	4.1242

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:03:46	273374.1400	667955.8800	311746.5900	192674.4500	136204.9200	M 38233.3400	M 15930.2120	17.5000	429665.8800
2	16:04:31	266728.9200	647823.3800	300590.2300	188579.8700	134536.4700	M 37871.6940	M 16000.3460	15.8333	420692.4900
3	16:05:15	264197.6700	647089.5200	299639.3900	186373.5600	132759.9900	M 37546.8960	M 15569.5310	16.6667	413645.0100
4	16:06:01	262360.9900	641439.2700	295515.9900	185425.2500	129752.3400	M 36807.7760	M 15458.4910	26.6667	413545.2400
5	16:06:45	243722.6800	585026.4800	270667.9200	170060.2000	118906.4800	34073.6860	14284.7330	22.5000	405976.3500
x		262076.8800	637866.9000	295632.0200	184622.6700	130432.0400	M 36906.6780	M 15448.6630	19.8334	416705.0000
%RSD		4.2263	4.8917	5.1398	4.6615	5.2686	M 4.5211	M 4.4679	23.2805	2.1408

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:03:46	142.5012	120.0009	145.0013	55.0002	175.0018	566777.8300	M 1134250.4000	15594.5780	M 1111665.3000
2	16:04:31	112.5008	115.0008	160.0015	62.5002	175.0018	562170.9400	M 1113538.7000	15311.5540	M 1101844.0000
3	16:05:15	125.0009	115.0008	127.5010	25.0000	132.5011	554165.5200	M 1109617.4000	15291.5170	M 1095298.2000
4	16:06:01	140.0012	117.5008	185.0021	55.0002	182.5020	548231.6800	M 1100542.7000	14407.4440	M 1086466.4000
5	16:06:45	105.0007	75.0003	155.0014	57.5002	170.0017	537479.0200	989134.4800	13473.3830	979159.3900
x		125.0010	108.5007	154.5015	51.0002	167.0017	553765.0000	M 1089416.7000	14815.6950	M 1074886.7000
%RSD		13.1910	17.3655	13.6539	29.1245	11.8539	2.0904	M 5.2691	5.8913	M 5.0517

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:03:46	239803.9100	594406.6400	1152.5797	658482.1300	135652.6900	244659.5400	57.5002	57.5002	7.5000
2	16:04:31	237072.4000	586073.8700	1107.5736	650357.2900	135398.6000	241972.7800	45.0001	45.0001	12.5000
3	16:05:15	234313.5000	572269.7700	1122.5756	644580.8400	132558.4900	238661.8200	37.5001	37.5001	17.5000
4	16:06:01	229242.8600	559312.9100	957.5550	627621.8400	129376.5600	232997.3600	52.5002	52.5002	2.5000
5	16:06:45	209578.9200	558543.8100	977.5573	573061.4900	118455.9700	212464.3700	45.0001	45.0001	12.5000
x		230002.3200	574121.4000	1063.5682	630820.7200	130288.4600	234151.1700	47.5001	47.5001	10.5000
%RSD		5.2460	2.7811	8.4068	5.4238	5.4392	5.5008	16.2222	16.2222	54.2941

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:03:46	7.5000	941641.2400	7.5000	7.5000	5.0000	5.0000	959814.8000	1030567.0000	2548031.9000
2	16:04:31	12.5000	941839.3700	15.0000	15.0000	5.0000	5.0000	965174.0100	1036238.7000	2572059.4000
3	16:05:15	17.5000	928103.9100	30.0001	30.0001	15.0000	15.0000	941292.4400	1020859.0000	2534867.5000
4	16:06:01	2.5000	910376.5900	17.5000	17.5000	2.5000	2.5000	927357.2500	988424.7000	2440480.4000
5	16:06:45	12.5000	885367.6100	25.0000	25.0000	0.0000	0.0000	903897.4700	897188.5100	2206849.6000
x		10.5000	921465.7500	19.0000	19.0000	5.5000	5.5000	939507.1900	994655.5700	2460457.8000
%RSD		54.2941	2.5979	46.1466	46.1466	103.6524	103.6524	2.6557	5.7851	6.1092

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:03:46	825340.2300	740991.8000	1837869.6000	696518.0800	0.0000
2	16:04:31	833801.0300	745596.6000	1859661.7000	701981.7100	2.5000
3	16:05:15	818172.4500	733427.0000	1820578.6000	685312.5100	0.0000
4	16:06:01	780950.0900	701989.8600	1746471.4000	666380.7100	0.0000
5	16:06:45	712231.5700	634178.9300	1566046.0000	644793.9100	2.5000
x		794099.0700	711236.8400	1766125.5000	678997.3900	1.0000
%RSD		6.2986	6.5125	6.7756	3.4572	136.9306

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:08:31	115680.7200	679193.6400	┬1796545.7000	┬1297922.9000	168843.3300	195726.8600	┬2658172.9000	922338.4000	36863.8570
2	16:09:16	115623.2600	672533.8400	┬1790920.4000	┬1287745.0000	169052.5100	197656.6100	┬2692690.3000	┬937019.1400	36858.8350
3	16:10:01	113130.2300	659851.8700	┬1792486.0000	1286591.5000	165655.3000	195025.7100	┬2628311.4000	945786.0700	36482.1830
4	16:10:46	112285.5900	657949.9600	┬1788648.1000	┬1270752.0000	164747.5700	188063.3900	┬2600201.9000	948966.4900	37521.7830
5	16:11:30	111620.0700	627900.8900	┬1687683.0000	┬1209386.9000	158003.8500	181653.5300	┬2475642.5000	┬901805.7100	35400.0300
x		113667.9700	659486.0400	┬1771256.6000	┬1270479.6000	165260.5100	191625.2200	┬2611003.8000	┬931183.1600	36625.3370
%RSD		1.6616	2.9933	┬2.6426	┬2.7948	2.7111	3.4703	┬3.1835	┬2.0829	2.1311

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:08:31	191368.6200	55.0002	┬4135693.9000	┬4037291.7000	219549.5200	┬5693849.1000	┬2775420.8000	67542.6160	┬5577204.4000
2	16:09:16	190087.2900	62.5002	┬4152910.6000	┬4086870.2000	218997.7800	┬5646801.8000	┬2804578.4000	67877.8230	┬5579246.8000
3	16:10:01	188554.3000	67.5003	┬4097627.0000	┬3995346.1000	217904.6800	┬5627797.1000	┬2787521.2000	68875.9620	┬5524044.7000
4	16:10:46	186126.8900	75.0003	┬4025347.4000	┬3945661.6000	213923.5000	┬5540827.0000	┬2750199.5000	67053.6910	┬5460345.5000
5	16:11:30	186287.9300	42.5001	┬3833518.6000	┬3759556.6000	207898.8700	┬5283069.2000	┬2637068.0000	63153.3980	┬5165857.2000
x		188485.0100	60.5002	┬4049019.5000	┬3964945.2000	215654.8700	┬5558468.8000	┬2750957.6000	66900.6980	┬5461339.7000
%RSD		1.2236	20.5369	┬3.2123	┬3.1798	2.2546	┬2.9437	┬2.4237	3.2863	┬3.1525

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:08:31	1213817.6000	┬2961609.9000	1368533.5000	835182.1000	583595.3400	122.5009	26.6667	22.5000	378460.6300
2	16:09:16	1221206.9000	┬2914150.4000	1352260.1000	826786.0600	577492.2200	120.8342	28.3334	20.0000	373650.7100
3	16:10:01	1214597.4000	┬2884056.7000	1340421.5000	826758.5200	571905.1300	115.8341	27.5000	25.0000	370152.1500
4	16:10:46	1185241.8000	┬2850408.0000	1321239.6000	815701.9700	564955.0900	125.8343	18.3334	15.8333	372174.2900
5	16:11:30	1130911.5000	┬2728398.6000	1265732.4000	774574.2300	535395.2600	120.0009	21.6667	22.5000	369893.5400
x		1193155.0000	┬2867724.7000	1329637.4000	815800.5700	566668.6100	121.0009	24.5000	21.1667	372866.2600
%RSD		3.1389	┬3.0673	2.9836	2.9496	3.3156	3.0178	17.6084	16.3753	0.9348

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:08:31	135.0011	192.5022	257.5040	132.5011	345.0071	507119.5800	241.2535	65720.6340	236.2534
2	16:09:16	137.5011	167.5017	190.0022	92.5005	347.5073	506763.8900	280.0047	65171.3460	268.7543
3	16:10:01	150.0014	202.5025	187.5021	87.5005	320.0061	500053.6900	366.2581	64954.6640	341.2570
4	16:10:46	147.5013	167.5017	190.0022	107.5007	300.0054	499833.5500	543.7677	63919.2030	565.0192
5	16:11:30	142.5012	222.5030	187.5021	122.5009	342.5070	495641.4500	285.0049	61463.3320	275.0045
x		142.5012	190.5022	202.5025	108.5007	331.0066	501882.4300	343.2578	64245.8360	337.2577
%RSD		4.4729	12.3946	15.1959	17.6686	6.1962	0.9850	35.2410	2.6258	39.4093

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:08:31	1027478.2000	516425.8200	990.0588	┬2964905.5000	575346.1400	1050160.5000	215.0028	215.0028	27.5000
2	16:09:16	1017279.6000	512536.3700	855.0439	┬2946160.6000	572136.0400	1036077.9000	185.0021	185.0021	40.0001
3	16:10:01	1019189.5000	508707.0900	992.5591	┬2935207.2000	568772.0600	1036001.8000	175.0018	175.0018	22.5000
4	16:10:46	1002907.8000	514983.0100	1002.5603	┬2911064.7000	565927.8800	1029897.6000	227.5031	227.5031	27.5000
5	16:11:30	967454.6200	515636.6300	977.5573	┬2799701.7000	538981.5600	988357.3800	137.5011	137.5011	17.5000
x		1006861.9000	513657.7800	963.5559	┬2911407.9000	564232.7400	1028099.0000	188.0022	188.0022	27.0000
%RSD		2.3577	0.6087	6.3629	┬2.2467	2.5791	2.2788	18.8391	18.8391	30.9875

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:08:31	27.5000	826940.2900	25.0000	25.0000	0.0000	0.0000	836508.2300	┬4356831.0000	┬10685211.0000
2	16:09:16	40.0001	819339.1500	27.5000	27.5000	5.0000	5.0000	840427.1600	┬4398570.1000	┬10745395.0000
3	16:10:01	22.5000	820112.4500	45.0001	45.0001	10.0000	10.0000	841795.4800	┬4445738.4000	┬10908443.0000
4	16:10:46	27.5000	824822.5400	32.5001	32.5001	10.0000	10.0000	847941.7400	┬4506989.7000	┬11059550.0000
5	16:11:30	17.5000	837506.4200	37.5001	37.5001	5.0000	5.0000	853824.3400	┬4310707.8000	┬10574779.0000
x		27.0000	825744.1700	33.5001	33.5001	6.0000	6.0000	844099.3900	┬4403767.4000	┬10794676.0000
%RSD		30.9875	0.8845	23.9505	23.9505	69.7217	69.7217	0.8073	┬1.7333	┬1.7690

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:08:31	┬3547443.0000	┬3066006.0000	┬7716515.9000	596427.3800	10.0000
2	16:09:16	┬3567187.6000	┬3081194.6000	┬7728632.7000	595400.1900	0.0000
3	16:10:01	┬3626345.2000	┬3128464.9000	┬7860425.7000	602797.1100	2.5000
4	16:10:46	┬3625861.2000	┬3149861.2000	┬7906706.4000	609907.5600	2.5000
5	16:11:30	┬3502323.2000	┬3035628.9000	┬7615027.8000	620498.1500	2.5000
x		┬3573832.0000	┬3092231.1000	┬7765461.7000	605006.0800	3.5000
%RSD		┬1.4885	┬1.5036	┬1.5148	1.7232	108.3268

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:13:17	110020.6800	TM 1238168.9000	TM 3446555.6000	TM 2471389.4000	M 322309.7600	M 378332.5100	TM 5051254.5000	T 1821081.0000	M 72609.9600
2	16:14:04	107891.4400	TM 1244834.7000	TM 3409270.5000	TM 2464009.0000	M 321733.1100	M 377187.3100	TM 5059793.1000	TM 1842131.6000	M 72963.0240
3	16:14:49	106525.7100	T 1215912.0000	TM 3437411.0000	TM 2465735.0000	M 324429.6900	M 374740.5400	TM 5012886.0000	TM 1834711.5000	M 73015.9850
4	16:15:34	106327.3600	T 1195885.4000	TM 3434376.6000	TM 2434516.8000	M 316212.7200	M 368673.7300	T 4888815.8000	TM 1823549.0000	M 72625.0910
5	16:16:18	106961.2300	T 1171419.1000	T 3242796.6000	T 2331428.2000	302979.4600	357158.1400	T 4812426.1000	T 1768301.2000	69422.9730
X		107545.2800	TM 1213244.0000	TM 3394082.1000	TM 2433415.7000	M 317532.9500	M 371218.4400	TM 4965035.1000	TM 1817954.9000	M 72127.4070
%RSD		1.4034	TM 2.4990	TM 2.5247	TM 2.4160	M 2.7345	M 2.3438	TM 2.2018	TM 1.5971	M 2.1120

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:13:17	181811.9300	17.5000	TM 7919973.4000	TM 7739725.3000	M 422045.9200	TM 10876355.0000	TM 5384424.7000	M 132888.6800	TM 10568419.0000
2	16:14:04	181387.8400	30.0001	TM 7921229.8000	TM 7797042.7000	M 425344.9600	TM 10757972.0000	TM 5294601.0000	M 132195.2800	TM 10563139.0000
3	16:14:49	180719.8100	20.0000	TM 7871413.5000	TM 7683326.6000	M 424866.4600	TM 10817501.0000	TM 5354793.2000	M 130097.6600	TM 10425375.0000
4	16:15:34	179993.0800	20.0000	T 7727380.6000	T 7538160.2000	M 421391.5100	T 10582975.0000	T 5193879.7000	126845.6000	T 10314662.0000
5	16:16:18	180917.7900	15.0000	T 7564569.0000	T 7336701.1000	410095.8900	T 10293640.0000	T 5159309.8000	128112.2500	T 10091889.0000
X		180966.0900	20.5000	TM 7800913.3000	TM 7618991.2000	M 420748.9500	TM 10665688.0000	TM 5277401.7000	M 130027.9000	TM 10392697.0000
%RSD		0.3812	27.8092	TM 1.9744	TM 2.4258	M 1.4731	TM 2.2049	TM 1.8629	M 1.9863	TM 1.9098

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:13:17	T 2160361.2000	TM 5469034.9000	T 2386961.7000	M 1547607.7000	M 1082207.4000	104.1673	33.3334	30.0001	359038.9300
2	16:14:04	T 2163011.8000	T 5391481.7000	T 2378672.2000	M 1536083.7000	M 1076095.9000	120.0009	32.5001	10.8333	355395.1200
3	16:14:49	T 2141844.7000	TM 5464969.3000	T 2364208.8000	M 1544288.0000	M 1078038.8000	118.3342	39.1668	30.0001	355366.4300
4	16:15:34	T 2130810.0000	T 5339629.7000	T 2313567.6000	1509867.4000	1060161.8000	92.5005	39.1668	20.8334	353848.8600
5	16:16:18	T 2065616.8000	T 5221971.9000	T 2271677.6000	1479401.8000	1026850.3000	110.8341	35.8334	14.1667	353316.9900
X		T 2132328.9000	TM 5377417.5000	T 2343017.6000	M 1523449.7000	M 1064670.9000	109.1674	36.0001	21.1667	355393.2700
%RSD		T 1.8568	TM 1.9021	T 2.0918	M 1.8860	M 2.1354	10.3125	8.7229	41.7212	0.6290

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:13:17	55.0002	60.0002	50.0001	32.5001	150.0014	480184.7100	308.7557	123561.8100	323.7563
2	16:14:04	55.0002	72.5003	40.0001	32.5001	145.0013	476078.9000	343.7571	122336.4300	350.0074
3	16:14:49	47.5001	62.5002	57.5002	42.5001	80.0004	478885.5600	403.7598	123645.5400	383.7588
4	16:15:34	35.0001	52.5002	55.0002	25.0000	117.5008	479883.0600	528.7668	120299.6000	553.7684
5	16:16:18	42.5001	47.5001	82.5004	27.5000	160.0015	476277.2700	327.5064	118681.6400	262.5041
X		47.0001	59.0002	57.0002	32.0001	130.5011	478261.9000	382.5092	121705.0000	374.7590
%RSD		18.1943	16.3012	27.6352	20.9632	24.7714	0.4105	23.3134	1.7779	29.2125

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:13:17	1980635.8000	497815.4700	40.0001	TM 5737009.3000	M 1127223.4000	M 2069391.0000	367.5081	367.5081	50.0001
2	16:14:04	1967624.6000	497958.6500	52.5002	TM 5714018.5000	M 1124798.7000	M 2070282.0000	337.5068	337.5068	57.5002
3	16:14:49	1959481.0000	493467.9900	45.0001	TM 5711308.4000	M 1124667.6000	M 2072399.2000	362.5079	362.5079	77.5004
4	16:15:34	1932570.5000	500321.5700	57.5002	T 5633212.1000	1104023.7000	2044852.9000	367.5081	367.5081	75.0003
5	16:16:18	1884314.0000	502040.4700	47.5001	T 5474422.2000	1086655.1000	1976166.4000	290.0051	290.0051	52.5002
X		1944925.2000	498320.8300	48.5001	TM 5653994.1000	M 1113473.7000	M 2046618.3000	345.0072	345.0072	62.5002
%RSD		1.9627	0.6485	13.9271	TM 1.9061	M 1.5883	M 2.0012	9.6136	9.6136	20.5913

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:13:17	50.0001	815845.0100	30.0001	30.0001	7.5000	7.5000	834498.4300	TM 8961024.9000	T 21952236.0000
2	16:14:04	57.5002	820013.3800	32.5001	32.5001	5.0000	5.0000	836513.7500	TM 8988222.2000	T 22029407.0000
3	16:14:49	77.5004	817919.3200	25.0000	25.0000	5.0000	5.0000	836177.3700	TM 9046453.0000	T 22213207.0000
4	16:15:34	75.0003	820060.1600	15.0000	15.0000	0.0000	0.0000	845846.5100	TM 9060230.0000	T 22191524.0000
5	16:16:18	52.5002	826152.6200	42.5001	42.5001	15.0000	15.0000	845363.4900	T 8711967.0000	T 21390993.0000
X		62.5002	819998.1000	29.0001	29.0001	6.5000	6.5000	839679.9100	TM 8953579.4000	T 21955473.0000
%RSD		20.5913	0.4702	34.8046	34.8046	84.2650	84.2650	0.6509	TM 1.5759	T 1.5213

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:13:17	T 7274549.7000	T 6321296.9000	T 15918811.0000	602911.1800	5.0000
2	16:14:04	T 7279263.0000	T 6340988.6000	T 15923931.0000	607821.8800	2.5000
3	16:14:49	T 7299924.8000	T 6359306.5000	T 16016981.0000	608047.4800	5.0000
4	16:15:34	T 7291364.5000	T 6308627.0000	T 15866305.0000	612869.7300	5.0000
5	16:16:18	T 7096745.7000	T 6140331.5000	T 15399820.0000	616439.1300	7.5000
X		T 7248369.6000	T 6294110.1000	T 15825169.0000	609617.8800	5.0000
%RSD		T 1.1775	T 1.3997	T 1.5411	0.8515	35.3553

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:18:04	107217.8300	26103.3190	₸1422724.3000	611974.9300	79330.8140	92313.4900	531314.4300	757258.6000	30282.4220
2	16:18:49	107038.0400	26831.4600	₸1449798.0000	616554.7300	80310.1270	95721.6180	549127.9000	761759.9300	30134.3870
3	16:19:34	107549.5600	26567.2820	₸1449146.7000	618625.0300	81446.0720	94487.6550	560012.6400	767472.6000	30412.8960
4	16:20:19	108348.1400	26450.2440	₸1461575.1000	616027.8200	81708.6240	94700.0460	556605.3400	775877.5100	29765.5650
5	16:21:04	111815.1600	26426.0000	₸1413898.4000	598384.2200	79749.7840	91600.6890	547351.5600	750045.4800	29620.0470
x		108393.7500	26475.6610	₸1439428.5000	612313.3500	80509.0840	93764.7000	548882.3700	762482.8200	30043.0630
%RSD		1.8243	0.9935	₸1.3995	1.3312	1.2910	1.8485	2.0258	1.2897	1.1267

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:18:04	182978.3000	37.5001	160880.6100	154402.2700	65120.9540	218574.3800	1156565.6000	27267.0370	217814.8800
2	16:18:49	186735.2700	20.0000	161956.1400	159242.0800	67270.4270	225400.1400	1173037.2000	27703.4730	219629.0700
3	16:19:34	186829.8600	22.5000	163613.0400	158724.8500	67388.8780	222793.9400	1167021.4000	27891.5980	221818.4300
4	16:20:19	189628.2600	27.5000	162142.2100	158936.3300	66038.1290	225525.9700	1159922.7000	29053.0570	224190.6600
5	16:21:04	192292.0200	12.5000	158956.7100	155533.0100	65733.2330	221435.9600	1147972.7000	27643.2730	216142.1600
x		187692.7400	24.0000	161509.7400	157367.7100	66310.3240	222746.0800	1160903.9000	27911.6870	219919.0400
%RSD		1.8607	38.6963	1.0696	1.4201	1.4904	1.3068	0.8303	2.4260	1.4492

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:18:04	47545.2470	115783.8000	53153.9820	66398.4760	46410.5440	13546.8350	5489.3074	21.6667	359722.4800
2	16:18:49	47603.0760	116354.1700	53491.1290	67240.1850	46678.7020	13551.0090	5567.6927	20.8334	363321.1700
3	16:19:34	48940.7910	116919.5000	54225.8540	69226.3480	47184.8740	13693.7420	5636.0719	18.3334	363295.0600
4	16:20:19	49443.7470	118154.2300	55539.4630	69085.1840	47251.0810	13409.1130	5629.4008	17.5000	365897.8100
5	16:21:04	47472.3330	114937.2000	52660.8660	66292.6380	45835.7090	12999.2980	5482.6363	19.1667	370878.3900
x		48201.0390	116429.7800	53814.2590	67648.5660	46672.1820	13439.9990	5561.0218	19.5000	364622.9800
%RSD		1.9156	1.0400	2.0810	2.1063	1.2522	1.9801	1.3226	8.8617	1.1327

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:18:04	47.5001	15.0000	22.5000	20.0000	25.0000	481335.8600	186201.0200	2567.8956	184312.2200
2	16:18:49	45.0001	20.0000	55.0002	10.0000	42.5001	487989.0600	188347.2000	2612.9096	187618.5300
3	16:19:34	37.5001	17.5000	42.5001	10.0000	32.5001	483776.2600	189260.0300	2752.9547	187421.6800
4	16:20:19	50.0001	27.5000	52.5002	17.5000	45.0001	486895.2800	192271.5500	2705.4391	189276.6500
5	16:21:04	40.0001	17.5000	47.5001	5.0000	32.5001	492153.5700	183346.2500	2597.9049	179920.2900
x		44.0001	19.5000	44.0001	12.5000	35.5001	486430.0100	187885.2100	2647.4208	185709.8700
%RSD		11.7821	24.6608	29.4141	48.9898	23.0359	0.8501	1.7809	2.9544	1.9925

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:18:04	40661.4600	494586.4600	100.0006	220861.0000	23004.2080	41460.3820	2.5000	2.5000	2.5000
2	16:18:49	40351.2070	497762.4400	75.0003	222439.6600	22969.1110	40282.1240	17.5000	17.5000	2.5000
3	16:19:34	40853.6460	496556.0600	82.5004	220581.2300	22856.3020	40900.1240	5.0000	5.0000	5.0000
4	16:20:19	40074.8790	498245.0300	82.5004	217127.2800	22613.1400	40618.7520	7.5000	7.5000	2.5000
5	16:21:04	38869.1880	500064.3000	102.5006	214100.4600	21951.3740	39375.3060	7.5000	7.5000	0.0000
x		40162.0760	497442.8600	88.5005	219021.9300	22678.8270	40527.3380	8.0000	8.0000	2.5000
%RSD		1.9457	0.4091	13.6357	1.5366	1.9159	1.9134	71.2610	71.2610	70.7107

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:18:04	2.5000	813614.4400	22.5000	22.5000	12.5000	12.5000	836268.3600	363193.2700	885022.4200
2	16:18:49	2.5000	803208.9800	32.5001	32.5001	10.0000	10.0000	826295.8300	358945.0100	880561.1300
3	16:19:34	5.0000	803206.2300	17.5000	17.5000	20.0000	20.0000	820327.1200	355833.2300	873454.6300
4	16:20:19	2.5000	805967.1700	15.0000	15.0000	7.5000	7.5000	820687.6600	353573.7900	859644.5300
5	16:21:04	0.0000	806948.1300	15.0000	15.0000	20.0000	20.0000	821689.5400	341880.7300	833320.0600
x		2.5000	806588.9900	20.5000	20.5000	14.0000	14.0000	825053.7000	354685.2100	866400.5500
%RSD		70.7107	0.5287	35.9705	35.9705	41.1103	41.1103	0.8131	2.2601	2.4052

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:18:04	293354.0900	253544.2900	630419.1000	603025.2600	0.0000
2	16:18:49	289094.0200	249366.0000	622691.8100	595499.4200	0.0000
3	16:19:34	287215.7200	247174.6500	617369.3500	585238.0900	0.0000
4	16:20:19	281053.3600	240755.7800	607252.5400	583351.1800	0.0000
5	16:21:04	275510.2900	236380.6700	588418.2400	591328.8200	0.0000
x		285245.5000	245444.2800	613230.2100	591688.5500	0.0000
%RSD		2.4590	2.7940	2.6464	1.3475	0.0000

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:22:50	111557.5700	50.0001	2975.5311	105.0007	30.0001	25.0000	1545.1432	13648.6680	87.5005
2	16:23:35	111256.9300	41.6668	3215.6203	95.0005	10.0000	15.0000	1622.6580	14124.4600	75.0003
3	16:24:20	111706.2100	67.5003	3030.5510	80.0004	25.0000	15.0000	1520.1386	14560.2090	72.5003
4	16:25:04	112552.4900	50.8335	3145.5936	85.0004	10.0000	15.0000	1577.6493	14179.5530	80.0004
5	16:25:49	112160.5900	48.3335	2872.9952	95.0005	15.0000	25.0000	1425.1218	14152.0070	85.0004
x		111846.7600	51.6668	3048.0582	92.0005	18.0000	19.0000	1538.1422	14132.9790	80.0004
%RSD		0.4576	18.4958	4.4564	10.5944	50.4609	28.8275	4.8051	2.2919	7.9673

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:22:50	191930.0700	10.0000	157.5015	320.0061	1217.5889	55.0002	42550.8580	287.5050	60.0002
2	16:23:35	193690.0900	15.0000	177.5019	440.0116	1227.5904	60.0002	42593.5750	260.0041	57.5002
3	16:24:20	194726.3300	17.5000	130.0010	362.5079	1325.1053	57.5002	43392.6820	317.5061	45.0001
4	16:25:04	192714.1000	20.0000	87.5005	322.5062	1457.6275	77.5004	44101.3880	252.5038	85.0004
5	16:25:49	192891.9000	5.0000	350.0074	372.5083	1257.5949	72.5003	44101.3880	262.5041	37.5001
x		193190.5000	13.5000	180.5024	363.5080	1297.1014	64.5003	43347.9780	276.0046	57.0002
%RSD		0.5498	44.5985	55.7253	13.4125	7.6386	15.3579	1.7651	9.6629	31.8399

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:22:50	15.0000	195.0023	65.0003	105.0007	7.5000	107.5007	20.8334	23.3334	377221.2900
2	16:23:35	20.0000	157.5015	80.0004	80.0004	5.0000	103.3340	22.5000	9.1667	377234.3700
3	16:24:20	10.0000	162.5016	87.5005	77.5004	5.8333	115.8341	14.1667	9.1667	380275.5200
4	16:25:04	10.0000	157.5015	62.5002	75.0003	5.8333	115.8341	10.0000	25.8334	384557.9700
5	16:25:49	12.5000	182.5020	92.5005	70.0003	8.3333	95.8339	15.0000	18.3334	382841.5900
x		13.5000	171.0018	77.5004	81.5004	6.5000	107.6674	16.5000	17.1667	380426.1500
%RSD		30.9874	9.8942	17.2212	16.7453	21.0663	7.9387	31.0103	45.3566	0.8657

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:22:50	10.0000	0.0000	2.5000	2.5000	5.0000	503210.4700	78.7504	2.5000	66.2503
2	16:23:35	20.0000	0.0000	10.0000	0.0000	7.5000	510140.8800	91.2505	0.0000	80.0004
3	16:24:20	10.0000	2.5000	5.0000	2.5000	2.5000	506639.1400	91.2505	0.0000	113.7508
4	16:25:04	17.5000	2.5000	5.0000	0.0000	7.5000	512249.5100	187.5021	0.0000	162.5016
5	16:25:49	10.0000	0.0000	7.5000	0.0000	7.5000	514499.4700	76.2503	0.0000	55.0002
x		13.5000	1.0000	6.0000	1.0000	6.0000	509347.8900	105.0008	0.5000	95.5006
%RSD		36.0993	136.9306	47.5073	136.9306	37.2678	0.8813	44.4165	223.6068	45.5173

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:22:50	5.0000	511593.5000	7.5000	562.5190	5.0000	12.5000	0.0000	0.0000	2.5000
2	16:23:35	3.7500	519787.9900	5.0000	477.5137	5.0000	2.5000	2.5000	2.5000	0.0000
3	16:24:20	2.5000	519639.1300	2.5000	367.5081	5.0000	2.5000	0.0000	0.0000	2.5000
4	16:25:04	2.5000	528320.2700	0.0000	340.0069	0.0000	5.0000	0.0000	0.0000	0.0000
5	16:25:49	7.5000	527686.9800	17.5000	347.5073	0.0000	10.0000	0.0000	0.0000	0.0000
x		4.2500	521405.5700	6.5000	419.0110	3.0000	6.5000	0.5000	0.5000	1.0000
%RSD		49.2153	1.3193	103.9174	23.2688	91.2871	69.8689	223.6068	223.6068	136.9306

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:22:50	2.5000	821995.0800	40.0001	40.0001	2.5000	2.5000	838339.2400	105.0007	248.7537
2	16:23:35	0.0000	841640.9800	25.0000	25.0000	2.5000	2.5000	861519.0900	127.5010	298.7554
3	16:24:20	2.5000	846798.8200	25.0000	25.0000	2.5000	2.5000	872154.7300	138.7512	307.5057
4	16:25:04	0.0000	866243.2200	20.0000	20.0000	2.5000	2.5000	883116.5000	138.7512	298.7554
5	16:25:49	0.0000	864353.8200	25.0000	25.0000	7.5000	7.5000	884053.4700	110.0007	308.7557
x		1.0000	848206.3900	27.0000	27.0000	3.5000	3.5000	867836.6000	124.0009	292.5052
%RSD		136.9306	2.1402	28.0848	28.0848	63.8877	63.8877	2.1750	12.7791	8.5150

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:22:50	135.0011	125.0009	412.5102	622245.2300	0.0000
2	16:23:35	145.0013	117.5008	345.0071	635090.8600	0.0000
3	16:24:20	132.5011	115.0008	322.5062	641014.6400	0.0000
4	16:25:04	132.5011	105.0007	270.0044	654856.1900	0.0000
5	16:25:49	155.0014	132.5011	280.0047	657377.3100	0.0000
x		140.0012	119.0009	326.0065	642116.8400	0.0000
%RSD		7.0304	8.7381	17.5599	2.2577	0.0000

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:27:36	86858.6520	94.1672	TM 60897832.0000	TM 42143910.0000	TM 5440149.8000	TM 6348098.0000	TM 84159880.0000	TM 31561119.0000	TM 1331996.0000
2	16:28:21	85929.9310	94.1672	TM 61697419.0000	TM 41895830.0000	TM 5523024.3000	TM 6445675.9000	TM 84888502.0000	TM 31576556.0000	M 1326412.9000
3	16:29:05	85711.0280	80.0004	TM 60754608.0000	TM 42326785.0000	TM 5492646.9000	TM 6441825.7000	TM 84494922.0000	TM 31080745.0000	M 1314896.4000
4	16:29:50	84791.6940	95.8339	TM 60642545.0000	TM 42178402.0000	TM 5501590.2000	TM 6425763.3000	TM 83569107.0000	TM 30991510.0000	M 1279290.1000
5	16:30:35	84267.2480	105.0007	TM 59372813.0000	TM 41494933.0000	TM 5433561.5000	TM 6307310.2000	TM 83403085.0000	TM 30201990.0000	M 1278348.1000
X		85511.7110	93.8339	TM 60673043.0000	TM 42007972.0000	TM 5478194.6000	TM 6393734.6000	TM 84103099.0000	TM 31082384.0000	TM 1306188.7000
%RSD		1.1834	9.5363	TM 1.3785	TM 0.7759	TM 0.7190	TM 0.9764	TM 0.7399	TM 1.8033	TM 1.9704

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:27:36	153941.3600	181727.6200	2667.9270	26873.2610	TM 5168030.4000	14640.3490	TM 90150434.0000	TM 2299557.3000	2572.8971
2	16:28:21	153682.9100	182100.6300	2560.3933	27124.0710	TM 5185905.6000	14587.7570	TM 89286148.0000	TM 2265564.9000	2372.8378
3	16:29:05	152610.9800	181122.1500	2585.4010	26384.2020	TM 5185121.3000	14582.7480	TM 89017315.0000	TM 2280458.6000	2355.3328
4	16:29:50	153201.6700	180079.9300	2697.9367	26838.1480	TM 5100961.9000	14898.3060	TM 88725228.0000	TM 2259081.3000	2475.3676
5	16:30:35	156325.1300	179964.9800	2928.0143	26514.6140	TM 5047883.5000	14409.9480	TM 87527197.0000	TM 2227645.2000	2535.3856
X		153952.4100	180999.0600	2687.9344	26746.8590	TM 5137580.5000	14623.8220	TM 88941264.0000	TM 2266461.5000	2462.3642
%RSD		0.9224	0.5295	5.4207	1.1092	TM 1.1883	1.2057	TM 1.0715	TM 1.1784	3.9159

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:27:36	2367.8364	6757.7389	3548.2552	2945.5205	155.8348	118.3342	22.5000	70.0003	302230.4800
2	16:28:21	2387.8421	6715.2045	3440.7102	2985.5347	155.0014	125.0009	11.6667	73.3337	305963.0500
3	16:29:05	2457.8624	6650.1524	3613.2832	2985.5347	171.6684	129.1677	25.8334	60.0002	305667.5000
4	16:29:50	2355.3328	6950.3973	3285.6476	3083.0702	150.8347	107.5007	25.0000	78.3337	310942.3600
5	16:30:35	2325.3244	6860.3227	3423.2030	3208.1174	155.0014	144.1679	20.8334	61.6669	311575.3600
X		2378.8396	6786.7632	3462.2198	3041.5555	157.6682	124.8343	21.1667	68.6670	307275.7500
%RSD		2.0874	1.7560	3.6359	3.4859	5.1163	10.8610	26.7890	11.3067	1.2781

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:27:36	516837.7100	905247.9300	986545.3400	579280.1400	1534041.2000	404858.9100	48.7501	570.0195	267.5043
2	16:28:21	521053.4700	917906.8200	992181.8300	593119.6100	1544544.7000	407432.4000	52.5002	562.5190	56.2502
3	16:29:05	525223.4200	925424.0100	997774.1700	597061.7300	1562076.6000	412279.7900	43.7501	600.0216	61.2502
4	16:29:50	523005.2200	921002.0100	991179.9600	591165.3100	1544517.9000	414167.5300	52.5002	695.0290	50.0001
5	16:30:35	513915.0100	905100.6500	981501.0800	587748.3500	1525360.6000	412904.6100	38.7501	565.0192	56.2502
X		520006.9700	914936.2900	989836.4800	589675.0300	1542108.2000	410328.6500	47.2501	598.5216	98.2510
%RSD		0.8836	1.0168	0.6199	1.1389	0.8915	0.9709	12.6044	9.3575	96.3853

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:27:36	748.7836	444963.1200	162.5016	1290.0999	335.0067	572.5197	2.5000	2.5000	0.0000
2	16:28:21	857.5441	452537.6100	167.5017	1367.6122	305.0056	627.5236	7.5000	7.5000	10.0000
3	16:29:05	802.5386	458152.2700	122.5009	1345.1086	382.5088	580.0202	0.0000	0.0000	5.0000
4	16:29:50	675.0273	460844.8100	162.5016	1415.1201	335.0067	610.0223	2.5000	2.5000	10.0000
5	16:30:35	747.5335	460145.2000	150.0014	1282.5987	347.5073	562.5190	5.0000	5.0000	5.0000
X		766.2855	455328.6000	153.0014	1340.1079	341.0070	590.5210	3.5000	3.5000	6.0000
%RSD		8.9057	1.4603	11.9181	4.1238	8.2067	4.6128	81.4411	81.4411	69.7217

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:27:36	0.0000	741098.1600	32.5001	32.5001	0.0000	0.0000	756783.1900	150.0014	325.0063
2	16:28:21	10.0000	753606.2300	37.5001	37.5001	7.5000	7.5000	771284.0500	102.5006	310.0058
3	16:29:05	5.0000	759537.6700	22.5000	22.5000	17.5000	17.5000	774541.3800	82.5004	226.2531
4	16:29:50	10.0000	759657.9300	57.5002	57.5002	7.5000	7.5000	774856.2200	78.7504	213.7527
5	16:30:35	5.0000	764510.5100	20.0000	20.0000	12.5000	12.5000	777668.4600	61.2502	188.7521
X		6.0000	755682.1000	34.0001	34.0001	9.0000	9.0000	771026.6600	95.0006	252.7540
%RSD		69.7217	1.1939	43.9950	43.9950	72.4356	72.4356	1.0736	35.8540	24.0804

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:27:36	6189.7980	4691.3201	12058.7180	526677.2600	2.5000
2	16:28:21	6294.8766	4856.4147	12344.1360	530034.1300	0.0000
3	16:29:05	6312.3899	4633.7880	12489.3520	528962.9300	2.5000
4	16:29:50	6379.9413	4673.8103	12311.5880	530004.8600	0.0000
5	16:30:35	6012.1680	4641.2921	11495.4230	523303.0800	2.5000
X		6237.8347	4699.3250	12139.8430	527796.4500	1.5000
%RSD		2.2987	1.9344	3.2306	0.5416	91.2871

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:32:23	85508.9680	4299.4422	TM 60978762.0000	TM 42121828.0000	TM 5522517.6000	TM 6441013.6000	TM 86030844.0000	TM 30831461.0000	M 1320730.0000
2	16:33:07	84295.8690	4265.2579	TM 60724153.0000	TM 42506029.0000	TM 5519476.8000	TM 6407294.5000	TM 85262433.0000	TM 30895613.0000	M 1315455.1000
3	16:33:52	83652.7700	4240.2452	TM 61162541.0000	TM 42894278.0000	TM 5573106.8000	TM 6444893.8000	TM 84731146.0000	TM 31291348.0000	M 1321682.2000
4	16:34:38	83446.5520	4231.0738	TM 61085976.0000	TM 42084598.0000	TM 5462239.7000	TM 6326681.4000	TM 83248065.0000	TM 31564635.0000	M 1327482.4000
5	16:35:22	84938.1750	4126.0212	TM 59756402.0000	TM 41821252.0000	TM 5422114.1000	TM 6276809.6000	TM 83003712.0000	TM 31134170.0000	M 1311349.8000
X		84368.4670	4232.4081	TM 60741567.0000	TM 42285597.0000	TM 5499891.0000	TM 6379338.6000	TM 84455240.0000	TM 31143445.0000	M 1319339.9000
%RSD		1.0252	1.5382	TM 0.9468	TM 0.9907	TM 1.0650	TM 1.1670	TM 1.5409	TM 0.9608	M 0.4682

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:32:23	154277.4900	182775.1600	30194.6040	53926.4210	TM 5216548.8000	52952.7070	TM 90319456.0000	TM 2312820.9000	38403.2850
2	16:33:07	154985.4500	183408.8600	30849.4960	54205.7240	TM 5206443.8000	51893.5750	TM 89808925.0000	TM 2288516.7000	38167.2040
3	16:33:52	155442.6000	185243.7800	30415.4050	54110.1060	TM 5252700.5000	52444.5080	TM 90074551.0000	TM 2292036.4000	38149.6240
4	16:34:38	154770.2600	184190.8300	30269.8760	53478.5480	TM 5125713.6000	52117.4660	TM 89760797.0000	TM 2283274.3000	37883.4140
5	16:35:22	155767.3300	178565.3600	29815.7430	52469.6660	TM 5046789.1000	50751.5740	TM 88112299.0000	TM 2237815.2000	37245.5480
X		155048.6300	182836.8000	30309.0250	53638.0930	TM 5169639.2000	52031.9660	TM 89615206.0000	TM 2282892.7000	37969.8150
%RSD		0.3744	1.3999	1.2360	1.3245	TM 1.6032	1.5743	TM 0.9703	TM 1.2082	1.1713

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:32:23	10181.2160	24134.8990	11437.8440	7806.1545	3795.8643	1087.5710	452.5123	67.5003	309705.0400
2	16:33:07	9755.7071	24315.4230	11507.9400	7998.8370	3891.7419	1156.7469	454.1790	65.8336	311627.2500
3	16:33:52	10063.5730	24500.9650	11320.1840	7761.1124	3937.5967	1161.7476	475.8469	72.5003	315919.4100
4	16:34:38	9613.0414	24285.3350	11505.4370	7976.3155	3876.7349	1239.2588	479.1804	71.6670	315607.9300
5	16:35:22	9485.3953	23573.2950	11618.0930	7703.5590	3863.3953	1120.0753	444.1785	75.8337	322081.1800
X		9819.7065	24161.9830	11477.9000	7849.1957	3873.0666	1153.0799	461.1794	70.6670	314988.1600
%RSD		3.0069	1.4647	0.9523	1.6778	1.3279	4.9242	3.3457	5.6800	1.5123

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:32:23	534850.2000	939950.3800	1014665.3000	605217.1700	1578270.0000	412799.6000	29208.5990	1060.0674	29251.2480
2	16:33:07	534946.0700	944962.5300	1023254.0000	604747.3300	1583130.7000	415816.6900	29504.6390	1122.5756	29016.6800
3	16:33:52	539426.5100	947849.4400	1024166.6000	612063.6000	1597647.1000	419412.8500	29673.9890	1032.5640	29692.8060
4	16:34:38	535033.9600	944566.1400	1024127.1000	603890.9500	1590801.5000	423491.5600	30239.7670	1057.5671	29977.5720
5	16:35:22	531117.4500	926680.2900	1007858.9000	600450.1700	1563006.7000	425439.6200	29158.4240	1085.0706	29170.9680
X		535074.8400	940801.7600	1018814.4000	605273.8500	1582571.2000	419392.0600	29557.0840	1071.5689	29421.8550
%RSD		0.5502	0.8914	0.7176	0.6988	0.8339	1.2482	1.4775	3.1762	1.3579

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:32:23	7358.2472	457753.7400	147.5013	20956.3170	4621.2810	8469.3016	2.5000	2.5000	10.0000
2	16:33:07	7612.2252	464732.0200	180.0019	21753.3550	4658.8019	8661.9995	5.0000	5.0000	7.5000
3	16:33:52	7374.5116	465796.5500	165.0016	22181.9830	4798.8814	8794.6383	10.0000	10.0000	22.5000
4	16:34:38	7427.0582	467225.8300	135.0011	21304.6990	4886.4322	8659.4969	5.0000	5.0000	5.0000
5	16:35:22	7183.0945	478544.2700	205.0025	21505.2130	4856.4147	8664.5021	2.5000	2.5000	5.0000
X		7391.0273	466810.4800	166.5017	21540.3130	4764.3622	8649.9877	5.0000	5.0000	10.0000
%RSD		2.0830	1.6075	16.5030	2.1463	2.4875	1.3434	61.2373	61.2373	72.8870

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:32:23	10.0000	753008.1200	32.5001	32.5001	12.5000	12.5000	767404.2200	33534.8400	81380.4360
2	16:33:07	7.5000	769839.1700	35.0001	35.0001	7.5000	7.5000	780341.8800	34316.7630	83742.4140
3	16:33:52	22.5000	780095.3200	15.0000	15.0000	7.5000	7.5000	794791.4400	34876.5800	84194.4340
4	16:34:38	5.0000	794890.2300	35.0001	35.0001	15.0000	15.0000	802890.3600	35507.9880	86233.8800
5	16:35:22	5.0000	801058.5200	37.5001	37.5001	17.5000	17.5000	822430.0200	34813.8190	84777.8040
X		10.0000	779778.2700	31.0001	31.0001	12.0000	12.0000	793571.5800	34609.9980	84065.7940
%RSD		72.8870	2.4807	29.4106	29.4106	37.2678	37.2678	2.6589	2.1237	2.1062

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:32:23	32842.0890	27257.0040	68749.9280	513984.0800	2.5000
2	16:33:07	33788.3610	28275.3890	70441.4670	533364.3600	0.0000
3	16:33:52	34270.3230	28731.9460	71215.5040	539201.3600	0.0000
4	16:34:38	35086.2070	29211.1080	72173.6950	548719.7800	2.5000
5	16:35:22	34732.2290	28558.8530	72211.5200	564130.7100	0.0000
X		34143.8420	28406.8600	70958.4230	539880.0600	1.0000
%RSD		2.5663	2.5598	2.0249	3.4401	136.9306

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:37:07	88676.8180	566529.2500	TM 32341259.0000	TM 22874905.0000	TM 2980324.9000	TM 3478032.4000	TM 46835800.0000	TM 17298036.0000	M 709285.5000
2	16:37:53	88878.1120	568623.2400	TM 32418559.0000	TM 23175154.0000	TM 3026204.0000	TM 3538191.4000	TM 47864504.0000	TM 17514994.0000	M 711962.4600
3	16:38:37	88202.6590	577767.8800	TM 33177258.0000	TM 23394366.0000	TM 3029155.3000	TM 3552539.3000	TM 48292792.0000	TM 17900455.0000	M 731448.9700
4	16:39:23	89799.5780	570024.2600	TM 33504317.0000	TM 23243988.0000	TM 3026770.5000	TM 3519030.8000	TM 48085656.0000	TM 18164305.0000	M 728308.4700
5	16:40:07	90919.9620	556099.8800	TM 32403151.0000	TM 22752175.0000	TM 2970934.4000	TM 3493192.5000	TM 47895392.0000	TM 17699707.0000	M 714528.7800
X		89295.4260	567808.9000	TM 32768909.0000	TM 23088118.0000	TM 3006677.8000	TM 3516197.3000	TM 47794829.0000	TM 17715499.0000	M 719106.8400
%RSD		1.2067	1.3741	TM 1.6341	TM 1.1540	TM 0.9498	TM 0.8764	TM 1.1777	TM 1.8941	M 1.4001

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:37:07	170723.5600	35.0001	T 3794568.8000	T 3626705.3000	TM 2914314.2000	T 5084147.8000	TM 49844061.0000	M 1265848.2000	T 4883064.4000
2	16:37:53	173316.2600	27.5000	T 3840412.1000	T 3672308.3000	TM 2980434.2000	T 5096993.8000	TM 50789168.0000	M 1298173.5000	T 5025318.2000
3	16:38:37	175404.2700	37.5001	T 3888802.2000	T 3767101.2000	TM 3025377.6000	T 5186842.8000	TM 51458881.0000	M 1318258.1000	T 5108574.2000
4	16:39:23	177478.7600	22.5000	T 3863758.2000	T 3696602.9000	TM 2976239.0000	T 5188409.8000	TM 51684179.0000	M 1299884.5000	T 5016589.9000
5	16:40:07	180432.4300	22.5000	T 3801564.1000	T 3642024.1000	TM 2964474.2000	T 5110386.4000	TM 50271475.0000	M 1266537.0000	T 4938035.3000
X		175471.0600	29.0001	T 3837821.1000	T 3680948.4000	TM 2972167.9000	T 5133356.1000	TM 50809553.0000	M 1289740.2000	T 4994316.4000
%RSD		2.1292	24.0763	T 1.0474	T 1.5003	TM 1.3376	T 0.9819	TM 1.5273	M 1.7751	T 1.7357

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:37:07	1024783.4000	T 2397980.2000	1126884.3000	702131.0400	521128.8000	16609.8700	6761.0749	45.8335	345395.0400
2	16:37:53	1046116.1000	T 2474021.6000	1138246.7000	715717.0400	529577.2500	16518.0210	6970.4140	44.1668	345856.0800
3	16:38:37	1060248.6000	T 2514024.0000	1163535.7000	721464.8800	533286.2600	17196.8920	7031.2984	50.0001	352334.1600
4	16:39:23	1057893.0000	T 2508180.9000	1153749.9000	718828.5100	532183.1500	16934.6900	7102.1918	46.6668	357335.5100
5	16:40:07	1039697.3000	T 2451058.0000	1132539.5000	706237.2100	520688.3400	16294.2480	6990.4307	36.6667	361337.6600
X		1045747.7000	T 2469052.9000	1142991.2000	712875.7300	527372.7600	16710.7440	6971.0820	44.6668	352451.6900
%RSD		1.3808	T 1.9162	1.3333	1.1669	1.1481	2.1311	1.8328	11.0847	1.9867

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:37:07	45.0001	102.5006	197.5023	75.0003	165.0016	459377.0100	440244.6500	59992.6730	431179.9100
2	16:37:53	75.0003	92.5005	115.0008	70.0003	145.0013	462957.2100	444421.5900	60536.5850	438222.1200
3	16:38:37	75.0003	67.5003	175.0018	42.5001	160.0015	470119.4500	451018.4800	60471.1120	445532.3600
4	16:39:23	70.0003	92.5005	152.5014	45.0001	172.5018	474494.7700	458920.3500	61010.0190	451698.8900
5	16:40:07	65.0003	77.5004	140.0012	50.0001	140.0012	478184.4700	436821.3700	59866.7720	432566.5700
X		66.0003	86.5005	156.0015	56.5002	156.5015	469026.5800	446285.2900	60375.4320	439839.9700
%RSD		18.8635	16.0399	20.3534	26.4749	8.7204	1.6683	1.9776	0.7604	1.9806

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:37:07	947603.7100	500175.6900	45.0001	T 2903950.6000	579082.0600	1053895.9000	145.0013	145.0013	35.0001
2	16:37:53	956014.1300	508701.7800	20.0000	T 2909438.6000	584817.5500	1064839.9000	180.0019	180.0019	22.5000
3	16:38:37	967117.3900	512881.6700	40.0001	T 2946883.3000	586465.0000	1065887.0000	222.5030	222.5030	30.0001
4	16:39:23	960420.2000	516027.2300	30.0001	T 2939362.7000	587405.3900	1072001.8000	170.0017	170.0017	35.0001
5	16:40:07	937153.9100	528168.6000	30.0001	T 2872084.2000	570592.9400	1039663.5000	170.0017	170.0017	27.5000
X		953661.8700	513190.9900	33.0001	T 2914343.9000	581672.5900	1059257.6000	177.5019	177.5019	30.0001
%RSD		1.2200	2.0015	29.5358	T 1.0298	1.2009	1.2036	15.9350	15.9350	17.6777

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:37:07	35.0001	837663.6000	32.5001	32.5001	2.5000	2.5000	855504.2200	T 4566966.5000	T 11205483.0000
2	16:37:53	22.5000	841903.0800	40.0001	40.0001	10.0000	10.0000	857856.0600	T 4613816.2000	T 11339668.0000
3	16:38:37	30.0001	845377.2900	37.5001	37.5001	7.5000	7.5000	862636.2800	T 4670899.9000	T 11427072.0000
4	16:39:23	35.0001	859533.9500	27.5000	27.5000	2.5000	2.5000	873982.1200	T 4690220.9000	T 11483258.0000
5	16:40:07	27.5000	862246.3600	35.0001	35.0001	7.5000	7.5000	882742.2900	T 4550462.0000	T 11130770.0000
X		30.0001	849344.8500	34.5001	34.5001	6.0000	6.0000	866544.1900	T 4618473.1000	T 11317250.0000
%RSD		17.6777	1.2868	13.9387	13.9387	55.9017	55.9017	1.3288	T 1.3346	T 1.3060

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:37:07	T 3699260.4000	T 3211302.5000	T 8070245.0000	600829.8800	0.0000
2	16:37:53	T 3732635.3000	T 3220868.5000	T 8110248.5000	605944.8000	10.0000
3	16:38:37	T 3750774.9000	T 3276432.7000	T 8179013.4000	608305.3200	5.0000
4	16:39:23	T 3753450.0000	T 3244223.8000	T 8149969.1000	615179.7300	2.5000
5	16:40:07	T 3643287.4000	T 3173903.4000	T 7948202.0000	621976.2200	2.5000
X		T 3715881.6000	T 3225346.2000	T 8091535.6000	610447.1900	4.0000
%RSD		T 1.2373	T 1.1836	T 1.1125	1.3525	94.7860

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:41:52	98877.3100	70.0003	27628.2230	605.0220	105.0007	90.0005	1827.7004	20309.7190	112.5008
2	16:42:37	100503.2500	60.8336	21705.7320	415.0103	75.0003	65.0003	1607.6551	18836.2640	67.5003
3	16:43:22	101954.9000	58.3335	18104.6450	480.0138	35.0001	55.0002	1695.1724	18513.0410	72.5003
4	16:44:07	102605.3100	57.5002	16285.8980	900.0486	95.0005	120.0009	2320.3230	18843.7810	85.0004
5	16:44:53	104191.4700	63.3336	15048.5750	1235.0915	115.0008	150.0014	2822.9781	19184.5570	92.5005
X		101626.4500	62.0002	19754.6150	727.0373	85.0005	96.0006	2054.7658	19137.4730	86.0005
%RSD		1.9964	8.0981	25.6502	46.7106	37.2034	40.9114	24.8328	3.6421	20.7193

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:41:52	202876.0700	10.0000	222.5030	437.5115	1362.6114	122.5009	47814.2800	322.5062	127.5010
2	16:42:37	207283.8300	2.5000	187.5021	415.0103	1580.1498	100.0006	48699.3830	422.5107	87.5005
3	16:43:22	209145.7400	12.5000	170.0017	467.5131	1552.6446	140.0012	51111.2620	372.5083	120.0009
4	16:44:07	211447.7500	10.0000	215.0028	495.0147	1652.6639	190.0022	53287.3290	367.5081	177.5019
5	16:44:53	214914.7700	10.0000	687.5284	570.0195	1717.6770	217.5028	54656.1520	327.5064	195.0023
X		209133.6300	9.0000	296.5076	477.0138	1573.1493	154.0015	51113.6810	362.5080	141.5013
%RSD		2.1565	42.1271	74.0634	12.6084	8.5288	31.5331	5.7030	11.1633	31.0726

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:41:52	22.5000	682.5280	85.0004	97.5006	21.6667	169.1684	21.6667	15.0000	410153.6300
2	16:42:37	12.5000	487.5143	100.0006	105.0007	20.8334	170.0017	25.0000	15.8333	417358.4600
3	16:43:22	30.0001	517.5161	107.5007	107.5007	11.6667	161.6682	25.8334	17.5000	430420.8900
4	16:44:07	30.0001	435.0114	75.0003	105.0007	14.1667	185.8354	16.6667	20.0000	434783.8600
5	16:44:53	72.5003	432.5112	100.0006	97.5006	38.3334	199.1691	25.8334	20.0000	436871.4000
X		33.5001	511.0162	93.5005	102.5006	21.3334	177.1686	23.0000	17.6667	425917.6500
%RSD		68.5189	20.0403	14.0979	4.5630	48.8360	8.5357	17.1098	13.0891	2.7296

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:41:52	15.0000	15.0000	7.5000	2.5000	15.0000	550077.5600	46.2501	2.5000	37.5001
2	16:42:37	5.0000	20.0000	12.5000	2.5000	5.0000	562037.3700	62.5002	5.0000	50.0001
3	16:43:22	20.0000	12.5000	22.5000	7.5000	20.0000	576817.8400	67.5003	7.5000	50.0001
4	16:44:07	12.5000	5.0000	7.5000	7.5000	7.5000	580037.7100	108.7507	5.0000	103.7507
5	16:44:53	10.0000	7.5000	10.0000	7.5000	7.5000	586347.1200	42.5001	10.0000	68.7503
X		12.5000	12.0000	12.0000	5.5000	11.0000	571063.5200	65.5003	6.0000	62.0003
%RSD		44.7214	49.7389	51.8746	49.7930	57.0450	2.5812	40.2714	47.5073	41.7248

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:41:52	35.0001	581550.3700	2.5000	1350.1094	10.0000	12.5000	0.0000	0.0000	0.0000
2	16:42:37	11.2500	591875.6700	5.0000	1190.0850	2.5000	22.5000	2.5000	2.5000	0.0000
3	16:43:22	17.5000	599312.5000	7.5000	822.5406	5.0000	2.5000	0.0000	0.0000	0.0000
4	16:44:07	31.2501	607550.6300	5.0000	787.5372	12.5000	25.0000	0.0000	0.0000	0.0000
5	16:44:53	43.7501	613611.4400	20.0000	715.0307	17.5000	22.5000	0.0000	0.0000	2.5000
X		27.7501	598780.1200	8.0000	973.0606	9.5000	17.0000	0.5000	0.5000	0.5000
%RSD		47.6074	2.1153	86.7153	28.7440	62.8281	55.4160	223.6068	223.6068	223.6068

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:41:52	0.0000	969475.4900	30.0001	30.0001	10.0000	10.0000	1001333.0000	216.2528	427.5110
2	16:42:37	0.0000	981299.2600	35.0001	35.0001	2.5000	2.5000	1014530.3000	163.7516	400.0096
3	16:43:22	0.0000	994031.5100	32.5001	32.5001	10.0000	10.0000	1024929.9000	160.0015	378.7586
4	16:44:07	0.0000	1001068.9000	35.0001	35.0001	2.5000	2.5000	1028406.7000	221.2529	493.7646
5	16:44:53	2.5000	1019872.2000	20.0000	20.0000	12.5000	12.5000	1041627.5000	293.7552	707.5300
X		0.5000	993149.4700	30.5001	30.5001	7.5000	7.5000	1022165.5000	211.0028	481.5148
%RSD		223.6068	1.9358	20.4097	20.4097	62.3610	62.3610	1.4818	25.7565	27.7371

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:41:52	267.5043	220.0029	557.5187	743464.3900	0.0000
2	16:42:37	182.5020	137.5011	410.0101	754642.7800	2.5000
3	16:43:22	192.5022	147.5013	347.5073	761759.9300	0.0000
4	16:44:07	247.5037	185.0021	467.5131	765594.8600	2.5000
5	16:44:53	265.0042	295.0052	582.5204	780456.9500	0.0000
X		231.0033	197.0025	473.0139	761183.7800	1.0000
%RSD		17.5781	32.3720	20.8441	1.7965	136.9306

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:46:38	99316.6550	47.5001	12061.2220	630.0238	100.0006	110.0007	1460.1279	17999.4180	107.5007
2	16:47:23	98271.8790	44.1668	10421.5120	600.0216	130.0010	120.0009	1435.1236	16824.4670	100.0006
3	16:48:08	98036.6320	55.8335	9142.5124	630.0238	60.0002	85.0004	1435.1236	16438.6980	110.0007
4	16:48:53	100630.6100	51.6668	8679.5177	505.0153	35.0001	60.0002	1460.1279	16208.2470	107.5007
5	16:49:38	101091.1400	45.8335	7440.8205	600.0216	80.0004	80.0004	1437.6240	16225.7810	92.5005
x		99469.3820	49.0001	9549.1170	593.0212	81.0005	91.0005	1445.6254	16739.3220	103.5007
%RSD		1.3756	9.6505	18.4665	8.6731	45.0239	26.4652	0.9185	4.4617	6.9589

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:46:38	194603.5100	5.0000	5011.5065	970.0565	1472.6301	85.0004	47142.9710	347.5073	50.0001
2	16:47:23	194448.7100	5.0000	5271.6669	992.5591	1382.6147	87.5005	47673.4770	290.0051	55.0002
3	16:48:08	194763.4300	7.5000	5406.7534	1102.5729	1492.6337	72.5003	47912.3410	315.0060	35.0001
4	16:48:53	196744.1500	22.5000	5411.7567	1050.0662	1452.6266	105.0007	47449.7050	325.0063	37.5001
5	16:49:38	196900.2700	10.0000	5897.0858	1175.0828	1450.1262	62.5002	48168.8130	295.0052	17.5000
x		195492.0100	10.0000	5399.7538	1058.0675	1450.1262	82.5004	47669.4610	314.5060	39.0001
%RSD		0.6244	72.8870	5.9628	7.8755	2.8594	19.5215	0.8351	7.4231	37.5425

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:46:38	17.5000	355.0076	150.0014	117.5008	148.3347	146.6680	23.3334	25.0000	415120.7400
2	16:47:23	30.0001	347.5073	125.0009	97.5006	115.8341	133.3344	18.3334	16.6667	403002.0800
3	16:48:08	15.0000	325.0063	120.0009	90.0005	119.1675	121.6676	26.6667	25.0000	406170.4800
4	16:48:53	25.0000	247.5037	115.0008	117.5008	130.0010	139.1678	20.0000	16.6667	406773.8700
5	16:49:38	30.0001	315.0060	102.5006	95.0005	150.8347	126.6676	20.0000	22.5000	403993.3900
x		23.5000	318.0062	122.5009	103.5007	132.8344	133.5011	21.6667	21.1667	407012.1100
%RSD		29.7112	13.4043	14.2858	12.6207	12.1859	7.4175	15.3846	19.9975	1.1764

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:46:38	15.0000	5.0000	0.0000	5.0000	5.0000	552793.7500	40.0001	0.0000	60.0002
2	16:47:23	32.5001	0.0000	5.0000	0.0000	5.0000	543688.0100	52.5002	0.0000	33.7501
3	16:48:08	20.0000	2.5000	7.5000	0.0000	5.0000	539948.7500	38.7501	0.0000	28.7500
4	16:48:53	12.5000	2.5000	2.5000	0.0000	10.0000	546391.5200	51.2502	0.0000	36.2501
5	16:49:38	17.5000	0.0000	2.5000	5.0000	10.0000	544303.8300	35.0001	2.5000	32.5001
x		19.5000	2.0000	3.5000	2.0000	7.0000	545425.1700	43.5001	0.5000	38.2501
%RSD		39.9293	104.5825	81.4411	136.9306	39.1231	0.8672	18.1058	223.6068	32.5653

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:46:38	12.5000	588305.6900	2.5000	287.5050	5.0000	10.0000	0.0000	0.0000	0.0000
2	16:47:23	8.7500	577524.3400	10.0000	310.0058	10.0000	5.0000	0.0000	0.0000	0.0000
3	16:48:08	10.0000	569421.7600	5.0000	230.0032	17.5000	15.0000	0.0000	0.0000	2.5000
4	16:48:53	7.5000	568448.5700	10.0000	245.0036	10.0000	22.5000	0.0000	0.0000	2.5000
5	16:49:38	3.7500	568419.1600	15.0000	235.0033	5.0000	5.0000	0.0000	0.0000	0.0000
x		8.5000	574423.9100	8.5000	261.5042	9.5000	11.5000	0.0000	0.0000	1.0000
%RSD		38.0652	1.5054	57.3341	13.5137	53.9314	64.4887	0.0000	0.0000	136.9306

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:46:38	0.0000	988525.7000	32.5001	32.5001	5.0000	5.0000	1016041.3000	135.0011	332.5066
2	16:47:23	0.0000	958151.1900	22.5000	22.5000	5.0000	5.0000	988155.4000	93.7505	255.0039
3	16:48:08	2.5000	948634.1500	37.5001	37.5001	10.0000	10.0000	966413.5800	71.2503	187.5021
4	16:48:53	2.5000	934586.9700	32.5001	32.5001	0.0000	0.0000	957192.3200	71.2503	200.0024
5	16:49:38	0.0000	920230.9000	17.5000	17.5000	0.0000	0.0000	937802.3900	50.0001	166.2517
x		1.0000	950025.7800	28.5001	28.5001	4.0000	4.0000	973121.0000	84.2505	228.2533
%RSD		136.9306	2.7227	28.8275	28.8275	104.5825	104.5825	3.0890	38.3556	29.2972

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:46:38	275.0045	252.5038	590.0209	759595.0700	0.0000
2	16:47:23	245.0036	182.5020	492.5146	735754.3500	0.0000
3	16:48:08	255.0039	145.0013	432.5112	711580.5700	0.0000
4	16:48:53	215.0028	185.0021	472.5134	695541.3400	0.0000
5	16:49:38	227.5031	177.5019	425.0108	681311.0300	0.0000
x		243.5036	188.5022	482.5142	716756.4700	0.0000
%RSD		9.6204	20.8145	13.7334	4.3728	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:51:23	102269.5500	577.5200	734988.4900	533790.3800	69080.1420	81107.7970	42957.9380	389324.3100	15637.1570
2	16:52:08	101077.6400	632.5240	731051.2400	528200.5300	68369.3160	78593.8800	44053.6360	395741.2200	16115.5680
3	16:52:54	101654.5900	640.8580	734996.6600	535761.0100	68636.4990	80289.9340	43475.6130	400838.9000	15920.1930
4	16:53:38	102236.6500	584.1871	727480.6400	518413.7300	67527.4940	78245.6260	43390.1690	402663.8000	15832.5260
5	16:54:22	103344.3500	590.8543	702513.8800	509689.4700	66539.5950	76206.8630	41583.4930	390518.2800	14890.7920
x		102116.5600	605.1887	726206.1800	525171.0200	68030.6090	78888.8200	43092.1700	395817.3000	15679.2470
%RSD		0.8249	4.8398	1.8740	2.0880	1.4808	2.4201	2.1565	1.5071	3.0175

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:51:23	193935.7100	15.0000	22848.7810	7478.3540	27239.4470	4601.2700	497844.6400	11583.0440	4736.3456
2	16:52:08	194819.7200	17.5000	22044.1180	7273.1726	27231.9220	4491.2099	497253.3500	11765.8000	4721.3371
3	16:52:54	192780.6100	25.0000	22264.7030	7656.0153	27191.7910	4741.3484	500464.8000	11487.9130	4506.2180
4	16:53:38	193548.1000	12.5000	21811.0060	7340.7318	27006.1890	4528.7302	493677.3600	11745.7720	4311.1149
5	16:54:22	193165.6300	12.5000	21683.1730	7017.9539	25676.9980	4196.0561	477187.1700	11104.8940	4476.2019
x		193649.9500	16.5000	22130.3560	7353.2455	26869.2690	4511.7229	493285.4600	11537.4850	4550.2435
%RSD		0.4042	31.4189	2.0751	3.2348	2.5055	4.4481	1.8892	2.3224	3.9392

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:51:23	945.0536	5006.5035	2377.8392	1627.6589	641.6914	928.3850	295.0052	20.0000	402134.1200
2	16:52:08	1002.5603	4923.9543	2197.7898	1540.1423	662.5263	872.5457	309.1724	12.5000	405236.6200
3	16:52:54	980.0576	5049.0291	2420.3514	1560.1460	604.1886	873.3791	346.6739	18.3334	400209.7200
4	16:53:38	1080.0700	4873.9249	2157.7793	1715.1765	575.8532	915.0502	325.8397	10.8333	403652.4500
5	16:54:22	1037.5646	4978.9870	2290.3147	1542.6428	584.1871	825.8743	316.6727	14.1667	403623.6000
x		1009.0612	4966.4797	2288.8149	1597.1533	613.6893	883.0469	318.6728	15.1667	402971.3000
%RSD		5.1579	1.3858	4.9181	4.6908	6.0759	4.5833	6.0561	25.5952	0.4700

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:51:23	27.5000	2.5000	7.5000	5.0000	2.5000	539932.7700	4347.3837	57.5002	4103.5101
2	16:52:08	17.5000	5.0000	5.0000	2.5000	7.5000	540990.6800	4231.0738	72.5003	4238.5777
3	16:52:54	10.0000	0.0000	20.0000	2.5000	2.5000	543837.3000	4278.5981	37.5001	4218.5675
4	16:53:38	15.0000	5.0000	0.0000	5.0000	0.0000	537676.1400	4216.0662	82.5004	4058.4880
5	16:54:22	15.0000	2.5000	2.5000	2.5000	5.0000	538890.9700	3940.9316	40.0001	3958.4399
x		17.0000	3.0000	7.0000	3.5000	3.5000	540265.5700	4202.8107	58.0002	4115.5166
%RSD		38.0653	69.7217	111.2316	39.1230	81.4411	0.4340	3.6899	33.9945	2.8188

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:51:23	897.5483	564642.4300	12.5000	5186.6136	4966.4795	9142.5124	5.0000	5.0000	0.0000
2	16:52:08	968.8063	562603.7300	5.0000	5251.6543	4928.9572	9122.4905	0.0000	0.0000	0.0000
3	16:52:54	936.3026	567237.5900	17.5000	5246.6511	5361.7243	9292.6783	2.5000	2.5000	5.0000
4	16:53:38	960.0553	568068.9500	7.5000	5091.5550	5081.5489	9295.1811	2.5000	2.5000	2.5000
5	16:54:22	886.2971	572443.6200	25.0000	5044.0261	4998.9989	8944.7980	0.0000	0.0000	0.0000
x		929.8019	566999.2600	13.5000	5164.1000	5067.5418	9159.5321	2.0000	2.0000	1.5000
%RSD		3.9560	0.6582	59.4327	1.8028	3.4301	1.5812	104.5825	104.5825	149.0712

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:51:23	0.0000	920576.0800	45.0001	45.0001	5.0000	5.0000	943575.2500	3620.7864	8948.5520
2	16:52:08	0.0000	925293.1000	25.0000	25.0000	7.5000	7.5000	946012.2100	3837.1332	9158.7802
3	16:52:54	5.0000	935724.6400	17.5000	17.5000	5.0000	5.0000	959003.9200	3833.3815	9411.5617
4	16:53:38	2.5000	941245.0000	37.5001	37.5001	7.5000	7.5000	959756.0700	3864.6459	9567.9896
5	16:54:22	0.0000	947394.2900	47.5001	47.5001	5.0000	5.0000	967558.1800	3743.3406	9049.9114
x		1.5000	934046.6200	34.5001	34.5001	6.0000	6.0000	955181.1300	3779.8575	9227.3590
%RSD		149.0712	1.1860	37.4436	37.4436	22.8218	22.8218	1.0567	2.6447	2.7836

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:51:23	3300.6535	2677.9302	7253.1551	681924.5400	0.0000
2	16:52:08	3343.1705	2882.9986	7145.5622	693360.3500	0.0000
3	16:52:54	3468.2216	2988.0356	7355.7450	704998.6400	2.5000
4	16:53:38	3443.2112	2930.5152	7288.1857	713305.3300	0.0000
5	16:54:22	3160.5992	3045.5564	7248.1508	721086.6500	0.0000
x		3343.1712	2905.0072	7258.1598	702935.1000	0.5000
%RSD		3.6873	4.8483	1.0499	2.2204	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:56:09	96471.8620	254.1705	115730.5700	1292180.3000	163911.3200	190763.7400	TM 9425828.6000	542301.9200	TM 2832459.4000
2	16:56:54	95787.3670	260.8374	113348.1600	1285524.1000	161836.3500	189413.4600	TM 9281461.5000	537835.9800	TM 2812393.2000
3	16:57:39	95440.0830	263.3375	113254.4000	T 1261496.6000	160072.7700	186268.7500	TM 9177246.3000	533960.8000	TM 2809960.9000
4	16:58:24	94921.7130	275.0045	112162.2800	T 1260246.7000	164201.9500	184321.1600	TM 9066402.3000	532906.4100	TM 2799640.2000
5	16:59:09	96593.2560	239.1701	107959.8200	T 1231409.3000	156872.7800	178593.4500	TM 8784549.5000	510499.3600	TM 2687558.6000
X		95842.8560	258.5040	112491.0500	T 1266171.4000	161379.0300	185872.1100	TM 9147097.6000	531500.9000	TM 2788402.5000
%RSD		0.7327	5.0942	2.5321	T 1.9006	1.8745	2.5803	TM 2.6476	2.3156	TM 2.0662

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:56:09	163628.3400	1950.2282	59043.4290	57120.0940	M 826031.4400	T 2086041.6000	TM 14502407.0000	M 391447.9100	19084.3280
2	16:56:54	162204.6600	2107.7665	57970.9390	56916.2060	M 817567.1400	T 2052459.8000	TM 14259014.0000	M 391662.6500	18908.9290
3	16:57:39	160833.4600	1922.7218	57802.2730	56465.6560	M 811400.9400	T 2053808.2000	TM 14258358.0000	M 387248.3600	18726.0160
4	16:58:24	160616.8400	1832.7015	57318.9520	55650.1980	M 803769.3400	T 2025765.7000	TM 14149801.0000	M 380850.9200	18620.7810
5	16:59:09	160616.8400	1742.6822	55650.1980	53380.4220	M 766963.8100	T 1955504.5000	TM 13491386.0000	M 369164.7600	18009.4390
X		161580.0300	1911.2200	57557.1580	55906.5150	M 805146.5300	T 2034716.0000	TM 14132193.0000	M 384074.9200	18669.8990
%RSD		0.8186	7.1576	2.1514	2.7203	M 2.8386	T 2.4162	TM 2.6945	M 2.4518	2.1932

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:56:09	10904.6300	25481.3990	12091.2660	31692.6510	2054.4199	145.8346	29.1667	31.6667	384866.7500
2	16:56:54	10937.1730	24811.8830	12111.2950	32124.2990	2088.5950	145.8346	42.5001	24.1667	386044.3900
3	16:57:39	11144.9480	25303.3570	11983.6100	31860.7900	2068.5900	149.1680	37.5001	25.0000	379836.1400
4	16:58:24	10534.1540	25285.8040	11815.8710	32264.8410	2004.4077	124.1676	40.8334	18.3334	379443.8600
5	16:59:09	10536.6570	24094.7830	11715.7300	30719.0150	1970.2329	137.5011	43.3334	22.5000	380576.2900
X		10811.5120	24995.4450	11943.5540	31732.3190	2037.2491	140.5012	38.6668	24.3334	382153.4900
%RSD		2.4824	2.2455	1.4488	1.9183	2.3900	7.1864	14.9004	19.8807	0.8034

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:56:09	975.0570	197.5023	312.5059	105.0007	287.5050	464135.0900	261.2541	25.0000	217.5028
2	16:56:54	1062.5677	145.0013	375.0084	135.0011	267.5043	460274.5600	268.7543	30.0001	232.5032
3	16:57:39	987.5585	147.5013	355.0076	97.5006	272.5045	455122.8500	222.5030	32.5001	227.5031
4	16:58:24	1000.0600	127.5010	317.5061	102.5006	272.5045	454088.6600	212.5027	52.5002	243.7536
5	16:59:09	982.5579	142.5012	287.5050	120.0009	292.5051	457196.8800	223.7530	20.0000	217.5028
X		1001.5602	152.0014	329.5066	112.0008	278.5047	458163.6100	237.7534	32.0001	227.7531
%RSD		3.5243	17.4994	10.6413	13.7055	3.8923	0.8926	10.6810	38.8275	4.8536

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:56:09	218.7529	505367.8200	1200.0864	365.0080	31353.8730	57719.2010	8018.8563	8018.8563	8819.6647
2	16:56:54	208.7526	505898.6200	1487.6328	357.5077	31961.1740	57142.7480	7746.0985	7746.0985	8682.0203
3	16:57:39	182.5020	504035.6600	1495.1341	327.5064	32156.9250	57930.6600	7951.2916	7951.2916	8907.2578
4	16:58:24	207.5026	505691.6100	1297.6010	372.5083	31644.9700	57938.2120	8073.9094	8073.9094	8456.7889
5	16:59:09	188.7521	499340.2600	1390.1159	357.5077	30493.1880	55086.4710	7493.3675	7493.3675	8717.0568
X		201.2524	504066.7900	1374.1140	356.0076	31522.0260	57163.4590	7856.7046	7856.7046	8716.5577
%RSD		7.4922	0.5436	9.2001	4.8042	2.0668	2.1087	3.0299	3.0299	1.9509

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:56:09	8819.6647	845498.7300	5586.8722	5586.8722	5794.5139	5794.5139	866459.0200	352.5075	798.7883
2	16:56:54	8682.0203	853197.2200	5857.0576	5857.0576	5761.9913	5761.9913	871473.7000	295.0052	778.7864
3	16:57:39	8907.2578	855540.1500	5736.9741	5736.9741	5666.9262	5666.9262	873168.0500	346.2572	752.5340
4	16:58:24	8456.7889	858591.3000	5879.5734	5879.5734	5839.5453	5839.5453	878153.3300	313.7559	778.7864
5	16:59:09	8717.0568	846950.6500	5181.6104	5181.6104	5416.7599	5416.7599	864575.1000	282.5048	737.5326
X		8716.5577	851955.6100	5648.4175	5648.4175	5695.9473	5695.9473	870765.8400	318.0061	769.2855
%RSD		1.9509	0.6566	5.0581	5.0581	2.9572	2.9572	0.6230	9.6871	3.1439

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:56:09	129498.4300	106946.8800	268796.2800	623576.9600	0.0000
2	16:56:54	130514.0900	106534.1500	272235.2600	631585.1200	0.0000
3	16:57:39	130861.9900	108793.0500	271853.0800	627772.5800	2.5000
4	16:58:24	129511.1300	107683.7800	271899.5600	634592.4500	0.0000
5	16:59:09	123762.2500	102132.0500	255884.2000	620998.4300	0.0000
X		128829.5800	106417.9800	268133.6700	627705.1100	0.5000
%RSD		2.2483	2.3914	2.6062	0.8888	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:00:55	96217.2780	2752.1210	104351.7900	T 1191798.7000	150985.5200	171823.3200	TM 9082106.4000	481489.3500	TM 2543545.3000
2	17:01:40	96103.4760	2743.7850	105906.2200	1190176.5000	149361.6500	174932.0000	TM 9102703.2000	487168.0500	TM 2541737.5000
3	17:02:25	97378.9880	2783.7982	109274.2900	T 1204863.4000	154463.3900	179747.8700	TM 9353037.4000	496701.8800	TM 2563595.1000
4	17:03:10	95379.3940	2761.2907	107222.9000	1208636.9000	155263.0500	177817.1100	TM 9298128.3000	498740.9200	TM 2551811.7000
5	17:03:54	97633.6080	2675.4294	105058.0800	1171759.9000	147483.6400	172160.1700	TM 9036477.7000	490969.1800	TM 2506387.5000
x		96542.5490	2743.2849	106362.6600	T 1193447.0000	151511.4500	175296.0900	TM 9174490.6000	491013.8800	TM 2541415.4000
%RSD		0.9746	1.4861	1.8310	T 1.2177	2.1868	1.9803	TM 1.5405	1.4313	TM 0.8420

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:00:55	161629.9000	1982.7358	193214.2400	105853.0500	M 717947.1700	T 2108471.9000	TM 12623036.0000	M 344931.4200	205615.7600
2	17:01:40	159768.2600	2082.7602	192894.4500	107739.4900	M 727232.8500	T 2129262.4000	TM 12732614.0000	M 349667.8100	208531.8900
3	17:02:25	158728.6800	2017.7442	195954.6200	109849.2700	M 725672.7500	T 2137789.9000	TM 12918457.0000	M 348057.4500	207932.1800
4	17:03:10	158961.8100	1992.7382	197669.4100	108342.2300	M 732560.5300	T 2137206.9000	TM 12835759.0000	M 350136.9000	207993.6900
5	17:03:54	160546.7600	1870.2098	187342.4200	103116.5600	M 705004.0700	T 2057780.4000	TM 12360453.0000	M 342447.0400	201107.7300
x		159927.0800	1989.2377	193415.0300	106980.1200	M 721683.4800	T 2114102.3000	TM 12694064.0000	M 347048.1200	206236.2500
%RSD		0.7449	3.8762	2.0312	2.4223	M 1.4814	T 1.5916	TM 1.7090	M 0.9455	1.4930

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:00:55	50147.9360	71076.8280	33110.6480	58147.1600	3461.5521	1074.2359	446.6786	22.5000	370457.7900
2	17:01:40	51931.3090	71825.7080	33923.9100	58620.4590	3458.2174	1103.4064	422.5107	23.3334	367498.4900
3	17:02:25	51516.2450	72148.4780	33615.1620	59038.3940	3517.4088	1186.7512	459.1793	25.0000	371824.1700
4	17:03:10	51481.0280	71903.8770	33710.5460	59791.2330	3561.5943	1141.7449	453.3457	26.6667	369026.3300
5	17:03:54	48938.2770	68210.5230	32234.7240	57069.7510	3429.0387	1140.9114	413.3436	30.8334	365848.2000
x		50802.9590	71033.0830	33318.9980	58533.3990	3485.5623	1129.4099	439.0116	25.6667	368931.0000
%RSD		2.4403	2.2917	2.0278	1.7373	1.5258	3.7806	4.5587	12.8647	0.6395

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:00:55	990.0588	160.0015	312.5059	85.0004	255.0039	443848.4700	16674.1650	307.5057	16710.4880
2	17:01:40	925.0513	122.5009	322.5062	80.0004	275.0045	447464.3600	16849.5170	240.0035	16819.4570
3	17:02:25	1080.0700	140.0012	297.5053	55.0002	217.5028	448545.2000	17435.7210	292.5051	16818.2040
4	17:03:10	960.0553	145.0013	320.0061	107.5007	257.5040	445166.0400	17156.3920	275.0045	16793.1540
5	17:03:54	965.0559	137.5011	322.5062	70.0003	195.0023	447664.7000	16676.6700	285.0049	16427.4260
x		984.0583	141.0012	315.0060	79.5004	240.0035	446537.7500	16958.4930	280.0047	16713.7450
%RSD		5.9414	9.5975	3.3672	24.3991	13.6416	0.4376	1.9536	9.0396	0.9939

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:00:55	4208.5625	487223.6600	1222.5897	5539.3404	120335.1000	215777.9000	6662.6624	6662.6624	7681.0383
2	17:01:40	4042.2301	484522.8200	1052.5665	5404.2518	120550.6900	219020.8800	6792.7674	6792.7674	7933.7749
3	17:02:25	4019.7193	483238.8900	1132.5770	5636.9058	120626.7800	220185.9800	7080.5067	7080.5067	7473.3496
4	17:03:10	4193.5549	479787.8000	1162.5811	5284.1748	121897.5700	218928.5000	6772.7511	6772.7511	7653.5130
5	17:03:54	3908.4163	483551.2500	1205.0871	5396.7469	117406.2700	212548.9900	6812.7837	6812.7837	7313.2076
x		4074.4966	483664.8900	1155.0803	5452.2840	120163.2800	217292.4500	6824.2943	6824.2943	7610.9767
%RSD		3.0989	0.5531	5.8285	2.5167	1.3803	1.4339	2.2648	2.2648	3.0710

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:00:55	7681.0383	799413.7700	5074.0443	5074.0443	4871.4234	4871.4234	822785.1400	16794.4060	40800.8890
2	17:01:40	7933.7749	796081.2800	4758.8584	4758.8584	5174.1058	5174.1058	813201.9400	16919.6590	40528.3140
3	17:02:25	7473.3496	787251.1100	4881.4293	4881.4293	5039.0230	5039.0230	800289.6500	16929.6790	40905.1480
4	17:03:10	7653.5130	789793.0800	4876.4264	4876.4264	5129.0780	5129.0780	810699.8800	16750.5680	40799.6330
5	17:03:54	7313.2076	805027.5300	4816.3915	4816.3915	4888.9337	4888.9337	819977.6000	16870.8100	40390.1450
x		7610.9767	795513.3500	4881.4300	4881.4300	5020.5128	5020.5128	813390.8400	16853.0250	40684.8260
%RSD		3.0710	0.9044	2.4321	2.4321	2.7322	2.7322	1.0833	0.4650	0.5308

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:00:55	118991.0100	99007.1720	249584.9100	575260.5200	0.0000
2	17:01:40	118689.2500	97276.9740	244726.4600	569294.7600	0.0000
3	17:02:25	119609.7700	97079.6930	244463.9200	560238.3300	2.5000
4	17:03:10	118182.1200	98185.0300	245681.4500	569440.4800	0.0000
5	17:03:54	116275.5800	96455.0020	240493.3600	577620.6800	0.0000
x		118349.5500	97600.7740	244990.0200	570370.9500	0.5000
%RSD		1.0725	1.0257	1.3251	1.1799	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:05:41	97156.4130	261.6708	107210.2300	1295612.0000	162606.1200	186457.9100	TM 9497262.4000	527404.9300	TM 2706326.6000
2	17:06:26	95982.9320	275.0045	109292.0200	T 1261645.4000	161933.2000	186713.5400	TM 9346424.3000	542235.2900	TM 2702070.1000
3	17:07:11	96417.0670	272.5045	110936.0300	T 1282298.9000	164008.1900	185716.6300	TM 9462603.0000	540039.3500	TM 2717715.5000
4	17:07:56	97013.9340	290.8384	109137.5100	1277087.5000	163309.6800	188840.6800	TM 9428590.6000	545010.3300	TM 2717814.1000
5	17:08:41	96512.3270	251.6705	106321.4600	T 1249354.6000	158126.1300	182445.5600	TM 9185374.6000	528940.3100	TM 2617269.4000
x		96616.5340	270.3377	108579.4500	T 1273199.7000	161996.6600	186034.8700	TM 9384051.0000	536726.0400	TM 2692239.1000
%RSD		0.4914	5.4564	1.6823	T 1.4172	1.4187	1.2461	TM 1.3252	1.4948	TM 1.5779

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:05:41	158721.0300	1857.7070	57311.4000	54666.2180	M 799795.4100	T 1951787.4000	TM 13959620.0000	M 378876.4000	18515.5470
2	17:06:26	157643.3600	1862.7082	57286.2280	54547.9460	M 787698.0200	T 1938230.8000	TM 14005707.0000	M 376277.5300	18726.0160
3	17:07:11	157298.1800	1930.2235	57258.5390	54668.7340	M 793905.1400	T 1946776.6000	TM 13894726.0000	M 381026.1600	18918.9510
4	17:07:56	157109.6800	1932.7241	56515.9960	53810.6760	M 796517.6700	T 1969042.9000	TM 13848894.0000	M 377286.6600	18680.9150
5	17:08:41	158508.2900	1767.6875	54618.4060	51315.0090	M 760174.5000	T 1865473.4000	TM 13416122.0000	M 362710.4100	18124.6890
x		157856.1100	1870.2101	56598.1140	53801.7170	M 787618.1500	T 1934262.2000	TM 13825014.0000	M 375235.4300	18593.2240
%RSD		0.4576	3.6100	2.0423	2.6677	M 2.0276	T 2.0714	TM 1.7094	M 1.9262	1.6067

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:05:41	10541.6630	24834.4500	11650.6390	32244.7630	2096.0969	150.8347	35.0001	16.6667	366848.2600
2	17:06:26	10784.4740	24312.9150	11815.8710	32350.1700	2011.0760	120.8342	33.3334	21.6667	371272.8900
3	17:07:11	10807.0030	24235.1890	11728.2470	31918.5110	2036.0820	131.6677	37.5001	25.8334	370230.5200
4	17:07:56	10321.3880	24789.3160	11728.2470	32420.4430	1986.0700	155.0014	35.0001	18.3334	368668.5000
5	17:08:41	9980.9730	23906.7430	11210.0350	30638.7210	1951.0617	144.1679	35.8334	31.6667	368987.1500
x		10487.1600	24415.7230	11626.6080	31914.5210	2016.0773	140.5012	35.3334	22.8334	369201.4600
%RSD		3.2941	1.6087	2.0651	2.3145	2.7118	10.0359	3.2844	26.5196	0.4536

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:05:41	1100.0726	172.5018	382.5088	102.5006	230.0032	444552.0300	233.7533	17.5000	205.0025
2	17:06:26	1002.5603	192.5022	312.5059	82.5004	247.5037	443951.2400	230.0032	25.0000	207.5026
3	17:07:11	1020.0624	182.5020	340.0069	130.0010	235.0033	442133.3100	232.5032	32.5001	237.5034
4	17:07:56	1042.5652	155.0014	355.0076	67.5003	280.0047	447087.4100	240.0035	17.5000	205.0025
5	17:08:41	1087.5710	160.0015	332.5066	87.5005	260.0041	448271.0300	215.0028	25.0000	225.0030
x		1050.5663	172.5018	344.5072	94.0006	250.5038	445199.0000	230.2532	23.5000	216.0028
%RSD		4.0157	8.9926	7.6009	25.2030	8.0587	0.5545	4.0335	26.7020	6.7786

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:05:41	198.7524	488778.3600	1222.5897	285.0049	29981.3360	55149.3850	7383.2693	7383.2693	8304.1355
2	17:06:26	203.7525	486209.4200	1162.5811	272.5045	30643.7390	55209.7830	7538.4081	7538.4081	7903.7464
3	17:07:11	180.0019	487708.3200	1200.0864	340.0069	30796.8020	55534.4300	7343.2340	7343.2340	7888.7322
4	17:07:56	177.5019	486950.8900	1242.5926	337.5068	31238.4410	55557.0800	7798.6474	7798.6474	8394.2257
5	17:08:41	161.2516	495808.4600	1097.5723	287.5050	29763.0560	53687.3850	7040.4728	7040.4728	8344.1754
x		184.2521	489091.0900	1185.0844	304.5056	30484.6750	55027.6130	7420.8063	7420.8063	8167.0030
%RSD		9.3343	0.7920	4.8297	10.4404	1.9852	1.4022	3.7434	3.7434	3.0523

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:05:41	8304.1355	814081.9600	5164.0996	5164.0996	5554.3504	5554.3504	834798.9100	323.7563	730.0320
2	17:06:26	7903.7464	820706.9200	5436.7729	5436.7729	5521.8288	5521.8288	840162.3500	320.0061	753.7841
3	17:07:11	7888.7322	829587.5200	5331.7051	5331.7051	5306.6891	5306.6891	843721.4100	240.0035	718.7810
4	17:07:56	8394.2257	826193.9300	5234.1433	5234.1433	5491.8090	5491.8090	849217.3500	300.0054	811.2895
5	17:08:41	8344.1754	830248.7600	5109.0657	5109.0657	5211.6292	5211.6292	853694.4900	305.0056	747.5335
x		8167.0030	824163.8200	5255.1573	5255.1573	5417.2613	5417.2613	844318.9000	297.7554	752.2840
%RSD		3.0523	0.8233	2.4978	2.4978	2.7658	2.7658	0.8787	11.3445	4.7577

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:05:41	120596.3400	99791.4440	251704.7600	593968.2200	2.5000
2	17:06:26	123592.2600	100413.8500	255227.0000	601582.6400	2.5000
3	17:07:11	124257.0300	103567.0900	258866.7200	607851.4200	0.0000
4	17:07:56	124274.8000	102486.3600	262655.0400	609535.5100	0.0000
5	17:08:41	120327.5000	99847.1040	249134.2200	614695.9100	0.0000
x		122609.5800	101221.1700	255517.5500	605526.7400	1.0000
%RSD		1.6165	1.6888	2.1214	1.3178	136.9306

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:10:28	103160.4300	89.1671	27570.5330	290962.3900	38061.7240	43895.3040	T2214560.1000	131131.1700	M613635.6300
2	17:11:13	106843.9100	98.3339	29165.9500	312434.1300	39885.2220	46102.1730	T2357759.2000	140019.0200	M650292.5100
3	17:11:58	106177.9800	91.6672	29998.8990	312013.8200	41302.0990	47530.1620	T2422027.6000	142027.5800	M668932.2200
4	17:12:43	106651.4700	79.1670	29820.7610	318190.9300	41216.6770	48495.7010	T2524585.5000	144687.7600	M673669.4600
5	17:13:29	107148.6200	80.0004	29281.3540	302274.5400	39071.3800	45252.5350	T2371017.0000	143497.4400	M660435.4900
x		105996.4800	87.6671	29167.4990	307175.1600	39907.4200	46255.1750	T2377989.9000	140272.6000	M653393.0600
%RSD		1.5322	9.2504	3.2890	3.4884	3.4914	3.9337	T4.7296	3.8490	M3.6639

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:10:28	185284.6800	417.5105	14009.2660	13132.8400	186171.6200	460628.3200	T3334936.9000	88818.3130	4376.1487
2	17:11:13	194407.7700	485.0141	15299.0310	13848.9980	197925.3800	498483.6900	T3621938.8000	96781.2520	4628.7852
3	17:11:58	197253.4800	485.0141	15216.3800	15003.4940	202859.4300	510860.5200	T3652244.5000	98033.2590	5081.5489
4	17:12:43	202056.5200	485.0141	15178.8110	15281.4990	208795.8800	525750.1200	T3785385.4000	101183.0700	4971.4825
5	17:13:29	201785.0600	477.5137	14768.0740	14712.9770	201156.3800	503022.0900	T3609401.1000	95625.5240	4771.3656
x		196157.5000	470.0133	14894.3120	14395.9620	199381.7400	499748.9500	T3600781.4000	96088.2840	4765.8662
%RSD		3.5038	6.2826	3.5964	6.1628	4.2000	4.8421	T4.5617	4.7488	5.8661

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:10:28	2715.4423	6414.9682	3033.0519	8416.7484	444.1785	154.1681	27.5000	25.0000	393527.5000
2	17:11:13	2857.9900	6532.5595	3250.6339	8787.1304	455.8458	140.0012	25.8334	22.5000	407503.2400
3	17:11:58	2990.5365	6820.2898	3340.6695	9079.9440	470.8466	107.5007	18.3334	27.5000	411781.0100
4	17:12:43	2975.5311	7012.9496	3288.1486	9432.8357	476.6803	171.6684	24.1667	15.0000	418903.1500
5	17:13:29	2832.9815	6740.2247	3178.1059	8621.9580	471.6800	155.8348	27.5000	15.0000	417129.9400
x		2874.4953	6704.1984	3218.1219	8867.7233	463.8463	145.8346	24.6667	21.0000	409768.9700
%RSD		3.9269	3.5236	3.7039	4.4919	2.9043	16.5863	15.4078	27.4069	2.4725

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:10:28	242.5035	45.0001	97.5006	37.5001	85.0004	514624.3400	51.2502	7.5000	58.7502
2	17:11:13	265.0042	50.0001	85.0004	20.0000	62.5002	530215.1200	63.7502	7.5000	62.5002
3	17:11:58	235.0033	57.5002	90.0005	20.0000	62.5002	537905.2400	68.7503	12.5000	71.2503
4	17:12:43	257.5040	37.5001	67.5003	20.0000	50.0001	545868.9000	65.0003	2.5000	53.7502
5	17:13:29	202.5025	37.5001	77.5004	30.0001	62.5002	549986.8600	68.7503	10.0000	57.5002
x		240.5035	45.5001	83.5004	25.5000	64.5003	535680.0900	63.5002	8.0000	60.7502
%RSD		10.1159	18.7942	13.8180	31.3113	19.6494	2.6112	11.3424	46.3513	10.9461

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:10:28	43.7501	546178.2000	245.0036	72.5003	6695.1885	12619.5480	1662.6659	1662.6659	2030.2473
2	17:11:13	50.0001	558685.3400	312.5059	117.5008	7123.0430	12854.9070	1690.1714	1690.1714	1995.2388
3	17:11:58	40.0001	559219.4400	255.0039	95.0005	7120.5408	13000.1320	1802.6950	1802.6950	1917.7206
4	17:12:43	58.7502	566302.0600	297.5053	60.0002	7273.1726	13781.3860	1905.2178	1905.2178	1897.7161
5	17:13:29	47.5001	565206.2900	262.5041	95.0005	7240.6442	12584.4950	1662.6659	1662.6659	1852.7059
x		48.0001	559118.2700	274.5046	88.0005	7090.5178	12968.0940	1744.6832	1744.6832	1938.7257
%RSD		14.8003	1.4317	10.5703	25.3623	3.2632	3.7459	6.1172	6.1172	3.7456

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:10:28	2030.2473	891255.9500	1270.0968	1270.0968	1100.0726	1100.0726	913808.4900	72.5003	176.2519
2	17:11:13	1995.2388	896787.3300	1227.5904	1227.5904	1135.0773	1135.0773	910193.0700	86.2504	180.0019
3	17:11:58	1917.7206	895335.4500	1225.0900	1225.0900	1237.5919	1237.5919	909197.7100	98.7506	203.7525
4	17:12:43	1897.7161	898875.3300	1370.1126	1370.1126	1295.1006	1295.1006	913458.0000	98.7506	206.2526
5	17:13:29	1852.7059	902311.0700	1270.0968	1270.0968	1180.0835	1180.0835	923410.4500	100.0006	237.5034
x		1938.7257	896913.0300	1272.5973	1272.5973	1189.5852	1189.5852	914013.5400	91.2505	200.7525
%RSD		3.7456	0.4580	4.6162	4.6162	6.5806	6.5806	0.6151	13.0318	12.2542

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:10:28	27259.5120	22369.9850	56938.8600	659831.6100	0.0000
2	17:11:13	27522.8760	22911.4530	57323.9870	651193.9900	0.0000
3	17:11:58	27828.8890	22778.5890	56505.9280	650381.5800	0.0000
4	17:12:43	27833.9060	22818.6990	56309.6060	655335.5100	0.0000
5	17:13:29	27510.3340	21848.6040	55468.9960	660288.2300	0.0000
x		27591.1030	22545.4660	56509.4750	655406.1800	0.0000
%RSD		0.8815	1.9579	1.2420	0.7092	0.0000

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:15:16	100937.6200	776.7029	750438.6200	T 1786582.1000	229733.6000	267025.7000	TM 9783518.7000	865817.1700	TM 2820856.8000
2	17:16:01	100388.5500	743.3665	756324.1900	T 1769797.4000	226748.4900	260101.8000	TM 9783076.8000	T 876351.3900	TM 2831489.8000
3	17:16:46	100678.6900	742.5331	753458.7500	T 1773874.6000	226239.9400	262572.5000	TM 9574646.5000	871963.7000	TM 2806378.3000
4	17:17:31	99648.9200	740.8663	738205.0100	T 1754917.4000	224062.2800	259998.6600	TM 9529096.7000	867374.8400	TM 2775859.9000
5	17:18:17	100034.3300	710.0303	715591.9500	T 1695218.9000	216588.5300	249747.1700	TM 9273869.8000	827515.9500	TM 2659226.0000
X		100337.6200	742.6998	742803.7000	T 1756078.1000	224674.5700	259889.1700	TM 9588841.7000	T 861804.6100	TM 2778762.2000
%RSD		0.5095	3.1772	2.2489	T 2.0414	2.2042	2.4415	TM 2.2037	T 2.2750	TM 2.5199

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:15:16	167821.7500	1942.7264	74930.3660	62944.3250	M 873190.2000	T 2141725.7000	TM 15208458.0000	M 410689.0600	23034.2910
2	17:16:01	166753.1200	1847.7048	74435.9650	63810.8780	M 858688.0500	T 2085859.4000	TM 15087017.0000	M 411791.5100	23079.4150
3	17:16:46	163166.9200	1747.6832	73225.3090	63133.2460	M 853310.4900	T 2102021.6000	TM 15086051.0000	M 406529.8800	23096.9640
4	17:17:31	162211.0300	1857.7070	72435.9560	61244.2270	M 832872.1800	T 2046975.2000	TM 14711777.0000	M 397431.3800	22402.5720
5	17:18:17	162488.8600	1837.7026	70554.9210	59491.6000	M 809209.9800	T 1997832.5000	TM 14206640.0000	TM 396942.9900	21783.4340
X		164488.3400	1846.7048	73116.5030	62124.8550	M 845454.1800	T 2074882.9000	TM 14859989.0000	TM 404676.9600	22679.3350
%RSD		1.5845	3.7544	2.3756	2.8158	M 2.9440	T 2.6442	TM 2.7601	TM 1.7583	2.5518

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:15:16	12138.8350	29825.7790	14520.1390	33843.5840	2636.2503	773.3692	290.0051	20.0000	383087.5200
2	17:16:01	12031.1790	29263.7920	14177.0490	34162.3810	2431.1879	727.5318	310.0058	25.0000	385162.4500
3	17:16:46	11748.2750	29308.9500	13833.9730	33153.3180	2477.0348	770.0356	308.3390	26.6667	380351.3600
4	17:17:31	11991.1210	28794.6620	13806.4280	33708.0360	2530.3841	716.6975	295.0052	30.0001	380176.1300
5	17:18:17	11400.2930	27864.0060	13075.2500	31454.2500	2382.0071	739.1995	303.3389	22.5000	374847.7100
X		11861.9410	29011.4380	13882.5680	33261.3140	2491.3728	745.3667	301.3388	24.8334	380725.0300
%RSD		2.4867	2.5440	3.8676	3.2336	3.9276	3.4012	2.8580	15.4508	1.0194

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:15:16	1010.0612	172.5018	325.0063	100.0006	242.5035	460366.9600	3582.0197	37.5001	3439.4596
2	17:16:01	982.5579	170.0017	312.5059	107.5007	235.0033	462048.8100	3622.0370	67.5003	3518.2425
3	17:16:46	1000.0600	195.0023	322.5062	115.0008	270.0044	456267.9900	3599.5272	57.5002	3572.0154
4	17:17:31	990.0588	180.0019	312.5059	82.5004	232.5032	457128.2700	3483.2278	62.5002	3503.2362
5	17:18:17	987.5585	127.5010	320.0061	92.5005	235.0033	455275.8800	3348.1725	45.0001	3394.4412
X		994.0593	169.0017	318.5061	99.5006	243.0036	458217.5800	3526.9968	54.0002	3485.4790
%RSD		1.1050	14.8889	1.8071	12.7376	6.4002	0.6263	3.2082	23.0554	1.9920

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:15:16	926.3015	502117.4000	1182.5839	4556.2452	35919.7470	64858.9220	7786.1357	7786.1357	8596.9321
2	17:16:01	973.8069	498306.0200	1185.0843	4433.6791	36281.3080	65773.5490	7453.3316	7453.3316	8431.7635
3	17:16:46	952.5544	499600.1600	1290.0999	4596.2672	36248.6670	65748.3520	7676.0337	7676.0337	8704.5438
4	17:17:31	977.5573	498223.8200	1172.5825	4448.6871	36354.1250	65632.4430	7661.0199	7661.0199	8601.9373
5	17:18:17	895.0481	495397.5700	1145.0787	4378.6501	34092.0940	62841.0500	7545.9149	7545.9149	8199.0315
X		945.0536	498729.0000	1195.0858	4482.7057	35779.1880	64970.8630	7624.4872	7624.4872	8506.8416
%RSD		3.6623	0.4888	4.6384	2.0168	2.6768	1.9216	1.6795	1.6795	2.3262

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:15:16	8596.9321	822300.6400	5481.8024	5481.8024	5484.3041	5484.3041	841801.0000	3569.5143	8926.0279
2	17:16:01	8431.7635	831326.1400	5626.8991	5626.8991	5666.9262	5666.9262	844924.6500	3807.1195	9196.3215
3	17:16:46	8704.5438	833277.3300	5501.8156	5501.8156	5609.3873	5609.3873	849601.1700	3750.8439	9126.2446
4	17:17:31	8601.9373	834578.3700	5516.8255	5516.8255	5526.8321	5526.8321	858859.4400	3680.8127	9501.6638
5	17:18:17	8199.0315	824390.2400	5309.1907	5309.1907	5514.3239	5514.3239	844792.1800	3529.4973	8753.3448
X		8506.8416	829174.5400	5487.3067	5487.3067	5560.3547	5560.3547	847995.6900	3667.5575	9100.7205
%RSD		2.3262	0.6628	2.0843	2.0843	1.3574	1.3574	0.7881	3.2049	3.1163

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:15:16	125426.8600	103422.8200	261001.8000	595039.4900	0.0000
2	17:16:01	127190.8000	104503.6800	265085.2000	600953.3200	0.0000
3	17:16:46	129833.5900	106926.6300	268984.7200	608925.7600	0.0000
4	17:17:31	128744.3800	106992.4600	269276.4100	611927.9100	0.0000
5	17:18:17	122907.2400	101410.8200	252825.4300	598930.1700	0.0000
X		126820.5700	104651.2800	263434.7100	603155.3300	0.0000
%RSD		2.1657	2.2758	2.5894	1.1689	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:20:05	99981.1980	212.5027	143339.7700	T 1480738.6000	191643.5900	218938.7600	TM 6984640.4000	404641.2100	TM 3257646.3000
2	17:20:49	99463.3900	235.0033	142576.8400	T 1469697.6000	193198.8900	221094.5700	TM 7042611.3000	405522.5400	TM 3239075.6000
3	17:21:35	100019.1500	206.6692	145135.4500	T 1499636.2000	192027.2700	222691.2500	TM 7160920.7000	412833.7300	TM 3311534.2000
4	17:22:19	101462.2700	255.8373	145369.4700	T 1489041.6000	190410.8000	219605.9800	TM 6991300.8000	405779.6100	TM 3273127.4000
5	17:23:04	101727.1400	215.8361	139246.2300	T 1465263.4000	185450.8100	210223.6100	TM 6859260.2000	401077.4800	TM 3174275.4000
X		100530.6300	225.1697	143133.5500	T 1480875.5000	190546.2700	218510.8300	TM 7007746.7000	405970.9100	TM 3251131.8000
%RSD		0.9950	8.9569	1.7280	T 0.9474	1.5835	2.2210	TM 1.5555	1.0527	TM 1.5553

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:20:05	163981.4300	1887.7138	57860.1730	32907.3460	M 711486.8000	T 2113191.2000	TM 12716431.0000	M 351460.9200	18387.7640
2	17:20:49	166443.2700	1865.2087	58668.2940	33768.2790	M 735198.3400	T 2146463.3000	TM 12750782.0000	M 358444.1300	18763.6010
3	17:21:35	167408.5700	1982.7358	59015.7340	33710.5460	M 736225.8900	T 2175927.0000	TM 13046769.0000	M 362232.7900	19019.1790
4	17:22:19	166814.3300	1782.6907	59005.6630	34049.4200	M 727671.2500	T 2153861.1000	TM 12923778.0000	M 353277.8800	18786.1510
5	17:23:04	166960.9700	1710.1755	57706.6140	32849.6180	M 715143.2800	T 2078662.0000	TM 12582853.0000	M 351012.6100	18405.3030
X		166321.7100	1845.7049	58451.2960	33457.0420	M 725145.1100	T 2133620.9000	TM 12804123.0000	M 355285.6700	18672.4000
%RSD		0.8136	5.6346	1.0742	1.6256	M 1.5675	T 1.7851	TM 1.4225	M 1.3728	1.4516

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:20:05	10316.3820	26627.4730	12534.4200	34026.8280	2171.9497	132.5011	25.8334	21.6667	372989.5500
2	17:20:49	10501.6130	26602.3940	12674.6310	34817.5840	2164.4477	122.5009	30.0001	19.1667	377341.5600
3	17:21:35	10346.4190	26529.6620	12639.5780	35475.3500	2249.4702	126.6676	35.0001	10.0000	375678.9100
4	17:22:19	10586.7200	26005.5140	12206.4330	35025.9550	2274.4770	145.0013	30.8334	21.6667	379825.6800
5	17:23:04	10266.3090	25441.2760	12264.0180	33675.4050	2144.4425	147.5013	33.3334	26.6667	377038.2800
X		10405.4920	26241.2610	12463.8160	34604.2240	2200.9574	134.8344	31.0001	19.8334	376574.8000
%RSD		1.2973	1.9602	1.7324	2.1326	2.6028	8.1924	11.3095	30.9331	0.6642

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:20:05	842.5426	177.5019	315.0060	112.5008	340.0069	449924.1400	536.2672	40.0001	547.5180
2	17:20:49	802.5386	217.5028	315.0060	130.0010	325.0063	452081.3100	596.2713	22.5000	545.0178
3	17:21:35	817.5401	172.5018	372.5083	115.0008	310.0058	455012.0400	471.2633	40.0001	537.5173
4	17:22:19	785.0370	172.5018	342.5070	115.0008	317.5061	457553.1600	513.7658	35.0001	533.7671
5	17:23:04	730.0320	225.0030	320.0061	87.5005	322.5062	455782.4700	561.2689	20.0000	462.5128
X		795.5381	193.0023	333.0067	112.0008	323.0063	454070.6200	535.7673	31.5001	525.2666
%RSD		5.3122	13.4742	7.4587	13.7055	3.4354	0.6707	8.8319	30.5334	6.7916

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:20:05	235.0033	484628.7200	1840.2032	367.5081	26637.5050	48206.5300	5929.6089	5929.6089	7393.2782
2	17:20:49	213.7527	487930.7900	1960.2305	345.0071	27229.4140	47467.3050	6192.2998	6192.2998	6840.3062
3	17:21:35	191.2522	484292.4900	1950.2282	377.5086	27196.8080	48543.4780	6324.8994	6324.8994	6910.3640
4	17:22:19	206.2526	493666.7600	1827.7004	400.0096	26920.9140	48410.2060	6187.2961	6187.2961	7218.1247
5	17:23:04	207.5026	497285.1700	1900.2166	342.5070	25957.8660	47479.8760	5957.1285	5957.1285	6870.3309
X		210.7527	489560.7800	1895.7158	366.5081	26788.5010	48021.4790	6118.2465	6118.2465	7046.4808
%RSD		7.5330	1.1701	3.2154	6.5180	1.9499	1.0711	2.7653	2.7653	3.4892

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:20:05	7393.2782	805516.5700	4398.6606	4398.6606	4608.7741	4608.7741	824698.6300	232.5032	511.2657
2	17:20:49	6840.3062	802052.6700	4301.1097	4301.1097	4406.1645	4406.1645	813122.2000	203.7525	512.5158
3	17:21:35	6910.3640	804131.9400	4323.6213	4323.6213	4553.7439	4553.7439	820706.9200	211.2527	520.0162
4	17:22:19	7218.1247	804750.0500	4466.1965	4466.1965	4473.7005	4473.7005	823679.8900	207.5026	530.0169
5	17:23:04	6870.3309	818775.0400	4186.0511	4186.0511	4281.0994	4281.0994	832682.0100	218.7529	592.5211
X		7046.4808	807045.2500	4335.1278	4335.1278	4464.6965	4464.6965	822977.9300	214.7528	533.2671
%RSD		3.4892	0.8280	2.4393	2.4393	2.8749	2.8749	0.8590	5.2934	6.3674

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:20:05	118580.2200	96993.7010	245655.7100	564351.1600	0.0000
2	17:20:49	118453.4300	95746.9060	242652.1100	559438.4300	0.0000
3	17:21:35	119039.1900	95102.0850	242366.4700	556877.6600	2.5000
4	17:22:19	119751.7900	97694.3140	247772.0000	566490.5000	0.0000
5	17:23:04	115390.9100	95423.2250	240557.6800	576427.1400	0.0000
X		118243.1100	96192.0460	243800.7900	564716.9800	0.5000
%RSD		1.4153	1.1479	1.1800	1.3420	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:24:51	101131.6200	251.6705	112557.5500	1123907.0000	143260.9300	163921.5100	TM 7772638.2000	408710.2500	TM 2662858.0000
2	17:25:35	100595.1900	247.5037	113984.2500	1143857.8000	144583.4800	168450.5000	TM 7850937.7000	419121.2100	TM 2726852.9000
3	17:26:19	99964.3310	246.6703	114050.1400	1143012.8000	143672.9300	163926.6100	TM 7669228.0000	411410.8900	TM 2691174.2000
4	17:27:04	100880.2700	253.3372	115568.3400	1151906.6000	147152.8700	167088.4900	TM 7795602.5000	421388.8900	TM 2737781.7000
5	17:27:48	100246.0200	210.8360	111756.8800	1102562.9000	142228.4700	163279.0800	TM 7521877.9000	413169.7800	TM 2603809.7000
X		100563.4900	242.0035	113583.4300	1133049.4000	144179.7300	165333.2400	TM 7722056.9000	414760.2000	TM 2684495.3000
%RSD		0.4674	7.2911	1.2989	1.7567	1.2934	1.3855	TM 1.6815	1.2832	TM 2.0109

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:24:51	163211.5300	1767.6875	57359.2280	50414.5380	M 609489.8400	1266658.6000	TM 10786235.0000	M 299761.1500	15366.6550
2	17:25:35	163128.6800	1772.6885	56956.4800	51068.5020	M 611381.1300	1280035.0000	TM 10882072.0000	M 299406.2300	15336.6000
3	17:26:19	161873.3100	1727.6791	56767.6980	50688.6930	M 614917.6500	1269912.5000	TM 10745122.0000	M 297315.8500	15286.5080
4	17:27:04	160044.7400	1727.6791	54661.1850	49901.4630	M 608662.5400	1274633.4000	TM 10749186.0000	M 298281.9700	15336.6000
5	17:27:48	158329.9500	1740.1817	53810.6760	49277.7680	M 588367.3300	1229121.2000	TM 10409445.0000	M 287880.5800	14672.9060
X		161317.6400	1747.1832	55911.0530	50270.1930	M 606563.7000	1264072.1000	TM 10714412.0000	M 296529.1500	15199.8540
%RSD		1.3048	1.2411	2.8135	1.3904	M 1.7233	1.5963	TM 1.6723	M 1.6625	1.9472

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:24:51	9492.9038	19966.3910	9202.5784	36017.6690	1506.8029	142.5012	32.5001	20.8334	371636.0500
2	17:25:35	9765.7188	20011.4990	9690.6312	36585.1320	1466.7957	120.0009	25.8334	20.8334	370366.3600
3	17:26:19	9778.2335	19214.6270	9415.3159	35731.4400	1440.9579	140.0012	32.5001	22.5000	370525.7100
4	17:27:04	9848.3155	19455.1840	9089.9549	35636.0330	1415.1201	152.5014	40.0001	24.1667	370442.1200
5	17:27:48	9407.8074	18843.7810	9029.8897	35143.9500	1383.4482	138.3345	40.8334	20.0000	368634.5500
X		9658.5959	19498.2960	9285.6740	35822.8450	1442.6250	138.6678	34.3334	21.6667	370320.9600
%RSD		2.0191	2.3556	2.9069	1.4792	3.2815	8.5053	18.0332	7.6923	0.2906

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:24:51	862.5446	115.0008	285.0049	67.5003	210.0027	453442.3500	167.5017	30.0001	143.7512
2	17:25:35	850.0434	110.0007	260.0041	77.5004	160.0015	455336.5600	155.0014	30.0001	130.0010
3	17:26:19	877.5462	107.5007	292.5051	65.0003	190.0022	449847.6700	160.0015	25.0000	143.7512
4	17:27:04	812.5396	135.0013	295.0052	75.0003	197.5023	449568.1800	127.5010	20.0000	148.7513
5	17:27:48	782.5367	97.5006	242.5035	72.5003	167.5017	450939.3700	133.7511	30.0000	153.7514
X		837.0421	113.0008	275.0046	71.5003	185.0021	451826.8300	148.7513	27.0000	144.0013
%RSD		4.6390	12.2584	8.3073	7.2505	11.2659	0.5504	11.6138	16.5635	6.1504

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:24:51	235.0033	494875.0100	1257.5949	330.0065	24611.2890	46235.4080	6444.9919	6444.9919	6987.9286
2	17:25:35	216.2528	494907.1800	1227.5904	360.0078	25371.0630	46162.5050	6520.0497	6520.0497	7646.0061
3	17:26:19	243.7536	492036.9800	1367.6122	322.5062	25506.4750	46416.4100	6427.4778	6427.4778	7253.1551
4	17:27:04	233.7533	495249.1300	1337.6073	320.0061	25646.9050	46363.6170	6560.0811	6560.0811	7610.9740
5	17:27:48	247.5037	494557.3000	1242.5926	405.0098	24809.3750	44558.8120	6357.4241	6357.4241	7373.2605
X		235.2533	494315.1200	1286.5995	347.5073	25189.0220	45947.3500	6462.0048	6462.0048	7374.2649
%RSD		5.1435	0.2624	4.8265	10.3259	1.7991	1.7035	1.2333	1.2333	3.6752

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:24:51	6987.9286	823010.8800	4603.7713	4603.7713	4586.2617	4586.2617	837710.4800	235.0033	650.0254
2	17:25:35	7646.0061	827369.9700	4796.3799	4796.3799	4888.9337	4888.9337	843969.7800	248.7537	615.0227
3	17:26:19	7253.1551	834644.5300	4773.8670	4773.8670	4903.9425	4903.9425	854832.7800	203.7525	640.0246
4	17:27:04	7610.9740	833831.3500	4903.9425	4903.9425	4778.8699	4778.8699	854371.3700	238.7534	577.5200
5	17:27:48	7373.2605	838377.8500	4778.8699	4778.8699	4696.3230	4696.3230	858231.9600	286.2549	630.0238
X		7374.2649	831446.9200	4771.3661	4771.3661	4770.8661	4770.8661	849823.2700	242.5036	622.5233
%RSD		3.6752	0.7408	2.2561	2.2561	2.7994	2.7994	1.0148	12.2418	4.5438

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:24:51	56171.1760	45863.3610	115760.9900	597041.6100	0.0000
2	17:25:35	57772.0650	46652.7240	117391.0600	604019.8100	0.0000
3	17:26:19	57920.5910	47366.7350	119477.9000	608908.3000	0.0000
4	17:27:04	58867.1890	47698.6200	120451.7700	608411.4100	0.0000
5	17:27:48	56269.3350	45999.1060	117804.3300	616834.3200	0.0000
X		57400.0710	46716.1090	118177.2100	607043.0900	0.0000
%RSD		2.0149	1.7370	1.5523	1.1947	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:29:35	98670.7170	219.1696	95000.9420	1003431.9000	126903.9800	147514.1700	TM 6115738.9000	360340.8600	TM 2095761.3000
2	17:30:20	99880.8380	200.8358	94285.3840	1010150.6000	127381.1700	149178.4100	TM 6230244.6000	358099.7900	TM 2073821.6000
3	17:31:05	99372.3130	202.5025	94935.1990	1012608.8000	128081.7900	147682.1100	TM 6233843.1000	359725.0900	TM 2085489.9000
4	17:31:51	100594.3400	198.3357	94780.9580	1006641.6000	130128.1300	148740.6900	TM 6287757.8000	356347.0000	TM 2068151.8000
5	17:32:36	102046.8400	209.1693	92467.6860	979090.7300	125756.7800	144354.5600	TM 6029469.0000	345035.6000	TM 2002266.8000
X		100113.0100	206.0026	94294.0340	1002384.7000	127650.3700	147493.9900	TM 6179410.7000	355909.6700	TM 2065098.3000
%RSD		1.2883	4.0696	1.1228	1.3446	1.2717	1.2812	TM 1.6938	1.7627	TM 1.7774

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:29:35	154831.3800	1757.6853	42601.1140	57346.6420	M 496073.5600	1111979.7000	TM 8856876.1000	M 238101.1200	12128.8200
2	17:30:20	155937.9700	1822.6993	44033.5310	57548.0230	M 502109.4400	1135145.8000	TM 8950121.3000	M 241267.7700	12176.3890
3	17:31:05	157309.6500	1757.6853	44546.2450	58421.5690	M 501499.3000	1131270.7000	TM 8854652.9000	M 240848.4000	12627.0590
4	17:31:51	159155.4500	1825.1999	43852.5800	58582.6950	M 497112.8300	1133389.2000	TM 8726487.0000	M 238432.9100	12516.8930
5	17:32:36	158918.4900	1800.1944	42699.1130	57495.1600	M 484679.0200	1108694.6000	TM 8536598.1000	M 235344.4500	12304.0770
X		157230.5900	1792.6929	43546.5160	57878.8180	M 496294.8300	1124096.6000	TM 8786147.1000	M 238798.9300	12350.6480
%RSD		1.1893	1.8636	1.9695	0.9962	M 1.4124	1.1288	TM 1.8389	M 1.0009	1.7450

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:29:35	7483.3585	25448.7990	12026.1710	31434.1750	1019.2290	128.3343	42.5001	27.5000	358248.4800
2	17:30:20	7803.6521	26349.0910	12228.9660	31095.4070	1073.4025	121.6676	33.3334	22.5000	352949.3900
3	17:31:05	7748.6008	26003.0060	12356.6540	31391.5140	1047.5658	123.3343	34.1667	23.3334	357296.3800
4	17:31:51	7738.5915	25867.5860	12481.8410	31527.0250	1015.0618	136.6678	28.3334	15.8333	356026.2200
5	17:32:36	7981.3203	24869.5540	11911.0060	30355.1860	1060.0674	138.3345	29.1667	18.3334	357499.8400
X		7751.1046	25707.6070	12200.9280	31160.3610	1043.0653	129.6677	33.5001	21.5000	356404.0600
%RSD		2.3044	2.2122	1.9158	1.5352	2.4358	5.8480	16.8164	21.1232	0.5865

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:29:35	752.5340	100.0006	245.0036	65.0003	167.5020	445600.8800	173.7518	32.5001	193.7523
2	17:30:20	720.0311	97.5006	242.5035	60.0002	165.0016	443287.2500	185.0021	20.0000	187.5021
3	17:31:05	767.5354	107.5007	250.0038	40.0001	195.0023	436476.4900	175.0018	40.0001	180.0019
4	17:31:51	680.0278	100.0006	240.0035	50.0001	127.5010	441422.0500	177.5019	42.5001	181.2520
5	17:32:36	732.5322	85.0004	182.5020	87.5005	167.5017	442710.2600	156.2515	20.0000	147.5013
X		730.5321	98.0006	232.0033	60.5002	167.5017	441899.3900	173.5018	31.0001	178.0019
%RSD		4.6006	8.3447	12.0335	29.5680	15.1845	0.7667	6.1006	34.4988	10.0621

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:29:35	226.2531	487959.9200	1287.5995	307.5057	23824.0060	41588.5180	5656.9194	5656.9194	5879.5734
2	17:30:20	181.2520	479909.5200	1295.1006	250.0038	23072.7310	41191.5540	5441.7762	5441.7762	5934.6124
3	17:31:05	205.0025	478853.8100	1232.5912	280.0047	22663.2760	41490.5310	5349.2163	5349.2163	6044.6915
4	17:31:51	200.0024	475563.1700	1400.1176	282.5048	22823.7130	41060.9110	5304.1875	5304.1875	5817.0296
5	17:32:36	195.0023	478660.6800	1185.0843	325.0063	21868.6570	40528.3140	5011.5065	5011.5065	5436.7729
X		201.5025	480189.4200	1280.0986	289.0051	22910.4760	41171.9660	5352.7212	5352.7212	5822.5360
%RSD		8.1524	0.9655	6.2946	9.9125	3.2387	1.0175	4.3740	4.3740	3.9726

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:29:35	5879.5734	824112.1500	3888.4070	3888.4070	3890.9081	3890.9081	844670.7400	175.0018	505.0153
2	17:30:20	5934.6124	811213.9800	3858.3930	3858.3930	3980.9507	3980.9507	832147.3500	217.5028	488.7643
3	17:31:05	6044.6915	795688.8200	3855.8919	3855.8919	3763.3496	3763.3496	816989.3900	202.5025	477.5137
4	17:31:51	5817.0296	800652.1100	3940.9316	3940.9316	4063.4905	4063.4905	814395.4900	186.2521	503.7652
5	17:32:36	5436.7729	794078.0000	3648.2984	3648.2984	3680.8127	3680.8127	807893.4800	198.7524	472.5134
X		5822.5360	805149.0100	3838.3844	3838.3844	3875.9023	3875.9023	823219.2900	196.0023	489.5144
%RSD		3.9726	1.5571	2.9086	2.9086	4.0214	4.0214	1.8134	8.2590	3.0248

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:29:35	94492.7120	76401.1300	192170.5100	608086.4200	0.0000
2	17:30:20	91459.1470	73818.0040	187094.4400	591966.8100	0.0000
3	17:31:05	89220.0700	72153.5210	185854.6600	581131.3500	0.0000
4	17:31:51	87774.8440	72294.7370	181926.9000	573589.8000	0.0000
5	17:32:36	83425.5090	69140.6410	174737.9900	567046.4600	0.0000
X		89274.4560	72761.6070	184356.9000	584364.1700	0.0000
%RSD		4.6342	3.6402	3.5280	2.7686	0.0000

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Iser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:34:23	98437.1450	210.8360	137022.3200	1114984.2000	141175.7900	165956.2000	TM 6835901.4000	366600.1900	TM 3183757.9000
2	17:35:09	100761.3400	185.0021	137728.8300	T 1127279.0000	146104.6600	165991.9000	TM 6800042.4000	378484.1700	TM 3211005.9000
3	17:35:54	100574.9500	213.3361	138104.9700	1137835.9000	143494.9000	166211.2000	TM 6804288.0000	380466.4400	TM 3241162.8000
4	17:36:40	99631.2100	196.6690	138379.4700	1135667.9000	145997.8200	165660.4000	TM 6821207.4000	381188.3300	TM 3271862.0000
5	17:37:24	99297.2600	195.0023	134306.1400	1112719.3000	139858.8600	163401.4500	TM 6635094.3000	372088.0700	TM 3178071.7000
X		99740.3810	200.1691	137108.3500	T 1125697.3000	143326.4100	165444.2300	TM 6779306.7000	375765.4400	TM 3217172.1000
%RSD		0.9572	5.8907	1.2014	T 1.0249	1.9589	0.7003	TM 1.2076	1.6642	TM 1.2287

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:34:23	160005.2400	1632.6599	55056.2730	36801.0800	M 671255.8800	T 1799548.9000	TM 11929796.0000	M 328031.6700	16346.0160
2	17:35:09	160909.9100	1612.6560	55692.9830	36921.6120	M 684725.8600	T 1820685.5000	TM 12107675.0000	M 342512.1300	16699.2150
3	17:35:54	159784.8200	1465.1288	54734.1610	36459.5840	M 679717.1800	1774813.6000	TM 12044239.0000	M 332750.8500	16042.9280
4	17:36:40	161691.0700	1572.6484	55846.5050	36477.1610	M 682011.2300	T 1795157.5000	TM 11836455.0000	M 331094.2900	16085.5100
5	17:37:24	159702.0100	1510.1368	53581.7080	35746.5050	M 665181.6000	T 1760628.3000	TM 11775698.0000	M 332417.9500	16235.8010
X		160418.6100	1558.6460	54982.3260	36481.1880	M 676578.3500	T 1790166.8000	TM 11938772.0000	M 333361.3800	16281.8940
%RSD		0.5350	4.5014	1.6471	1.2536	M 1.2007	T 1.2959	TM 1.1606	M 1.6330	1.6135

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:34:23	9362.7567	17954.3210	8689.5231	23971.9300	2074.4248	135.8344	32.5001	18.3334	365258.1400
2	17:35:09	9758.2100	18538.0970	8839.6859	24200.0880	2039.4162	121.6676	34.1667	14.1667	370366.3600
3	17:35:54	9197.5729	18763.6010	8511.8449	24245.2190	2101.9317	129.1677	35.0001	15.0000	371100.4600
4	17:36:40	9355.2483	18763.6010	8819.6647	24124.8700	2152.7780	130.8344	40.8334	25.0000	371087.3900
5	17:37:24	9182.5564	17886.6750	8809.6541	23846.5710	2024.4125	124.1676	24.1667	25.0000	372589.7500
X		9371.2689	18381.2510	8734.7[illegible]	24077.7350	2078.5927	128.3343	33.3334	19.5000	370080.4200
%RSD		2.4788	2.3461	1.5036	0.6883	2.4691	4.3560	18.0278	26.9604	0.7605

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:34:23	690.0286	172.5018	282.5018	85.0004	280.0047	444512.5000	220.0029	45.0001	220.0029
2	17:35:09	617.5229	150.0014	275.0045	92.5005	267.5043	447105.8600	250.0038	17.5000	216.2528
3	17:35:54	567.5193	167.5017	277.5046	95.0005	247.5037	448276.3000	220.0029	15.0000	206.2526
4	17:36:40	602.5218	132.5011	282.5048	90.0005	192.5022	450406.6900	257.5040	30.0001	222.5030
5	17:37:24	600.0216	182.5020	277.5046	82.5004	235.0033	456956.7300	217.5028	15.0000	188.7521
X		615.5228	161.0016	279.0047	89.0005	244.5036	449451.6200	233.0033	24.5000	210.7527
%RSD		7.3866	12.3055	1.2022	5.8249	13.8587	1.0467	8.2207	53.2181	6.3325

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:34:23	177.5019	477626.2900	967.5562	267.5043	23688.6210	42656.3950	6224.8240	6224.8240	6877.8371
2	17:35:09	198.7524	485118.5200	1077.5697	300.0054	22460.4770	43510.7960	6059.7024	6059.7024	6922.8744
3	17:35:54	186.2521	491162.5900	1027.5633	352.5075	24744.1820	43754.5670	6247.3409	6247.3409	6980.4224
4	17:36:40	197.5023	491480.5400	1012.5615	332.5066	24699.0480	43789.7510	6377.4394	6377.4394	7220.6269
5	17:37:24	203.7525	499202.3500	965.0559	345.0071	23834.0350	43033.3260	6207.3110	6207.3110	6937.8869
X		192.7522	488918.0600	1010.0613	319.5062	24085.2730	43348.9670	6223.3235	6223.3235	6987.9295
%RSD		5.5295	1.6468	4.6178	11.0577	2.4753	1.1326	1.8208	1.8208	1.9340

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:34:23	6877.8371	803332.5800	4586.2617	4586.2617	4328.6239	4328.6239	816117.3400	191.2522	468.7632
2	17:35:09	6922.8744	812959.9500	4166.0411	4166.0411	4668.8075	4668.8075	833415.1500	230.0032	548.7681
3	17:35:54	6980.4224	829240.3800	4436.1805	4436.1805	4628.7852	4628.7852	839999.6100	201.2524	476.2636
4	17:36:40	7220.6269	836011.9400	4573.7548	4573.7548	4776.3684	4776.3684	852625.4000	293.7552	582.5204
5	17:37:24	6937.8869	839114.2200	4436.1805	4436.1805	4781.3713	4781.3713	860852.7200	231.2532	562.5190
X		6987.9295	824131.8200	4439.6837	4439.6837	4636.7913	4636.7913	840602.0400	229.5032	527.7668
%RSD		1.9340	1.8691	3.8086	3.8086	3.9831	3.9831	2.0658	17.4192	9.8368

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:34:23	151863.7600	124353.4600	315151.1200	569583.5200	0.0000
2	17:35:09	154827.5600	126145.0800	321639.6000	581407.1300	2.5000
3	17:35:54	157568.2100	129663.4700	329555.0400	599720.3300	0.0000
4	17:36:40	160034.5500	131316.5500	331359.5200	603857.4000	2.5000
5	17:37:24	156651.1700	127657.8600	326862.0300	608470.5000	0.0000
X		156189.0500	127827.2800	324913.4600	592607.7700	1.0000
%RSD		1.9594	2.1592	2.0236	2.7783	136.9306

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:39:09	99173.2970	198.3357	118532.0400	1066665.2000	134293.4300	154677.3000	TM 6657474.6000	383354.3800	TM 2668297.7000
2	17:39:55	99574.7080	217.5028	119990.1800	1052321.9000	133724.3900	154030.4900	TM 6806008.4000	378546.9200	TM 2661970.5000
3	17:40:40	99989.6310	240.0035	120926.0700	1076531.3000	136758.0300	156730.1300	TM 6826463.2000	382522.4300	TM 2649447.6000
4	17:41:24	101107.1600	192.5022	120822.0700	1067055.8000	136453.0900	157056.1800	TM 6867278.0000	381248.4900	TM 2634541.7000
5	17:42:10	100903.8900	206.6692	117847.4300	1055487.2000	134669.4300	156261.4500	TM 6801510.2000	379428.1700	TM 2577597.1000
X		100149.7400	211.0027	119623.5600	1063612.3000	135179.6800	155751.1100	TM 6791746.9000	381020.0800	TM 2638370.9000
%RSD		0.8347	8.8815	1.1533	0.9183	0.9977	0.8515	TM 1.1695	0.5316	TM 1.3775

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:39:09	157164.4400	1810.1966	51886.0280	52280.9850	M 577837.4700	1018397.0000	TM 10106188.0000	M 280153.8200	12141.3380
2	17:39:55	158726.1300	1930.2235	51745.1560	52746.4040	M 576055.2000	1025045.4000	TM 10169059.0000	M 284060.2800	12521.9010
3	17:40:40	159752.9700	1977.7347	51408.0800	52726.2780	M 578924.1400	1040086.7000	TM 10418211.0000	M 286077.5600	12664.6160
4	17:41:24	160576.0700	1937.7253	52072.1840	51888.5440	M 580318.8100	1036156.9000	TM 10222709.0000	M 283000.1100	12764.7690
5	17:42:10	162483.7600	1895.2155	51433.2340	52660.8660	M 572368.7300	1023634.2000	TM 10193260.0000	M 285430.9400	12524.4050
X		159740.6800	1910.2191	51708.9370	52460.6150	M 577100.8700	1028664.1000	TM 10221886.0000	M 283744.5400	12523.4060
%RSD		1.2477	3.3052	0.5564	0.7080	M 0.5320	0.8836	TM 1.1528	M 0.8234	1.8903

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:39:09	8171.5044	22149.3970	10296.3570	30437.9870	1442.6249	135.8344	35.0001	20.0000	360301.7200
2	17:39:55	8529.3628	22430.1460	10366.4440	31143.0850	1487.6328	133.3344	36.6667	21.6667	361802.2000
3	17:40:40	8236.5685	22600.6060	10754.4350	31286.1190	1533.4744	130.0010	40.0001	19.1667	365333.8600
4	17:41:24	8251.5830	22831.2330	10922.1530	30751.6350	1511.8038	129.1677	38.3334	18.3334	364383.5800
5	17:42:10	8371.7060	22342.4110	10609.2490	30540.8620	1530.1405	133.3344	42.5001	16.6667	363519.5400
X		8312.1444	22470.7590	10589.7280	30831.9380	1501.1353	132.3344	38.5001	19.1667	363080.1860
%RSD		1.7002	1.1523	2.1712	1.2021	2.4940	2.0599	7.5603	9.7220	0.5538

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:39:09	802.5386	182.5020	362.5079	102.5006	240.0035	444275.3400	237.5034	20.0000	202.7525
2	17:39:55	920.0508	147.5013	332.5066	130.0010	292.5051	442886.7800	255.0039	25.0000	246.2536
3	17:40:40	847.5431	182.5020	322.5062	115.0008	237.5034	444436.0800	195.0023	20.0000	223.7530
4	17:41:24	827.5411	157.5015	330.0065	102.5006	312.5059	446620.8700	251.2538	32.5001	225.0030
5	17:42:10	812.5396	150.0014	312.5059	120.0009	252.5038	448442.3900	218.7529	25.0000	242.5035
X		842.0427	164.0016	332.0066	114.0008	267.0043	445332.2900	231.5033	24.5000	228.2531
%RSD		5.5556	10.5394	5.6452	10.3560	12.6042	0.4924	10.7411	20.9122	7.4549

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:39:09	211.2527	491117.5500	1395.1168	360.0078	22229.6100	38689.6050	5884.5770	5884.5770	6294.8766
2	17:39:55	221.2529	483701.5600	1457.6275	357.5077	21557.8480	39402.9360	5832.0400	5832.0400	6492.5282
3	17:40:40	231.2532	487178.6400	1400.1176	395.0094	21998.9990	38576.5830	5529.3338	5529.3338	6272.3597
4	17:41:24	217.5028	483294.4800	1470.1297	365.0080	21284.6480	38704.6750	5706.9535	5706.9535	6625.1325
5	17:42:10	233.7531	483590.9600	1450.1262	322.5062	20936.2670	37707.6190	5489.3074	5489.3074	6119.7463
X		223.0030	485792.6400	1434.6235	360.0078	21601.4740	38616.2840	5688.4423	5688.4423	6360.9286
%RSD		4.2246	0.6936	2.4100	7.1667	2.4247	1.5641	3.1002	3.1002	3.1195

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:39:09	6294.8766	824442.5600	4088.5027	4088.5027	4131.0237	4131.0237	848482.8900	208.7526	547.5180
2	17:39:55	6492.5282	819570.3100	4096.0064	4096.0064	4286.1020	4286.1020	833453.7300	198.7524	525.0165
3	17:40:40	6272.3597	808737.2300	4091.0039	4091.0039	4423.6738	4423.6738	836794.9900	185.0021	482.5140
4	17:41:24	6625.1325	808737.2300	4086.0015	4086.0015	4223.5700	4223.5700	823699.1600	216.2528	548.7681
5	17:42:10	6119.7463	805016.5400	4198.5574	4198.5574	3903.4140	3903.4140	818227.4800	222.5030	490.0144
X		6360.9286	813300.7700	4112.0144	4112.0144	4193.5567	4193.5567	832131.6500	206.2526	518.7662
%RSD		3.1195	1.0171	1.1800	1.1800	4.6257	4.6257	1.4159	7.1839	6.0243

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:39:09	190106.4700	155746.9500	395253.8900	601605.4500	0.0000
2	17:39:55	186314.7700	152477.3100	386135.9900	587425.4900	0.0000
3	17:40:40	184052.8300	150669.8800	380639.0600	579345.7300	2.5000
4	17:41:24	182374.0200	148519.2900	376154.6700	574035.2000	0.0000
5	17:42:10	177178.7300	143825.5300	365187.6500	570197.1800	0.0000
X		184005.3600	150247.7900	380674.2500	582521.8100	0.5000
%RSD		2.6039	2.9695	2.9448	2.1411	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:43:56	100739.4100	182.5020	82822.0340	859694.2900	110062.0500	124036.2800	TM 5668811.7000	319798.2300	TM 1798054.9000
2	17:44:40	101731.3600	175.0018	82978.5800	853078.4400	109778.3500	127609.6300	TM 5643874.5000	320252.6900	TM 1816609.1000
3	17:45:25	102090.7100	173.3351	83498.7370	860180.8700	110345.7700	127386.2500	TM 5639581.6000	325284.5700	TM 1817611.6000
4	17:46:10	101232.8400	150.0014	83390.1580	851056.5400	108993.1400	124716.3200	TM 5600376.6000	324777.8700	TM 1801456.7000
5	17:46:55	100337.9500	165.0016	80474.1990	825910.2700	106207.5200	122691.5900	TM 5426621.5000	318133.8100	TM 1764151.0000
X		101226.4500	169.1684	82632.7420	849984.0800	109077.3600	125288.0100	TM 5595853.2000	321649.4300	TM 1799576.7000
%RSD		0.7035	7.3233	1.4991	1.6518	1.5418	1.7131	TM 1.7464	0.9922	TM 1.2035

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:43:56	161858.0100	1777.6896	42254.3550	35507.9880	M 452577.1700	916957.8900	TM 8037164.9000	M 217886.7200	10894.6170
2	17:44:40	162929.8500	1795.1933	41940.2740	35141.4390	M 451614.4900	904831.1000	TM 8018668.0000	M 220653.1000	10721.8930
3	17:45:25	162130.7400	1785.1912	40628.8010	34546.4590	M 451938.8900	909219.9500	TM 8016809.2000	M 220357.9400	10934.6690
4	17:46:10	158631.8600	1780.1901	41221.7020	34508.8040	M 439952.3000	886959.2700	TM 7851175.8000	M 217029.7900	10942.1790
5	17:46:55	159574.6000	1712.6760	39611.4210	33085.5490	M 435573.5400	867836.9400	TM 7591053.6000	M 209513.5600	10551.6760
X		161025.0100	1770.1880	41131.3110	34558.0480	M 446331.2800	897161.0300	TM 7902974.3000	M 217088.2200	10809.0070
%RSD		1.1356	1.8553	2.5748	2.6732	M 1.7881	2.2013	TM 2.4036	M 2.0782	1.5664

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:43:56	7170.5837	20818.4720	10061.0700	25300.8500	1068.4018	115.8341	33.3334	16.6667	359521.5900
2	17:44:40	7040.4728	21071.6070	9810.7717	25345.9870	1037.5646	126.6676	34.1667	20.8334	356727.7800
3	17:45:25	6937.8869	21339.7880	9940.9258	25418.7080	1125.9094	135.8344	30.8334	18.3334	358243.2600
4	17:46:10	6632.6385	21151.8100	9728.1749	25371.0630	1040.8983	130.0010	34.1667	19.1667	355598.5200
5	17:46:55	6682.6784	20041.5710	9525.4409	24485.9210	1010.8946	121.6676	32.5001	15.8333	354101.7700
X		6892.6522	20884.6500	9813.2766	25184.5060	1056.7338	126.0010	33.0001	18.1667	356838.5900
%RSD		3.3765	2.4281	2.0871	1.5598	4.1360	6.0869	4.2256	10.9517	0.5980

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:43:56	765.0351	182.5020	270.0044	105.0007	245.0036	453160.1000	147.5013	22.5000	176.2519
2	17:44:40	950.0542	152.5014	315.0060	82.5004	232.5032	450314.3900	160.0015	22.5000	141.2512
3	17:45:25	805.0389	177.5019	265.0042	115.0008	272.5045	447422.1800	177.5019	30.0001	148.7513
4	17:46:10	792.5377	132.5011	305.0056	92.5005	252.5038	446547.0700	125.0009	27.5000	127.5010
5	17:46:55	875.0459	177.5019	292.5051	75.0003	240.0035	446789.5600	150.0014	32.5001	158.7515
X		837.5424	164.5017	289.5051	94.0005	248.5037	448846.6600	152.0014	27.0000	150.5014
%RSD		8.9358	13.0027	7.4887	17.2976	6.1443	0.6332	12.6014	16.5635	12.2012

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:43:56	184.5020	481867.8200	1192.5853	367.5081	18357.6980	32801.9310	4426.1751	4426.1751	4891.4351
2	17:44:40	197.5023	480065.8600	1135.0773	347.5073	18756.0840	32957.5430	4318.6187	4318.6187	4861.4176
3	17:45:25	181.2520	487827.5000	1090.0713	395.0094	18362.7090	33399.2970	4541.2370	4541.2370	5111.5672
4	17:46:10	181.2520	488293.6400	1085.0706	402.5097	18407.8080	33670.3850	4336.1278	4336.1278	4888.9337
5	17:46:55	157.5015	490950.6400	1050.0662	380.0087	18237.4340	32779.3430	4201.0587	4201.0587	4626.2838
X		180.0020	487401.0900	1110.5741	378.5086	18424.3470	33121.7000	4364.6435	4364.6435	4875.9275
%RSD		7.9635	0.6854	4.9438	5.8073	1.0632	1.1930	2.9131	2.9131	3.5295

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:43:56	4891.4351	810815.3500	3173.1040	3173.1040	3168.1021	3168.1021	823148.5300	195.0023	490.0144
2	17:44:40	4861.4176	815902.7700	3168.1021	3168.1021	3293.1506	3293.1506	834090.4600	190.0022	458.7626
3	17:45:25	5111.5672	820098.6900	3225.6242	3225.6242	3273.1427	3273.1427	841478.2100	177.5019	431.2612
4	17:46:10	4888.9337	821017.9400	3343.1705	3343.1705	3128.0870	3128.0870	843188.8400	205.0025	438.7616
5	17:46:55	4626.2838	829237.6300	3115.5823	3115.5823	3108.0795	3108.0795	846776.7400	185.0021	461.2628
X		4875.9275	819414.4800	3205.1166	3205.1166	3194.1124	3194.1124	837736.5600	190.5022	456.0125
%RSD		3.5295	0.8318	2.6971	2.6971	2.6423	2.6423	1.1191	5.4427	5.0264

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:43:56	82130.2380	67552.6970	170407.1800	585736.3300	2.5000
2	17:44:40	82852.3330	68772.6140	171805.4600	594218.9300	0.0000
3	17:45:25	84786.6430	69612.0410	175233.2300	600510.5500	0.0000
4	17:46:10	85640.3060	70358.2690	176951.4700	604237.2500	0.0000
5	17:46:55	82789.2110	69067.5380	171853.9400	607832.6200	0.0000
X		83639.7460	69072.6320	173250.2600	598507.1400	0.5000
%RSD		1.7874	1.5087	1.5742	1.4597	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:48:40	99745.0600	218.3362	118843.9300	1088609.7000	137718.6600	158656.0600	TM 7290846.4000	417082.6600	TM 2599405.3000
2	17:49:25	99759.3970	215.0028	120307.2100	1112269.8000	141786.0200	160215.4800	TM 7396592.5000	422327.1400	TM 2665783.3000
3	17:50:10	99220.5200	211.6694	121626.1400	1125770.2000	140672.3900	165461.5000	TM 7341478.2000	423283.9000	TM 2666424.2000
4	17:50:54	99977.8240	190.0022	119860.8400	1106263.6000	139533.4800	162657.1000	TM 7336506.6000	421649.0600	TM 2635905.8000
5	17:51:40	99794.8170	204.1692	115079.1400	1068997.7000	133983.5100	155701.1100	TM 7069852.8000	411122.1500	TM 2526272.9000
X		99699.5240	207.8359	119143.4500	1100382.2000	138738.8100	160538.2500	TM 7287055.3000	419092.9800	TM 2618758.3000
%RSD		0.2844	5.4212	2.0832	2.0035	2.2013	2.3260	TM 1.7439	1.2057	TM 2.2352

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:48:40	154404.8200	1965.2317	47799.1940	53186.6900	M 689260.2700	T 1746033.1000	TM 12202638.0000	M 328065.4600	15727.3270
2	17:49:25	155035.1100	1842.7037	49119.3370	52879.7450	M 691651.7400	T 1742038.8000	TM 12252151.0000	M 330283.0300	16273.3740
3	17:50:10	155698.5600	1847.7048	48634.0030	53453.3880	M 696442.1100	T 1774112.0000	TM 12354932.0000	M 335947.8600	16238.3060
4	17:50:54	153186.3900	1757.6853	47464.7910	52635.7080	M 694499.6000	T 1741587.1000	TM 12163548.0000	M 330909.6700	15927.7070
5	17:51:40	154979.0800	1710.1755	46109.7140	50371.7800	M 660759.7500	T 1664693.4000	TM 11600296.0000	M 315348.3800	15541.9800
X		154660.7900	1824.7002	47825.4080	52505.4620	M 686522.6900	T 1733692.9000	TM 12114713.0000	M 328110.8800	15941.7390
%RSD		0.6098	5.3563	2.4300	2.3466	M 2.1353	T 2.3569	TM 2.4463	M 2.3452	1.9933

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:48:40	8777.1198	22873.8500	10786.9770	30310.0220	1632.6599	135.0011	32.5001	21.6667	352120.4100
2	17:49:25	9127.4959	23014.2350	10624.2680	29941.1920	1651.8304	125.8343	38.3334	20.0000	356610.4200
3	17:50:10	8929.7819	23036.7980	11207.5310	30555.9170	1676.8354	130.8344	40.0001	34.1667	356023.6100
4	17:50:54	9275.1588	22966.6040	10807.0030	29878.4680	1651.8304	132.5011	32.5001	14.1667	357119.0200
5	17:51:40	8304.1355	21517.7450	10141.1670	28654.1790	1533.4744	134.1678	31.6667	15.0000	353739.3500
X		8882.7384	22681.8460	10713.3800	29867.2930	1629.3261	131.6677	35.0001	21.0000	355122.5600
%RSD		4.2200	2.8823	3.5962	2.4554	3.4267	2.7588	11.0400	38.2067	0.5963

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:48:40	830.0413	132.5011	237.5034	105.0007	247.5037	431907.4200	208.7526	35.0001	190.0022
2	17:49:25	967.5562	150.0014	305.0056	115.0008	207.5026	435731.4800	192.5022	30.0001	178.7519
3	17:50:10	915.0502	122.5009	287.5050	72.5003	205.0025	433186.3000	221.2529	22.5000	188.7521
4	17:50:54	870.0454	110.0007	300.0054	82.5004	185.0021	437879.8100	182.5020	35.0001	192.5022
5	17:51:40	900.0486	70.0003	217.5028	85.0004	197.5023	438506.5100	222.5030	32.5001	176.2519
X		896.5484	117.0009	269.5044	92.0005	208.5026	435442.3000	205.5026	31.0001	185.2521
%RSD		5.7207	25.7034	14.6588	18.9635	11.2673	0.6596	8.5873	16.7230	3.9172

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:48:40	208.7526	475600.1900	1162.5811	315.0060	25697.0590	48078.2920	6142.2628	6142.2628	6767.7470
2	17:49:25	180.2521	478216.2200	1165.0814	295.0052	26013.0370	47414.5050	6007.1644	6007.1644	6937.8869
3	17:50:10	202.5025	480301.1400	1240.0923	327.5064	26542.2020	47688.5630	6169.7831	6169.7831	6807.7796
4	17:50:54	212.5027	480631.9200	1155.0800	430.0111	26527.1540	47879.6540	6169.7831	6169.7831	7210.6182
5	17:51:40	188.7521	485862.5400	1042.5652	295.0052	25208.0690	45222.3720	5887.0787	5887.0787	6472.5126
X		199.7524	480122.4000	1153.0800	332.5068	25997.5040	47256.6770	6075.2144	6075.2144	6839.3089
%RSD		5.8937	0.7885	6.1358	16.9135	2.1852	2.4616	2.0560	2.0560	3.9250

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:48:40	6767.7470	810430.4700	4433.6791	4433.6791	4468.6978	4468.6978	828143.9800	231.2532	518.7662
2	17:49:25	6937.8869	813036.9500	4623.7824	4623.7824	4566.2507	4566.2507	836428.2700	211.2527	582.5204
3	17:50:10	6807.7796	817677.2000	4461.1938	4461.1938	4703.8272	4703.8272	833428.9300	250.0038	601.2717
4	17:50:54	7210.6182	818128.4200	4398.6606	4398.6606	4488.7086	4488.7086	840446.4700	231.2532	581.2703
5	17:51:40	6472.5126	821095.0000	4513.7221	4513.7221	4298.6084	4298.6084	842154.1500	233.7533	530.0169
X		6839.3089	816073.6100	4486.2076	4486.2076	4505.2185	4505.2185	836120.3600	231.5032	562.7691
%RSD		3.9250	0.5237	1.9539	1.9539	3.2822	3.2822	0.6715	5.9445	6.4215

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:48:40	118146.6200	97671.5490	248861.2500	587738.9800	0.0000
2	17:49:25	121035.1300	99667.4730	250164.4100	596277.1900	0.0000
3	17:50:10	121831.6100	99422.0680	252696.6100	598113.2700	0.0000
4	17:50:54	122293.3000	99644.7030	251606.8700	598849.6900	2.5000
5	17:51:40	115416.2600	95812.6560	240923.0100	601549.0900	0.0000
X		119744.5900	98443.6900	248850.4300	596505.6400	0.5000
%RSD		2.4278	1.7161	1.8737	0.8808	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:53:26	101230.3100	182.5020	77178.2420	857809.0700	107969.9500	126472.4900	TM 5696747.6000	344418.3300	TM 1699810.9000
2	17:54:10	100005.6600	168.3350	78861.3900	868982.6100	111050.0300	126401.4200	TM 5731486.0000	344944.4400	TM 1702571.9000
3	17:54:54	99801.5640	173.3351	77998.3240	862592.0300	110077.2500	125416.7100	TM 5715418.9000	345197.0800	TM 1715637.1000
4	17:55:40	102460.2000	173.3351	79237.4320	862874.1200	111369.2500	127817.7800	TM 5738272.7000	345843.0600	TM 1721405.5000
5	17:56:25	99103.3050	155.0014	77526.4510	830323.1500	106936.7500	122412.5300	TM 5492105.2000	342535.5700	TM 1665989.2000
X		100520.2100	170.5018	78160.3680	856516.1900	109480.6500	125704.1900	TM 5674806.1000	344587.7000	TM 1701082.9000
%RSD		1.3213	5.9017	1.1161	1.7711	1.7770	1.6138	TM 1.8218	0.3646	TM 1.2677

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:53:26	156030.9400	1832.7015	38996.0280	32091.6740	M 470563.4900	1316325.3000	TM 8418491.6000	M 223073.7800	10654.3070
2	17:54:10	157290.5400	1907.7183	40337.3910	31667.5560	M 474312.3100	1310186.3000	TM 8333151.0000	M 226689.4100	11200.0210
3	17:54:54	157103.3100	1640.1614	39078.9150	32259.8210	M 473590.4500	1324542.5000	TM 8354089.8000	M 225284.5800	11042.3110
4	17:55:40	155126.7900	1810.1966	40063.5740	31532.0440	M 477642.1600	1322191.9000	TM 8281997.6000	M 222847.8500	10794.4870
5	17:56:25	157396.2600	1777.6896	38958.3530	30445.5140	M 457030.6200	1296065.0000	TM 8068345.3000	M 216357.6400	10246.2950
X		156589.5700	1793.6935	39486.8520	31599.3220	M 470627.8100	1313862.2000	TM 8291215.0000	M 222850.6500	10787.4840
%RSD		0.6272	5.4783	1.6716	2.2484	M 1.7013	0.8676	TM 1.6144	M 1.7790	3.4242

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:53:26	6747.7308	19993.9570	9362.7567	25491.4290	1114.2412	121.6676	35.0001	20.8334	351961.4000
2	17:54:10	6862.8247	20136.8000	9633.0645	26003.0060	1192.5853	100.8339	45.0001	19.1667	352957.2100
3	17:54:54	6622.6305	19966.3910	9180.0536	26178.5550	1108.4070	120.8342	43.3334	12.5000	351849.3100
4	17:55:40	6635.1405	19931.3070	9362.7567	26118.3660	1170.9156	142.5012	36.6667	26.6667	352980.6800
5	17:56:25	6627.6145	19374.9970	9427.8300	25263.2360	1075.9028	128.3343	24.1667	21.6667	355202.1500
X		6699.1922	19880.6900	9393.2923	25810.9180	1132.4104	122.8343	36.8334	20.1667	352990.1500
%RSD		1.5694	1.4752	1.7332	1.5840	4.2358	12.2550	22.4199	25.3721	0.3815

Run	Time	93Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo Q	109Ag
1	17:53:26	792.5377	145.0013	337.5068	92.5005	255.0039	441127.0300	176.2519	20.0000	173.7518
2	17:54:10	775.0360	115.0008	265.0042	72.5003	207.5026	443271.4400	177.5019	20.0000	173.7518
3	17:54:54	875.0459	160.0015	237.5034	97.5006	242.5035	443495.4000	220.0029	22.5000	171.2518
4	17:55:40	802.5386	112.5008	320.0061	77.5004	215.0028	445477.0100	190.0022	27.5000	192.5022
5	17:56:25	767.5354	147.5013	292.5051	75.0003	220.0029	447909.8600	162.5016	15.0000	165.0016
X		802.5387	136.0011	290.5051	83.0004	228.0031	444256.1500	185.2521	21.0000	175.2519
%RSD		5.3373	15.5221	13.9220	13.5375	8.7515	0.5759	11.7302	21.6261	5.8688

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:53:26	172.5018	483694.2000	1092.5716	365.0080	20206.9700	36798.5690	4493.7113	4493.7113	5074.0443
2	17:54:10	150.0014	486683.4300	1075.0693	382.5088	20302.2010	37175.2350	4653.7991	4653.7991	5004.0020
3	17:54:54	150.0014	490595.6200	1137.5776	380.0087	20171.8850	37029.5890	4693.8215	4693.8215	5096.5580
4	17:55:40	171.2518	491615.6700	1080.0700	330.0065	20805.9410	37524.2950	4618.7796	4618.7796	5299.1843
5	17:56:25	162.5016	493945.0400	1042.5652	357.5077	19916.2710	35761.5690	4513.7221	4513.7221	5159.0965
X		161.2516	489306.7900	1085.5708	363.0079	20280.6530	36857.8510	4594.7667	4594.7667	5126.5770
%RSD		6.8024	0.8357	3.1723	5.8318	1.6099	1.8097	1.9052	1.9052	2.1707

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:53:26	5074.0443	830697.8800	3315.6595	3315.6595	3525.7457	3525.7457	851114.5400	173.7518	490.0144
2	17:54:10	5004.0020	833045.8100	3348.1725	3348.1725	3443.2112	3443.2112	854611.7400	176.2519	435.0114
3	17:54:54	5096.5580	833434.4400	3250.6339	3250.6339	3470.7226	3470.7226	857615.5900	196.2523	505.0153
4	17:55:40	5299.1843	838402.6700	3490.7310	3490.7310	3333.1665	3333.1665	855888.3200	210.0027	442.5118
5	17:56:25	5159.0965	844311.9700	3208.1174	3208.1174	3228.1251	3228.1251	865772.9000	210.0027	496.2648
X		5126.5770	835978.5600	3322.6628	3322.6628	3400.1942	3400.1942	857000.6200	193.2523	473.7635
%RSD		2.1707	0.6505	3.2712	3.2712	3.5012	3.5012	0.6362	9.1087	6.8603

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:53:26	81120.4190	66423.6750	167912.3000	617650.3100	0.0000
2	17:54:10	81105.2730	67020.9290	167986.2700	620390.5600	0.0000
3	17:54:54	81791.9350	67666.1110	169733.6400	622884.1600	0.0000
4	17:55:40	83109.8790	68510.4680	172548.0700	623622.7000	0.0000
5	17:56:25	80413.6180	65302.3650	165731.8000	627251.7200	0.0000
X		81508.2250	66984.7100	168782.4100	622359.8900	0.0000
%RSD		1.2507	1.8190	1.5042	0.5785	0.0000

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:58:11	94465.7420	567307.0900	TM 31834231.0000	TM 22648878.0000	TM 2930868.5000	TM 3404518.1000	TM 45521755.0000	TM 16925141.0000	M 681363.8500
2	17:58:56	94871.1420	583293.6100	TM 32910360.0000	TM 23544892.0000	TM 3044955.2000	TM 3508833.8000	TM 46995887.0000	TM 17621409.0000	M 712699.1100
3	17:59:41	94737.1300	589689.3800	TM 33647458.0000	TM 23614084.0000	TM 3074796.0000	TM 3587732.4000	TM 48002022.0000	TM 18179000.0000	M 732203.6200
4	18:00:26	95557.2480	595230.7900	TM 34476350.0000	TM 24039027.0000	TM 3142616.0000	TM 3669969.7000	TM 49055158.0000	TM 18746190.0000	M 746379.7600
5	18:01:11	95721.6180	580647.2100	TM 33360414.0000	TM 23867252.0000	TM 3105322.4000	TM 3606532.0000	TM 48385627.0000	TM 18340114.0000	M 734457.0600
X		95070.5760	583233.6100	TM 33245762.0000	TM 23542826.0000	TM 3059711.6000	TM 3555517.2000	TM 47592090.0000	TM 17962371.0000	M 721420.6800
%RSD		0.5707	1.8104	TM 2.9293	TM 2.2831	TM 2.6349	TM 2.8724	TM 2.8925	TM 3.9328	M 3.5271

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:58:11	166690.6400	27.5000	T 3673406.6000	T 3511469.7000	TM 2819484.5000	T 4864800.4000	TM 48393634.0000	M 1212695.4000	T 4730964.8000
2	17:58:56	172766.2700	15.0000	T 3788745.0000	T 3605485.1000	TM 2908495.7000	T 4956617.3000	TM 49245000.0000	M 1243229.8000	T 4872467.2000
3	17:59:41	177944.7900	22.5000	T 3886255.4000	T 3677591.3000	TM 2998327.7000	T 5199670.6000	TM 51300537.0000	M 1300968.2000	T 5015992.6000
4	18:00:26	180417.1000	20.0000	T 3907275.4000	T 3735633.1000	TM 3035592.0000	T 5211077.1000	TM 51435738.0000	M 1308226.2000	T 5097726.4000
5	18:01:11	180445.2000	7.5000	T 3857577.9000	T 3711462.3000	TM 3018902.4000	T 5165797.3000	TM 51509743.0000	M 1299869.9000	T 5041792.1000
X		175652.8000	18.5000	T 3822652.1000	T 3648328.3000	TM 2956160.4000	T 5079592.5000	TM 50376930.0000	M 1272997.9000	T 4951788.6000
%RSD		3.3629	41.2107	T 2.4766	T 2.4908	TM 3.0714	T 3.1189	TM 2.8889	M 3.3485	T 3.0051

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:58:11	998144.8800	T 2366476.7000	1078789.8000	667809.8400	499291.6400	15577.0450	6495.0301	42.5001	339138.2600
2	17:58:56	1023437.1000	T 2425111.5000	1128309.1000	691125.6700	514510.1000	16189.8780	6848.6464	34.1667	347661.4200
3	17:59:41	1045749.0000	T 2508548.7000	1152389.5000	714387.3900	528455.1000	16548.9160	6977.9203	50.0001	354049.6200
4	18:00:26	1078429.8000	T 2506934.7000	1151449.4000	716391.4600	535077.4500	16604.0250	7042.9750	40.8334	359542.4600
5	18:01:11	1046076.5000	T 2494901.3000	1147638.5000	711427.0100	525531.9900	16771.0260	6929.5466	48.3335	362564.2500
X		1038367.5000	T 2460394.6000	1131715.3000	700228.2700	520573.2500	16338.1780	6858.8237	43.1668	352591.2000
%RSD		2.8729	T 2.5197	2.7531	2.9622	2.6941	2.9093	3.1401	14.6642	2.6726

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:58:11	60.0002	62.5002	117.5008	35.0001	122.5009	458300.0700	417454.3400	56450.5540	412497.6900
2	17:58:56	62.5002	80.0004	105.0007	52.5002	97.5006	470745.8700	436502.8200	59156.7280	431486.4300
3	17:59:41	55.0002	45.0001	95.0005	32.5001	112.5008	473548.1400	447717.4200	59866.7720	442896.0000
4	18:00:26	45.0001	52.5002	142.5012	42.5001	125.0009	476301.0700	457493.7800	60345.2040	452036.4800
5	18:01:11	70.0003	65.0003	105.0007	40.0001	82.5004	488916.1000	447094.0000	59959.9380	442357.2300
X		58.5002	61.0002	113.0008	40.5001	108.0007	473562.2500	441252.4700	59158.8400	436254.7600
%RSD		15.8754	21.8024	16.2126	19.2252	16.5636	2.3231	3.4530	2.6574	3.4717

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:58:11	900147.2600	495665.3100	37.5001	T 2788883.9000	547063.5300	994138.1800	135.0011	135.0011	25.0000
2	17:58:56	927857.3400	507531.0300	52.5002	T 2838885.4000	565441.4700	1029274.7000	130.0010	130.0010	25.0000
3	17:59:41	947909.4800	513933.6000	37.5001	T 2918404.5000	580211.7200	1058037.2000	140.0012	140.0012	17.5000
4	18:00:26	958318.9400	523510.5200	52.5002	T 2937510.8000	585361.3100	1059428.4000	185.0021	185.0021	20.0000
5	18:01:11	946676.6900	530196.4900	40.0001	T 2904244.2000	579494.2900	1050070.1000	190.0022	190.0022	45.0001
X		936181.9400	514167.3900	44.0001	T 2877585.8000	571514.4700	1038189.7000	156.0015	156.0015	26.5000
%RSD		2.4507	2.6286	17.7870	T 2.1516	2.7188	2.6406	18.6065	18.6065	40.9048

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:58:11	25.0000	819443.7200	40.0001	40.0001	2.5000	2.5000	839508.6400	T 4345781.3000	T 10666387.0000
2	17:58:56	25.0000	834333.0300	27.5000	27.5000	2.5000	2.5000	852606.0700	T 4515401.2000	T 11014619.0000
3	17:59:41	17.5000	840377.5100	37.5001	37.5001	2.5000	2.5000	864215.5200	T 4585038.5000	T 11210347.0000
4	18:00:26	20.0000	850987.4900	35.0001	35.0001	7.5000	7.5000	870153.3300	T 4627975.6000	T 11378350.0000
5	18:01:11	45.0001	864677.4500	30.0001	30.0001	5.0000	5.0000	886327.0100	T 4580004.3000	T 11229585.0000
X		26.5000	841963.8400	34.0001	34.0001	4.0000	4.0000	862562.1100	T 4530840.2000	T 11099858.0000
%RSD		40.9048	2.0271	15.2474	15.2474	55.9017	55.9017	2.0541	T 2.4497	T 2.4745

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:58:11	T 3527443.5000	T 3045627.4000	T 7662671.9000	587495.1500	2.5000
2	17:58:56	T 3583492.9000	T 3131365.3000	T 7899528.9000	601303.5300	2.5000
3	17:59:41	T 3668229.4000	T 3182146.5000	T 8037316.0000	605002.3900	2.5000
4	18:00:26	T 3712381.1000	T 3211556.9000	T 8110299.9000	611784.1600	5.0000
5	18:01:11	T 3687031.4000	T 3184359.9000	T 7991009.6000	623240.6400	2.5000
X		T 3635715.7000	T 3151011.2000	T 7940165.3000	605765.1700	3.0000
%RSD		T 2.1313	T 2.0834	T 2.1780	2.1774	37.2678

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:02:57	104599.0300	54.1668	9235.1144	345.0071	35.0001	70.0003	1300.1014	16784.3860	82.5004
2	18:03:43	106239.5900	54.1668	7418.3004	185.0021	25.0000	10.0000	1112.5743	16581.4800	87.5005
3	18:04:27	105887.6500	34.1667	6695.1885	275.0045	10.0000	30.0001	977.5573	16779.3760	75.0003
4	18:05:13	109319.8800	53.3335	6172.2850	220.0029	30.0001	30.0001	1070.0687	16436.1930	90.0005
5	18:05:58	110157.4700	55.0002	5746.9810	210.0027	40.0001	45.0001	1030.0637	16491.3020	107.5007
X		107240.7200	50.1668	7053.5738	247.0039	28.0001	37.0001	1098.0731	16614.5470	88.5005
%RSD		2.2185	17.8678	19.4187	25.8686	41.1103	60.1315	11.2424	0.9710	13.6357

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:02:57	202162.8000	17.5000	312.5059	467.5131	1607.6551	97.5006	49564.4610	332.5066	97.5006
2	18:03:43	205811.7600	12.5000	257.5040	387.5090	1515.1377	90.0005	51247.0930	350.0074	95.0005
3	18:04:27	208453.7200	5.0000	197.5023	442.5118	1645.1624	102.5006	52600.4860	335.0067	72.5003
4	18:05:13	211760.5500	17.5000	222.5030	460.0127	1582.6503	70.0003	53101.1470	252.5038	55.0002
5	18:05:58	213031.0700	17.5000	522.5164	492.5146	1482.6319	110.0007	54391.9320	360.0078	52.5002
X		208243.9800	14.0000	302.5063	450.0122	1566.6475	94.0005	52181.0240	326.0065	74.5004
%RSD		2.1236	39.1231	43.0873	8.7315	4.2597	16.2431	3.5375	13.0663	28.6123

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:02:57	17.5000	237.5034	72.5003	77.5004	20.8334	133.3344	12.5000	15.8333	412327.0400
2	18:03:43	17.5000	177.5019	65.0003	107.5007	6.6667	132.5011	13.3333	15.8333	421042.0000
3	18:04:27	17.5000	192.5022	45.0001	110.0007	7.5000	140.8345	15.0000	17.5000	422061.6900
4	18:05:13	20.0000	162.5016	62.5002	112.5008	8.3333	163.3349	20.0000	18.3334	429847.4000
5	18:05:58	20.0000	122.5009	45.0001	105.0007	16.6667	162.5016	23.3334	15.8333	431133.8600
X		18.5000	178.5020	58.0002	102.5006	12.0000	146.5013	16.8334	16.6667	423282.4000
%RSD		7.4017	23.5530	21.4221	13.9646	53.0240	10.4687	27.6520	7.0711	1.7964

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:02:57	7.5000	2.5000	7.5000	0.0000	5.0000	551779.7500	33.7501	5.0000	25.0000
2	18:03:43	10.0000	15.0000	2.5000	0.0000	0.0000	562825.4800	30.0001	5.0000	26.2500
3	18:04:27	37.5001	2.5000	2.5000	5.0000	0.0000	565719.4200	43.7501	0.0000	21.2500
4	18:05:13	12.5000	0.0000	5.0000	2.5000	0.0000	574575.6100	48.7501	2.5000	52.5002
5	18:05:58	7.5000	0.0000	15.0000	7.5000	2.5000	574259.9200	46.2501	2.5000	38.7501
X		15.0000	4.0000	6.5000	3.0000	1.5000	565832.0400	40.5001	3.0000	32.7501
%RSD		84.9838	156.8738	79.7556	108.6534	149.0712	1.6626	20.1919	69.7217	39.2407

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:02:57	12.5000	578343.3100	37.5001	1442.6249	5.0000	15.0000	0.0000	0.0000	0.0000
2	18:03:43	10.0000	585291.6600	5.0000	1110.0739	7.5000	12.5000	0.0000	0.0000	0.0000
3	18:04:27	2.5000	591213.5600	5.0000	860.0444	5.0000	15.0000	0.0000	0.0000	2.5000
4	18:05:13	7.5000	588836.2700	2.5000	657.5259	10.0000	12.5000	0.0000	0.0000	0.0000
5	18:05:58	10.0000	586553.4100	15.0000	647.5252	10.0000	7.5000	2.5000	2.5000	0.0000
X		8.5000	586047.6400	13.0000	943.5589	7.5000	12.5000	0.5000	0.5000	0.5000
%RSD		44.6052	0.8300	111.6380	35.6743	33.3333	24.4949	223.6068	223.6068	223.6068

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:02:57	0.0000	969310.3300	25.0000	25.0000	2.5000	2.5000	989314.0400	110.0007	297.5053
2	18:03:43	0.0000	965439.8200	35.0001	35.0001	5.0000	5.0000	992170.6000	110.0007	273.7545
3	18:04:27	2.5000	957569.7000	40.0001	40.0001	5.0000	5.0000	981164.7200	101.2506	243.7536
4	18:05:13	0.0000	955722.0600	40.0001	40.0001	5.0000	5.0000	977611.2100	120.0009	285.0049
5	18:05:58	0.0000	952743.1600	45.0001	45.0001	5.0000	5.0000	971202.8300	81.2504	236.2534
X		0.5000	960157.0100	37.0001	37.0001	4.5000	4.5000	982292.6800	104.5007	267.2543
%RSD		223.6068	0.7235	20.4943	20.4943	24.8452	24.8452	0.8714	13.9651	9.8746

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:02:57	247.5037	235.0033	520.0162	736174.1000	5.0000
2	18:03:43	237.5034	202.5025	507.5155	727599.0900	0.0000
3	18:04:27	197.5023	170.0017	437.5115	716267.7200	0.0000
4	18:05:13	187.5021	200.0024	300.0054	704405.2200	0.0000
5	18:05:58	192.5022	155.0014	412.5102	696549.2800	0.0000
X		212.5028	192.5023	435.5118	716199.0800	1.0000
%RSD		13.1008	16.1689	20.2857	2.2667	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:07:45	97935.4530	252.5038	126089.2500	1136095.7000	147076.5400	172287.7600	TM 8004190.6000	450804.8700	TM 2752753.3000
2	18:08:30	98333.4320	225.0030	126525.7900	1140398.3000	146242.0400	171756.9700	TM 7918378.4000	450591.2700	TM 2753985.9000
3	18:09:15	97586.3930	219.1696	124074.3400	1157715.0000	146272.5700	167547.5700	TM 7864574.2000	447195.4900	TM 2747494.3000
4	18:09:59	97507.1410	230.8365	122808.2900	1132268.6000	144278.2500	167027.2800	TM 7846550.0000	446146.4400	TM 2731405.2000
5	18:10:44	97255.0540	238.3367	115340.2200	1076933.6000	135035.2800	157020.5200	TM 7277225.6000	429447.5500	TM 2603398.8000
X		97723.4940	233.1699	122967.5800	1128682.2000	143780.9400	167128.0200	TM 7782183.8000	444837.1300	TM 2717807.5000
%RSD		0.4287	5.5449	3.6783	2.7040	3.4751	3.6689	TM 3.7118	1.9881	TM 2.3764

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:07:45	164977.0400	1930.2235	57386.9170	60090.8760	M 643102.9500	1099039.9000	TM 11553991.0000	M 313601.7900	14114.4430
2	18:08:30	163672.9500	1910.2189	57283.7110	59408.5100	M 633009.8700	1087889.1000	TM 11231635.0000	M 310197.8700	13788.8990
3	18:09:15	160689.4700	2222.7964	55355.7470	59181.9060	M 632568.1400	1082392.7000	TM 11041965.0000	M 304915.6900	14036.8120
4	18:09:59	159477.7800	1987.7370	56005.0640	59005.6630	M 619716.8500	1080243.8000	TM 11020315.0000	M 307173.9000	13981.7190
5	18:10:44	157175.9100	1780.1901	52874.7140	55194.6840	M 591422.6400	1003828.1000	TM 10598915.0000	M 289865.1300	12930.0230
X		161198.6300	1966.2332	55781.2310	58576.3280	M 623964.0900	1070678.7000	TM 11089364.0000	M 305150.8700	13770.3790
%RSD		1.9569	8.2531	3.2952	3.3029	M 3.2044	3.5560	TM 3.1357	M 2.9976	3.5214

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:07:45	9302.6895	25318.4030	11958.5740	33966.5830	1456.7940	145.8346	30.0001	23.3334	374270.0900
2	18:08:30	9447.8527	24829.4350	11573.0310	32513.3030	1470.1297	130.0010	33.3334	25.8334	370624.9800
3	18:09:15	8764.6067	25035.0490	11405.3000	32566.0090	1440.9579	150.8347	35.0001	14.1667	367159.0000
4	18:09:59	9062.4250	24463.3550	11535.4790	32616.2040	1477.6310	138.3345	38.3334	29.1667	367085.8800
5	18:10:44	8734.5752	23202.2560	11315.1770	30741.5980	1338.4408	133.3344	39.1668	30.0001	363861.4900
X		9062.4298	24569.6990	11557.5720	32480.7400	1436.7907	139.6678	35.1667	24.5000	368600.2900
%RSD		3.5002	3.3598	2.1347	3.5302	3.9478	6.1806	10.6504	25.9709	1.0773

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:07:45	907.5494	185.0021	320.0061	100.0006	295.0052	457584.8300	292.5051	37.5001	265.0042
2	18:08:30	1020.0624	177.5019	367.5081	127.5010	242.5035	449776.4800	266.2543	45.0001	246.2536
3	18:09:15	942.5533	165.0016	337.5068	122.5009	330.0065	448107.5800	256.2539	27.5000	260.0041
4	18:09:59	980.0576	182.5020	342.5070	95.0005	247.5037	447543.4400	256.2539	27.5000	238.7534
5	18:10:44	897.5483	160.0015	362.5079	90.0005	235.0033	446075.2800	255.0039	35.0001	271.2544
X		949.5542	174.0018	346.0072	107.0007	270.0045	449817.5200	265.2542	34.5001	256.2530
%RSD		5.3750	6.3121	5.5876	15.7949	15.1725	1.0092	5.9926	21.3738	5.2426

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:07:45	256.2539	493438.8300	1672.6679	630.0238	22743.4940	40525.8010	6127.2518	6127.2518	6942.8910
2	18:08:30	247.5037	487416.9900	1550.1442	590.0209	22655.7550	41221.7020	5874.5099	5874.5699	6657.6584
3	18:09:15	210.0027	488672.4100	1432.6231	517.5161	22573.0310	40905.1480	6074.7133	6074.7133	6827.7960
4	18:09:59	231.2532	489901.5200	1480.1314	547.5180	22462.7340	41136.2820	6064.7060	6064.7060	6547.5712
5	18:10:44	223.7530	490004.8300	1402.6180	477.5137	22111.7970	39129.1500	6072.2115	6072.2115	6379.9413
X		233.7533	489886.9200	1507.6369	552.5185	22509.3620	40583.6170	6042.6905	6042.6905	6671.1716
%RSD		7.9048	0.4588	7.1481	10.8176	1.0894	2.1106	1.6087	1.6087	3.3404

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:07:45	6942.8910	817880.8000	4423.6738	4423.6738	4508.7194	4508.7194	832219.0000	263.7542	646.2751
2	18:08:30	6657.6584	818373.3100	4573.7548	4573.7548	4313.6161	4313.6161	834261.3600	276.2546	637.5244
3	18:09:15	6827.7960	816224.6200	4463.6952	4463.6952	4593.7658	4593.7658	831414.3200	260.0041	637.5244
4	18:09:59	6547.5712	813339.4400	4271.0943	4271.0943	4338.6291	4338.6291	833814.8200	215.0028	602.5218
5	18:10:44	6379.9413	819606.0800	4393.6579	4393.6579	4173.5448	4173.5448	843059.1500	221.2529	563.7691
X		6671.1716	817084.8500	4425.1752	4425.1752	4385.6551	4385.6551	834953.7300	247.2537	617.5229
%RSD		3.3404	0.2961	2.4831	2.4831	3.7957	3.7957	0.5601	11.0614	5.5753

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:07:45	198677.9800	162894.1600	412411.0500	587645.2000	0.0000
2	18:08:30	201786.3400	164400.8200	415895.4700	584856.3900	0.0000
3	18:09:15	201740.2400	166723.7900	419762.3000	588800.1000	0.0000
4	18:09:59	203197.5100	165792.9900	419665.0800	591659.8700	0.0000
5	18:10:44	195527.2600	161013.1300	403888.4800	599261.5200	0.0000
X		200185.8700	164164.9800	414324.4800	590444.6200	0.0000
%RSD		1.5402	1.3892	1.5879	0.9314	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:12:30	97153.8840	228.3365	88062.8580	1077058.3000	135584.0800	156113.7200	TM 8123036.6000	410276.9900	TM 2256751.2000
2	18:13:15	98019.7690	223.3363	88214.4490	1069258.1000	136204.0700	156271.6400	TM 8155423.3000	417292.7900	TM 2269816.4000
3	18:14:00	98309.8220	247.5037	88702.0840	1089500.7000	136478.5100	156633.3300	TM 8182364.9000	415688.0000	TM 2238492.8000
4	18:14:45	97312.3840	233.3366	88532.7980	1059456.7000	137423.8500	157932.5100	TM 8145306.4000	422913.2700	TM 2276192.9000
5	18:15:31	98865.5050	223.3363	85935.8250	1030545.8000	132007.3400	151754.2900	TM 7825890.1000	411001.4100	TM 2210472.4000
X		97932.2730	231.1699	87889.6030	1065163.9000	135539.5700	155741.1000	TM 8086404.3000	415434.4900	TM 2250345.1000
%RSD		0.7241	4.3379	1.2755	2.0895	1.5367	1.5029	TM 1.8201	1.2374	TM 1.1796

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:12:30	156504.7000	1637.6609	59720.7300	19412.5850	M 618700.3300	1374205.7000	TM 10910191.0000	M 296310.9900	15399.2150
2	18:13:15	158090.4700	1630.1594	59740.8730	19274.7650	M 619996.5500	1397200.4000	TM 11150905.0000	M 300020.2300	15511.9240
3	18:14:00	157603.8800	1565.1470	59335.4930	19415.0900	M 613630.2600	1378662.2000	TM 10943850.0000	M 293320.4300	15722.3170
4	18:14:45	158950.3400	1647.6629	58690.9520	19317.3640	M 617982.3800	1380321.2000	TM 10725204.0000	M 290413.7400	15311.5540
5	18:15:31	157442.1100	1550.1442	57872.7600	19031.7080	M 601778.5500	1337503.7000	TM 10604692.0000	M 288178.1100	14750.5430
X		157718.3000	1606.1549	59072.1620	19290.3020	M 614417.6100	1373578.6000	TM 10866968.0000	M 293648.7000	15339.1110
%RSD		0.5688	2.8036	1.3439	0.8129	M 1.2140	1.5996	TM 1.9373	M 1.5990	2.3674

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:12:30	8832.1780	18575.6800	8992.3491	19700.7600	1638.4944	104.1673	35.0001	20.8334	364686.4000
2	18:13:15	8977.3329	18758.5890	9217.5950	19663.1710	1585.9842	124.1676	34.1667	21.6667	366380.8500
3	18:14:00	8727.0673	18888.8830	8979.8356	20527.7520	1610.1555	130.8344	25.0000	23.3334	367072.8300
4	18:14:45	8664.5021	18658.3650	8867.2151	20322.2490	1574.3154	126.6676	38.3334	22.5000	368530.0800
5	18:15:31	8346.6779	17889.1810	8426.7585	19512.8180	1575.1489	116.6675	34.1667	17.5000	367216.4500
X		8709.5536	18554.1400	8896.7507	19945.3500	1596.8197	120.5009	33.3334	21.1667	366777.3200
%RSD		2.6973	2.1001	3.2806	2.2531	1.7174	8.7011	14.8955	10.6372	0.3827

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:12:30	1002.5603	110.0007	275.0045	60.0002	220.0029	442488.9600	152.5014	12.5000	147.5013
2	18:13:15	832.5416	112.5008	270.0044	75.0003	182.5020	446607.6900	156.2515	37.5001	132.5011
3	18:14:00	905.0491	95.0005	280.0047	62.5002	205.0025	447264.0200	151.2514	25.0000	118.7509
4	18:14:45	902.5439	117.5008	285.0049	62.5002	230.0032	451701.5300	162.5016	12.5000	140.0012
5	18:15:31	847.5431	90.0005	247.5037	75.0003	167.5017	448255.2100	135.0011	20.0000	125.0009
X		898.0486	105.0007	271.5044	67.0003	201.0025	447263.4800	151.5014	21.5000	132.7511
%RSD		7.4352	11.2939	5.3535	11.0059	12.8839	0.7407	6.7385	48.3643	8.6404

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:12:30	146.2513	486482.1700	865.0449	347.5073	25752.2290	46318.3670	6647.6504	6647.6504	7691.0475
2	18:13:15	132.5011	486148.5200	822.5406	300.0054	25977.9280	46652.7240	6647.6504	6647.6504	7370.7582
3	18:14:00	142.5012	489096.2200	840.0423	322.5062	26113.3500	47210.8540	6737.7227	6737.7227	7663.5222
4	18:14:45	123.7509	488865.7700	802.5386	317.5061	25692.0440	46961.9540	6960.4056	6960.4056	7558.4262
5	18:15:31	130.0010	490060.4600	895.0481	272.5045	25396.1390	45604.4450	6792.7674	6792.7674	7205.6139
X		135.0011	488130.6300	845.0429	312.0059	25786.3380	46549.6690	6757.2393	6757.2393	7497.8736
%RSD		6.8356	0.3525	4.2825	8.9301	1.0725	1.3436	1.9144	1.9144	2.7495

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:12:30	7691.0475	813493.4400	5091.5550	5091.5550	4926.4558	4926.4558	838981.8400	281.2548	681.2779
2	18:13:15	7370.7582	823781.7600	5026.5155	5026.5155	5091.5550	5091.5550	843324.0500	262.5041	618.7730
3	18:14:00	7663.5222	826832.8800	4938.9632	4938.9632	5009.0050	5009.0050	846831.9500	277.5046	707.5300
4	18:14:45	7558.4262	824541.6800	5136.5826	5136.5826	4903.9425	4903.9425	845156.4800	263.7542	645.0250
5	18:15:31	7205.6139	825194.2800	4843.9074	4843.9074	4911.4469	4911.4469	855479.3500	250.0038	655.0257
X		7497.8736	822768.8100	5007.5047	5007.5047	4968.4810	4968.4810	845954.7400	267.0043	661.5263
%RSD		2.7495	0.6449	2.3534	2.3534	1.6219	1.6219	0.7182	4.7121	5.1534

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:12:30	45109.2610	35952.3880	91580.4690	601339.7600	0.0000
2	18:13:15	45423.4610	36100.5260	91130.5770	609064.0900	0.0000
3	18:14:00	45129.3700	36833.7240	92687.6090	610671.8500	2.5000
4	18:14:45	44825.2350	35849.4450	93471.2890	614052.2000	0.0000
5	18:15:31	43968.1870	36100.5260	90867.7300	611436.2100	0.0000
X		44891.1030	36167.3220	91947.5350	609312.8200	0.5000
%RSD		1.2422	1.0711	1.1960	0.7890	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:17:19	97911.8440	135.0011	143543.2200	TM 9762232.3000	M 1258797.8000	TM 1441409.6000	T 4243070.2000	289570.1300	TM 3535713.8000
2	18:18:04	97946.4140	150.0014	140682.5600	TM 9892610.9000	M 1259584.4000	TM 1453802.4000	T 4233379.4000	289381.2400	TM 3591048.0000
3	18:18:49	98345.2360	149.1680	141376.6500	TM 10011651.0000	TM 1273168.2000	TM 1460209.3000	T 4266586.8000	293584.4900	TM 3650457.8000
4	18:19:33	98843.5800	146.6680	145483.9500	TM 10013526.0000	TM 1278087.0000	TM 1467368.2000	T 4298500.0000	291050.3900	TM 3627104.7000
5	18:20:17	100720.8600	159.1682	140456.2900	TM 9682743.4000	TM 1251883.1000	TM 1435303.5000	T 4249667.4000	287984.0700	TM 3519460.4000
X		98753.5870	148.0013	142308.5300	TM 9872552.6000	TM 1264304.1000	TM 1451618.6000	T 4258240.8000	290314.0600	TM 3584756.9000
%RSD		1.1771	5.8597	1.5133	TM 1.5009	TM 0.8623	TM 0.9094	T 0.6001	0.7325	TM 1.5792

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:17:19	159067.5500	3478.2257	30596.0640	54097.5240	M 581938.6200	T 1934531.9000	TM 10277562.0000	M 293553.4300	12466.8180
2	18:18:04	159056.0800	3465.7205	30189.5860	54736.6780	M 576649.2500	T 1922797.4000	TM 10204632.0000	M 292867.4100	12098.7760
3	18:18:49	160615.5700	3563.2616	30488.1700	55539.4630	M 582648.2200	T 1920920.6000	TM 10258518.0000	M 297678.4500	12364.1660
4	18:19:33	160415.5200	3605.7799	30332.6040	56143.4910	M 587290.1800	T 1960442.5000	TM 10372197.0000	M 298191.3100	12597.0140
5	18:20:17	164126.7400	3478.2257	30746.6170	53481.0650	M 572652.2500	T 1931543.6000	TM 10132193.0000	M 289810.7900	11780.8210
X		160656.2900	3518.2427	30470.6080	54799.6440	M 580235.7000	T 1934047.2000	TM 10249020.0000	M 294420.2800	12261.5190
%RSD		1.2903	1.7779	0.7157	1.9545	M 0.9782	T 0.8184	TM 0.8685	M 1.1918	2.6515

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:17:19	34928.0450	13851.5020	6700.1925	19713.2890	1329.2727	110.0007	26.6667	21.6667	358757.1800
2	18:18:04	34142.2990	13468.3750	6682.6784	19991.4510	1344.2751	128.3343	29.1667	16.6667	358261.5200
3	18:18:49	35076.1650	13678.7170	6585.1008	20249.5730	1370.9461	138.3345	25.0000	18.3334	364375.7500
4	18:19:33	35831.8700	14187.0660	6502.5360	20239.5490	1300.1014	123.3343	47.5001	17.5000	363446.4600
5	18:20:17	34679.5100	13826.4610	6752.7349	19675.7010	1275.9310	130.0010	28.3334	21.6667	365918.7000
X		34931.5780	13802.4240	6644.6485	19973.9120	1324.1053	126.0010	31.3334	19.1667	362151.9200
%RSD		1.7655	1.9094	1.5041	1.3796	2.8067	8.2923	29.2916	12.2975	0.9512

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:17:19	592.5211	215.0028	267.5043	87.5005	252.5038	442062.1800	62.5002	10.0000	61.2502
2	18:18:04	525.0165	172.5018	300.0054	102.5006	237.5034	442599.6100	90.0005	15.0000	61.2502
3	18:18:49	557.5187	140.0012	265.0042	87.5005	265.0042	444038.1900	72.5003	17.5000	68.7503
4	18:19:33	597.5214	165.0016	197.5023	110.0007	260.0041	445563.9800	77.5004	17.5000	73.7503
5	18:20:17	557.5187	170.0017	215.0028	112.5008	277.5046	449768.5700	66.2503	15.0000	62.5002
X		566.0193	172.5018	249.0038	100.0006	258.5040	444806.5100	73.7503	15.0000	65.5003
%RSD		5.2413	15.6765	16.8096	11.9896	5.7461	0.6946	14.5803	20.4124	8.4919

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:17:19	146.2513	487207.7700	620.0231	277.5046	14642.8530	26647.5370	6334.9069	6334.9069	5799.5174
2	18:18:04	151.2514	489721.3800	627.5236	265.0042	14284.7330	26376.6780	6119.7463	6119.7463	5777.0017
3	18:18:49	138.7512	494172.9800	697.5292	297.5053	14998.4850	26522.1380	6147.2665	6147.2665	6112.2407
4	18:19:33	145.0013	489244.5600	700.0294	292.5051	14803.1360	26221.1880	5939.6160	5939.6160	5994.6554
5	18:20:17	138.7512	490002.1800	552.5183	260.0041	14059.3500	25519.0130	6054.6988	6054.6988	5406.7534
X		144.0013	490069.7700	639.5247	278.5047	14557.7120	26257.3110	6119.2469	6119.2469	5818.0337
%RSD		3.7033	0.5186	9.6136	5.9070	2.6262	1.6851	2.3643	2.3643	4.6195

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:17:19	5799.5174	830144.0600	3853.3907	3853.3907	3528.2468	3528.2468	850153.4700	133.7511	378.7586
2	18:18:04	5777.0017	834933.9900	3798.3655	3798.3655	3555.7584	3555.7584	860548.5900	141.2512	335.0067
3	18:18:49	6112.2407	843790.4000	3828.3792	3828.3792	3665.8061	3665.8061	862215.9400	145.0013	295.0052
4	18:19:33	5994.6554	830502.2500	3590.7735	3590.7735	3550.7563	3550.7563	852404.4200	113.7508	316.2560
5	18:20:17	5406.7534	827102.8000	3803.3677	3803.3677	3525.7457	3525.7457	843409.5900	128.7510	285.0049
X		5818.0337	833294.7000	3774.8553	3774.8553	3565.2627	3565.2627	853746.4000	132.5011	322.0063
%RSD		4.6195	0.7798	2.7874	2.7874	1.6199	1.6199	0.9065	9.2434	11.5376

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:17:19	46961.9540	37988.8920	94871.9850	597626.3800	0.0000
2	18:18:04	46813.6230	38127.0210	95908.7520	599881.3200	0.0000
3	18:18:49	46921.7280	37938.6640	96439.8280	599732.4000	0.0000
4	18:19:33	46426.4660	37486.6260	94444.6720	591177.3700	0.0000
5	18:20:17	43636.4500	35711.3540	89682.4940	581006.8600	0.0000
X		46152.0440	37450.5120	94269.5460	593884.8600	0.0000
%RSD		3.0814	2.6741	2.8480	1.3505	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:22:06	100065.5300	153.3347	97954.8450	944153.0300	120317.3500	138333.7200	TM 5572219.7000	330067.2200	TM 1606267.2000
2	18:22:51	100666.8800	170.8351	98698.5430	937623.8800	121047.8200	139706.3400	TM 5532951.6000	330023.0200	TM 1632644.1000
3	18:23:36	102105.8900	165.8350	97034.1680	947949.9700	121311.6100	141160.5400	TM 5540148.7000	331679.3800	TM 1634189.0000
4	18:24:21	101269.9500	145.8346	97405.9680	920381.2200	120520.2500	137586.5000	TM 5429667.7000	333140.9800	TM 1638774.1000
5	18:25:06	101135.8400	152.5014	91997.5250	875084.2800	112438.4600	129325.7800	TM 5066485.0000	316620.2700	TM 1530078.0000
X		101048.8200	157.6682	96618.2100	925038.4700	119127.1000	137222.5800	TM 5428294.5000	328306.1700	TM 1608390.5000
%RSD		0.7482	6.5420	2.7510	3.2277	3.1565	3.3673	TM 3.8542	2.0283	TM 2.8346

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:22:06	162838.0800	2157.7793	36994.4330	27552.9750	M 440837.2800	940845.9900	TM 7905354.3000	M 209608.4000	10549.1730
2	18:22:51	164110.1700	2255.3051	37556.9410	28656.6880	M 447527.6200	956186.0300	TM 7932616.7000	M 214477.4700	10781.9710
3	18:23:36	162202.1100	2222.7964	37283.2160	28330.5760	M 442254.4900	941141.7600	TM 7962321.0000	M 215254.6300	10696.8610
4	18:24:21	164961.7400	2190.2878	36901.5230	28571.3960	M 445756.3700	943915.7700	TM 7961974.7000	M 213354.1800	10301.3630
5	18:25:06	160554.4100	2075.2584	34260.2820	26349.0910	M 412600.0700	880303.4100	TM 7373301.0000	M 197101.1900	9878.3514
X		162933.3000	2180.2854	36599.2790	27892.1450	M 437795.1700	932478.5900	TM 7827113.5000	M 209959.1700	10441.5440
%RSD		1.0498	3.1671	3.6411	3.4641	M 3.2745	3.1994	TM 3.2552	M 3.5756	3.4845

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:22:06	6932.8827	24516.0090	11563.0170	37217.9250	1229.2573	150.0014	40.8334	23.3334	357121.6300
2	18:22:51	7135.5537	25080.1840	11693.1980	37300.7950	1244.2596	136.6678	35.0001	15.8333	355786.2900
3	18:23:36	7185.5966	24257.7550	12013.6530	36647.9070	1135.0773	130.8344	39.1668	31.6667	354584.1400
4	18:24:21	7067.9961	24360.5540	11380.2650	36148.2320	1112.5743	131.6677	34.1667	12.5000	354153.9200
5	18:25:06	6612.6226	22690.8500	10879.5970	34039.3790	1070.0687	124.1676	30.0001	14.1667	354320.7900
X		6986.9303	24181.0710	11505.9460	36270.8480	1158.2474	134.6678	35.8334	19.5000	355193.3500
%RSD		3.2884	3.6870	3.6467	3.6717	6.5239	7.1713	11.9717	40.8338	0.3528

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:22:06	1055.0668	260.0041	390.0091	122.5009	320.0061	447680.5200	98.7506	77.5004	85.0004
2	18:22:51	975.0570	192.5022	410.0101	145.0013	335.0067	444689.0600	98.7506	72.5003	98.7506
3	18:23:36	1002.5603	182.5020	412.5102	115.0008	377.5086	452648.3900	105.0007	117.5008	101.2506
4	18:24:21	1090.0713	187.5021	415.0103	110.0007	317.5061	447119.0400	101.2506	100.0006	88.7505
5	18:25:06	950.0542	195.0023	345.0071	120.0009	350.0074	451029.0300	100.0006	112.5008	112.5008
X		1014.5619	203.5025	394.5094	122.5009	340.0070	448633.2100	100.7506	96.0006	97.2506
%RSD		5.6639	15.6991	7.4500	10.9902	7.2606	0.7103	2.5728	21.1244	11.1833

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:22:06	218.7529	484848.4600	1087.5710	515.0159	19806.0090	35502.9670	3765.8507	3765.8507	4080.9990
2	18:22:51	216.2528	479528.5000	1112.5743	482.5140	19462.7010	35354.8390	3833.3815	3833.3815	4261.0891
3	18:23:36	228.7531	482227.7700	1085.0706	562.5190	19131.9370	35179.0980	3693.3183	3693.3183	4118.5175
4	18:24:21	213.7527	483125.0700	1082.5703	565.0192	19427.6200	35447.7320	3608.2810	3608.2810	4146.0311
5	18:25:06	215.0028	481068.5700	1027.5633	477.5137	18580.6910	32877.2270	3578.2681	3578.2681	3913.4187
X		218.5029	482159.6700	1079.0699	520.5163	19281.7920	34872.3730	3695.8199	3695.8199	4104.0111
%RSD		2.7556	0.4184	2.8922	8.0760	2.3806	3.2176	2.8799	2.8799	3.0702

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:22:06	4080.9990	804307.7600	2667.9270	2667.9270	2807.9730	2807.9730	822655.7500	172.5018	458.7626
2	18:22:51	4261.0891	797673.2500	2717.9432	2717.9432	2797.9696	2797.9696	814081.9600	180.0019	417.5105
3	18:23:36	4118.5175	797338.3600	2675.4294	2675.4294	2837.9832	2837.9832	820428.9500	215.0028	441.2617
4	18:24:21	4146.0311	811887.5800	2740.4505	2740.4505	2812.9747	2812.9747	832345.7800	173.7518	431.2612
5	18:25:06	3913.4187	819275.8600	2502.8758	2502.8758	2547.8894	2547.8894	831496.9900	158.7515	387.5090
X		4104.0111	806096.5600	2660.9252	2660.9252	2760.9580	2760.9580	824201.8900	180.0020	427.2610
%RSD		3.0702	1.1738	3.5060	3.5060	4.3470	4.3470	0.9370	11.6928	6.2798

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:22:06	77907.4800	62672.2860	156880.4200	577737.1000	5.0000
2	18:22:51	77756.0760	62846.0880	157654.8300	571082.3100	2.5000
3	18:23:36	78096.7390	62228.9820	159285.4000	579534.4400	2.5000
4	18:24:21	78374.3270	64387.7900	162555.1400	591917.2200	0.0000
5	18:25:06	74330.0250	60934.4690	154173.0900	599794.1100	0.0000
X		77292.9300	62613.9230	158109.7700	584013.0400	2.0000
%RSD		2.1636	1.9840	1.9586	1.9861	104.5825

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:26:53	99334.3650	212.5027	63634.5370	1094303.1000	140143.5900	157377.1500	TM 7146242.5000	477747.9700	TM 2625124.9000
2	18:27:39	100015.7800	222.5030	66234.6800	1122853.1000	142370.8700	163911.3200	TM 7329325.3000	487914.9000	TM 2657779.8000
3	18:28:24	98916.1000	215.0028	66179.2420	1169509.1000	147213.9300	167899.5500	TM 7563040.0000	496145.1400	TM 2719917.7000
4	18:29:10	100267.9500	235.8367	67938.3130	1161947.9000	147010.3900	172828.7900	TM 7802562.8000	505030.7800	TM 2731454.5000
5	18:29:55	101897.5300	241.6702	66484.1550	1126408.4000	143922.1800	168593.3400	TM 7545520.9000	493306.3200	TM 2669415.2000
x		100086.3400	225.5031	66094.1850	1135004.3000	144132.1900	166122.0300	TM 7477338.3000	492029.0200	TM 2680738.4000
%RSD		1.1450	5.6808	2.3475	2.7137	2.1055	3.5050	TM 3.3387	2.0539	TM 1.6531

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:26:53	155853.9200	1520.1386	40264.5400	19294.8120	M 476877.6900	1209514.0000	TM 8601838.2000	M 238108.8300	10056.0640
2	18:27:39	156528.9000	1475.1305	41493.0440	19978.9210	M 491885.9400	1244526.1000	TM 8738860.7000	M 246945.5000	10383.9660
3	18:28:24	156355.6900	1710.1755	42221.6900	20204.4640	M 505834.9200	1290407.0000	TM 8951893.5000	M 255902.2400	10827.0290
4	18:29:10	157406.4500	1525.1396	43566.0830	20956.3170	M 509808.9600	1303298.7000	TM 8958399.2000	M 251004.1000	10368.9470
5	18:29:55	160121.1900	1600.1536	42666.4470	20841.0280	M 492248.9700	1263084.6000	TM 8825987.3000	M 249742.0200	10734.4090
x		157253.2300	1566.1476	42042.3610	20255.1080	M 495331.3000	1262166.1000	TM 8815395.8000	M 248340.5400	10474.0830
%RSD		1.0800	5.8853	2.9627	3.3448	M 2.6358	2.9575	TM 1.7078	M 2.6472	2.9668

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:26:53	7751.1031	15875.1070	7525.8968	17856.6110	1144.2452	127.5010	25.8334	30.0001	354672.8000
2	18:27:39	7926.2678	16233.2960	7741.0938	17894.1920	1184.2508	140.0012	30.8334	20.8334	355770.6400
3	18:28:24	8216.5487	16706.7300	7961.3011	18933.9850	1205.0871	125.8343	38.3334	34.1667	354651.9400
4	18:29:10	8033.8707	16636.5900	8186.5192	18994.1220	1255.0945	138.3345	23.3334	11.6667	358149.3500
5	18:29:55	7701.0567	16295.9180	7841.1873	18655.8590	1207.5875	138.3345	35.8334	16.6667	357092.9300
x		7925.7604	16349.5280	7851.1996	18466.9540	1199.2530	134.0011	30.8334	22.6667	356067.5300
%RSD		2.6559	2.0548	3.1368	3.0056	3.3543	5.0408	20.6717	41.0549	0.4310

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:26:53	982.5579	97.5006	240.0035	67.5003	142.5012	433573.1600	107.5007	12.5000	96.2506
2	18:27:39	995.0594	65.0003	242.5035	42.5001	160.0015	438100.9900	122.5009	15.0000	128.7510
3	18:28:24	955.0547	105.0007	220.0029	55.0002	172.5018	434523.2800	107.5007	20.0000	102.5006
4	18:29:10	962.5556	75.0003	282.5048	60.0002	167.5017	438698.7400	111.2507	15.0000	101.2506
5	18:29:55	945.0536	115.0008	255.0039	42.5001	175.0018	435584.0600	105.0007	25.0000	116.2508
x		968.0562	91.5005	248.0037	53.5002	163.5016	436096.0500	110.7507	17.5000	109.0007
%RSD		2.1094	22.8270	9.2776	20.5289	7.9893	0.5114	6.2639	28.5715	12.2014

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:26:53	162.5016	478504.5800	795.0379	172.5018	19911.2590	36238.6230	6029.6806	6029.6806	6062.2042
2	18:27:39	140.0012	483516.8400	782.5367	162.5016	19813.5270	36886.4560	5814.5278	5814.5278	6522.5516
3	18:28:24	148.7513	474611.1300	677.5275	192.5022	20435.0250	36929.1450	5706.9535	5706.9535	6392.4509
4	18:29:10	108.7507	473408.0100	665.0265	145.0013	20625.4930	37632.2800	6017.1716	6017.1716	6169.7831
5	18:29:55	153.7514	470600.5000	722.5313	152.5014	20016.5110	35711.3540	5504.3173	5504.3173	6124.7499
x		142.7512	476128.2100	728.5320	165.0017	20160.3630	36679.5720	5814.5302	5814.5302	6254.3480
%RSD		14.4869	1.0527	8.1234	11.2368	1.7446	1.9963	3.7988	3.7988	3.1155

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:26:53	6062.2042	812014.0600	4153.5349	4153.5349	4173.5448	4173.5448	831618.2400	261.2541	533.7671
2	18:27:39	6522.5516	807189.9500	4158.5373	4158.5373	4326.1226	4326.1226	823043.9200	232.5032	578.7701
3	18:28:24	6392.4509	790629.6000	4201.0587	4201.0587	4193.5549	4193.5549	805791.3200	217.5028	550.0181
4	18:29:10	6169.7831	786820.6600	4303.6110	4303.6110	4298.6084	4298.6084	807662.6300	223.7530	513.7658
5	18:29:55	6124.7499	787242.8800	4080.9990	4080.9990	4136.0261	4136.0261	802678.8700	210.0027	540.0175
x		6254.3480	796779.4300	4179.5482	4179.5482	4225.5714	4225.5714	814158.9900	229.0032	543.2677
%RSD		3.1155	1.4961	1.9542	1.9542	1.9513	1.9513	1.5387	8.6601	4.3919

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:26:53	38332.9630	31281.1000	79030.4800	595302.3000	0.0000
2	18:27:39	38257.6180	31720.2560	78450.0340	584042.1500	0.0000
3	18:28:24	38883.0020	31936.0780	79527.6770	569076.8500	2.5000
4	18:29:10	38247.5720	31331.2880	78848.7710	562691.9000	0.0000
5	18:29:55	36878.9230	30272.3850	74869.8250	556442.4900	2.5000
x		38120.0150	31308.2220	78145.3580	573511.1400	1.0000
%RSD		1.9468	2.0441	2.3950	2.7759	136.9306

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:31:39	100865.9300	221.6696	192098.8900	T 1670220.5000	212900.2900	246317.3200	TM 9278147.0000	683493.0600	TM 3040533.5000
2	18:32:25	101910.1900	265.0042	197902.3400	T 1706497.9000	216044.6800	249134.2200	TM 9336528.3000	710829.0700	TM 3104774.9000
3	18:33:09	100117.8200	250.8371	202593.0600	T 1738370.9000	220304.0400	253374.2300	TM 9332393.2000	722354.7300	TM 3191498.5000
4	18:33:55	98889.9590	250.8371	201007.8600	T 1709295.4000	219431.4700	252271.5200	TM 9280956.4000	722376.5000	TM 3199896.4000
5	18:34:40	101174.6400	240.8368	183641.4000	T 1526985.6000	195762.6900	224231.7400	TM 8083279.2000	666668.6800	TM 2884703.9000
X		100591.7100	245.8370	195448.7100	T 1670274.0000	212888.6300	245065.8100	TM 9062260.8000	701144.4100	TM 3084281.4000
%RSD		1.1415	6.5162	3.9516	T 5.0094	4.7035	4.8844	TM 6.0466	3.5618	TM 4.1970

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:31:39	161632.4500	2920.5117	61851.1850	38996.0280	M 718325.2700	T 2899474.6000	TM 12815968.0000	M 353079.7500	21808.4990
2	18:32:25	162678.7600	2945.5205	63344.8430	39641.5630	M 734170.9200	T 2976659.8000	TM 12952207.0000	M 356213.9900	22292.2770
3	18:33:09	161831.2500	3168.1021	64929.4690	40264.5400	M 735152.0100	T 3007836.4000	TM 13158169.0000	M 361455.0900	22084.2240
4	18:33:55	160745.5400	2935.5169	64700.1960	39473.2670	M 734446.1600	T 3008437.7000	TM 13049885.0000	M 356516.5300	22242.1430
5	18:34:40	162640.5300	2635.4167	56284.4370	34830.1370	M 627514.1600	T 2644832.7000	TM 11246414.0000	M 310745.2100	19590.5000
X		161905.7100	2921.0136	62222.0260	38641.1070	M 709921.7000	T 2907448.2000	TM 12644529.0000	M 347602.1100	21603.5290
%RSD		0.4945	6.4827	5.6892	5.6370	M 6.5646	T 5.2753	TM 6.2609	M 5.9897	5.2816

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:31:39	12006.1430	50588.0850	23646.0000	71712.2370	2053.5863	176.6685	43.3334	17.5000	372281.4200
2	18:32:25	12281.5440	50658.5100	23653.5220	72241.7810	2013.5766	178.3352	65.0003	16.6667	373282.2300
3	18:33:09	12491.8560	52693.5720	24440.7890	73280.7940	2061.9217	175.8352	50.8335	25.8334	374570.6600
4	18:33:55	12218.9520	50688.6930	24192.5660	72667.9630	2008.5754	185.8354	60.0002	22.5000	372767.4400
5	18:34:40	10959.7020	45617.0140	21633.0430	64889.1560	1851.0389	158.3348	60.8336	22.5000	370139.0900
X		11991.6390	50049.1750	23513.1840	70958.3860	1997.7398	175.0018	56.0002	21.0000	372608.1700
%RSD		5.0226	5.2586	4.7044	4.8496	4.2715	5.7834	15.6569	18.2712	0.4355

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:31:39	1655.1644	312.5059	607.5221	260.0041	572.5197	426599.2000	221.2529	67.5003	245.0036
2	18:32:25	1770.1880	342.5070	590.0209	250.0038	585.0205	430173.6000	247.5037	70.0003	195.0023
3	18:33:09	1747.6832	330.0065	602.5218	235.0033	575.0198	432504.7300	232.5032	72.5003	213.7527
4	18:33:55	1687.6709	307.5057	682.5280	265.0042	637.5244	430226.2100	230.0032	67.5003	183.7520
5	18:34:40	1507.6364	332.5066	497.5149	190.0022	472.5134	432709.9900	190.0022	60.0002	192.5022
X		1673.6686	325.0064	596.0215	240.0035	568.5196	430442.7500	224.2530	67.5003	206.0026
%RSD		6.1877	4.4854	11.0650	12.5867	10.5205	0.5724	9.5219	6.9290	11.8397

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:31:39	461.2628	465027.8600	2857.9900	605.0220	41482.9940	73575.8770	6525.0536	6525.0536	7283.1813
2	18:32:25	483.7640	464512.7900	2690.4342	600.0216	42676.4980	77670.2810	6557.5791	6557.5791	7565.9330
3	18:33:09	500.0150	470079.8100	2885.4995	632.5240	43993.3190	78853.8190	6722.7106	6722.7106	7736.0892
4	18:33:55	500.0150	466824.2300	2790.4671	607.5221	44222.0250	78225.4380	6687.6824	6687.6824	7573.4399
5	18:34:40	376.2585	468399.0100	2505.3766	492.5146	39573.7420	70333.0570	6334.9069	6334.9069	7123.0430
X		464.2631	466968.7400	2745.9535	587.5209	42389.7160	75731.6940	6565.5865	6565.5865	7456.3373
%RSD		11.1354	0.4970	5.6113	9.2892	4.5321	4.8299	2.3413	2.3413	3.3195

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:31:39	7283.1813	795000.0000	4751.3541	4751.3541	5059.0352	5059.0352	814563.2600	351.2574	900.0486
2	18:32:25	7565.9330	803313.3600	5031.5185	5031.5185	4873.9249	4873.9249	826086.5200	373.7584	903.7990
3	18:33:09	7736.0892	813116.7000	5196.6198	5196.6198	5179.1089	5179.1089	830091.7100	390.0091	968.8063
4	18:33:55	7573.4399	815396.6500	4953.9721	4953.9721	5084.0504	5084.0504	833875.4600	375.0084	932.5522
5	18:34:40	7123.0430	824715.1500	4496.2126	4496.2126	4601.2700	4601.2700	845611.8900	391.2592	916.3004
X		7456.3373	810308.3700	4885.9354	4885.9354	4959.4779	4959.4779	830045.7700	376.2585	924.3013
%RSD		3.3195	1.4133	5.5331	5.5331	4.6123	4.6123	1.3635	4.2998	3.0222

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:31:39	83026.5540	67436.7630	170664.8800	542447.1900	0.0000
2	18:32:25	86317.2370	70638.1210	178475.9700	551915.8300	0.0000
3	18:33:09	88214.4490	72910.0630	183158.4400	564405.9400	2.5000
4	18:33:55	90789.3830	74420.8300	187081.6600	565520.3100	0.0000
5	18:34:40	80620.6040	65902.0590	167358.8300	577667.5200	0.0000
X		85793.6450	70261.5670	177347.9600	560391.3600	0.5000
%RSD		4.7170	5.1039	4.6687	2.4185	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:36:25	100920.7600	138.3345	49335.6090	806082.5700	103017.8500	120773.8800	TM 4943330.3000	411723.2600	TM 1769853.7000
2	18:37:10	100511.6900	158.3348	51342.6780	843050.8800	110284.9700	123610.0200	TM 5203623.5000	430063.1100	TM 1849379.0000
3	18:37:56	100181.9200	168.3350	51979.1060	864937.4700	109616.2300	126594.3200	TM 5319139.3000	433333.6700	TM 1864268.5000
4	18:38:40	100595.1900	167.5017	52074.7000	861447.2000	109585.8400	128269.6500	TM 5315619.7000	434665.4100	TM 1850036.4000
5	18:39:25	102576.6200	154.1681	48264.3630	768006.0500	99429.6580	113872.7400	TM 4693217.1000	408272.0300	TM 1668257.2000
X		100957.2300	157.3348	50599.2910	828704.8300	106386.9100	122624.1200	TM 5094986.0000	423611.5000	TM 1800358.9000
%RSD		0.9337	7.7610	3.3774	4.9705	4.5955	4.6243	TM 5.3314	2.9742	TM 4.5918

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:36:25	158085.3700	1762.6864	32578.5580	15802.4690	M 380526.6000	970833.2500	TM 6845493.8000	M 186314.7700	9057.4195
2	18:37:10	156069.1500	1662.6659	34383.2870	16230.7910	M 395772.6600	1014918.6000	TM 7048376.0000	M 196768.4600	9432.8357
3	18:37:56	154730.7800	1710.1755	34636.8330	17170.1710	M 404567.7700	1041218.3000	TM 7199120.8000	M 198898.1400	9833.2982
4	18:38:40	158653.5200	1795.1933	35261.9470	17560.9840	M 405965.8600	1060401.3000	TM 7336854.0000	M 201525.1300	9930.9139
5	18:39:25	159598.8100	1565.1470	32101.7120	14923.3500	358292.8300	944019.0500	TM 6450535.8000	M 173875.2300	8874.7231
X		157427.5300	1699.1736	33792.4670	16337.5530	M 389025.1400	1006278.1000	TM 6976076.1000	M 191476.3400	9425.8381
%RSD		1.2612	5.3188	4.0666	6.4833	M 5.1262	4.8065	TM 4.9573	M 5.9576	4.9211

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:36:25	6289.8729	16183.1990	7811.1591	19497.7830	1039.2315	116.6675	28.3334	18.3334	352060.4500
2	18:37:10	6124.7499	17042.4090	8121.4556	20941.2790	1117.5749	144.1679	41.6668	19.1667	351528.6900
3	18:37:56	6650.1524	17024.8730	8391.7231	21242.0390	1140.0780	133.3344	33.3334	7.5000	350181.2000
4	18:38:40	6597.6107	17581.0260	8214.0462	21352.3200	1150.9128	125.0009	19.1667	19.1667	351033.4600
5	18:39:25	6064.7060	15549.4940	7523.3946	19134.4420	1047.5658	120.0009	33.3334	23.3334	351218.5200
X		6345.4184	16676.2000	8012.3557	20433.5730	1099.0726	127.8343	31.1667	17.5000	351204.4700
%RSD		4.2217	4.8224	4.3057	5.0853	4.7594	8.6680	26.4423	33.8397	0.1970

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:36:25	750.0338	92.5005	262.5041	75.0003	202.5025	448031.1300	128.7510	22.5000	92.5005
2	18:37:10	875.0459	95.0005	270.0044	55.0002	212.5027	442604.8800	107.5007	37.5001	100.0006
3	18:37:56	857.5441	67.5003	267.5043	50.0001	202.5025	440908.4000	112.5008	35.0001	98.7506
4	18:38:40	772.5358	135.0011	295.0052	82.5004	175.0018	438540.7400	136.2511	7.5000	122.5009
5	18:39:25	595.0212	92.5005	212.5027	70.0003	182.5020	446325.6600	97.5006	20.0000	95.0005
X		770.0362	96.5006	261.5042	66.5003	195.0023	443282.1600	116.5008	24.5000	101.7506
%RSD		14.4787	25.1577	11.5241	20.5224	8.0065	0.0765	13.5594	49.6762	11.7706

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:36:25	140.0012	482151.0100	562.5190	220.0029	17706.2910	31577.2140	4103.5101	4103.5101	4508.7194
2	18:37:10	141.2512	483739.2000	547.5180	215.0028	18440.3800	33155.8280	4346.1330	4346.1330	4631.2866
3	18:37:56	162.5016	476491.5100	630.0238	237.5034	18407.8080	34458.5970	4556.2452	4556.2452	5031.5185
4	18:38:40	130.0010	474801.5300	622.5233	240.0035	18089.6130	33569.9810	4438.6818	4438.6818	5086.5519
5	18:39:25	108.7507	475391.2600	477.5137	250.0038	16458.7370	30119.3320	3745.8417	3745.8417	4451.1885
X		136.5011	478514.9000	568.0195	232.5033	17820.5660	32576.1900	4238.0824	4238.0824	4741.8530
%RSD		14.2958	0.8626	10.9439	6.2699	4.5838	5.2950	7.5869	7.5869	6.2718

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:36:25	4508.7194	821389.5200	3038.0537	3038.0537	3093.0739	3093.0739	837498.1400	187.5021	448.7621
2	18:37:10	4631.2866	823107.2400	3093.0739	3093.0739	3283.1466	3283.1466	845123.3600	191.2522	421.2607
3	18:37:56	5031.5185	810342.5000	3130.5879	3130.5879	3213.1193	3213.1193	833420.6600	172.5018	421.2607
4	18:38:40	5086.5519	802522.3100	3128.0870	3128.0870	3303.1545	3303.1545	823966.2200	188.7521	456.2625
5	18:39:25	4451.1885	800781.1700	2822.9781	2822.9781	2877.9969	2877.9969	818414.5800	148.7513	377.5086
X		4741.8530	811628.5500	3042.5561	3042.5561	3154.0983	3154.0983	831684.5900	177.7519	425.0109
%RSD		6.2718	1.2764	4.2171	4.2171	5.5440	5.5440	1.2797	10.0122	7.2762

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:36:25	38503.7470	31895.9240	80734.1950	605598.4300	0.0000
2	18:37:10	41347.3220	33846.0940	86521.8420	608451.6900	0.0000
3	18:37:56	41148.8430	33371.6870	85084.6580	594170.6700	0.0000
4	18:38:40	40116.3270	32977.6230	82923.0310	583617.6600	0.0000
5	18:39:25	35884.5960	28997.8650	73422.0290	577557.7900	0.0000
X		39400.1670	32217.8390	81737.1510	593879.2500	0.0000
%RSD		5.7493	6.0170	6.2877	2.2614	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:41:10	99577.2370	224.1697	150944.7900	T 1898449.9000	242636.6700	278776.2600	TM 6258527.7000	305823.0500	TM 3532196.9000
2	18:41:55	99434.7170	189.1688	160432.0800	T 2007222.7000	252204.5400	292862.2300	TM 6532694.2000	322634.4700	TM 3756984.6000
3	18:42:40	99773.7340	190.8355	161821.0600	T 2061832.3000	260081.1700	301315.7300	TM 6778467.1000	330142.6200	TM 3891055.2000
4	18:43:24	101292.7300	204.1692	161099.7800	T 2035673.3000	256013.0700	296228.1200	TM 6652850.2000	333284.0300	TM 3844217.6000
5	18:44:09	99849.6350	190.8355	155352.1900	T 1929846.7000	237599.6100	278264.5800	TM 6245554.1000	317557.4300	TM 3636899.5000
x		99985.6100	199.8357	157929.9800	T 1986605.0000	249707.0100	289489.3900	TM 6493618.6000	321888.3200	TM 3732270.8000
%RSD		0.7488	7.4505	2.9511	T 3.5132	3.7472	3.6123	TM 3.6509	3.3868	TM 3.9623

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:41:10	157714.7000	1567.6474	56206.4130	23420.3650	M 853755.2700	T 1852426.9000	TM 15189706.0000	M 416559.9600	16666.6500
2	18:41:55	159524.9200	1867.7093	57772.0650	24360.5540	M 910371.0300	T 1962574.4000	TM 16155206.0000	M 444075.0800	17726.3330
3	18:42:40	159249.7300	1745.1827	59224.7090	24568.6640	M 937573.6700	T 1996903.2000	TM 16597836.0000	M 452933.2600	17869.1380
4	18:43:24	157189.9200	1832.7015	58975.4500	25160.4260	M 922299.4200	T 1949764.9000	TM 16344147.0000	M 451759.5500	17598.5630
5	18:44:09	159140.1600	1660.1654	54032.1020	22946.5490	M 870385.8400	1825852.4000	TM 15256896.0000	M 421491.3800	16847.0120
x		158563.8800	1734.6813	57242.1480	24091.3110	M 898877.0500	T 1917504.4000	TM 15908758.0000	M 437363.8400	17341.5390
%RSD		0.6565	7.1112	3.7664	3.7150	M 3.9434	T 3.8686	TM 4.0580	M 3.9261	3.1486

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:41:10	9202.5784	17034.8930	8241.5734	22886.3840	2351.1650	120.0009	37.5001	24.1667	354599.7900
2	18:41:55	10053.5610	17616.1000	8326.6579	24225.1600	2451.1938	111.6674	26.6667	17.5000	360400.8700
3	18:42:40	9885.8603	18144.7320	8829.6753	25152.9030	2422.0186	117.5008	30.0001	20.0000	361671.6900
4	18:43:24	9860.8307	17623.6160	8912.263	25411.1850	2358.6671	123.3343	36.6667	23.3334	361491.6200
5	18:44:09	8812.1568	17062.4500	8088.9239	22848.7810	2201.9575	125.0009	21.6667	20.8334	363109.7400
x		9562.9974	17496.3580	8479.8127	24104.8830	2357.0004	119.5009	30.5001	21.1667	360254.7400
%RSD		5.5512	2.6380	4.3426	5.0306	4.0901	4.3994	21.9941	12.6353	0.9174

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:41:10	640.0246	205.0025	330.0065	155.0014	335.0067	426367.8000	112.5008	20.0000	111.2507
2	18:41:55	635.0242	227.5031	347.5073	110.0007	360.0078	435176.0600	113.7508	25.0000	116.2508
3	18:42:40	682.5280	200.0024	355.0076	150.0014	377.5086	429760.5900	126.2510	17.5000	121.2509
4	18:43:24	707.5300	225.0030	330.0065	140.0012	355.0076	431891.6300	128.7510	27.5000	98.7506
5	18:44:09	615.0227	197.5023	337.5068	90.0005	305.0056	443627.1400	116.2508	20.0000	97.5006
x		656.0259	211.0027	340.0069	129.0010	346.5072	433364.6400	119.5009	22.0000	109.0007
%RSD		5.7711	6.7339	3.2470	21.6501	7.9955	1.5163	6.2587	18.6724	9.6767

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:41:10	118.7509	462782.9100	1007.5609	290.0051	19663.1710	35764.0800	5759.4896	5759.4896	6194.8017
2	18:41:55	137.5011	470883.3200	1012.5615	237.5034	20881.1290	36931.6560	5782.0052	5782.0052	6982.9244
3	18:42:40	145.0013	470690.3600	1025.0630	350.0074	21655.6010	38895.5610	5932.1106	5932.1106	7148.0644
4	18:43:24	148.7513	476742.7900	1102.5729	245.0036	21653.0950	39448.1490	5842.0471	5842.0471	6952.8994
5	18:44:09	135.0011	482598.3200	1152.5797	225.0030	20194.4390	37140.0790	5729.4689	5729.4689	6454.9991
x		137.0011	472739.5400	1060.0676	269.5045	20809.4870	37635.9050	5809.0243	5809.0243	6746.7378
%RSD		8.4761	1.5688	6.0778	19.0159	4.2475	4.0113	1.3813	1.3813	5.9708

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:41:10	6194.8017	769182.4900	4143.5299	4143.5299	4523.7275	4523.7275	781287.0900	178.7519	396.2594
2	18:41:55	6982.9244	776370.3900	4233.5751	4233.5751	4551.2425	4551.2425	793688.3700	190.0022	450.0122
3	18:42:40	7148.0644	782383.1100	4343.6317	4343.6317	4693.8215	4693.8215	799391.8000	183.7520	450.0122
4	18:43:24	6952.8994	791142.5200	4418.6712	4418.6712	4533.7329	4533.7329	805033.0200	163.7516	437.5115
5	18:44:09	6454.9991	802937.0500	4358.6396	4358.6396	4311.1149	4311.1149	822669.5200	200.0024	472.5134
x		6746.7378	784403.1100	4299.6095	4299.6095	4522.7279	4522.7279	800413.9600	183.2520	441.2617
%RSD		5.9708	1.6734	2.5562	2.5562	3.0274	3.0274	1.9037	7.3563	6.3788

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:41:10	54963.1610	44754.8580	114105.9000	536354.9500	0.0000
2	18:41:55	58781.5880	48166.2980	121220.3000	548303.6900	0.0000
3	18:42:40	61319.7800	50406.9920	127091.8100	550479.0700	0.0000
4	18:43:24	62644.5790	50653.4800	129066.8100	562180.2900	0.0000
5	18:44:09	59592.3160	48385.0600	121552.5800	572796.6900	0.0000
x		59460.2850	48473.3380	122607.4800	554022.9400	0.0000
%RSD		4.9248	4.8842	4.7758	2.5147	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:45:54	101000.8800	154.1681	112375.1200	T 1171502.4000	149020.6200	170256.6500	TM 5573435.0000	280303.7400	TM 2668149.8000
2	18:46:39	100503.2500	150.8347	118286.0800	1227135.5000	155441.3200	179829.6100	TM 5868955.9000	301214.6800	TM 2892641.6000
3	18:47:25	100367.4700	165.8350	122257.7900	T 1275186.2000	162702.9800	184898.7500	TM 6033477.9000	308239.6900	TM 2975618.2000
4	18:48:09	100753.7500	169.1684	126376.0400	T 1325331.8000	165242.2200	189300.9400	TM 6168185.8000	309614.2600	TM 3000203.8000
5	18:48:54	101538.1900	165.8350	117593.8900	T 1212571.2000	154055.9500	177194.0500	TM 5743054.9000	295132.7700	TM 2797175.1000
X		100832.7100	161.1682	119377.7800	T 1242345.4000	157292.6200	180296.0000	TM 5877421.9000	298901.0300	TM 2866757.7000
%RSD		0.4591	5.0344	4.4064	T 4.7793	4.2027	4.0465	TM 3.9850	3.9846	TM 4.7642

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:45:54	157296.9100	1797.6939	46451.6050	20049.0890	M 581478.0800	1167679.8000	TM 10427869.0000	M 288170.3400	13380.7340
2	18:46:39	156941.5500	1772.6885	48948.3350	21264.5960	M 617936.6700	1246769.8000	TM 11047286.0000	M 302976.8600	14610.2960
3	18:47:25	157172.0900	1695.1724	49423.6280	21668.1340	M 634580.3300	1270801.5000	TM 11253941.0000	M 310804.8700	14455.0260
4	18:48:09	157538.9200	1897.7161	51060.9550	22299.7970	M 658971.1000	1310302.6000	TM 11458846.0000	M 316417.7900	14985.9630
5	18:48:54	158042.0600	1750.1838	48050.6340	20485.1480	M 606162.3000	1233243.9000	TM 10693969.0000	M 293038.2600	13914.1060
X		157398.3100	1782.6909	48787.0320	21153.3530	M 619825.7000	1245759.5000	TM 10976382.0000	M 302281.6300	14269.2250
%RSD		0.2666	4.1858	3.4903	4.2662	M 4.7112	4.2185	TM 3.7988	M 3.9056	4.4046

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:45:54	7508.3810	26318.9960	12581.9910	22412.5990	1746.8497	111.6674	23.3334	12.5000	352782.5500
2	18:46:39	7681.0383	27038.7950	12692.1580	23570.7880	1846.8713	117.5008	23.3334	17.5000	353661.1400
3	18:47:25	8326.6579	27966.8500	13300.6060	24684.0040	1989.4041	125.8343	32.5001	27.5000	355092.6200
4	18:48:09	8446.7787	28839.8186	13921.6190	25032.5410	1871.0434	117.5008	29.1667	17.5000	354326.0000
5	18:48:54	7676.0337	26895.8330	12609.5330	23385.2660	1725.1786	105.0007	20.0000	20.0000	353184.0300
X		7927.7775	27412.0580	13021.1810	23817.0400	1835.8694	115.5008	25.6667	19.0000	353809.2700
%RSD		5.3835	3.6237	4.4772	4.4279	5.7844	6.7026	19.6690	28.8275	0.2599

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:45:54	840.0473	242.5035	340.0069	155.0014	297.5053	441983.1500	188.7521	27.5000	147.5013
2	18:46:39	827.5411	225.0030	332.5066	180.0019	347.5073	439154.3200	165.0016	12.5000	158.7515
3	18:47:25	830.0413	252.5038	360.0078	147.5013	305.0056	441366.7300	170.0017	35.0001	136.2511
4	18:48:09	900.0486	245.0036	397.5095	140.0012	390.0091	437034.6300	150.0014	32.5001	168.7517
5	18:48:54	680.0278	200.0024	305.0056	105.0007	305.0056	439383.4400	136.2511	12.5000	152.5014
X		815.5402	233.0033	347.0073	145.5013	329.0066	439784.4500	162.0016	24.0000	152.7514
%RSD		9.9728	9.0219	9.9232	18.6805	11.9741	0.4470	12.3289	45.1656	7.9636

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:45:54	142.5012	481804.3000	957.5550	340.0069	18816.2190	33421.8870	4851.4118	4851.4118	5501.8156
2	18:46:39	143.7512	480727.1900	950.0542	315.0060	19071.1640	36341.5700	5094.0565	5094.0565	5992.1536
3	18:47:25	133.7511	484329.5500	1107.5736	322.5062	20986.3920	37594.6100	5509.3206	5509.3206	6199.8054
4	18:48:09	165.0016	483011.2500	1012.5615	380.0087	21282.1410	37926.1070	5371.7308	5371.7308	6237.3334
5	18:48:54	128.7510	480383.1700	925.0513	337.5068	19535.3710	35648.5870	4868.9220	4868.9220	5656.9194
X		142.7512	482051.0900	990.5591	339.0069	20098.2570	36186.5520	5139.0883	5139.0883	5917.6055
%RSD		9.7392	0.3394	7.3491	7.4226	5.0999	4.9753	5.7475	5.7475	5.5294

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:45:54	5501.8156	819784.9600	3353.1745	3353.1745	3475.7247	3475.7247	835038.7400	216.2528	400.0096
2	18:46:39	5992.1536	815052.8300	3660.8039	3660.8039	3683.3138	3683.3138	841574.7700	186.2521	511.2657
3	18:47:25	6199.8054	821799.6500	3635.7930	3635.7930	3670.8083	3670.8083	844524.4700	220.0029	470.0133
4	18:48:09	6237.3334	817580.9000	3728.3338	3728.3338	3818.3746	3818.3746	833718.3400	173.7518	490.0144
5	18:48:54	5656.9194	809281.4500	3373.1826	3373.1826	3513.2404	3513.2404	832166.6400	172.5018	432.5112
X		5917.6055	816699.9600	3550.2576	3550.2576	3632.2924	3632.2924	837404.5900	193.7523	460.7628
%RSD		5.5294	0.5937	4.9080	4.9080	3.8297	3.8297	0.6395	11.8349	9.6943

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:45:54	74292.1900	61269.4110	154190.9100	598071.6900	0.0000
2	18:46:39	80767.0110	66053.2490	166376.9600	597595.5300	0.0000
3	18:47:25	82912.9310	67532.5340	173048.2800	600302.5900	0.0000
4	18:48:09	82928.0810	68472.6590	173770.5800	591958.7700	0.0000
5	18:48:54	75934.3930	62866.2390	158200.0200	584379.6200	0.0000
X		79366.9210	65238.8180	165117.3500	594461.6400	0.0000
%RSD		5.0694	4.7100	5.3023	1.0800	0.0000

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:50:40	100842.3100	155.8348	218569.2500	TM 5670768.0000	M 723952.3400	M 846699.4500	T 3926131.7000	212420.7800	TM 4243947.9000
2	18:51:26	100847.3700	165.0016	223212.4200	TM 5900158.1000	M 756731.2800	M 869281.5000	T 4051117.3000	219901.1100	TM 4376342.2000
3	18:52:11	103132.5900	162.5016	224935.3300	TM 5901199.7000	M 767179.9100	M 886645.9000	T 4066426.8000	224873.7000	TM 4468242.5000
4	18:52:57	100005.6600	164.1683	224660.5600	TM 5969171.5000	M 760830.5000	M 886568.2600	T 4060729.2000	226414.5900	TM 4442785.8000
5	18:53:41	103181.5200	144.1679	216529.5200	TM 5664786.2000	M 731015.8200	M 840258.9000	T 3863489.0000	218628.2700	TM 4238919.0000
X		101601.8900	158.3348	221581.4200	TM 5821216.7000	M 747941.9700	M 865890.8000	T 3993578.8000	220447.6900	TM 4354047.5000
%RSD		1.4375	5.4949	1.7183	TM 2.4540	M 2.5678	M 2.5138	T 2.3288	2.5178	TM 2.4840

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:50:40	161206.8200	2135.2735	51561.5230	43953.1080	M 814901.5500	1329761.5000	TM 14393103.0000	M 405766.4900	14893.2970
2	18:51:26	161793.0200	2035.2485	53438.2910	46363.6170	M 865429.8700	1420533.4000	TM 15314811.0000	M 429476.4900	15121.2070
3	18:52:11	164484.9500	2092.7627	53556.5470	46848.8200	M 877236.3800	1437694.5000	TM 15649704.0000	M 437569.1100	15782.4310
4	18:52:57	163119.7600	2097.7640	53855.9670	47432.1050	M 876829.1900	1441710.2000	TM 15533912.0000	M 441398.3400	15855.0690
5	18:53:41	164063.0100	2035.2485	50988.0110	45159.5320	M 834299.9600	1359565.5000	TM 14722110.0000	M 415572.4400	15016.0170
X		162933.5100	2079.2595	52680.0680	45951.4360	M 853739.3900	1397853.0000	TM 15122728.0000	M 425956.5800	15333.6040
%RSD		0.8679	2.0876	2.4823	3.0366	M 3.2651	3.5997	TM 3.5862	M 3.5238	2.9406

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:50:40	8839.6859	16781.8810	8516.8500	22071.6910	1842.7037	116.6675	30.8334	28.3334	359545.0700
2	18:51:26	9392.7905	17783.9560	8619.4554	22337.3970	1862.7082	138.3345	34.1667	29.1667	363613.5100
3	18:52:11	9673.1109	18159.7650	8839.6859	23232.3390	1930.2235	127.5010	30.0001	29.1667	364232.1700
4	18:52:57	9442.8470	17370.5850	8704.5438	22680.8230	1941.0594	132.5011	25.8334	13.3333	367621.2300
5	18:53:41	8912.2632	17037.3990	8321.6529	21981.4530	1826.0334	118.3342	36.6667	35.0001	368020.7900
X		9252.1395	17426.7170	8600.4376	22460.7410	1880.5456	126.6676	31.5001	27.0000	364606.5500
%RSD		3.8933	3.1892	2.2751	2.2703	2.7697	7.2816	13.1479	29.9717	0.9450

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:50:40	1275.0975	227.5031	482.5140	175.0018	425.0108	438535.4800	117.5008	22.5000	116.2508
2	18:51:26	1370.1126	270.0044	380.0087	190.0022	415.0103	437774.4900	127.5010	40.0001	120.0009
3	18:52:11	1355.1102	230.0032	500.0150	160.0015	432.5112	440213.0500	152.5014	27.5000	126.2510
4	18:52:57	1385.1151	277.5046	500.0150	175.0018	432.5112	442072.7200	143.7512	22.5000	148.7513
5	18:53:41	1205.0871	235.0033	460.0127	107.5007	405.0098	445253.0100	135.0011	25.0000	118.7509
X		1318.1045	248.0037	464.5131	161.5016	422.0107	440769.7500	135.2511	27.5000	126.0010
%RSD		5.7762	9.6006	10.7672	19.8120	2.8226	0.6813	10.0905	26.5044	10.5085

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:50:40	181.2520	476875.0400	572.5197	407.5100	14740.5250	26677.6340	5141.5857	5141.5857	5659.4211
2	18:51:26	172.5018	475737.7200	577.5200	385.0089	15551.9980	27166.7100	4826.3972	4826.3972	5882.0752
3	18:52:11	187.5021	479962.4400	685.0282	405.0098	15514.4280	28009.4930	4921.4528	4921.4528	5962.1321
4	18:52:57	185.0021	480602.8100	632.5240	412.5102	15867.5920	28157.4900	5099.0595	5099.0595	6119.7463
5	18:53:41	146.2513	487072.7100	607.5221	340.0069	15005.9990	26499.5670	4773.8670	4773.8670	5714.4586
X		174.5018	480050.1500	615.0228	390.0092	15336.1090	27302.1790	4952.4725	4952.4725	5867.5666
%RSD		9.6187	0.9217	7.4848	7.6523	2.9605	2.7680	3.2871	3.2871	3.1829

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:50:40	5659.4211	788334.1700	3653.3006	3653.3006	3653.3006	3653.3006	805291.2800	123.7509	323.7563
2	18:51:26	5882.0752	789019.7200	3815.8735	3815.8735	3723.3316	3723.3316	800429.6900	141.2512	328.7565
3	18:52:11	5962.1321	791139.7800	3835.8826	3835.8826	3950.9364	3950.9364	806568.9200	138.7512	362.5079
4	18:52:57	6119.7463	787133.2100	3713.3271	3713.3271	3895.9105	3895.9105	810743.8700	148.7513	393.7593
5	18:53:41	5714.4586	805783.0800	3588.2724	3588.2724	3588.2724	3588.2724	826177.4000	143.7512	287.5050
X		5867.5666	792281.9900	3721.3312	3721.3312	3762.3503	3762.3503	809842.2300	139.2512	339.2570
%RSD		3.1829	0.9702	2.8330	2.8330	4.1416	4.1416	1.2156	6.7654	11.9187

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:50:40	107238.0900	89841.6950	229034.7500	542019.4000	0.0000
2	18:51:26	111860.7600	92523.2980	235349.5900	544337.1500	0.0000
3	18:52:11	113393.7800	94381.4620	239168.5400	542898.9800	0.0000
4	18:52:57	114290.9100	95317.0200	240850.9700	551870.4700	0.0000
5	18:53:41	109172.9700	90809.6020	231136.6000	561639.3300	0.0000
X		111191.3000	92574.6150	235108.0900	548553.0700	0.0000
%RSD		2.6454	2.4969	2.1498	1.5107	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:55:27	104285.1300	217.5028	83099.7790	935671.6600	118927.6100	140280.8700	TM 7024839.7000	357309.4200	TM 2176289.1000
2	18:56:12	103108.1200	231.6699	85377.6310	970732.4600	124594.5200	141430.0500	TM 7296717.6000	374549.7500	TM 2223570.5000
3	18:56:56	102636.5200	266.6709	83809.3320	980856.3900	123681.0600	141689.4000	TM 7117438.5000	361966.5900	TM 2235912.6000
4	18:57:41	102433.2100	240.8368	84344.6920	960217.4600	123564.3500	144746.2700	TM 7148436.4000	368310.6900	TM 2251574.4000
5	18:58:26	102515.8800	232.5032	82256.4740	951921.7600	119799.9800	137881.3200	TM 6845150.2000	356550.4300	TM 2147184.1000
X		102995.7700	237.8367	83777.5820	959879.9500	122113.5000	141205.5800	TM 7086516.5000	363737.3800	TM 2206906.1000
%RSD		0.7443	7.6390	1.4194	1.8099	2.0966	1.7608	TM 2.3511	2.1024	TM 1.9775

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:55:27	160058.7600	1315.1038	56276.8860	16528.8760	M 557139.3100	1337699.2000	TM 9863669.8000	M 269364.1800	14249.6730
2	18:56:12	159899.4900	1450.1262	58016.2530	16541.4010	M 565476.2200	1357205.7000	TM 10093978.0000	M 272191.3600	14610.2960
3	18:56:56	157861.1800	1415.1201	58869.7070	17270.3770	M 581502.1800	1379849.2000	TM 10249516.0000	M 278029.4200	14525.1480
4	18:57:41	155969.8100	1342.6081	57573.1960	16831.9820	M 567962.0200	1368732.6000	TM 10142708.0000	M 274115.4100	14344.8360
5	18:58:26	156228.3400	1350.1094	55760.9350	16376.0750	M 553821.2200	1306036.8000	TM 9812552.9000	M 263872.6100	14081.8880
X		158003.5200	1374.6135	57299.3950	16709.7420	M 565180.1900	1349904.7000	TM 10032485.0000	M 271514.6000	14362.3680
%RSD		1.2307	4.0682	2.2191	2.1193	M 1.9137	2.1527	TM 1.8641	M 1.9549	1.4755

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:55:27	8604.4399	16922.1640	8231.5635	16774.3660	1664.3329	126.6676	33.3334	24.1667	360990.5900
2	18:56:12	8867.2151	16829.4770	8071.4070	16781.8810	1597.6531	125.0009	25.0000	20.0000	361807.3900
3	18:56:56	8747.0883	17302.9450	8179.0118	17378.1010	1738.5147	123.3343	33.3334	25.0000	361922.2200
4	18:57:41	8549.3833	16887.0930	7938.7797	17433.2160	1615.9900	120.0009	39.1668	25.0000	361034.9500
5	18:58:26	8221.5536	16739.2950	7941.2820	16729.2750	1600.1536	129.1677	30.8334	19.1667	361384.6300
X		8597.9360	16936.1950	8072.4088	17019.3680	1643.3289	124.8343	32.3334	22.6667	361427.9600
%RSD		2.8419	1.2776	1.6591	2.0785	3.6256	2.7686	15.8249	12.5755	0.1187

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:55:27	807.5391	80.0004	217.5028	62.5002	175.0018	446578.6900	141.2512	25.0000	135.0011
2	18:56:12	747.5335	82.5004	242.5035	60.0002	115.0008	445519.1800	122.5009	12.5000	125.0009
3	18:56:56	757.5344	110.0007	267.5043	57.5002	200.0024	442175.4600	131.2510	12.5000	133.7511
4	18:57:41	720.0311	122.5009	215.0028	82.5004	157.5015	446141.1700	121.2509	15.0000	106.2507
5	18:58:26	755.0342	85.0004	235.0033	72.5003	140.0012	441295.6100	123.7509	17.5000	120.0009
X		757.5345	96.0006	235.5034	67.0003	157.5015	444342.0200	128.0010	16.5000	124.0009
%RSD		4.1813	19.8841	9.0515	15.4750	20.6351	0.5466	6.5365	31.4189	9.4404

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:55:27	135.0011	481791.0600	602.5218	202.5025	23247.3810	43714.3570	6399.9566	6399.9566	7130.5494
2	18:56:12	120.0009	482127.1900	725.0315	162.5016	24523.5310	43769.6460	6422.4739	6422.4739	7215.6226
3	18:56:56	137.5011	482410.4000	702.5296	235.0033	24400.6710	44222.0250	6797.7715	6797.7715	7345.7362
4	18:57:41	132.5011	482524.2100	655.0257	202.5025	24521.0240	44666.8880	6715.2045	6715.2045	7518.3900
5	18:58:26	115.0008	481587.2800	615.0227	195.0023	23994.4940	41960.3750	6409.9643	6409.9643	7230.6356
X		128.0010	482088.0300	660.0263	199.5024	24137.4200	43666.6580	6549.0742	6549.0742	7288.1867
%RSD		7.7390	0.0826	8.0846	12.9445	2.2484	2.3559	2.9278	2.9278	2.0551

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:55:27	7130.5494	805989.1500	4708.8300	4708.8300	4758.8584	4758.8584	824734.4300	226.2531	586.2706
2	18:56:12	7215.6226	806285.9000	4903.9425	4903.9425	4776.3684	4776.3684	832241.0500	242.5035	556.2686
3	18:56:56	7345.7362	808105.0900	5066.5397	5066.5397	4811.3886	4811.3886	831684.3800	237.5034	560.0188
4	18:57:41	7518.3900	808685.0100	5001.5005	5001.5005	4963.9780	4963.9780	827507.6900	262.5041	615.0227
5	18:58:26	7230.6356	815347.1400	4838.9045	4838.9045	4548.7411	4548.7411	833001.7100	243.7536	598.7715
X		7288.1867	808882.4600	4903.9434	4903.9434	4771.8669	4771.8669	829833.8500	242.5035	583.2704
%RSD		2.0551	0.4689	2.8522	2.8522	3.1161	3.1161	0.4289	5.4186	4.3095

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:55:27	36356.6360	29645.1360	75341.5480	588528.1000	0.0000
2	18:56:12	37803.0500	30761.6720	78238.0560	594342.2800	0.0000
3	18:56:56	37674.9720	31070.3140	77917.5740	592858.2100	2.5000
4	18:57:41	38044.1440	31293.6470	78470.2230	598396.2900	0.0000
5	18:58:26	36981.8780	29589.9410	76499.5260	595229.9000	0.0000
X		37372.1360	30472.1420	77293.3850	593870.9600	0.5000
%RSD		1.8502	2.6349	1.7245	0.6078	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	19:00:12	94278.6410	576775.9100	M 32037671.0000	M 22561264.0000	M 2930957.9000	M 3427107.8000	M 45698587.0000	M 16892509.0000	M 674597.7300
2	19:00:57	95822.7710	593155.3600	M 33305255.0000	M 23297854.0000	M 3069877.2000	M 3543605.7000	M 48083825.0000	M 18229796.0000	M 721470.3200
3	19:01:41	95300.1620	606678.7600	M 34638930.0000	M 24308593.0000	M 3163245.2000	M 3660675.1000	M 49643501.0000	M 18542684.0000	M 735228.3200
4	19:02:27	96246.7820	605402.4300	M 35000877.0000	M 24330824.0000	M 3127919.2000	M 3666480.5000	M 50070021.0000	M 18736511.0000	M 748792.4700
5	19:03:12	96118.6490	587538.4700	M 33282698.0000	M 23562153.0000	M 3063587.0000	M 3570707.4000	M 48541200.0000	M 18324968.0000	M 732620.4700
X		95553.4010	593910.1800	M 33653086.0000	M 23612138.0000	M 3071117.3000	M 3573715.3000	M 48407427.0000	M 18145294.0000	M 722541.8600
%RSD		0.8376	2.1129	M 3.5335	M 3.1460	M 2.8857	M 2.7480	M 3.5410	M 4.0087	M 3.9459

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	19:00:12	168241.3400	12.5000	T 3594250.6000	T 3446236.7000	M 2792963.5000	T 4830453.4000	M 47893363.0000	M 1204249.6000	T 4708537.1000
2	19:00:57	173192.4800	5.0000	T 3803890.3000	T 3664958.1000	M 2942112.0000	T 5054884.5000	M 50580855.0000	M 1268450.4000	T 5017225.8000
3	19:01:41	177932.0200	30.0001	T 3897750.2000	T 3756588.3000	M 3058246.1000	T 5209892.7000	M 51866651.0000	M 1307647.5000	T 5109421.9000
4	19:02:27	181772.3300	17.5000	T 3966922.6000	T 3784239.9000	M 3080024.6000	T 5321716.5000	M 53056408.0000	M 1329411.7000	T 5162832.1000
5	19:03:12	182914.4200	22.5000	T 3858138.2000	T 3696249.5000	M 3030430.1000	T 5129518.8000	M 51719022.0000	M 1297906.3000	T 5029056.2000
X		176810.5200	17.5000	T 3824190.4000	T 3669654.5000	M 2980755.3000	T 5109293.2000	M 51023260.0000	M 1281533.1000	T 5005414.6000
%RSD		3.4595	54.3984	T 3.7032	T 3.6390	M 3.9370	T 3.6138	M 3.8357	M 3.7800	T 3.5237

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	19:00:12	987482.1700	T 2370624.1000	1082758.4000	656450.8800	491105.1900	15412.5730	6300.7144	37.5001	332873.0900
2	19:00:57	1039440.6000	T 2500070.1000	1132779.0000	699299.6800	513777.7500	16264.1890	6912.8661	36.6667	344561.5800
3	19:01:41	1079733.6000	T 2579789.0000	1167739.9000	717846.5300	532791.9300	16701.7200	6811.1157	28.3334	352941.5700
4	19:02:27	1092324.5000	T 2598217.0000	1182259.3000	726350.6700	533933.2800	16765.1810	7198.9415	37.5001	356448.7200
5	19:03:12	1064259.9000	T 2528141.3000	1163730.3000	710432.2800	521750.0900	16477.9420	6829.4640	43.3334	358029.3600
X		1052648.1000	T 2515368.3000	1145853.4000	702076.0100	518671.6500	16324.3210	6810.6203	36.6667	348970.8600
%RSD		3.9352	T 3.5759	3.4568	3.8989	3.3749	3.3487	4.7669	14.6411	2.9791

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	19:00:12	45.0001	37.5001	117.5008	42.5001	90.0005	451250.5500	411028.9700	56052.8840	406053.7400
2	19:00:57	55.0002	57.5002	117.5008	32.5001	140.0012	462925.5200	429610.6400	57344.1240	423517.8400
3	19:01:41	52.5002	65.0003	125.0009	25.0000	145.0013	470415.4800	446184.6600	59972.5290	439956.2500
4	19:02:27	70.0003	40.0001	140.0012	15.0000	117.5008	477462.2800	453164.0600	60722.9330	449545.7700
5	19:03:12	77.5004	47.5001	115.0008	40.0001	132.5011	481169.1300	439637.5800	58716.1290	434610.1400
X		60.0002	49.5002	123.0009	31.0001	125.0010	468644.5900	435925.1800	58561.7200	430736.7500
%RSD		22.2440	23.5270	8.3061	36.3351	17.7202	2.5539	3.7622	3.2469	3.8764

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	19:00:12	876944.1400	485258.8500	45.0001	T 2693420.2000	529435.3100	968126.3300	217.5028	217.5028	27.5000
2	19:00:57	915355.2200	501960.8800	47.5001	T 2810158.2000	558426.3200	1012378.1000	182.5020	182.5020	30.0001
3	19:01:41	941588.2200	505229.8200	27.5000	T 2896746.2000	569354.9200	1039982.3000	177.5019	177.5019	27.5000
4	19:02:27	948886.8900	516327.5000	52.5002	T 2928228.7000	579783.4000	1049592.7000	187.5021	187.5021	50.0001
5	19:03:12	926390.5800	518472.2000	52.5002	T 2845660.7000	565388.0200	1023775.1000	212.5027	212.5027	27.5000
X		921833.0100	505449.8500	45.0001	T 2834842.8000	560477.5900	1018770.9000	195.5023	195.5023	32.5001
%RSD		3.0682	2.6318	22.9062	T 3.2176	3.3893	3.1159	9.3273	9.3273	30.2847

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	19:00:12	27.5000	792055.9800	27.5000	27.5000	2.5000	2.5000	808778.4500	T 4210725.2000	T 10304002.0000
2	19:00:57	30.0001	804917.6400	27.5000	27.5000	2.5000	2.5000	828460.7700	T 4390642.8000	T 10750518.0000
3	19:01:41	27.5000	821042.7100	27.5000	27.5000	15.0000	15.0000	834655.5600	T 4492052.8000	T 11005757.0000
4	19:02:27	50.0001	828413.9400	22.5000	22.5000	17.5000	17.5000	845642.2500	T 4556936.3000	T 11204745.0000
5	19:03:12	27.5000	841668.5700	22.5000	22.5000	2.5000	2.5000	855512.5100	T 4466894.7000	T 10877316.0000
X		32.5001	817619.7700	25.5000	25.5000	8.0000	8.0000	834609.9100	T 4423450.4000	T 10828468.0000
%RSD		30.2847	2.3853	10.7397	10.7397	94.7860	94.7860	2.1297	T 3.0064	T 3.1199

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	19:00:12	T 3378403.1000	T 2938162.5000	T 7356921.4000	568903.0700	0.0000
2	19:00:57	T 3533405.1000	T 3070254.8000	T 7646438.9000	578609.6300	0.0000
3	19:01:41	T 3602855.4000	T 3122308.1000	T 7844758.8000	586923.1300	2.5000
4	19:02:27	T 3633911.9000	T 3167441.3000	T 7983163.3000	591712.1500	5.0000
5	19:03:12	T 3560792.9000	T 3083102.7000	T 7769613.8000	601131.7800	5.0000
X		T 3541873.7000	T 3076253.9000	T 7720179.2000	585455.9500	2.5000
%RSD		T 2.8000	T 2.7958	T 3.0688	2.1057	100.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	19:04:58	105516.3200	65.0003	8451.7838	400.0096	35.0001	85.0004	1085.0706	16060.4610	70.0003
2	19:05:42	105189.7300	52.5002	7042.9750	295.0052	30.0001	50.0001	870.0454	16393.6090	65.0003
3	19:06:28	106062.3500	51.6668	5679.4347	215.0028	25.0000	30.0001	872.5457	16398.6190	65.0003
4	19:07:13	109200.8300	59.1669	5496.8123	230.0032	30.0001	55.0002	842.5426	16366.0550	97.5006
5	19:07:59	108365.0300	50.8335	5179.1089	220.0029	20.0000	35.0001	917.5505	17084.9960	162.5016
X		106866.8500	55.8335	6370.0229	272.0047	28.0000	51.0002	917.5510	16460.7480	92.0006
%RSD		1.6854	10.9170	21.4161	28.8497	20.3603	42.3957	10.6186	2.2877	45.2838

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	19:04:58	198244.0700	7.5000	875.0459	472.5134	1707.6750	115.0008	51551.4620	307.5057	70.0003
2	19:05:42	201149.9800	15.0000	547.5180	445.0119	1487.6328	102.5006	52746.4040	335.0067	70.0003
3	19:06:28	205335.2200	7.5000	340.0069	395.0094	1637.6609	65.0003	52723.7620	370.0082	42.5001
4	19:07:13	209882.6700	10.0000	212.5027	452.5123	1497.6346	130.0010	54334.0560	332.5066	32.5001
5	19:07:59	213956.8400	17.5000	562.5190	447.5120	1542.6428	107.5007	56073.0180	385.0089	65.0003
X		205713.7600	11.5000	507.5185	442.5118	1574.6492	104.0007	53485.7400	346.0072	56.0002
%RSD		3.0945	39.4911	49.7295	6.4789	6.0409	23.2193	3.2762	9.0045	31.0261

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	19:04:58	20.0000	280.0047	65.0003	100.0006	30.8334	150.0014	11.6667	22.5000	398141.6000
2	19:05:42	27.5000	187.5021	67.5003	95.0005	21.6667	165.0016	13.3333	15.8333	406923.4100
3	19:06:28	17.5000	165.0016	67.5003	60.0002	3.3333	159.1682	23.3334	15.8333	415099.7300
4	19:07:13	20.0000	140.0012	40.0001	62.5002	8.3333	124.1676	18.3334	15.8333	424490.5100
5	19:07:59	10.0000	150.0014	52.5002	90.0005	10.0000	156.6681	16.6667	18.3334	420997.3200
X		19.0000	184.5022	58.5002	81.5004	14.8334	151.0014	16.6667	17.6667	413130.5100
%RSD		33.0261	30.5168	20.6283	23.1184	75.4150	10.5538	27.3862	16.4757	2.5901

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	19:04:58	10.0000	2.5000	0.0000	12.5000	0.0000	537737.4100	32.5001	0.0000	27.5000
2	19:05:42	7.5000	2.5000	2.5000	2.5000	5.0000	544887.6900	30.0001	0.0000	20.0000
3	19:06:28	15.0000	2.5000	2.5000	5.0000	5.0000	551825.1100	20.0000	2.5000	21.2500
4	19:07:13	12.5000	7.5000	7.5000	0.0000	0.0000	565609.8400	30.0001	2.5000	12.5000
5	19:07:59	7.5000	2.5000	7.5000	2.5000	5.0000	570764.0800	43.7501	5.0000	20.0000
X		10.5000	3.5000	4.0000	4.5000	3.0000	554164.8300	31.2501	2.0000	20.2500
%RSD		31.0438	63.8877	83.8526	106.8633	91.2871	2.5003	27.1294	104.5825	26.3343

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	19:04:58	8.7500	566002.7200	10.0000	1527.6400	10.0000	12.5000	0.0000	0.0000	0.0000
2	19:05:42	13.7500	570266.7000	10.0000	1222.5897	5.0000	0.0000	0.0000	0.0000	0.0000
3	19:06:28	6.2500	571467.4200	7.5000	1017.5621	15.0000	12.5000	2.5000	2.5000	0.0000
4	19:07:13	10.0000	580594.5500	0.0000	770.0356	2.5000	10.0000	2.5000	2.5000	0.0000
5	19:07:59	3.7500	574923.4100	15.0000	672.5271	5.0000	5.0000	0.0000	0.0000	2.5000
X		8.5000	572650.9600	8.5000	1042.0709	7.5000	8.0000	1.0000	1.0000	0.5000
%RSD		44.6052	0.9547	64.4380	33.2262	66.6667	67.7484	136.9306	136.9306	223.6068

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	19:04:58	0.0000	928585.9400	27.5000	27.5000	2.5000	2.5000	955610.2600	108.7507	198.7524
2	19:05:42	0.0000	935261.7400	22.5000	22.5000	2.5000	2.5000	957242.6300	68.7503	213.7527
3	19:06:28	0.0000	926109.2300	50.0001	50.0001	5.0000	5.0000	952701.2500	75.0003	212.5027
4	19:07:13	0.0000	924780.6200	25.0000	25.0000	12.5000	12.5000	944080.4500	86.2504	225.0030
5	19:07:59	2.5000	920623.4100	35.0001	35.0001	2.5000	2.5000	944046.9600	73.7503	161.2516
X		0.5000	927072.1900	32.0001	32.0001	5.0000	5.0000	950736.3100	82.5004	202.2525
%RSD		223.6068	0.5837	34.6756	34.6756	86.6026	86.6026	0.6631	19.4035	12.2322

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	19:04:58	197.5023	180.0019	385.0089	708922.7400	0.0000
2	19:05:42	197.5023	175.0018	420.0106	701816.1000	0.0000
3	19:06:28	160.0015	87.5005	415.0103	692099.2000	0.0000
4	19:07:13	165.0016	132.5011	292.5051	682269.9200	0.0000
5	19:07:59	165.0016	130.0010	355.0076	677816.3200	0.0000
X		177.0019	141.0013	373.5085	692584.8600	0.0000
%RSD		10.6356	26.8489	13.9894	1.8783	0.0000

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	15:40:01	98.56%	9.9533	-221.2891	37.8540	-7.8753	19.9601	7.2695	287.7544	18.5035
2	15:40:47	99.84%	-0.9487	-37.4543	9.7837	2.0287	-11.0909	-95.8716	-21.1000	-6.7536
3	15:41:31	101.30%	0.7041	-109.8143	-31.0102	-8.0079	3.6164	-2.5789	-64.0212	-14.3001
4	15:42:17	100.35%	-4.4303	243.5057	-15.8808	6.9115	-11.2376	48.4058	-242.3481	-19.7474
5	15:43:01	99.95%	-5.2785	125.0520	-0.7466	6.9430	-1.2479	42.7752	39.7149	22.2976
x		100.00%	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000
%RSD		0.99	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	15:40:01	97.73%	-8.7007	42.3956	-21.4873	43.9966	17.6772	64.7572	-2.3462	9.6882
2	15:40:47	100.20%	-6.4471	-5.6190	-17.1827	122.5406	-9.0242	-971.4580	-39.3912	-1.4415
3	15:41:31	100.23%	-3.9706	66.0714	20.4402	-120.2310	-6.8218	-573.9558	-1.2039	-4.2695
4	15:42:17	100.87%	10.8122	-6.4577	-16.8348	-110.1938	-4.5966	1226.0329	-5.5498	-11.8704
5	15:43:01	100.97%	8.3062	-96.3903	35.0646	63.8875	2.7654	254.6237	48.4911	7.8932
x		100.00%	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	0.0000	0.0000	-0.0000
%RSD		1.32	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	15:40:01	6.8481	-0.4461	-5.1224	47.1083	-13.2946	-9.3868	0.0861	1.1492	98.23%
2	15:40:47	-6.0138	33.3155	-5.7913	-4.4335	25.9374	10.8422	9.3686	-5.8099	98.87%
3	15:41:31	-1.0773	-0.0268	6.2312	-11.3827	-31.5231	1.5275	-5.6273	3.7528	101.04%
4	15:42:17	1.3666	-34.9625	-11.2538	-21.7299	11.9651	0.6788	-10.5893	2.9488	100.85%
5	15:43:01	-1.1236	2.1199	15.9363	-9.5623	30.8455	-3.6617	6.7619	-2.0409	101.00%
x		-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	100.00%
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.34

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	15:40:01	-2.3053	-3.4794	2.6003	-1.9930	-4.4724	98.55%	-3.6063	-16.8621	4.3610
2	15:40:47	-4.9112	-0.9600	2.5309	0.5233	-1.9577	99.72%	-2.4441	46.8351	-0.7565
3	15:41:31	-0.0964	3.9478	-5.0225	0.4832	2.9570	100.90%	-0.0578	-49.3315	-2.0254
4	15:42:17	2.4121	-3.4794	-2.5407	-1.9930	5.4579	100.62%	2.4132	7.8552	1.6887
5	15:43:01	4.9009	3.9710	2.4320	2.9794	-1.9848	100.22%	3.6950	11.5033	-3.2679
x		0.0000	0.0000	0.0000	0.0000	-0.0000	100.00%	0.0000	0.0000	-0.0000
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.93	0.0000	0.0000	0.0000

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	15:40:01	3.7241	98.08%	1.2789	1.6484	0.1344	-0.9912	0.0000	0.0000	-1.5084
2	15:40:47	-5.0789	99.38%	-8.9600	1.5399	-2.4703	-0.9912	0.0000	0.0000	3.5390
3	15:41:31	2.8948	100.32%	0.9846	-3.5182	-0.0033	1.5022	0.0000	0.0000	0.9863
4	15:42:17	1.8389	101.14%	15.7011	-3.5412	2.4005	1.4714	0.0000	0.0000	-1.5084
5	15:43:01	-3.3788	101.09%	-9.0045	3.8712	-0.0612	-0.9912	0.0000	0.0000	-1.5084
x		-0.0000	100.00%	0.0000	0.0000	0.0000	-0.0000	0.0000	0.0000	0.0000
%RSD		0.0000	1.29	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	15:40:01	-1.5084	96.98%	-17.5686	-17.5686	1.3418	1.3418	3070.6423	-24.8153	-53.7689
2	15:40:47	3.5390	99.04%	-0.4369	-0.4369	-1.4067	-1.4067	-3207.1850	7.4575	2.7701
3	15:41:31	0.9863	100.20%	9.0375	9.0375	-6.4885	-6.4885	359.9267	-19.1913	-3.3551
4	15:42:17	-1.5084	101.90%	15.5193	15.5193	0.8245	0.8245	2325.9942	4.9341	23.0680
5	15:43:01	-1.5084	101.88%	-6.5513	-6.5513	5.7290	5.7290	-2549.3781	31.6150	31.2858
x		-0.0000	100.00%	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000
%RSD		0.0000	2.08	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	15:40:01	-36.9463	-10.5472	-57.4427	95.76%	0.0000
2	15:40:47	-19.4940	-6.6056	-19.9979	98.62%	0.0000
3	15:41:31	53.1471	23.4219	113.9351	100.42%	0.0000
4	15:42:17	0.5236	3.0553	-10.5070	102.52%	0.0000
5	15:43:01	2.7695	-9.3244	-25.9875	102.68%	0.0000
x		0.0000	0.0000	0.0000	100.00%	0.0000
%RSD		0.0000	0.0000	0.0000	2.90	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	15:44:47	99.93%	322.3990	433285.9500	317159.1200	40852.9620	47939.0210	30339.9230	231854.8200	9375.4056
2	15:45:32	99.96%	331.7527	433199.9400	317027.5000	41262.8890	47413.2490	29802.9760	237264.3500	9715.6032
3	15:46:16	100.29%	310.7882	438942.7000	318720.8300	41348.7560	48396.0630	30697.8200	236362.6600	9595.5802
4	15:47:00	99.31%	348.4922	436902.7500	319728.8400	41057.9390	47494.9980	30289.9890	230298.3100	9220.5709
5	15:47:45	99.96%	299.7213	423410.6600	309473.2000	41083.1350	47321.7440	29944.7080	219810.8900	9002.4768
x		99.89%	322.6307	433148.4000	316421.9000	41121.1360	47713.0150	30215.0830	231118.2100	9381.9273
%RSD		0.36	5.8341	1.3780	1.2780	0.4698	0.9420	1.1668	3.0160	3.0478

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	15:44:47	97.87%	1.4955	9421.0012	3880.1740	15403.8150	2757.3832	267262.6500	6954.7019	2874.1353
2	15:45:32	98.34%	1.3958	9359.5840	3645.1376	15243.9230	2691.4367	267311.1100	6463.5031	2515.7261
3	15:46:16	98.52%	-3.7244	9282.2878	3733.2443	15379.5260	2477.5414	266440.8300	6565.5509	2654.4339
4	15:47:00	99.50%	8.6969	9678.5541	3781.5329	15427.9960	2707.1406	260020.1500	6633.7503	2739.9757
5	15:47:45	99.81%	6.1180	9217.6076	3544.5485	15103.1510	2659.6582	255627.7900	6590.8642	2587.2522
x		98.81%	2.7963	9391.8069	3716.9275	15311.6820	2658.6320	263332.5100	6641.6741	2674.3046
%RSD		0.83	171.5261	1.8932	3.4548	0.8925	4.0325	2.0029	2.7983	5.2003

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	15:44:47	668.5908	2807.7316	1255.7681	707.0208	297.1597	408.8372	183.2460	-2.3811	98.91%
2	15:45:32	560.9324	2922.1546	1326.2337	628.2522	260.3654	383.1267	159.3274	-2.5398	99.67%
3	15:46:16	624.7392	2772.3361	1306.6095	803.4498	320.4133	435.5013	177.6440	-5.3453	101.42%
4	15:47:00	580.1594	2849.9250	1265.4011	727.9819	306.8542	396.0970	173.8680	5.6001	100.39%
5	15:47:45	597.8711	2875.3498	1289.8431	789.6686	288.2212	414.4196	166.4322	1.5887	99.70%
x		606.4586	2845.4994	1[illegible]	731.2747	294.6027	407.5964	172.1035	-0.6155	100.02%
%RSD		6.9140	2.0466	2.2483	9.6288	7.6576	4.8416	5.4612	692.5640	0.94

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	15:44:47	7.6823	-3.4794	2.5263	-1.9930	-4.4724	99.81%	2366.9390	-81.1343	2334.6576
2	15:45:32	-2.4523	-3.4794	-2.5183	0.5106	-4.4724	100.00%	2357.0974	-69.9659	2354.0789
3	15:46:16	-0.1416	-3.4794	-2.5555	-1.9930	-4.4724	101.25%	2371.9890	-27.4427	2439.2767
4	15:47:00	2.4441	-3.4794	-2.5378	-1.9930	-1.9892	100.83%	2309.7483	-27.8224	2274.5598
5	15:47:45	-4.9358	1.5480	-2.5078	-1.9930	-1.9557	99.14%	2308.7623	-56.7299	2347.8122
x		0.5193	-2.4739	-1.5186	-1.4923	-3.4725	100.20%	2342.9072	-52.6190	2350.0770
%RSD		933.6521	90.8802	148.9001	75.0282	39.4342	0.84	1.3310	46.3537	2.5100

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	15:44:47	488.5955	100.51%	8.3963	2810.2274	2752.2086	5334.4831	0.0000	0.0000	-1.5084
2	15:45:32	475.2378	102.19%	5.6343	2675.9872	2675.7469	4930.1277	4.8430	4.8429	-1.5084
3	15:46:16	482.4475	101.24%	-11.4763	2905.7398	2953.8407	5208.1832	0.0000	0.0000	-1.5084
4	15:47:00	420.1568	102.14%	0.7592	2744.3172	2866.8682	5209.8007	0.0000	0.0000	0.9311
5	15:47:45	464.6756	100.49%	0.9676	2678.3998	2731.8479	5068.0867	4.9988	4.9988	-1.5084
x		466.2226	101.31%	0.8562	2762.9343	2796.1025	5150.1363	1.9684	1.9684	-1.0205
%RSD		5.8441	0.82	889.0581	3.5129	4.0157	3.0088	136.9593	136.9593	106.9032

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	15:44:47	-1.5084	102.46%	-21.4012	-21.4012	0.7622	0.7622	4127.0518	2070.9716	5019.5319
2	15:45:32	-1.5084	103.52%	9.7564	9.7564	-1.7518	-1.7518	90.5999	2102.1680	5044.5771
3	15:46:16	-1.5084	103.89%	9.5756	9.5756	-4.1755	-4.1755	-6826.6892	2087.3273	5154.2927
4	15:47:00	0.9311	102.50%	-18.9628	-18.9628	-6.5430	-6.5430	-4938.7530	2119.2479	5120.3961
5	15:47:45	-1.5084	99.90%	-18.3271	-18.3271	-1.4716	-1.4716	39.0121	2054.9870	5086.9492
x		-1.0205	102.45%	-7.8718	-7.8718	-2.6359	-2.6359	-1501.7556	2086.9404	5085.1494
%RSD		106.9031	1.52	203.9042	203.9037	106.1558	106.1558	291.7029	1.2103	1.0761

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	15:44:47	1709.2021	1386.4010	6444.4713	104.02%	0.0000
2	15:45:32	1573.5833	1466.2735	6439.0203	105.57%	0.0000
3	15:46:16	1659.0736	1446.8423	6631.7027	105.09%	2.3789
4	15:47:00	1538.8276	1377.4434	6347.8973	102.08%	0.0000
5	15:47:45	1496.4974	1386.1561	6570.8418	99.36%	0.0000
x		1595.4368	1412.6233	6486.7867	103.22%	0.4758
%RSD		5.4699	2.8918	1.7480	2.46	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	15:49:30	101.02%	3526.7232	10808.1300	6779.9623	938.5944	940.7211	14597.1470	4411.4158	224.2771
2	15:50:16	101.26%	3347.4594	10886.3330	6876.3165	767.4455	1070.3626	15022.1820	5108.4530	207.1923
3	15:51:01	102.08%	3437.8542	10767.4430	7161.0112	864.3260	1050.5147	14364.4610	4637.6820	288.9024
4	15:51:45	103.29%	3283.7433	10854.7920	6556.5883	791.8136	939.8022	14545.9250	5140.1313	193.2945
5	15:52:31	104.10%	3279.8393	10496.6840	6450.5489	876.0088	853.4145	14195.6080	4917.7891	205.4457
X		102.35%	3375.1239	10762.6760	6764.8854	847.6377	970.9630	14545.0650	4843.0942	223.8224
%RSD		1.29	3.1465	1.4440	4.1268	8.1102	9.1991	2.1332	6.4701	16.9863

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	15:49:30	99.69%	-1.3796	18408.5050	20201.0280	1157.3812	27937.6990	12125.3910	320.6279	27191.3210
2	15:50:16	101.21%	5.7812	19187.8850	20271.7150	1060.1302	27555.3250	13242.0330	312.5050	27356.8230
3	15:51:01	103.14%	-1.9487	18180.5340	20001.9260	1113.3935	27805.0280	12960.5490	219.1013	27680.8790
4	15:51:45	101.72%	0.7251	18374.7020	19842.5470	1223.7824	27745.1110	12726.2360	203.5352	27412.8130
5	15:52:31	101.74%	-6.6475	16693.7450	19232.6520	1258.0605	26317.1480	12702.0950	264.9503	25911.5560
X		101.50%	-0.6939	18169.0740	19909.9740	1162.5496	27472.0620	12751.2610	264.1439	27110.6790
%RSD		1.22	650.1978	5.0100	2.0820	6.9089	2.4029	3.2321	20.0614	2.5565

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	15:49:30	6084.6868	14784.2380	6902.6376	4384.2248	3125.3093	852.2307	360.5665	5.6440	100.19%
2	15:50:16	6307.6277	14972.4660	6814.3608	4247.0025	3188.9497	854.3267	372.3564	-3.5914	100.40%
3	15:51:01	5972.7303	14584.2590	6974.2238	4249.6776	3036.5516	943.9942	369.1428	1.1085	101.36%
4	15:51:45	6276.0523	14490.0010	6872.6409	4115.1900	3077.0393	796.5638	359.8878	2.5309	102.53%
5	15:52:31	5886.4905	14170.3780	6479.1319	3915.0716	2791.9479	853.1646	336.4468	0.1020	102.47%
X		6105.5 75	14600.2680	6808.5990	4182.2333	3043.9596	860.0560	359.6801	1.1588	101.39%
%RSD		3.0197	2.0820	2.8343	4.2339	4.9903	6.1576	3.9093	291.6348	1.09

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	15:49:30	5.0192	-0.9796	2.4790	5.5108	20.5480	99.77%	24380.6420	-218.0629	24474.5720
2	15:50:16	2.4986	1.5136	4.9677	3.0043	13.0257	99.80%	24631.6950	-63.1304	24004.6380
3	15:51:01	2.2782	-1.0223	4.7996	0.4610	5.3371	102.27%	24579.3730	-116.5991	24114.7190
4	15:51:45	11.9579	6.2972	-2.5774	2.8993	10.2103	101.95%	24582.1420	67.3301	24519.4420
5	15:52:31	9.4042	6.2851	4.7429	0.4486	7.7368	102.33%	22988.5220	62.2079	22785.9740
X		6.2496	2.4188	2.8824	2.4648	11.3716	101.22%	24232.4750	-53.6507	23979.8690
%RSD		69.0399	152.1847	111.6913	85.6778	51.6367	1.31	2.8970	226.6452	2.9340

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	15:49:30	4798.6688	98.35%	11.4079	13668.8030	2909.7426	5382.0075	2.5516	2.5516	-1.5084
2	15:50:16	5077.6508	99.25%	21.2915	13448.4890	2892.5129	5470.8309	0.0000	0.0000	-1.5084
3	15:51:01	4891.2826	100.99%	23.1957	13666.8020	2949.6565	5443.8545	7.4630	7.4630	-1.5084
4	15:51:45	4727.3900	100.86%	8.3490	13361.6400	3131.5856	5470.0537	2.4724	2.4724	0.9629
5	15:52:31	4782.3449	101.89%	20.4218	12770.7310	2869.0520	5298.7896	0.0000	0.0000	-1.5084
X		4855.4674	100.27%	16.9332	13383.2930	2950.5099	5413.1072	2.4974	2.4974	-1.0142
%RSD		2.8319	1.43	39.0171	2.7501	3.5728	1.3562	122.0030	122.0031	108.9801

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	15:49:30	-1.5084	97.88%	-22.9126	-22.9125	-1.3041	-1.3041	442.6743	21865.0900	52397.3710
2	15:50:16	-1.5084	98.29%	2.4433	2.4433	1.2050	1.2050	-1580.5780	21871.0320	53099.9600
3	15:51:01	-1.5084	100.37%	-10.9667	-10.9667	3.4847	3.4847	-439.1652	21960.4090	52613.8510
4	15:51:45	0.9629	101.18%	-18.6421	-18.6421	-6.5103	-6.5103	-3564.5624	22037.3720	53217.6760
5	15:52:31	-1.5084	101.86%	-18.8113	-18.8113	-4.0742	-4.0742	-5467.9829	20493.8530	50626.4420
X		-1.0142	99.92%	-13.7779	-13.7779	-1.4398	-1.4398	-2121.9228	21645.5510	52391.0600
%RSD		108.9801	1.76	72.8938	72.8939	277.6286	277.6286	112.9557	2.9923	1.9903

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	15:49:30	17409.3160	15912.4600	71785.6050	95.81%	2.6093
2	15:50:16	17513.7150	15632.0080	71947.2130	97.01%	0.0000
3	15:51:01	17694.8120	15476.9250	72001.2930	99.28%	0.0000
4	15:51:45	17271.4900	15676.4610	71570.8140	100.48%	0.0000
5	15:52:31	16315.2750	14359.7320	66558.2750	101.81%	0.0000
X		17240.9220	15411.5170	70772.6400	98.88%	0.5219
%RSD		3.1323	3.9473	3.3372	2.49	223.6068

S03 06/04/2019 15:53:32

Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	15:54:17	101.97%	16609.7550	48882.6970	32108.7150	3979.8180	4808.4448	71253.6000	23604.2010	994.6262
2	15:55:02	101.10%	16497.6820	48800.5710	31962.3210	4305.1170	5190.1216	69820.7900	25128.0050	1044.4052
3	15:55:47	100.18%	16360.3180	48517.1920	32149.0610	4351.7713	5154.2827	70574.8210	24440.1180	1019.8454
4	15:56:31	99.29%	15925.2920	48423.9940	32619.6000	4235.6696	4914.5849	69505.4980	24028.7680	1007.4742
5	15:57:17	99.71%	15626.6180	46449.7400	30220.7650	4243.2067	4531.6623	67717.4990	23419.9770	982.9149
X		100.45%	16203.9330	48214.8390	31812.0920	4223.1165	4919.8193	69774.4420	24124.2140	1009.8532
%RSD		1.08	2.5564	2.0844	2.9017	3.4116	5.4836	1.9140	2.8440	2.3522

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	15:54:17	98.66%	13.9949	90064.3060	97927.5230	5570.5297	136939.2700	67126.5040	1660.0652	133875.4900
2	15:55:02	98.08%	9.0828	88859.2720	97868.8420	5768.1141	137564.7500	66554.0060	1597.1750	133792.0900
3	15:55:47	98.95%	3.7950	89355.3280	96694.8820	5569.5285	135607.8800	65052.0740	1554.3169	132096.5900
4	15:56:31	98.94%	16.4318	87982.2790	95093.3740	5230.0338	132767.1800	64302.6950	1514.2747	132838.5900
5	15:57:17	97.67%	14.3095	83779.6200	91295.6130	5651.2831	128808.6300	62331.6880	1636.6465	126749.2500
X		98.46%	11.5228	88008.1610	95776.0470	5557.8979	134337.5400	65073.3930	1592.4956	131870.4000
%RSD		0.57	44.1766	2.8206	2.8781	3.6064	2.6796	2.9277	3.7299	2.2408

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	15:54:17	30024.1240	72326.4570	33249.7540	20836.8410	15451.6620	4192.7934	1878.4098	-5.0742	99.74%
2	15:55:02	30058.0080	70845.7840	33787.2890	20523.2320	14906.8600	4320.3054	1727.5792	4.0803	100.04%
3	15:55:47	29530.3010	71799.5270	32822.6430	20868.7250	14863.2900	4126.0517	1774.1314	-3.5260	100.40%
4	15:56:31	29214.7840	70240.6910	32413.7460	20540.7880	14711.5600	4186.3202	1752.5663	-3.4231	99.82%
5	15:57:17	28382.0130	68599.3870	31911.9310	19857.0500	14351.6840	4084.7258	1624.2145	6.6207	99.98%
X		29441.8440	70762.3690	32837.0730	20525.3270	14857.0110	4182.0393	1751.3802	-0.2644	100.00%
%RSD		2.3417	2.0576	2.2110	1.9817	2.6768	2.1339	5.2170	1983.3117	0.25

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	15:54:17	67.4296	6.5009	7.4435	0.4983	7.9746	100.81%	118591.0500	11.2725	117176.8400
2	15:55:02	47.5141	4.0194	17.4747	5.5064	5.5271	99.99%	120008.3100	-41.0052	117904.1900
3	15:55:47	72.1351	1.4969	12.3922	5.4695	10.4504	100.58%	119497.4400	-139.8350	118553.1800
4	15:56:31	47.5083	4.0273	9.9885	0.5085	5.5320	100.03%	120745.0600	-300.9027	118279.8100
5	15:57:17	47.5978	6.5345	12.5051	-1.9930	5.5472	99.71%	113666.3000	-76.9749	112237.3500
X		56.4530	4.5158	11.9608	1.9979	7.0063	100.22%	118501.6300	-109.4891	116830.2700
%RSD		21.7548	46.4699	31.0531	167.4225	31.3441	0.45	2.3750	109.8761	2.2418

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	15:54:17	24082.4210	101.16%	116.9236	65989.7180	14572.8320	26810.4650	4.8923	4.8923	0.9334
2	15:55:02	24106.4260	101.74%	118.6743	65649.1130	14804.8660	26214.4410	2.4384	2.4384	-1.5084
3	15:55:47	23877.6060	101.97%	123.2124	65123.7220	14472.0440	26336.5950	9.6697	9.6697	0.9031
4	15:56:31	23716.6680	102.15%	137.6871	64917.6900	14318.2240	25916.3830	2.4228	2.4228	-1.5084
5	15:57:17	22648.1470	101.70%	116.2291	61792.3440	13882.9250	24526.2340	2.4308	2.4308	-1.5084
X		23686.2540	101.74%	122.5453	64694.5180	14410.1780	25960.8240	4.3708	4.3708	-0.5378
%RSD		2.5408	0.37	7.2553	2.5917	2.3851	3.3289	72.0263	72.0262	247.1703

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	15:54:17	0.9334	102.47%	7.8712	7.8712	-4.1073	-4.1073	-3701.9734	106106.0600	257332.5000
2	15:55:02	-1.5084	102.73%	-11.7242	-11.7242	-4.1209	-4.1209	-3737.9940	106649.7200	259648.5400
3	15:55:47	0.9031	103.80%	-19.2730	-19.2731	-8.9829	-8.9829	-4327.0864	106546.2800	258018.1800
4	15:56:31	-1.5084	103.45%	-4.7054	-4.7055	-4.1598	-4.1598	-659.6425	105515.0500	257954.1100
5	15:57:17	-1.5084	103.15%	-14.2746	-14.2746	3.1242	3.1242	-5998.2145	101637.5900	244472.0200
X		-0.5378	103.12%	-8.4212	-8.4212	-3.6493	-3.6493	-3684.9822	105290.9400	255485.0700
%RSD		247.1697	0.52	124.8526	124.8524	118.6718	118.6718	52.4090	1.9856	2.4330

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	15:54:17	86722.4290	76659.1420	350424.0100	103.26%	0.0000
2	15:55:02	86064.4210	77158.7320	350620.6500	103.82%	0.0000
3	15:55:47	85208.8460	76497.2110	349208.2800	104.88%	0.0000
4	15:56:31	84935.6700	76471.1100	346404.8600	105.62%	0.0000
5	15:57:17	81565.7380	73700.7280	333008.7400	104.14%	2.4006
X		84899.4210	76097.3850	345933.3000	104.34%	0.4801
%RSD		2.3477	1.7977	2.1445	0.88	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	15:59:02	97.45%	63772.2170	172787.4100	126083.9000	16481.0520	18929.3540	256331.6800	89230.0720	3623.1950
2	15:59:47	98.15%	64317.2550	173148.3000	125045.7000	16436.4690	19480.6980	261059.3100	89561.7380	3711.2382
3	16:00:32	96.94%	64239.7470	175877.7300	127563.1900	16153.3970	19142.5520	259453.0200	87722.1500	3636.1618
4	16:01:17	98.56%	63740.3590	172143.0600	121880.5000	16291.0190	18648.6800	255027.6400	89742.0720	3698.5083
5	16:02:01	98.91%	61837.6770	163937.8000	117208.8500	15517.6920	17367.3260	246916.3500	85732.8760	3377.6396
x		98.00%	63581.4510	171578.8600	123556.4300	16175.9260	18713.7220	255757.6000	88397.7820	3609.3486
%RSD		0.82	1.5879	2.6245	3.3311	2.4102	4.3376	2.1486	1.9108	3.7411

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	15:59:02	96.36%	19.9925	351459.6300	382310.4400	21028.5970	532825.5800	258124.2900	6531.1438	527737.9900
2	15:59:47	95.20%	36.2032	353893.4200	389115.0100	21217.8680	544320.5200	261677.2000	6477.8345	540933.5000
3	16:00:32	95.96%	7.1242	355958.7200	384317.0200	21296.3890	550380.6400	263538.6400	6471.6369	536452.3400
4	16:01:17	96.34%	17.4171	355665.2500	381391.9200	20993.2340	542851.1700	262593.7600	6527.9324	530501.5900
5	16:02:01	96.08%	30.5332	339849.0100	371524.1200	20325.6750	521271.2600	249318.1700	6147.1982	512071.3100
x		95.99%	22.2540	351365.2100	381731.7000	20972.3520	538329.8300	259050.4100	6431.1492	529539.3400
%RSD		0.49	51.2615	1.9018	1.6868	1.8267	2.1238	2.2440	2.5050	2.0835

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	15:59:02	116513.5500	282654.8100	130736.3400	82448.2520	58793.2230	16444.3000	6897.8232	-6.9669	96.00%
2	15:59:47	116458.1000	286785.1200	132117.5300	83009.2000	58378.0260	16630.3380	6839.4959	7.0633	95.66%
3	16:00:32	118384.1800	286521.7100	134459.2400	83130.8770	58795.5740	16628.2980	6974.5455	1.7841	95.75%
4	16:01:17	118172.5000	281536.1800	131635.0600	81568.6560	59220.2250	16787.4460	6914.7450	6.2022	95.44%
5	16:02:01	112275.0100	276428.9300	127088.5900	78979.7550	56343.3650	15771.9050	6484.0257	1.0677	95.06%
x		116360.6700	282785.3500	131207.3500	81627.3480	58306.0820	16452.4580	6822.1271	1.8301	95.58%
%RSD		2.1096	1.4997	2.0441	2.0863	1.9499	2.4274	2.8588	304.8177	0.37

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	15:59:02	86.7449	98.4042	128.2804	81.6921	168.2200	95.30%	477416.5400	51.9527	468970.8000
2	15:59:47	113.0018	106.3166	125.6931	73.8253	134.0988	95.60%	479594.3600	-62.7827	469359.7000
3	16:00:32	134.0480	116.9268	139.0003	71.3574	186.8418	95.20%	485361.1400	-111.5299	472481.0200
4	16:01:17	89.7613	109.2586	136.5774	47.8366	147.6630	95.24%	483559.7700	38.0526	474169.5000
5	16:02:01	79.4932	93.7253	110.5515	61.0358	155.6975	95.30%	457869.8900	-120.1209	449868.6500
x		100.6098	104.9263	128.0205	67.1494	158.5042	95.33%	476760.3400	-40.8856	466969.9300
%RSD		22.3775	8.6921	8.7718	19.4758	12.6905	0.17	2.3109	199.4473	2.0992

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	15:59:02	95198.5430	96.00%	1219.2527	274432.3200	56976.3400	102861.6200	20.5996	20.5996	3.6314
2	15:59:47	96320.6740	96.02%	1227.9285	275585.2300	57112.7420	103852.3300	7.8128	7.8128	8.9092
3	16:00:32	96232.2820	95.34%	1286.9063	276297.4600	58054.1360	104299.3900	15.7828	15.7828	-1.5084
4	16:01:17	93335.4560	95.82%	1168.6603	267521.8200	57110.5690	102734.2900	21.0286	21.0286	1.1235
5	16:02:01	90785.6660	94.57%	1056.3217	261569.0100	54288.8620	97782.1780	21.0793	21.0793	6.3918
x		94374.5240	95.55%	1191.8139	271081.1700	56708.5300	102305.9600	17.2606	17.2606	3.7095
%RSD		2.4781	0.64	7.2657	2.3467	2.5035	2.5546	33.2023	33.2023	111.2743

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	15:59:02	3.6314	97.38%	-25.3786	-25.3786	-3.8430	-3.8430	-5157.1402	419397.6800	1028423.1000
2	15:59:47	8.9092	95.99%	3.5392	3.5393	-3.7669	-3.7669	108.2565	425279.3200	1034116.6000
3	16:00:32	-1.5084	94.96%	-6.4833	-6.4833	4.2052	4.2052	-365.5025	425398.8100	1041930.5000
4	16:01:17	1.1235	94.93%	-27.5479	-27.5479	-6.3456	-6.3456	-3718.4987	421868.3100	1031459.4000
5	16:02:01	6.3918	94.96%	-6.4903	-6.4903	-3.7131	-3.7131	-621.2371	402583.0700	984002.1000
x		3.7095	95.64%	-12.4722	-12.4722	-2.6927	-2.6927	-1950.8244	418905.4400	1023986.3000
%RSD		111.2743	1.12	107.7101	107.7103	149.0641	149.0641	120.0139	2.2591	2.2370

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	15:59:02	340889.1000	304028.6800	1393621.8000	96.43%	0.0000
2	15:59:47	342403.6500	305801.3200	1397487.9000	94.70%	0.0000
3	16:00:32	344761.0200	308804.8200	1410341.8000	93.19%	0.0000
4	16:01:17	337307.6700	302126.4400	1382857.8000	93.61%	0.0000
5	16:02:01	321353.4900	289329.1600	1319215.2000	94.15%	0.0000
x		337342.9800	302018.0800	1380704.9000	94.42%	0.0000
%RSD		2.7684	2.4857	2.5893	1.33	0.0000

S05 06/04/2019 16:03:02

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:03:46	93.92%	168569.1000	447881.3100	324226.9600	42358.6820	48900.0850	669298.7800	235563.4300	9606.9868
2	16:04:31	91.88%	168909.7500	449880.0200	322270.6000	42495.1600	49378.3200	655745.0600	235051.8200	9330.9702
3	16:05:15	90.69%	168986.9300	446331.7800	323953.7000	42637.2430	48822.4840	666917.3900	233823.8500	9404.5208
4	16:06:01	91.27%	167226.4100	441690.6000	317621.3500	41952.0070	49635.8890	661094.8500	231501.8200	9126.6834
5	16:06:45	91.73%	155568.7900	406555.1900	289559.5900	37141.8700	45065.8180	602877.2300	210735.4300	8618.4104
X		91.90%	165852.1900	438467.7800	315526.4400	41316.9920	48360.5190	651186.6600	229335.2700	9217.5143
%RSD		1.33	3.4923	4.1265	4.6764	5.6827	3.8716	4.2253	4.5850	4.0835

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:03:46	90.15%	28.1909	934914.5800	1006030.6000	55369.1950	1426251.8000	690493.5300	17098.3170	1385772.2000
2	16:04:31	88.47%	6.4916	929192.4300	997724.7400	55368.5240	1409854.1000	680308.4500	17219.9240	1400280.8000
3	16:05:15	87.72%	23.8196	926980.7600	1007848.9000	54640.7590	1427905.0000	694799.3900	17407.8950	1407643.8000
4	16:06:01	87.25%	1.1233	923885.5100	997682.0000	53965.5630	1414688.6000	669020.6200	16932.3070	1384502.3000
5	16:06:45	87.37%	32.6125	839236.2500	921151.9500	50381.5900	1304135.4000	620463.5500	15679.7910	1298358.7000
X		88.19%	18.4476	910841.9100	986087.6400	53945.1260	1396567.0000	671017.1100	16867.6470	1375311.5000
%RSD		1.36	75.0883	4.4169	3.7115	3.8481	3.7399	4.4652	4.0691	3.2076

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:03:46	302126.5700	737614.5300	344080.2100	212441.8100	150933.3000	M 41914.6490	M 17495.0150	-5.0862	91.13%
2	16:04:31	300605.6100	729629.4500	338409.4300	212101.7100	152200.7100	M 42380.5690	M 17942.0270	-6.5524	89.22%
3	16:05:15	301163.0400	737569.8700	341526.3100	212262.2700	151623.3700	M 42644.6380	M 17731.3640	-5.3204	87.73%
4	16:06:01	300164.4000	733547.3900	337860.6500	211805.6300	149087.7200	M 41866.6560	M 17612.1360	6.1074	87.71%
5	16:06:45	280354.4500	673573.6300	311832.5500	195824.8300	138397.6400	39275.1630	16528.9220	1.7616	86.10%
X		296882.8100	722386.0800	334741.8300	208887.2500	148448.5500	M 41616.3350	M 17461.8930	-1.8180	88.38%
%RSD		3.1220	3.8050	3.8986	3.4975	3.8662	M 3.2404	M 3.1331	302.5120	2.14

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:03:46	144.4058	128.7141	154.8135	58.6729	188.6798	90.32%	M 1245999.2000	-328.3461	M 1216359.3000
2	16:04:31	113.4358	125.1914	173.9470	67.8965	191.1636	89.58%	M 1235688.0000	-358.6376	M 1219079.9000
3	16:05:15	129.6803	127.2410	139.8390	26.3977	145.9289	88.31%	M 1253049.1000	-123.0625	M 1235154.8000
4	16:06:01	147.3764	130.7185	206.3284	60.8584	204.1406	87.36%	M 1261336.0000	-732.8616	M 1245983.1000
5	16:06:45	109.7072	83.8257	175.4772	64.9916	193.6452	85.65%	1149272.2000	-161.7945	1134907.1000
X		128.9211	119.1381	170.0810	55.7634	184.7117	88.24%	M 1229068.9000	-340.9405	M 1210296.8000
%RSD		13.3784	16.6559	14.7154	30.1297	12.1624	2.09	M 3.7094	70.8865	M 3.6225

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:03:46	245186.6300	92.50%	1234.3115	711557.7600	146420.3400	264045.9100	61.9926	61.9926	6.5737
2	16:04:31	245460.1300	91.20%	1201.5135	711391.8000	147267.7000	262979.2200	48.6493	48.6493	11.9722
3	16:05:15	247465.8500	89.05%	1246.8327	721199.3500	147051.7600	264439.9200	41.2195	41.2194	17.6560
4	16:06:01	247395.4300	87.04%	1086.4567	718144.4800	146609.1300	263673.6000	58.8756	58.8755	1.2834
5	16:06:45	227492.5700	86.92%	1112.9286	658956.2300	136029.9900	243947.9300	51.6060	51.6060	12.8185
X		242600.1200	89.34%	1176.4086	704249.9200	144675.7800	259817.3200	52.4686	52.4685	10.0608
%RSD		3.5084	2.78	6.1685	3.6453	3.3488	3.4207	15.7635	15.7635	62.4990

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:03:46	6.5737	92.82%	-35.2750	-35.2750	-3.6003	-3.6003	-1531.1157	1102569.9000	2725227.2000
2	16:04:31	11.9722	92.84%	-27.2019	-27.2020	-3.6055	-3.6055	3081.4245	1101023.7000	2731195.6000
3	16:05:15	17.6560	91.48%	-10.5657	-10.5658	7.4032	7.4032	-6476.6286	1109809.6000	2755093.7000
4	16:06:01	1.2834	89.74%	-23.8517	-23.8517	-6.1963	-6.1963	-893.1689	1103917.6000	2725952.6000
5	16:06:45	12.8185	87.27%	-14.7037	-14.7037	-8.9829	-8.9829	2051.0313	1034933.5000	2546473.9000
X		10.0607	90.83%	-22.3196	-22.3196	-2.9964	-2.9964	-753.6915	1090450.9000	2696788.6000
%RSD		62.4990	2.60	44.2505	44.2505	207.7276	207.7276	496.2244	2.8624	3.1485

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:03:46	882527.4300	792193.6800	3638887.0000	93.55%	0.0000
2	16:04:31	885044.0500	791155.9500	3648099.9000	94.28%	2.6516
3	16:05:15	889075.5000	796872.0800	3663471.1000	92.05%	0.0000
4	16:06:01	872276.2100	784107.3400	3607402.7000	89.50%	0.0000
5	16:06:45	821897.3600	731921.8000	3361885.3000	86.60%	2.8867
X		870164.1100	779250.1700	3583949.2000	91.20%	1.1077
%RSD		3.1817	3.4454	3.5106	3.46	137.1362

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:08:31	84.25%	830173.4900	₸2157023.0000	₸1561615.9000	203304.0600	235830.8300	₸3204400.1000	1104492.3000	44928.5130
2	16:09:16	84.21%	827574.2900	₸2157248.2000	₸1554647.5000	204282.2900	239044.4700	₸3258657.9000	₸1128969.0000	45218.5480
3	16:10:01	82.40%	818569.9300	₸2193414.8000	1577327.0000	203207.4500	239349.4100	₸3226622.2000	1151514.2000	45135.7730
4	16:10:46	81.78%	826855.6100	₸2210542.7000	₸1573645.3000	204164.1500	233200.6700	₸3225713.5000	1169771.4000	47024.9000
5	16:11:30	81.29%	788409.0700	₸2091756.3000	₸1501806.5000	196315.7400	225797.6000	₸3078039.6000	₸1110934.8000	44329.5810
X		82.79%	818316.4800	₸2161997.0000	₸1553808.5000	202254.7400	234644.6000	₸3198686.6000	₸1133136.4000	45327.4630
%RSD		1.66	2.1111	₸2.1101	₸1.9607	1.6590	2.3657	₸2.1937	₸2.4211	2.2294

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:08:31	81.81%	48.3572	₸4571847.9000	₸4949423.0000	267711.7200	₸6990135.7000	₸3344287.6000	82487.8550	₸6858873.6000
2	16:09:16	81.26%	58.0699	₸4617107.1000	₸5048955.0000	269188.1600	₸6988904.8000	₸3408675.7000	83606.0650	₸6921191.9000
3	16:10:01	80.61%	64.9111	₸4599367.7000	₸4977054.7000	270101.7400	₸7024145.0000	₸3416771.5000	85563.5460	₸6911356.0000
4	16:10:46	79.57%	75.3616	₸4564693.2000	₸4964503.9000	267586.7300	₸6976171.0000	₸3398769.7000	83939.2860	₸6879888.5000
5	16:11:30	79.64%	34.4728	₸4330494.9000	₸4731567.8000	260155.0100	₸6656575.7000	₸3259339.2000	79133.1200	₸6517844.8000
X		80.58%	56.2345	₸4536702.2000	₸4934300.9000	266948.6700	₸6927186.4000	₸3365568.7000	82945.9740	₸6817831.0000
%RSD		1.22	27.8361	₸2.5831	₸2.4238	1.4760	₸2.1988	₸1.9552	2.8923	₸2.4865

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:08:31	1493406.6000	₸3648483.3000	1687385.9000	1030051.3000	722711.5400	-3.5904	7.8062	3.6408	80.27%
2	16:09:16	1515804.9000	₸3623320.0000	1683254.3000	1029582.9000	723000.6600	-3.9548	13.1078	0.8337	79.25%
3	16:10:01	1520548.2000	₸3617023.7000	1683099.1000	1038578.4000	722457.1800	-8.8993	5.7983	7.4135	78.50%
4	16:10:46	1493645.7000	₸3594012.0000	1666519.9000	1028893.3000	713916.7600	3.6118	5.8018	-4.2814	78.93%
5	16:11:30	1427377.6000	₸3447134.1000	1600247.9000	979453.7500	679206.3200	-3.0933	1.5703	4.3038	78.45%
X		1490156.5000	₸3585994.6000	1664101.4000	1021311.9000	712258.4900	-3.1852	6.8169	2.3821	79.08%
%RSD		2.4986	₸2.2312	2.1983	2.3235	2.6489	140.0663	61.4322	184.6551	0.93

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:08:31	155.3149	235.6605	314.7135	162.4509	423.5017	80.81%	787.8739	-1112.4936	289.9071
2	16:09:16	159.8825	206.2004	232.5046	113.4888	428.7876	80.75%	336.9603	-1040.8561	331.6238
3	16:10:01	177.5917	252.8370	232.0552	108.5247	399.2818	79.68%	449.4278	-950.7648	426.4151
4	16:10:46	173.7967	207.9122	234.6112	133.5012	373.4117	79.65%	670.0984	-1006.5893	703.9651
5	16:11:30	168.7384	279.3311	233.1859	153.5609	430.2401	78.98%	347.7423	-483.4808	342.1971
X		167.0648	236.3882	249.4141	134.3053	411.0445	79.97%	418.4206	-918.8369	418.8216
%RSD		5.5877	13.1027	14.6408	17.7044	5.9506	0.98	36.4371	27.2435	39.8563

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:08:31	1193541.4000	80.36%	1219.3441	₸3682346.8000	711345.4000	1297564.6000	264.5374	264.5374	32.2614
2	16:09:16	1192802.7000	79.76%	1059.6799	₸3687654.0000	713281.6600	1290949.4000	229.6568	229.6568	48.0613
3	16:10:01	1206763.3000	79.16%	1240.6078	₸3697416.3000	711716.6400	1295143.5000	217.4184	217.4180	26.3645
4	16:10:46	1177996.4000	80.14%	1238.3584	₸3625494.2000	701587.4300	1275945.6000	280.6499	280.6496	32.3487
5	16:11:30	1138787.6000	80.24%	1204.5068	₸3475865.5000	663154.3800	1214497.2000	167.5410	167.5406	19.7313
X		1182978.3000	79.93%	1192.4994	₸3633755.3000	700217.1000	1274820.1000	231.9607	231.9604	31.7534
%RSD		2.2691	0.61	6.3482	₸2.5490	3.0314	2.7260	19.0354	19.0355	33.0346

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:08:31	32.2614	81.51%	-12.6734	-12.6733	-8.9829	-8.9829	-6242.3907	₸5427433.2000	₸13320106.0000
2	16:09:16	48.0613	80.76%	-9.2974	-9.2974	-2.7859	-2.7859	7210.1279	₸5493774.4000	₸13426214.0000
3	16:10:01	26.3645	80.84%	12.3098	12.3098	3.3853	3.3853	6491.8300	₸5492034.6000	₸13474940.0000
4	16:10:46	32.3486	81.31%	-3.3867	-3.3868	3.3073	3.3073	7357.4675	₸5506772.0000	₸13508845.0000
5	16:11:30	19.7313	82.56%	2.0619	2.0619	-2.9320	-2.9320	-1544.3604	₸5178271.6000	₸12698244.0000
X		31.7534	81.40%	-2.1972	-2.1972	-1.6016	-1.6016	2654.5349	₸5419657.2000	₸13285670.0000
%RSD		33.0347	0.88	449.5049	449.5050	322.3536	322.3536	234.0344	₸2.5542	₸2.5292

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:08:31	₸4423678.9000	₸3824625.5000	₸17881831.0000	80.11%	12.4834
2	16:09:16	₸4457960.6000	₸3851347.2000	₸17974168.0000	79.97%	0.0000
3	16:10:01	₸4479334.8000	₸3864205.6000	₸18051890.0000	80.96%	3.0879
4	16:10:46	₸4428123.1000	₸3846203.2000	₸17925624.0000	81.92%	3.0519
5	16:11:30	₸4204738.0000	₸3643731.9000	₸16984945.0000	83.34%	2.9998
X		₸4398767.1000	₸3806022.7000	₸17763691.0000	81.26%	4.3246
%RSD		₸2.5194	₸2.4130	₸2.4763	1.72	109.7901

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:13:17	80.14%	TM 1592980.3000	TM 4355877.8000	TM 3127949.5000	M 408260.9500	M 479577.7900	TM 6407189.1000	T 2314227.6000	M 93248.9000
2	16:14:04	78.58%	TM 1605300.9000	TM 4360708.8000	TM 3154814.0000	M 412078.6000	M 483248.5400	TM 6483921.7000	TM 2352877.8000	M 93963.0980
3	16:14:49	77.58%	T 1573798.7000	TM 4435647.7000	TM 3184209.7000	M 419012.5800	M 484021.8000	TM 6474586.0000	TM 2355355.3000	M 94401.1030
4	16:15:34	77.45%	T 1554126.8000	TM 4444027.9000	TM 3152792.7000	M 409579.3600	M 477588.0400	T 6333273.6000	TM 2349628.0000	M 94269.1500
5	16:16:18	77.90%	T 1514549.7000	T 4172628.8000	T 3002571.1000	390273.9800	460127.0500	T 6200157.6000	T 2265888.2000	89645.8400
X		78.33%	TM 1568151.3000	TM 4353778.2000	TM 3124467.4000	M 407841.1000	M 476912.6400	TM 6379825.6000	TM 2327595.4000	M 93105.6180
%RSD		1.41	TM 2.2766	TM 2.5086	TM 2.2723	M 2.6138	M 2.0437	TM 1.8382	TM 1.6475	M 2.1318

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:13:17	77.73%	3.6063	TM 9180337.7000	TM 9989981.3000	M 543591.0600	TM 14059144.0000	TM 6898573.2000	M 171265.2300	TM 13686723.0000
2	16:14:04	77.54%	19.8083	TM 9278293.7000	TM 10100379.0000	M 550042.1400	TM 13964027.0000	TM 6812180.0000	M 171150.4800	TM 13746788.0000
3	16:14:49	77.26%	6.9866	TM 9246305.6000	TM 9984015.7000	M 551042.0700	TM 14081414.0000	TM 6909639.2000	M 168870.4800	TM 13601749.0000
4	16:15:34	76.95%	7.0915	T 9067082.6000	T 9835312.1000	M 548763.3900	T 13832548.0000	T 6727804.4000	165313.6200	T 13512733.0000
5	16:16:18	77.34%	0.4923	T 8883043.6000	T 9533795.0000	532008.6800	T 13406213.0000	T 6659519.0000	166450.4500	T 13181609.0000
X		77.36%	7.5970	TM 9131012.7000	TM 9888696.7000	M 545089.4700	TM 13868669.0000	TM 6801543.2000	M 168610.0500	TM 13545920.0000
%RSD		0.38	96.7611	TM 1.7573	TM 2.2211	M 1.4411	TM 1.9937	TM 1.5907	M 1.5997	TM 1.6388

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:13:17	T 2799101.2000	TM 7095927.3000	T 3099901.8000	M 2010623.0000	M 1412012.0000	-19.3853	6.9827	14.9697	76.15%
2	16:14:04	T 2816748.4000	T 7034576.3000	T 3107594.0000	M 2007934.2000	M 1415001.9000	2.6045	31.2619	-10.0009	75.37%
3	16:14:49	T 2795993.1000	TM 7146097.7000	T 3094961.9000	M 2022587.8000	M 1419229.2000	0.5593	14.7342	15.3531	75.37%
4	16:15:34	T 2793061.0000	T 7011118.5000	T 3041246.1000	1985727.2000	1401601.7000	-32.9920	26.9644	3.3484	75.05%
5	16:16:18	T 2699971.6000	T 6840410.5000	T 2980018.0000	1941933.7000	1356803.6000	-8.7306	31.4112	-5.4934	74.93%
X		T 2780975.1000	TM 7025626.1000	T 3064744.4000	M 1993761.2000	M 1400929.7000	-11.5888	22.2709	3.6354	75.37%
%RSD		T 1.6616	TM 1.6546	T 1.7659	M 1.5993	M 1.8210	127.7035	49.0304	318.1658	0.63

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:13:17	59.6306	75.1527	60.4816	40.5699	191.9050	76.52%	390.6346	-2312.6667	417.2543
2	16:14:04	60.3280	92.4425	47.8754	40.9667	187.1070	75.86%	438.7315	-2459.0834	453.2590
3	16:14:49	50.2727	79.0087	70.7994	53.9995	100.8319	76.31%	516.7730	-1172.2212	498.0532
4	16:15:34	33.8545	65.9200	67.5844	30.9658	150.2267	76.47%	676.1420	-1883.9310	714.4508
5	16:16:18	43.9870	59.5665	104.3791	34.4409	207.3152	75.89%	416.1948	-1417.1904	337.6762
X		49.6146	74.4181	70.2240	40.1885	167.4772	76.21%	487.6952	-1849.0185	484.1387
%RSD		22.4346	16.9878	29.9403	21.8907	25.5224	0.41	23.6667	30.0256	29.2320

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:13:17	2414942.3000	77.47%	40.0293	TM 7368634.2000	M 1430816.0000	M 2622288.2000	460.5513	460.5498	60.8272
2	16:14:04	2406104.9000	77.49%	56.0841	TM 7332352.4000	M 1424280.3000	M 2616492.9000	421.2320	421.2308	69.8375
3	16:14:49	2403420.9000	76.79%	46.9348	TM 7389269.7000	M 1432939.4000	M 2634622.9000	454.2195	454.2176	94.9444
4	16:15:34	2349280.7000	77.86%	62.1916	T 7198952.9000	1394267.0000	2578048.8000	458.1968	458.1953	91.5154
5	16:16:18	2289514.0000	78.13%	49.1556	T 6968426.0000	1365220.3000	2478094.5000	359.2033	359.2020	63.1462
X		2372652.6000	77.55%	50.8791	TM 7251527.1000	M 1409504.6000	M 2585909.5000	430.6806	430.6791	76.0541
%RSD		2.2414	0.65	16.7729	TM 2.4096	M 2.0730	M 2.4699	9.9881	9.9881	21.1300

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:13:17	60.8271	80.42%	-6.0547	-6.0548	0.3368	0.3368	2195.3481	TM 11075197.0000	T 27123937.0000
2	16:14:04	69.8373	80.83%	-3.1543	-3.1543	-2.8032	-2.8032	955.1961	TM 11023080.0000	T 27005950.0000
3	16:14:49	94.9441	80.62%	-12.3538	-12.3538	-2.7892	-2.7892	914.3317	TM 11094316.0000	T 27227619.0000
4	16:15:34	91.5153	80.84%	-24.8043	-24.8044	-8.9829	-8.9829	9500.8742	TM 11030876.0000	T 26998602.0000
5	16:16:18	63.1460	81.44%	8.8174	8.8174	9.4063	9.4063	1404.2920	T 10543393.0000	T 25870605.0000
X		76.0540	80.83%	-7.5099	-7.5100	-0.9665	-0.9665	2611.9300	TM 10953372.0000	T 26845343.0000
%RSD		21.1300	0.47	164.4678	164.4674	694.5937	694.5937	153.9736	TM 2.1100	T 2.0599

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:13:17	T 8987036.2000	T 7808276.8000	T 36452477.0000	80.98%	6.1746
2	16:14:04	T 8921831.6000	T 7770265.1000	T 36196344.0000	81.64%	3.0623
3	16:14:49	T 8945426.2000	T 7790744.4000	T 36346772.0000	81.67%	6.1224
4	16:15:34	T 8867487.7000	T 7669491.2000	T 35809552.0000	82.31%	6.0742
5	16:16:18	T 8579984.6000	T 7421181.2000	T 34598947.0000	82.79%	9.0586
X		T 8860353.2000	T 7691991.7000	T 35880819.0000	81.88%	6.0984
%RSD		T 1.8349	T 2.0887	T 2.1096	0.85	34.7725

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:18:04	78.10%	33342.4630	┬1817382.4000	782893.4700	101486.7900	118069.4400	678402.7200	950421.1400	38600.7790
2	16:18:49	77.96%	33583.1980	┬1837622.3000	782187.4600	101826.7700	121273.0000	694161.9100	939864.8400	37658.0660
3	16:19:34	78.33%	33235.4240	┬1831374.1000	782587.1200	102985.5300	119395.7000	706168.9900	945910.1400	37984.0410
4	16:20:19	78.92%	32600.1790	┬1827560.8000	770920.2000	102186.9600	118331.8600	693904.4800	943209.6400	36630.4160
5	16:21:04	81.45%	32118.7060	┬1725948.3000	731445.2400	97464.6090	111900.1200	667374.3900	895827.5200	35929.2510
x		78.95%	32975.9940	┬1807977.5000	770006.7000	101190.1300	117794.0200	688002.5000	935046.6600	37360.5110
%RSD		1.83	1.8236	┬2.5687	2.8752	2.1304	2.9946	2.2049	2.3808	2.8695

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:18:04	78.22%	29.0644	184381.1900	197619.2200	81973.8030	280964.5100	1423414.5000	34615.7070	280643.9400
2	16:18:49	79.83%	6.1641	183115.7600	200065.8900	83180.8150	284595.3800	1418168.8000	34562.3800	278222.6300
3	16:19:34	79.87%	9.2874	184671.5200	199322.7000	83297.5700	281199.5100	1410033.2000	34785.9670	280907.2100
4	16:20:19	81.07%	15.0614	179766.2500	196889.5100	80498.3690	280955.1100	1382324.3000	35798.3640	280428.7300
5	16:21:04	82.21%	-3.6932	173104.7600	189993.7100	78992.6640	272063.8800	1347727.2000	33556.7720	266651.1400
x		80.24%	11.1768	181007.9000	196778.2100	81588.6440	279955.6800	1396333.6000	34663.8380	277370.7300
%RSD		1.86	108.1886	2.6674	2.0333	2.2543	1.6694	2.2524	2.2990	2.1945

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:18:04	61294.3650	149469.1200	68687.0270	85715.3850	60212.7510	17491.4150	7141.2055	3.9853	76.29%
2	16:18:49	60351.1650	147819.2600	68056.8020	85483.6290	60202.4900	17277.7650	7161.3852	2.5900	77.06%
3	16:19:34	62028.5230	148498.4900	68975.7610	87994.4930	60960.6660	17460.1760	7252.7389	-0.6392	77.05%
4	16:20:19	61908.2810	148331.1600	69854.9330	86842.9330	60091.7740	16939.2410	7185.1463	-1.8991	77.60%
5	16:21:04	58624.7240	142316.0800	65320.9200	82185.1170	58085.4180	16192.5350	6900.8140	-0.0950	78.66%
x		60841.4120	147286.8200	68180.2890	85644.3110	59910.6200	17072.2270	7128.2580	0.7884	77.33%
%RSD		2.3108	1.9297	2.5246	2.5419	1.7984	3.1544	1.8786	307.4874	1.13

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:18:04	49.6689	16.1371	24.3910	24.1424	28.1844	76.70%	242475.5700	-12.1543	239885.9100
2	16:18:49	45.7370	22.3752	66.0316	10.9175	50.3615	77.76%	242518.0000	-157.7358	241743.9100
3	16:19:34	36.1874	19.2283	50.1228	10.9819	37.6944	77.09%	245304.2800	2.5812	242833.6400
4	16:20:19	51.9627	31.9611	62.6377	20.5607	53.5237	77.59%	247861.4600	-27.0249	244035.4900
5	16:21:04	38.4336	18.7973	55.4558	4.3745	36.9251	78.42%	234385.2100	21.4265	230311.2400
x		44.3979	21.6998	51.7278	14.1954	41.3378	77.51%	242508.9000	-34.5815	239762.0400
%RSD		15.5146	28.3354	31.8743	56.4643	25.2469	0.85	2.0870	205.7245	2.2935

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:18:04	49711.2240	76.97%	118.0969	285379.5300	29336.4360	52782.2070	3.1440	3.1440	1.6177
2	16:18:49	48835.8150	77.46%	85.2065	286316.2300	29356.3420	51440.3220	22.2033	22.2033	1.6539
3	16:19:34	49514.8480	77.27%	95.1160	284521.8100	29251.3020	52293.7840	6.3470	6.3470	4.8174
4	16:20:19	48354.9470	77.53%	94.7544	279115.8100	28841.4680	51757.0550	9.4880	9.4880	1.6436
5	16:21:04	46645.8300	77.82%	120.0486	274312.5700	27925.8330	50050.0900	9.4717	9.4717	-1.5084
x		48612.5330	77.41%	102.6445	281929.1900	28942.2760	51664.6920	10.1308	10.1308	1.6449
%RSD		2.5205	0.41	15.1297	1.8069	2.0915	2.0093	71.4745	71.4746	135.9742

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:18:04	1.6177	80.20%	-15.3045	-15.3045	6.5879	6.5879	6879.8290	448865.2300	1093378.4000
2	16:18:49	1.6539	79.17%	-2.3134	-2.3134	3.6347	3.6347	7752.7033	449238.3200	1101644.5000
3	16:19:34	4.8174	79.17%	-21.2475	-21.2475	16.2963	16.2963	2383.6418	452207.4000	1110366.9000
4	16:20:19	1.6436	79.45%	-24.4679	-24.4679	0.4707	0.4707	119.6820	450432.1400	1095764.2000
5	16:21:04	-1.5084	79.54%	-24.4956	-24.4956	16.1647	16.1647	-1420.9551	430289.7600	1048900.9000
x		1.6448	79.51%	-17.5658	-17.5658	8.6309	8.6309	3142.9802	446206.5700	1090011.0000
%RSD		135.9744	0.53	53.0207	53.0206	84.1986	84.1986	129.0058	2.0154	2.1923

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:18:04	362277.0000	313031.2600	1453291.4000	80.99%	0.0000
2	16:18:49	361534.5500	311766.9000	1451459.2000	79.98%	0.0000
3	16:19:34	365103.0000	314227.5700	1464456.6000	78.60%	0.0000
4	16:20:19	358280.6800	306973.1500	1440039.2000	78.35%	0.0000
5	16:21:04	346727.4100	297470.4900	1384752.1000	79.42%	0.0000
x		358784.5300	308693.8800	1438799.7000	79.47%	0.0000
%RSD		1.9968	2.2197	2.1844	1.35	0.0000

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:22:50	81.25%	33.3750	573.3821	-1.5642	23.7775	-5.4706	561.1157	-1227.9127	10.0957
2	16:23:35	81.03%	22.7572	858.1186	-14.1317	-0.7572	-17.7773	648.8297	-772.2889	-5.9759
3	16:24:20	81.37%	53.5221	614.8136	-32.9130	17.4183	-17.8633	514.9988	-334.6678	-9.4374
4	16:25:04	81.98%	34.1386	755.6554	-26.7618	-0.8004	-17.8342	588.7635	-663.1855	0.5285
5	16:25:49	81.70%	31.0500	429.3488	-14.4226	5.3086	-5.6294	405.1442	-700.7743	6.5226
x		81.47%	34.9686	646.2637	-17.9587	8.9894	-12.9150	543.7704	-739.7659	0.3467
%RSD		0.46	32.3518	25.6835	68.0303	123.6393	52.0603	16.8065	43.3221	2364.9569

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:22:50	82.05%	-6.7284	-39.0358	-144.8033	-214.8522	3.3383	-12061.0990	-4.5279	24.6708
2	16:23:35	82.80%	-0.7861	98.0810	-7.0479	-213.4261	8.9534	-12362.5680	-40.1083	21.1640
3	16:24:20	83.25%	2.1226	-0.0585	-88.9349	-104.3002	5.4940	-11706.6340	27.6467	5.5597
4	16:25:04	82.39%	5.3571	56.8927	-144.3514	66.3717	30.2032	-10585.8900	-49.9382	54.4559
5	16:25:49	82.46%	-12.8624	-103.7006	-89.9801	-176.6371	24.1480	-10562.7010	-37.7894	-3.3489
x		82.59%	-2.5794	2.4357	-95.0235	-128.5688	14.4273	-11455.7780	-20.9434	20.5003
%RSD		0.55	281.7466	3252.4828	59.3295	91.6567	83.1829	7.3111	153.2814	108.0562

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:22:50	7.4141	160.5690	34.1852	-63.2294	10.7737	-21.9564	-0.4829	4.7475	80.00%
2	16:23:35	13.4147	113.3526	52.1944	-94.5356	55.9011	-27.4216	19.2231	-12.9141	80.01%
3	16:24:20	1.1176	118.1959	60.6918	-98.2352	20.3789	-12.9840	8.8161	-13.0012	80.65%
4	16:25:04	1.1533	112.3887	30.2565	-101.2868	-41.3031	-13.8202	-16.7553	7.3122	81.56%
5	16:25:49	4.2124	143.1497	67.0131	-107.2425	9.5532	-37.9128	-1.4592	-1.7867	81.20%
x		5.4624	129.5312	48.8682	-92.9059	11.0607	-22.8190	1.8684	-3.1285	80.68%
%RSD		94.2064	16.5259	33.0290	18.5460	314.5504	45.3021	714.5345	305.7880	0.87

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:22:50	0.0156	-3.4794	-1.9012	1.1278	1.7682	80.19%	87.2170	-103.5702	79.6511
2	16:23:35	12.3834	-3.4794	7.3779	-1.9930	4.8067	81.29%	101.2105	-101.9889	95.3909
3	16:24:20	-0.0791	-0.3809	1.1739	1.1050	-1.3747	80.73%	101.7385	-88.4493	137.5166
4	16:25:04	8.9768	-0.4152	1.1055	-1.9930	4.7185	81.63%	217.9315	-57.3781	195.1001
5	16:25:49	-0.2001	-3.4794	4.1700	-1.9930	4.7074	81.99%	81.7271	-88.0266	63.7645
x		4.2193	-2.2469	2.3852	-0.7492	2.9252	81.16%	117.9649	-87.8826	114.2846
%RSD		142.6786	75.1160	147.6177	227.3148	93.2453	0.88	47.9461	21.1042	46.2589

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:22:50	17.4540	79.61%	-2.0667	698.8869	1.2407	14.5730	0.0000	0.0000	1.5807
2	16:23:35	18.5707	80.89%	-5.3053	582.3238	1.1213	2.0609	3.0292	3.0292	-1.5084
3	16:24:20	15.2872	80.86%	-8.3912	446.5330	1.1056	2.0521	0.0000	0.0000	1.4932
4	16:25:04	11.4207	82.22%	-11.4763	405.4549	-4.9899	4.9775	0.0000	0.0000	-1.5084
5	16:25:49	21.2820	82.12%	9.7825	415.0911	-4.9899	10.9663	0.0000	0.0000	-1.5084
x		16.8029	81.14%	-3.4914	509.6579	-1.3025	6.9260	0.6058	0.6058	-0.2903
%RSD		22.0434	1.32	235.0021	24.9877	258.4790	81.0425	223.6068	223.6068	574.7467

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:22:50	1.5807	81.03%	5.9830	5.9829	-5.9069	-5.9069	-3755.5340	32.2165	93.3536
2	16:23:35	-1.5084	82.96%	-13.2363	-13.2363	-5.9777	-5.9777	404.8013	56.0844	145.9928
3	16:24:20	1.4932	83.47%	-13.4216	-13.4216	-5.9970	-5.9970	6413.8628	67.8730	153.0288
4	16:25:04	-1.5084	85.39%	-19.9450	-19.9450	-6.0636	-6.0636	-4002.2373	64.4276	135.4490
5	16:25:49	-1.5084	85.20%	-14.0322	-14.0322	-0.2110	-0.2110	-1379.5508	31.2334	145.6712
x		-0.2903	83.61%	-10.9304	-10.9305	-4.8312	-4.8312	-463.7316	50.3670	134.6991
%RSD		574.7427	2.14	90.1596	90.1592	53.4724	53.4724	916.4871	34.8496	17.7785

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:22:50	25.7597	11.3476	199.6307	83.57%	0.0000
2	16:23:35	34.1985	-0.5033	107.0439	85.30%	0.0000
3	16:24:20	18.1115	-4.6673	56.9194	86.10%	0.0000
4	16:25:04	14.8399	-18.8848	-28.2061	87.95%	0.0000
5	16:25:49	39.8566	11.8785	37.6578	88.29%	0.0000
x		26.5533	-0.1659	74.6091	86.24%	0.0000
%RSD		39.7008	7676.4793	113.9896	2.26	0.0000

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:27:36	63.25%	115.5254	TM 94649554.0000	TM 65437149.0000	TM 8438345.1000	TM 9836648.3000	TM 130275390.0000	TM 48239076.0000	TM 2025746.5000
2	16:28:21	62.56%	115.7661	TM 96560879.0000	TM 65490209.0000	TM 8622584.5000	TM 10050422.0000	TM 132195370.0000	TM 48414696.0000	M 2021138.8000
3	16:29:05	62.42%	95.0585	TM 95497604.0000	TM 66458622.0000	TM 8614385.9000	TM 10091565.0000	TM 132215860.0000	TM 47953397.0000	M 2017402.3000
4	16:29:50	61.73%	118.7611	TM 95770095.0000	TM 66512250.0000	TM 8662460.8000	TM 10102290.0000	TM 131183300.0000	TM 47745023.0000	M 1955984.2000
5	16:30:35	61.35%	129.5541	TM 93316436.0000	TM 65077954.0000	TM 8502980.2000	TM 9848705.4000	TM 129944930.0000	TM 45795993.0000	M 1916889.8000
X		62.26%	114.9330	TM 95158914.0000	TM 65795237.0000	TM 8568151.3000	TM 9985926.2000	TM 131162970.0000	TM 47629637.0000	TM 1987432.3000
%RSD		1.19	10.8713	TM 1.2986	TM 0.9879	TM 1.0932	TM 1.3245	TM 0.8038	TM 2.2190	TM 2.4479

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:27:36	65.81%	276453.8200	-3168.9032	39047.1850	TM 7894057.7000	22317.0710	TM 137823040.0000	TM 3512752.6000	3893.7071
2	16:28:21	65.70%	277308.1300	-4865.3120	39403.1230	TM 7911736.1000	22202.4250	TM 136247810.0000	TM 3453273.3000	3576.9054
3	16:29:05	65.24%	277678.6600	-4258.1151	38508.6120	TM 7956221.3000	22320.2090	TM 136584340.0000	TM 3494629.6000	3568.4446
4	16:29:50	65.49%	274850.8100	-4476.6566	39009.8980	TM 7775788.4000	22647.9900	TM 135162860.0000	TM 3436149.2000	3722.2261
5	16:30:35	66.83%	269409.2600	-3981.6155	37812.4170	TM 7569161.3000	21553.6560	TM 131266390.0000	TM 3337014.5000	3758.4317
X		65.81%	275140.1400	-4150.1205	38756.2470	TM 7821392.9000	22208.2700	TM 135416890.0000	TM 3446763.8000	3703.9430
%RSD		0.92	1.2298	15.3390	1.5903	TM 1.9943	1.8099	TM 1.8511	TM 1.9914	3.6675

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:27:36	3619.6722	10301.0440	5411.0964	4340.0261	-90.9005	27.9232	-71.2483	84.5008	64.10%
2	16:28:21	3638.8861	10193.5820	5220.7364	4378.4806	-97.2446	36.5520	-92.3004	88.5028	64.89%
3	16:29:05	3764.4866	10140.1360	5508.4157	4397.2921	25.2949	43.4430	-50.0847	68.1544	64.83%
4	16:29:50	3576.8141	10502.8840	4955.1069	4499.2252	-109.0158	7.8051	-78.4232	94.5767	65.95%
5	16:30:35	3481.8933	10233.3970	5102.7107	4633.6402	-66.2816	52.0698	-59.1178	68.8592	66.08%
X		3616.3505	10274.2090	5239.6132	4449.7328	-67.6295	35.5586	-70.2349	80.9188	65.17%
%RSD		2.8370	1.3692	4.2858	2.6622	80.2026	56.1493	23.4449	14.6907	1.28

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:27:36	804450.3700	1408374.7000	1534149.2000	900407.8900	2383349.6000	64.51%	62.6163	795.0924	397.2206
2	16:28:21	802814.9800	1414235.1000	1528614.9000	913763.3500	2379448.1000	64.92%	67.5311	861.9077	79.9907
3	16:29:05	806346.4900	1419422.2000	1528940.9000	914038.9300	2389103.0000	65.70%	53.6223	756.4847	86.3039
4	16:29:50	792846.4500	1396129.5000	1502427.9000	896038.8900	2340924.2000	66.00%	66.2064	1045.0201	69.4736
5	16:30:35	778898.6400	1372229.3000	1488518.6000	891640.3800	2314754.7000	65.80%	46.0728	871.8020	78.7563
X		797071.3900	1402078.2000	1516530.3000	903177.8900	2361515.9000	65.39%	59.2098	866.0614	142.3490
%RSD		1.4326	1.3413	1.3163	1.1369	1.3672	0.97	15.4238	12.7953	100.1794

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:27:36	210.8682	69.24%	222.3746	1843.9060	467.3633	804.2919	3.4608	3.4607	-1.5084
2	16:28:21	368.3615	70.42%	225.5377	1922.2655	417.8907	866.9448	10.2096	10.2096	12.0037
3	16:29:05	244.1706	71.30%	159.7873	1868.3889	519.8869	793.1452	0.0000	0.0000	5.1927
4	16:29:50	-104.3425	71.71%	214.4675	1955.8946	453.1749	831.6582	3.3688	3.3688	11.8863
5	16:30:35	198.4326	71.61%	197.2968	1773.0347	469.3345	765.0318	6.7060	6.7060	5.1502
X		183.4981	70.86%	203.8928	1872.6979	465.5300	812.2144	4.7490	4.7490	6.5449
%RSD		95.0491	1.46	13.2302	3.7908	7.8887	4.7788	81.3938	81.3938	86.0794

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:27:36	-1.5084	73.05%	1.1642	1.1643	-8.9829	-8.9829	5393.1104	117.3494	253.2431
2	16:28:21	12.0036	74.28%	7.1715	7.1715	1.1573	1.1573	9071.1211	49.3677	228.9739
3	16:29:05	5.1927	74.87%	-13.2693	-13.2692	14.5169	14.5169	6577.6085	21.5162	112.1201
4	16:29:50	11.8863	74.88%	33.5142	33.5144	1.0849	1.0850	6599.4547	16.0764	94.0495
5	16:30:35	5.1501	75.36%	-16.7762	-16.7762	7.7240	7.7240	6255.7793	-7.4545	62.0635
X		6.5449	74.49%	2.3609	2.3610	3.1000	3.1000	6779.4148	39.3710	150.0900
%RSD		86.0795	1.19	848.6348	848.6059	281.9349	281.9349	20.2263	122.0402	56.9202

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:27:36	8597.5481	6485.1106	31802.9650	70.74%	3.5341
2	16:28:21	8684.2478	6672.0444	32371.0380	71.19%	0.0000
3	16:29:05	8721.6804	6370.5440	32347.3590	71.05%	3.5189
4	16:29:50	8799.7962	6414.3079	32185.2070	71.19%	0.0000
5	16:30:35	8383.2924	6447.2976	30864.7580	70.29%	3.5569
X		8637.3130	6477.8609	31914.2650	70.89%	2.1220
%RSD		1.8473	1.7978	1.9715	0.54	91.2893

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:32:23	62.26%	6491.2711	TM 95548198.0000	TM 65906214.0000	TM 8628079.6000	TM 10048232.0000	TM 134012050.0000	TM 47155798.0000	M 2005185.9000
2	16:33:07	61.37%	6409.9003	TM 95760401.0000	TM 66902443.0000	TM 8670358.6000	TM 10045283.0000	TM 133409940.0000	TM 47183172.0000	M 1989082.0000
3	16:33:52	60.91%	6353.3279	TM 96760227.0000	TM 67711440.0000	TM 8777910.5000	TM 10128410.0000	TM 132859970.0000	TM 47729809.0000	M 1993205.0000
4	16:34:38	60.76%	6367.1860	TM 96955320.0000	TM 66653759.0000	TM 8632241.0000	TM 9976558.4000	TM 130985980.0000	TM 48341450.0000	M 2010551.7000
5	16:35:22	61.84%	6168.4951	TM 93625984.0000	TM 65403875.0000	TM 8463506.4000	TM 9779045.6000	TM 129070070.0000	TM 47289656.0000	M 1972792.2000
X		61.43%	6358.0361	TM 95730026.0000	TM 66515546.0000	TM 8634419.2000	TM 9995506.0000	TM 132067600.0000	TM 47539977.0000	M 1994163.4000
%RSD		1.02	1.8688	TM 1.3842	TM 1.3460	TM 1.3095	TM 1.3248	TM 1.5316	TM 1.0601	M 0.7411

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:32:23	65.95%	277157.3600	32485.8140	79797.9470	TM 7914296.3000	80298.0320	TM 137007940.0000	TM 3503856.3000	58254.3270
2	16:33:07	66.26%	276827.5600	33654.6130	79830.7540	TM 7860279.8000	78302.2120	TM 135555810.0000	TM 3449604.9000	57601.6510
3	16:33:52	66.45%	278639.4600	32453.9630	79325.3350	TM 7889508.8000	78709.4210	TM 135194620.0000	TM 3434761.5000	57210.2090
4	16:34:38	66.17%	278217.2500	32773.7870	78694.3750	TM 7726936.3000	78498.9490	TM 135196590.0000	TM 3433330.8000	56997.2880
5	16:35:22	66.59%	267826.9600	32469.1360	76568.8770	TM 7538113.3000	75714.3920	TM 131412140.0000	TM 3330937.4000	55435.3710
X		66.28%	275733.7200	32767.4620	78843.4580	TM 7785826.9000	78304.6010	TM 134873420.0000	TM 3430498.2000	57099.7690
%RSD		0.37	1.6255	1.5663	1.7151	TM 2.0066	2.1066	TM 1.5379	TM 1.8254	1.8322

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:32:23	15447.4050	36575.3970	17328.5580	11666.1840	5500.7610	1498.5766	588.3314	78.3889	65.68%
2	16:33:07	14725.5830	36656.6520	17342.4450	11894.0970	5582.9154	1593.6350	589.9115	75.2568	66.09%
3	16:33:52	15090.6980	36666.7210	16925.5860	11440.7410	5739.8384	1581.9967	605.3336	84.0094	67.00%
4	16:34:38	14460.8710	36451.7830	17252.0590	11796.1890	5491.0541	1701.3152	612.4903	82.9192	66.94%
5	16:35:22	14111.1670	34956.4360	17201.5880	11236.8850	5475.7937	1494.8085	543.9933	87.0875	68.31%
X		14767.1450	36261.3980	17210.0470	11606.8190	5558.0725	1574.0664	588.0120	81.5323	66.81%
%RSD		3.5403	2.0257	0.9823	2.3052	1.9750	5.3737	4.5320	5.7588	1.51

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:32:23	813845.2100	1430129.7000	1543648.1000	920645.4200	2400589.5000	65.78%	43259.6400	911.2019	42763.3120
2	16:33:07	808654.2600	1428217.6000	1546266.3000	913684.9500	2391446.9000	66.26%	43273.9300	1036.4538	41954.5130
3	16:33:52	805805.5300	1416190.2000	1530491.5000	914820.7000	2388355.0000	66.83%	43235.1190	859.8335	42693.1380
4	16:34:38	796997.0900	1406245.8000	1523808.7000	898013.5000	2364221.3000	67.48%	43726.6040	939.1432	42823.3400
5	16:35:22	779623.4000	1361023.4000	1481051.0000	882842.3500	2299333.7000	67.79%	41714.5240	885.7627	41097.6040
X		800985.1000	1408361.3000	1525053.1000	906001.3800	2368789.3000	66.83%	43041.9630	926.4790	42266.3810
%RSD		1.6746	2.0004	1.7234	1.7023	1.7345	1.25	1.7881	7.3578	1.7557

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:32:23	9050.9952	71.23%	195.0237	29251.6760	6363.7116	11648.9820	3.3971	3.3970	12.0026
2	16:33:07	9200.8573	72.32%	236.6273	29881.0820	6299.4887	11695.2030	6.6554	6.6554	8.4082
3	16:33:52	8964.0016	72.49%	215.2711	30357.0400	6442.9966	11784.2450	13.1666	13.1665	27.8735
4	16:34:38	8946.4396	72.71%	173.2904	29008.2340	6495.6380	11480.1040	6.4827	6.4827	4.9067
5	16:35:22	8424.4869	74.47%	262.7451	28648.3300	6347.8267	11303.2080	3.2052	3.2052	4.8498
X		8917.3561	72.64%	216.5915	29429.2730	6389.9323	11582.3490	6.5814	6.5814	11.6081
%RSD		3.2894	1.61	16.1157	2.3317	1.2280	1.6512	61.2121	61.2121	82.3522

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:32:23	12.0026	74.23%	0.4973	0.4974	7.9843	7.9843	8581.3799	48075.8370	117019.9500
2	16:33:07	8.4082	75.89%	2.8233	2.8234	0.9591	0.9591	1013.9332	47488.2100	116169.9300
3	16:33:52	27.8734	76.90%	-23.8230	-23.8229	0.8308	0.8308	6631.9003	47728.1260	115510.8700
4	16:34:38	4.9066	78.35%	1.3715	1.3716	10.2818	10.2818	-2167.2416	47742.3150	116246.5900
5	16:35:22	4.8498	78.96%	4.1772	4.1773	13.2730	13.2730	12189.4080	45630.5130	111322.7500
X		11.6081	76.87%	-2.9907	-2.9907	6.6658	6.6658	5249.8761	47333.0000	115254.0200
%RSD		82.3522	2.48	392.2056	392.2183	83.8912	83.8912	110.2992	2.0587	1.9625

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:32:23	47238.1730	39234.6920	185779.5800	69.03%	3.6214
2	16:33:07	46871.7350	39243.7300	184155.5700	71.64%	0.0000
3	16:33:52	47019.8330	39442.9000	184509.3300	72.42%	0.0000
4	16:34:38	47301.5510	39403.0180	184347.5000	73.70%	3.3922
5	16:35:22	45592.3570	37492.6590	178086.4000	75.77%	0.0000
X		46804.7300	38963.4000	183375.6700	72.51%	1.4027
%RSD		1.4938	2.1236	1.6494	3.44	137.0525

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:37:07	64.57%	776200.4000	TM 47565812.0000	TM 33540876.0000	TM 4356303.7000	TM 5067883.4000	TM 68029694.0000	TM 24158113.0000	M 974976.6200
2	16:37:53	64.72%	767414.6600	TM 47324916.0000	TM 33717599.0000	TM 4387635.8000	TM 5112234.1000	TM 68917251.0000	TM 24148012.0000	M 964374.1300
3	16:38:37	64.23%	770474.1800	TM 48423122.0000	TM 34013160.0000	TM 4386710.4000	TM 5124317.2000	TM 69381709.0000	TM 24469315.0000	M 979546.0300
4	16:39:23	65.40%	751262.0100	TM 48144346.0000	TM 33277284.0000	TM 4316865.7000	TM 4999909.1000	TM 68059873.0000	TM 24512520.0000	M 963755.6500
5	16:40:07	66.21%	720911.5700	TM 45914528.0000	TM 32116962.0000	TM 4177442.9000	TM 4892646.6000	TM 66819768.0000	TM 23510921.0000	M 930154.9000
X		65.03%	757252.5600	TM 47474545.0000	TM 33333176.0000	TM 4324991.7000	TM 5039398.1000	TM 68241659.0000	TM 24159776.0000	M 962561.4600
%RSD		1.21	2.9482	TM 2.0565	TM 2.1921	TM 2.0207	TM 1.8936	TM 1.4387	TM 1.6575	M 2.0101

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:37:07	72.99%	29.0171	T 4704536.3000	T 4965680.7000	TM 3988338.2000	T 6960162.4000	TM 68161236.0000	M 1729091.2000	T 6682663.6000
2	16:37:53	74.09%	18.2024	T 4688018.4000	T 4963766.0000	TM 4029154.2000	T 6894899.1000	TM 68650934.0000	M 1753330.9000	T 6804192.3000
3	16:38:37	74.99%	31.0873	T 4696007.4000	T 5026000.0000	TM 4035765.5000	T 6922507.2000	TM 68614728.0000	M 1756140.0000	T 6820223.1000
4	16:39:23	75.87%	10.7264	T 4609291.9000	T 4872468.3000	TM 3921883.6000	T 6840019.7000	TM 68069211.0000	M 1710228.7000	T 6614207.2000
5	16:40:07	77.14%	10.2480	T 4467921.9000	T 4725973.4000	TM 3846631.9000	T 6634978.4000	TM 65209663.0000	M 1641421.6000	T 6415025.4000
X		75.01%	19.8562	T 4633155.2000	T 4910777.7000	TM 3964354.7000	T 6850513.4000	TM 67741154.0000	M 1718042.5000	T 6667262.3000
%RSD		2.13	49.6306	T 2.1564	T 2.3817	TM 2.0155	T 1.8714	TM 2.1243	M 2.7224	T 2.4739

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:37:07	1402338.4000	T 3280578.4000	1541378.3000	960146.8100	712267.0900	22539.8960	9175.0942	38.2809	73.25%
2	16:37:53	1416746.1000	T 3352797.8000	1543251.0000	970437.3600	720371.6600	22307.2030	9430.1384	35.8118	73.35%
3	16:38:37	1415600.4000	T 3357366.7000	1554087.0000	963543.1100	713792.3700	22838.0320	9340.0621	42.5616	74.73%
4	16:39:23	1394832.4000	T 3307243.0000	1521384.2000	947738.6900	702692.3800	22183.5620	9310.7196	37.2488	75.79%
5	16:40:07	1350875.1000	T 3186014.3000	1472561.5000	918242.4600	679089.1900	21072.2420	9067.1583	23.4851	76.64%
X		1396078.5000	T 3296800.0000	1526532.4000	952021.6900	705642.5400	22188.1870	9264.6345	35.4776	74.75%
%RSD		1.9261	T 2.1151	2.1223	2.1637	2.2862	3.0280	1.5475	20.1842	1.99

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:37:07	48.9727	136.4897	264.6894	100.4338	220.8791	73.20%	589472.9400	-781.8361	571498.7100
2	16:37:53	89.5665	122.3191	151.3121	93.1281	192.4846	73.77%	588745.6000	-706.2431	573799.4900
3	16:38:37	87.8048	86.7551	228.8785	54.8009	209.3031	74.91%	589727.8600	-1033.5944	576477.7200
4	16:39:23	79.9689	118.6975	196.4384	57.4640	223.4855	75.61%	595125.8400	-610.4398	579951.6900
5	16:40:07	72.5183	97.8908	178.1876	63.4656	178.8873	76.20%	559327.2400	254.4190	546988.2100
X		75.7663	112.4320	203.9012	73.8585	205.0079	74.74%	584479.9000	-575.5380	569743.1600
%RSD		21.7022	17.7122	21.6591	28.8611	9.2900	1.67	2.4447	85.0979	2.3000

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:37:07	1168223.3000	77.84%	46.1128	T 3701744.2000	724595.9900	1315202.6000	177.7956	177.7957	41.0557
2	16:37:53	1162507.8000	79.16%	13.7092	T 3652208.1000	723280.7200	1314144.5000	219.0459	219.0450	25.6933
3	16:38:37	1164492.5000	79.81%	38.4975	T 3671021.5000	720704.4700	1307310.0000	269.4206	269.4197	34.6010
4	16:39:23	1146914.5000	80.30%	25.7501	T 3634344.0000	714136.9500	1300124.6000	202.9106	202.9097	39.9565
5	16:40:07	1098834.8000	82.19%	24.9422	T 3478692.4000	683822.0000	1244088.3000	201.4128	201.4122	30.9223
X		1148194.6000	79.86%	29.8023	T 3627602.1000	713308.0200	1296174.0000	214.1171	214.1163	34.4457
%RSD		2.5052	2.00	42.4655	T 2.3956	2.3788	2.2943	15.9904	15.9904	18.5382

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:37:07	41.0555	82.57%	-3.9753	-3.9753	-5.9482	-5.9482	4348.4270	T 5643840.9000	T 13860301.0000
2	16:37:53	25.6932	82.99%	4.8647	4.8647	3.0907	3.0907	1524.0703	T 5655892.2000	T 13911625.0000
3	16:38:37	34.6009	83.33%	1.6654	1.6655	0.0353	0.0353	3044.9987	T 5703495.7000	T 13964201.0000
4	16:39:23	39.9563	84.73%	-10.8799	-10.8799	-6.0247	-6.0247	57.1717	T 5659511.7000	T 13870205.0000
5	16:40:07	30.9222	84.99%	-2.1600	-2.1599	-0.1433	-0.1433	6143.2740	T 5435882.4000	T 13305715.0000
X		34.4456	83.72%	-2.0970	-2.0970	-1.7980	-1.7980	3023.5883	T 5619724.6000	T 13782409.0000
%RSD		18.5381	1.29	285.4165	285.4211	224.3476	224.3476	78.5034	T 1.8724	T 1.9562

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:37:07	T 4577707.9000	T 3975661.8000	T 18555021.0000	80.70%	0.0000
2	16:37:53	T 4580942.6000	T 3954376.6000	T 18501505.0000	81.39%	12.2873
3	16:38:37	T 4585280.1000	T 4006950.8000	T 18603932.0000	81.70%	6.1198
4	16:39:23	T 4535841.1000	T 3922396.0000	T 18323234.0000	82.63%	3.0257
5	16:40:07	T 4356610.0000	T 3796606.8000	T 17668376.0000	83.54%	2.9926
X		T 4527276.3000	T 3931198.4000	T 18330414.0000	81.99%	4.8851
%RSD		T 2.1526	T 2.0683	T 2.1003	1.35	95.5884

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:41:52	72.00%	53.1473	32457.3920	644.2150	120.7948	78.0264	975.7201	6266.6763	33.7929
2	16:42:37	73.20%	41.0866	24331.1120	391.2339	80.8077	44.7927	659.9947	4057.7825	-19.9881
3	16:43:22	74.25%	37.6793	19507.9620	465.6871	30.2751	31.5487	744.0653	3468.7883	-15.0748
4	16:44:07	74.72%	36.0471	17074.7910	977.9374	103.4298	110.2328	1484.8132	3631.4706	-2.0477
5	16:44:53	75.88%	41.3701	15254.0870	1366.7265	125.7340	143.9513	2041.0475	3670.8089	4.6375
X		74.01%	41.8661	21725.0690	769.1600	92.2083	81.7104	1181.1282	4219.1053	0.2640
%RSD		2.00	16.0012	31.7562	52.4582	42.1171	56.6813	48.9389	27.6089	8023.2420

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:41:52	86.73%	-7.4017	48.0234	-9.4154	-136.4201	77.0654	-9163.1511	13.9260	97.8201
2	16:42:37	88.62%	-16.1088	91.6541	-62.2357	77.0174	48.7943	-9279.6876	119.8038	49.7277
3	16:43:22	89.41%	-4.9627	71.7681	4.3197	22.6801	91.7684	-7380.5097	56.9381	84.2862
4	16:44:07	90.40%	-7.8774	143.1866	21.9648	114.3520	145.1679	-5592.1549	47.1015	146.0827
5	16:44:53	91.88%	-8.0501	217.7755	101.2333	159.7761	172.1987	-4888.4794	-1.9979	162.6267
X		89.41%	-8.8801	114.4816	11.1733	47.4811	106.9989	-7260.7965	47.1543	108.1087
%RSD		2.16	47.6038	59.0113	531.1250	241.0289	47.2491	27.6495	99.9978	42.6300

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:41:52	14.8897	706.4233	51.9180	-80.5030	42.8570	39.1297	10.3089	-7.0680	86.99%
2	16:42:37	3.0847	470.8235	66.9505	-74.2079	44.9967	36.5161	12.9949	-6.4339	88.52%
3	16:43:22	22.2916	494.3663	73.1544	-73.7084	40.7684	22.5409	11.7987	-5.0935	91.29%
4	16:44:07	21.9384	397.7791	36.2714	-77.6963	19.7225	47.0560	-0.9896	-2.5701	92.21%
5	16:44:53	67.6581	389.5570	62.4714	-87.0662	37.6126	59.9258	8.9413	-2.7082	92.65%
X		25.9725	491.7838	58.1531	-78.6363	37.1915	41.0337	8.6108	-4.7747	90.33%
%RSD		94.5894	26.0804	24.9011	6.9457	27.2603	33.5742	64.8013	43.4857	2.73

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:41:52	4.7233	13.7083	3.5666	0.8685	12.6871	87.65%	40.9827	38.0832	38.8419
2	16:42:37	-6.8485	19.0026	9.0170	0.8126	1.1339	89.56%	57.9143	-60.6621	51.7897
3	16:43:22	9.3819	10.1737	19.5410	6.1908	17.3404	91.92%	61.8551	-7.5304	50.7376
4	16:44:07	1.0707	1.9375	3.1014	6.1296	3.6488	92.43%	105.5531	-117.5012	107.7262
5	16:44:53	-1.7131	4.5863	5.7253	6.0630	3.5788	93.43%	33.9319	-18.2405	69.5230
X		1.3229	9.8817	8.1903	4.0129	7.6778	91.00%	60.0474	-33.1702	63.7237
%RSD		466.8570	69.5747	82.5554	72.1770	90.7793	2.58	46.5410	177.2362	42.2542

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:41:52	33.0154	90.50%	-8.7238	1475.0772	5.7939	12.4553	0.0000	0.0000	-1.5084
2	16:42:37	15.5007	92.11%	-6.0654	1277.6691	-2.3346	22.8538	2.6111	2.6111	-1.5084
3	16:43:22	13.4426	93.26%	-3.4608	870.1632	0.2539	1.6248	0.0000	0.0000	-1.5084
4	16:44:07	43.4902	94.54%	-6.2028	822.2177	7.9798	24.8979	0.0000	0.0000	-1.5084
5	16:44:53	39.5474	95.49%	9.3974	737.6922	12.9193	21.9813	0.0000	0.0000	0.9873
X		28.9993	93.18%	-3.0111	1036.5639	4.9225	16.7626	0.5222	0.5222	-1.0093
%RSD		47.5824	2.12	238.5187	31.0135	123.7871	58.0100	223.6068	223.6068	110.5868

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:41:52	-1.5084	95.56%	-11.9881	-11.9881	1.4364	1.4364	7791.3455	123.8383	224.6304
2	16:42:37	-1.5084	96.73%	-7.2033	-7.2034	-6.4102	-6.4102	8467.5188	68.5922	191.1276
3	16:43:22	-1.5084	97.98%	-10.2132	-10.2133	1.1797	1.1797	6082.7465	63.3189	166.4672
4	16:44:07	-1.5084	98.68%	-7.9135	-7.9135	-6.4596	-6.4596	2515.8486	122.3596	276.7640
5	16:44:53	0.9873	100.53%	-23.4759	-23.4759	3.4002	3.4002	-3592.1079	187.7781	472.2392
X		-1.0093	97.90%	-12.1588	-12.1588	-1.3707	-1.3707	4253.0703	113.1774	266.2457
%RSD		110.5864	1.94	54.3176	54.3173	343.0424	343.0423	116.4954	44.6988	45.9523

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:41:52	132.5349	82.3086	441.9178	99.86%	0.0000
2	16:42:37	44.4968	-2.4889	115.3677	101.36%	2.4665
3	16:43:22	52.5706	6.0129	67.0009	102.31%	0.0000
4	16:44:07	105.2259	41.8082	270.4423	102.83%	2.4313
5	16:44:53	117.3779	143.5015	485.3211	104.82%	0.0000
X		90.4412	54.2285	276.0100	102.24%	0.9796
%RSD		43.7451	110.8504	67.9887	1.80	136.9366

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:46:38	72.34%	29.5328	12652.2590	688.3074	116.4864	105.8080	546.1411	4247.8953	33.0672
2	16:47:23	71.57%	25.5683	10605.9990	654.3893	156.3734	119.6341	524.5731	2855.0071	24.1863
3	16:48:08	71.40%	39.4945	8936.2068	694.1577	65.2317	74.2655	525.2227	2360.5815	36.0443
4	16:48:53	73.30%	33.8655	8105.0904	517.9270	31.7922	40.3793	523.6589	1820.6416	31.7079
5	16:49:38	73.63%	26.8868	6481.0197	637.6176	89.0547	65.5901	490.2861	1813.7231	13.6842
x		72.45%	31.0696	9356.1151	638.4798	91.7877	81.1354	521.9764	2619.5697	27.7380
%RSD		1.38	18.2722	25.3123	11.1767	51.9459	39.1736	3.8415	38.4671	32.4104

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:46:38	83.19%	-12.9351	-350.9726	682.1291	43.6395	36.8108	-8364.6235	54.1163	9.9984
2	16:47:23	83.13%	-12.9228	-184.7484	709.3289	-52.6370	40.5218	-7294.4376	-10.8956	16.5366
3	16:48:08	83.26%	-9.9361	-319.5386	821.6062	73.8779	22.3302	-7188.5421	17.5112	-7.4612
4	16:48:53	84.11%	7.7905	-390.7132	755.7279	11.6715	60.0452	-8190.3299	26.4171	-4.8203
5	16:49:38	84.18%	-7.0597	99.7219	891.0104	9.9910	9.8702	-7278.2970	-8.2939	-28.3764
x		83.57%	-7.0126	-229.2502	771.9605	17.3086	33.9156	-7663.2460	15.7710	-2.8246
%RSD		0.62	123.0185	87.0340	11.0097	272.0805	56.0830	7.3798	170.0500	617.7036

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:46:38	9.6139	337.5367	129.8368	-55.2351	34.7306	13.5287	0.7194	4.3026	88.04%
2	16:47:23	24.7253	333.7748	102.5433	-77.0064	-18.8567	1.6107	4.5978	-4.7440	85.47%
3	16:48:08	6.7834	305.4239	95.9783	-86.3942	12.7736	-13.0275	4.5749	4.8397	86.14%
4	16:48:53	18.4429	211.6711	89.2157	-54.7320	26.9052	6.8632	6.5188	-4.9321	86.27%
5	16:49:38	24.3998	291.9566	74.8420	-80.8487	11.1965	-6.9914	-0.2938	2.0054	85.68%
x		16.7931	296.0726	98.4832	-70.8633	13.3498	0.3967	3.2234	0.2943	86.32%
%RSD		49.3961	17.1963	20.6267	20.9739	153.6565	2674.9475	89.3983	1632.6358	1.18

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:46:38	4.5606	2.1985	-5.0225	3.6845	1.2048	88.09%	33.6084	-13.1001	63.5590
2	16:47:23	25.3684	-3.4794	0.7881	-1.9930	1.3269	86.64%	48.6424	-24.8442	34.9871
3	16:48:08	10.7534	-0.5757	3.6892	-1.9930	1.3363	86.04%	33.3728	-66.8506	29.6622
4	16:48:53	1.9682	-0.5929	-2.1379	-1.9930	7.0509	87.07%	47.3253	-5.5380	38.0393
5	16:49:38	7.8623	-3.4794	-2.1224	3.8021	7.1077	86.73%	28.8627	55.8937	33.8387
x		10.1026	-1.1858	-0.9611	0.3015	3.6053	86.91%	38.3623	-10.8878	40.0173
%RSD		90.6356	200.8942	344.7429	1042.0825	87.9739	0.87	23.4516	406.0970	33.7314

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:46:38	16.3937	91.55%	-8.7568	305.4452	0.3216	9.6018	0.0000	0.0000	-1.5084
2	16:47:23	13.8438	89.87%	-0.3860	336.6550	5.8921	4.4376	0.0000	0.0000	-1.5084
3	16:48:08	20.5027	88.61%	-5.8537	251.7022	14.2893	15.4936	0.0000	0.0000	1.1752
4	16:48:53	10.5535	88.46%	-0.2023	269.4554	6.1104	23.9385	0.0000	0.0000	1.2130
5	16:49:38	-3.8022	88.46%	5.4529	258.7661	0.5988	4.5912	0.0000	0.0000	-1.5084
x		11.4983	89.39%	-1.9492	284.4048	5.4424	11.6125	0.0000	0.0000	-0.4274
%RSD		80.8327	1.51	283.1886	12.5834	104.1829	70.9872	0.0000	0.0000	346.3209

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:46:38	-1.5084	97.44%	-10.0304	-10.0304	-3.8746	-3.8746	2479.4915	39.1770	122.1042
2	16:47:23	-1.5084	94.45%	-19.5521	-19.5522	-3.7124	-3.7124	6072.1086	1.5020	53.9662
3	16:48:08	1.1752	93.51%	-3.2681	-3.2681	1.6882	1.6882	-3806.1741	-19.1472	-8.5058
4	16:48:53	1.2130	92.12%	-8.0853	-8.0853	-8.9829	-8.9829	2668.5576	-17.4970	9.2933
5	16:49:38	-1.5084	90.71%	-24.0649	-24.0649	-8.9829	-8.9829	-1852.8751	-39.1972	-23.2310
x		-0.4274	93.65%	-13.0002	-13.0002	-4.7729	-4.7729	1112.2217	-7.0325	30.7254
%RSD		346.3178	2.72	65.8399	65.8397	93.1844	93.1844	353.6181	420.5644	191.1662

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:46:38	134.2360	109.5564	490.8503	102.02%	0.0000
2	16:47:23	112.5395	46.6146	326.3076	98.82%	0.0000
3	16:48:08	131.0900	13.4425	265.8999	95.57%	0.0000
4	16:48:53	94.2641	59.7373	328.6847	93.42%	0.0000
5	16:49:38	112.6689	55.6343	301.6425	91.51%	0.0000
x		116.9597	56.9970	342.6770	96.27%	0.0000
%RSD		13.8603	60.6288	25.2713	4.37	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:51:23	74.48%	669.0148	939995.7600	682918.7900	88141.1840	103183.5100	53188.3330	459870.3200	18818.9670
2	16:52:08	73.61%	731.8962	939757.1600	678955.0600	87609.3310	100372.6000	54772.4370	466880.5300	19318.3500
3	16:52:54	74.03%	750.0416	945703.6700	689580.7200	88103.8160	102759.3100	54178.1870	476954.6200	19276.7160
4	16:53:38	74.46%	678.4675	931311.6600	663945.0600	86254.7570	99654.9860	53802.2630	477090.4500	19092.7080
5	16:54:22	75.27%	687.9391	894249.3000	649365.1600	84577.0690	96614.2910	51282.8060	462082.6300	17980.5250
x		74.37%	703.4718	930203.5100	672952.9600	86937.2320	100516.9400	53444.8050	468575.7100	18897.4530
%RSD		0.83	5.0411	2.2301	2.4068	1.7537	2.6384	2.5048	1.7322	2.9057

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:51:23	82.91%	-0.8607	19400.0700	8483.7912	30961.0790	5450.5971	531932.8200	13445.3460	5613.0357
2	16:52:08	83.29%	2.0523	18140.0630	8208.1131	30783.5100	5290.5341	528059.1700	13583.4930	5563.9927
3	16:52:54	82.41%	11.3644	18893.9480	8753.6049	31091.6100	5651.0374	538486.2400	13407.7740	5368.2178
4	16:53:38	82.74%	-3.8460	18490.7180	8333.9969	30708.8910	5367.5754	527297.8900	13649.9390	5105.7465
5	16:54:22	82.58%	-3.8174	17941.1590	7945.4133	29162.7900	4976.4136	508394.5500	12897.9860	5310.5648
x		82.79%	0.9785	18573.1920	8344.9839	30541.5760	5347.2315	526834.1400	13396.9080	5392.3115
%RSD		0.40	643.6590	3.1630	3.6186	2.5709	4.6200	2.1296	2.2087	3.7958

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:51:23	1118.0202	5890.1530	2785.7320	1744.3175	543.9031	940.8628	326.5531	-0.7768	85.29%
2	16:52:08	1180.0391	5757.7173	2555.7894	1629.1597	736.6973	867.8526	349.5851	-9.7113	85.95%
3	16:52:54	1166.3915	5974.0686	2852.1025	1674.0625	632.1322	881.1762	391.3107	-2.6313	84.88%
4	16:53:38	1279.4200	5730.2344	2522.3892	1947.0291	530.5221	922.6414	372.6324	-11.6046	85.61%
5	16:54:22	1230.3018	5862.6825	2683.0071	1643.8332	657.7132	818.1184	358.0827	-7.6869	85.60%
x		1194.8345	5842.9712	2679.7640	1707.6804	620.1936	886.1303	359.6328	-6.4822	85.47%
%RSD		5.1831	1.7067	5.3148	5.2485	13.7254	5.4452	6.7685	71.3229	0.47

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:51:23	19.6700	-0.5591	3.7330	3.8404	-1.5576	86.04%	5006.6045	-69.4066	4716.5307
2	16:52:08	7.8661	2.3308	0.7864	0.9108	4.2371	86.21%	4871.7627	-45.8646	4875.8064
3	16:52:54	-0.7787	-3.4794	18.2985	0.9178	-1.5660	86.66%	4895.9827	-112.1407	4820.2844
4	16:53:38	5.0428	2.3591	-5.0225	3.8448	-4.4724	85.68%	4859.0981	0.2913	4660.7150
5	16:54:22	5.0295	-0.5628	-2.1066	0.9223	1.3567	85.87%	4522.9986	-28.9343	4523.4236
x		7.3659	0.0177	3.1377	2.0872	-0.4004	86.09%	4831.2893	-51.2110	4719.3520
%RSD		102.6831	13742.6560	289.3967	76.7744	827.0599	0.43	3.7654	82.9661	2.9303

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:51:23	975.4721	87.87%	2.7191	5871.2945	5565.8792	10239.1220	5.5470	5.5469	-1.5084
2	16:52:08	1039.8396	87.55%	-5.7808	5959.6806	5522.2999	10209.9000	0.0000	0.0000	-1.5084
3	16:52:54	1041.2542	88.27%	8.2911	5902.9750	5950.5277	10300.2550	2.7353	2.7353	3.9290
4	16:53:38	1008.7293	88.40%	-3.0194	5716.5947	5620.0447	10265.7790	2.7218	2.7218	1.1952
5	16:54:22	968.4713	89.08%	16.5000	5620.7058	5489.1971	9808.8193	0.0000	0.0000	-1.5084
x		1006.7533	88.23%	3.7420	5814.2501	5629.5897	10164.7750	2.2008	2.2008	0.1198
%RSD		3.4167	0.66	239.3639	2.4212	3.3038	1.9849	105.1978	105.1978	2028.6537

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:51:23	-1.5084	90.74%	6.2275	6.2274	-3.4779	-3.4779	4050.0571	3863.7968	9572.5132
2	16:52:08	-1.5084	91.21%	-15.9554	-15.9554	-0.7769	-0.7769	11.8866	4036.8822	9646.3748
3	16:52:54	3.9290	92.24%	-24.3908	-24.3908	-3.5761	-3.5761	1865.8784	3967.4222	9755.5839
4	16:53:38	1.1952	92.78%	-2.9615	-2.9615	-0.9248	-0.9248	-4107.8351	3955.7714	9808.0165
5	16:54:22	-1.5084	93.39%	7.4736	7.4735	-3.6480	-3.6480	-2994.7076	3788.4124	9166.9971
x		0.1198	92.07%	-5.9213	-5.9214	-2.4807	-2.4807	-234.9441	3922.4570	9589.8971
%RSD		2028.7150	1.19	235.4634	235.4619	60.0634	60.0634	1434.7562	2.4729	2.6450

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:51:23	3469.6758	2786.5145	13843.8830	91.59%	0.0000
2	16:52:08	3458.4072	2960.0109	13759.2860	93.13%	0.0000
3	16:52:54	3532.5245	3020.5866	13988.9370	94.69%	2.6402
4	16:53:38	3464.9508	2924.4311	13663.9490	95.81%	0.0000
5	16:54:22	3134.5955	3010.8834	13296.7170	96.85%	0.0000
x		3412.0308	2940.4853	13710.5540	94.41%	0.5280
%RSD		4.6285	3.2136	1.8987	2.22	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	16:56:09	70.13%	335.7886	162136.8200	1844626.3000	234006.9600	272339.1400	TM 13457869.0000	757066.1400	TM 4044682.0000
2	16:56:54	69.65%	348.5921	159984.8500	1849378.2000	232850.2700	272537.8200	TM 13356579.0000	757208.4800	TM 4051085.8000
3	16:57:39	69.38%	355.4351	160805.6600	T 1825674.9000	231719.5500	269682.1500	TM 13290465.0000	757627.0100	TM 4081607.9000
4	16:58:24	69.01%	372.9431	159813.7200	T 1830289.1000	238509.5800	267746.4200	TM 13172073.0000	757618.3600	TM 4072541.7000
5	16:59:09	70.23%	320.7552	152181.8900	T 1771756.6000	225843.4500	257240.6600	TM 12660750.0000	723038.6600	TM 3907747.3000
X		69.68%	346.7028	158984.5900	T 1824345.0000	232585.9600	267909.2400	TM 13187547.0000	750511.7300	TM 4031532.9000
%RSD		0.73	5.6975	2.4607	T 1.6985	1.9631	2.3462	TM 2.3677	2.0466	TM 1.7569

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	16:56:09	69.95%	2750.9288	69216.9390	79076.9770	M 1144634.3000	T 2885191.5000	TM 19906763.0000	M 525825.2900	25992.2890
2	16:56:54	69.34%	2999.5646	68088.6350	79384.2110	M 1140424.7000	T 2856905.3000	TM 19692197.0000	M 529322.6400	25892.2770
3	16:57:39	68.76%	2758.8743	69259.4370	79514.3250	M 1143058.4000	T 2887610.3000	TM 19893630.0000	M 528635.4900	25917.2370
4	16:58:24	68.66%	2632.3581	68688.1670	78464.2490	M 1133756.5000	T 2851843.7000	TM 19766978.0000	M 520435.6100	25803.8220
5	16:59:09	68.66%	2501.8386	66064.8950	75180.9510	M 1081182.6000	T 2751286.7000	TM 18831608.0000	M 504196.8300	24933.8650
X		69.08%	2728.7129	68263.6150	78324.1430	M 1128611.3000	T 2846567.5000	TM 19618235.0000	M 521683.1700	25707.8980
%RSD		0.82	6.7455	1.9304	2.3022	M 2.3779	T 1.9551	TM 2.2874	M 1.9902	1.7034

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	16:56:09	14818.1800	34217.1240	16115.9020	42022.2310	2157.1002	30.6306	-0.5253	15.3593	81.63%
2	16:56:54	14938.9820	33462.0720	16205.0130	42750.6610	2302.4425	30.6793	25.6638	5.9252	81.88%
3	16:57:39	15389.1320	34516.9140	16222.7800	42906.6960	2194.1904	37.6264	18.5671	7.4410	80.56%
4	16:58:24	14563.3620	34535.5000	16014.5950	43506.1190	2217.8022	5.4410	31.3592	-1.0031	80.48%
5	16:59:09	14553.5510	32868.6140	15858.7950	41358.2890	2129.7627	22.3408	29.1615	4.2241	80.72%
X		14852.5410	33920.0450	16083.4170	42508.7990	2200.2596	25.3436	20.8453	6.3893	81.05%
%RSD		2.3069	2.1556	0.9350	1.9583	3.0163	48.8232	61.8460	92.9621	0.80

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	16:56:09	1226.2993	249.2326	397.6723	134.2644	371.2236	73.96%	335.0030	-46.9537	282.0645
2	16:56:54	1339.2284	182.4505	479.6383	173.8541	346.6809	73.34%	346.8561	-5.9019	302.9073
3	16:57:39	1261.9256	188.3145	460.0722	126.7014	357.8912	72.52%	287.8689	-91.8561	298.6124
4	16:58:24	1280.0048	162.5734	411.6438	133.5415	358.5662	72.36%	274.5747	-35.2493	320.0486
5	16:59:09	1251.7528	181.2343	370.3910	155.8473	383.0587	72.85%	289.5101	-39.2833	285.9660
X		1271.8422	192.7611	423.8835	144.8418	363.4841	73.01%	306.7626	-43.8489	297.9198
%RSD		3.3320	17.1261	10.6269	13.5093	3.8439	0.89	10.4311	70.7443	5.0609

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	16:56:09	259.2822	78.64%	1508.7056	454.5689	38842.8670	71325.6890	9739.2727	9739.2254	10624.0650
2	16:56:54	235.6356	78.72%	1870.0159	444.1683	39415.0060	70266.2840	9339.1944	9339.1427	10369.8690
3	16:57:39	209.6078	78.43%	1885.7142	407.5732	39691.2510	71276.9460	9573.6353	9573.5771	10614.7620
4	16:58:24	210.3632	78.69%	1629.6329	462.8432	38926.4660	71043.0120	9687.3013	9687.2421	10042.2450
5	16:59:09	228.4565	77.70%	1769.1208	449.7464	38003.4830	68438.8070	9112.3309	9112.2760	10492.8730
X		228.6691	78.44%	1732.6379	443.7800	38975.8150	70470.1480	9490.3469	9490.2927	10428.7630
%RSD		8.9734	0.54	9.3239	4.8152	1.6579	1.7203	2.7550	2.7550	2.2979

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	16:56:09	10624.0340	83.34%	6659.4800	6659.4788	6940.2441	6940.2440	4396.1266	327.2424	749.0782
2	16:56:54	10369.8350	84.10%	6919.7181	6919.7159	6836.3742	6836.3741	523.6345	254.2315	713.6656
3	16:57:39	10614.7230	84.33%	6759.4715	6759.4715	6710.8826	6710.8826	784.0270	316.7585	687.4566
4	16:58:24	10042.2080	84.63%	6902.7859	6902.7841	6885.9873	6885.9873	2096.3341	274.5349	709.1974
5	16:59:09	10492.8350	83.49%	6163.3363	6163.3365	6479.8689	6479.8689	1086.2096	244.7734	679.1531
X		10428.7270	83.98%	6680.9584	6680.9574	6770.6714	6770.6714	1777.2664	283.5081	707.7102
%RSD		2.2979	0.66	4.6181	4.6181	2.7084	2.7084	88.9465	13.0273	3.8533

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	16:56:09	154529.0100	127579.8900	602705.6100	83.75%	0.0000
2	16:56:54	153799.9900	125492.5600	599866.0100	84.83%	0.0000
3	16:57:39	155065.3400	128889.8900	606044.1500	84.32%	2.9650
4	16:58:24	151878.8600	126238.5700	596779.8200	85.23%	0.0000
5	16:59:09	148239.5000	122307.5600	577008.9700	83.41%	0.0000
X		152702.5400	126101.7000	596480.9100	84.31%	0.5930
%RSD		1.8148	1.9724	1.9132	0.89	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:00:55	69.96%	3955.3996	146900.6400	T 1713257.9000	217120.2600	247142.4000	TM 13067988.0000	677621.5500	TM 3676049.9000
2	17:01:40	69.88%	3989.6046	150014.1400	1721270.8000	216141.4700	253271.1200	TM 13187378.0000	692902.2100	TM 3715256.4000
3	17:02:25	70.81%	4074.8819	154181.1100	T 1735651.6000	222757.6800	259482.7000	TM 13517243.0000	709405.9800	TM 3769883.2000
4	17:03:10	69.34%	4035.7450	152928.8200	1759262.1000	226118.2200	259077.6100	TM 13554846.0000	713764.6400	TM 3749173.5000
5	17:03:54	70.99%	3870.5313	147127.7200	1676576.8000	211209.3500	246740.6300	TM 12962900.0000	693796.5900	TM 3644857.1000
X		70.20%	3985.2325	150230.4900	T 1721203.9000	218669.4000	253142.8900	TM 13258071.0000	697498.1900	TM 3711044.0000
%RSD		0.98	1.9700	2.1989	T 1.7698	2.6728	2.4386	TM 2.0080	2.0730	TM 1.3832

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:00:55	69.10%	2834.8434	252776.4100	149521.7700	M 1011727.4000	T 2967838.6000	TM 17635402.0000	M 471790.2600	286116.4800
2	17:01:40	68.30%	3013.3063	254832.6400	153891.3400	M 1036115.1000	T 3029811.1000	TM 17983025.0000	M 483764.9400	293252.8900
3	17:02:25	67.86%	2935.7531	259329.7100	157553.0100	M 1037210.8000	T 3050541.6000	TM 18291008.0000	M 482237.8400	292782.1200
4	17:03:10	67.96%	2895.8943	263749.5200	155327.9100	M 1047251.8000	T 3050806.4000	TM 18183317.0000	M 485503.4600	293198.1300
5	17:03:54	68.63%	2691.6767	243532.6000	146722.8300	M 1001244.8000	T 2919508.3000	TM 17406811.0000	M 472199.9000	282207.2000
X		68.37%	2874.2947	254844.1700	152603.3700	M 1026710.0000	T 3003701.2000	TM 17899913.0000	M 479099.2800	289511.3600
%RSD		0.74	4.2065	2.9862	2.8873	M 1.8821	T 1.9319	TM 2.0778	M 1.3753	1.7542

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:00:55	69583.7240	97713.9430	45247.8420	79119.3780	4286.0068	1258.6239	554.2790	4.8537	78.57%
2	17:01:40	72817.3690	99761.2500	46830.4500	80568.4870	4066.1189	1310.1572	526.2743	6.1944	77.94%
3	17:02:25	72298.9600	100178.4100	46351.6730	81019.8170	4324.4884	1410.4237	567.4004	8.0843	78.86%
4	17:03:10	72344.8170	100029.3700	46590.8580	82262.1280	4358.6118	1358.6537	560.9449	10.4581	78.27%
5	17:03:54	68487.3920	94611.2130	44456.2380	78377.8280	4071.6212	1362.9018	505.8300	16.1265	77.59%
X		71106.4520	98458.8380	45895.4120	80269.5280	4221.3694	1340.1520	542.9457	9.1434	78.25%
%RSD		2.7289	2.4077	2.1943	1.9223	3.3538	4.3099	4.7904	48.5157	0.64

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:00:55	1297.5378	209.8433	414.7739	113.0481	343.2235	70.73%	23036.7120	-55.5359	22830.5070
2	17:01:40	1213.8432	159.9630	428.0184	106.1100	369.4810	71.30%	23192.0130	-126.0311	22945.1000
3	17:02:25	1407.6796	181.9152	391.7255	71.8697	289.6577	71.48%	23980.4850	-97.3546	22944.6330
4	17:03:10	1259.4508	189.9931	424.9698	143.4707	346.3936	70.94%	23772.3070	-72.0734	23079.9560
5	17:03:54	1270.2507	180.3943	428.8506	92.7456	261.0177	71.34%	22961.8570	-51.8635	22426.9980
X		1289.7524	184.4218	417.6676	105.4488	321.9547	71.16%	23388.6750	-80.5717	22845.4390
%RSD		5.6217	9.7679	3.7224	25.0580	13.9467	0.44	1.9618	38.6119	1.0945

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:00:55	5295.3389	75.82%	1596.9256	7262.5134	155983.1600	279218.3100	8523.2315	8523.2041	9772.1639
2	17:01:40	5170.3080	75.40%	1380.8346	7123.4565	157036.7900	284801.0700	8728.5805	8728.5519	10137.0040
3	17:02:25	5073.5263	75.20%	1491.4958	7458.5352	158151.4700	288277.5700	9183.9276	9183.9036	9649.9622
4	17:03:10	5367.2745	74.66%	1541.3490	7032.1153	160224.2400	287225.0400	8775.6631	8775.6326	9858.0522
5	17:03:54	4928.4445	75.25%	1584.4227	7115.5884	152356.1800	275164.9200	8681.2865	8681.2480	9248.8156
X		5166.9784	75.26%	1519.0056	7198.4418	156750.3700	282937.3800	8778.5379	8778.5080	9733.1996
%RSD		3.3833	0.55	5.7672	2.3236	1.8602	1.9727	2.7989	2.7990	3.3360

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:00:55	9772.1451	78.80%	6398.3430	6398.3477	6185.3124	6185.3125	12007.6080	21591.7320	52519.8760
2	17:01:40	10136.9840	78.47%	6024.2671	6024.2730	6601.9445	6601.9446	4942.0970	21966.1880	52690.5470
3	17:02:25	9649.9471	77.60%	6250.9882	6250.9955	6504.8256	6504.8258	532.0058	22323.2570	54024.7390
4	17:03:10	9858.0316	77.85%	6222.6241	6222.6283	6591.0791	6591.0792	8949.6773	21761.1910	53065.2480
5	17:03:54	9248.7910	79.35%	6028.9628	6028.9679	6166.0536	6166.0538	1530.1923	21593.9570	51763.9760
X		9733.1798	78.42%	6185.0370	6185.0425	6409.8430	6409.8432	5592.3160	21847.2650	52812.8770
%RSD		3.3360	0.90	2.5751	2.5751	3.3878	3.3878	87.1254	1.4063	1.5652

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:00:55	153690.0900	127903.5500	604336.6000	77.26%	0.0000
2	17:01:40	154850.9600	126953.1800	601594.1700	76.46%	0.0000
3	17:02:25	158532.5500	128721.2200	611882.5400	75.25%	3.3224
4	17:03:10	154223.5700	128147.9000	603309.0400	76.48%	0.0000
5	17:03:54	149539.9300	124079.0900	583330.0600	77.58%	0.0000
X		154167.4200	127160.9900	600890.4800	76.61%	0.6645
%RSD		2.0809	1.4448	1.7601	1.18	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:05:41	70.64%	358.0761	151414.2300	1868739.8000	234782.9000	269478.0600	TM 13740572.0000	754663.0400	TM 3980282.6000
2	17:06:26	69.78%	380.4974	155968.6500	T 1837453.4000	236053.6000	272397.9000	TM 13648219.0000	782463.4900	TM 4001717.4000
3	17:07:11	70.09%	377.6751	158117.8500	T 1865040.9000	238800.2200	270674.0800	TM 13806514.0000	780178.0800	TM 4033058.6000
4	17:07:56	70.54%	405.4582	155031.0200	1852273.4000	237165.3400	274565.9800	TM 13726462.0000	787586.2000	TM 4037283.6000
5	17:08:41	70.18%	343.8359	150781.0800	T 1809391.7000	229217.9900	264687.3900	TM 13338371.0000	758551.7400	TM 3854986.7000
X		70.25%	373.1085	154262.5700	T 1846579.8000	235204.0100	270360.6800	TM 13652028.0000	772688.5100	TM 3981465.8000
%RSD		0.50	6.2925	2.0137	T 1.3072	1.5551	1.3703	TM 1.3489	1.9395	TM 1.8705

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:05:41	67.85%	2702.9795	69586.3810	78189.5260	M 1146186.5000	T 2792849.7000	TM 19831477.0000	M 527077.0700	26128.5980
2	17:06:26	67.39%	2726.9256	68695.4130	78347.0730	M 1132671.3000	T 2781799.9000	TM 19949668.0000	M 524671.7100	26463.6040
3	17:07:11	67.25%	2832.7646	69384.6350	78710.2130	M 1144247.2000	T 2800545.6000	TM 19836820.0000	M 532457.3000	26800.2910
4	17:07:56	67.17%	2840.2244	68899.2640	77591.0250	M 1150027.5000	T 2837706.2000	TM 19808206.0000	M 528097.1300	26517.2640
5	17:08:41	67.76%	2573.8226	66168.8670	73393.1790	M 1089359.8000	T 2669033.6000	TM 19051651.0000	M 504229.7200	25557.5000
X		67.48%	2735.3433	68546.9120	77246.2030	M 1132498.5000	T 2776387.0000	TM 19695564.0000	M 523306.5800	26293.4510
%RSD		0.46	3.9922	2.0087	2.8370	M 2.2047	T 2.2900	TM 1.8487	M 2.1079	1.8088

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:05:41	14847.8910	34606.2650	16126.4580	44428.6130	2386.3933	45.4857	26.7499	-2.4690	77.80%
2	17:06:26	15205.4890	33870.3200	16338.5200	44508.4600	2260.3238	4.4289	17.8436	3.8291	78.74%
3	17:07:11	15273.6420	33843.8650	16256.9090	44020.7920	2359.1052	19.2267	17.8792	9.3334	78.52%
4	17:07:56	14617.9400	34700.3540	16297.0840	44829.7840	2191.9401	50.8856	24.5068	-0.3467	78.19%
5	17:08:41	14045.2540	33265.6600	15488.9940	42128.8890	2157.9213	35.8685	8.0726	17.0006	78.26%
X		14798.0430	34057.2930	16101.5930	43983.3080	2271.1367	31.1791	19.0104	5.4695	78.30%
%RSD		3.3684	1.7507	2.1834	2.4463	4.4157	61.5564	38.3302	143.7990	0.45

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:05:41	1451.0821	227.5783	510.7780	137.1522	309.8331	70.84%	311.2019	-11.3906	276.1951
2	17:06:26	1312.1611	252.8406	414.2861	109.5503	332.6979	70.74%	306.8545	-41.2031	280.5220
3	17:07:11	1339.7479	240.3526	452.7819	174.4037	316.8470	70.45%	310.8981	-62.4503	321.7604
4	17:07:56	1367.3394	203.0436	471.1461	89.1467	376.0859	71.24%	318.9371	-41.0212	275.8804
5	17:08:41	1424.6919	209.3505	440.1661	115.9244	348.1807	71.43%	282.3230	-68.8720	300.0447
X		1379.0045	226.6331	457.8316	125.2355	336.7289	70.94%	306.0429	-44.9875	290.8805
%RSD		4.2015	9.1793	7.8862	25.8577	7.8783	0.55	4.5621	50.1277	6.8445

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:05:41	247.0937	76.06%	1590.2419	366.0416	38479.1380	70617.0080	9304.4548	9304.4131	10385.7170
2	17:06:26	248.7240	75.66%	1518.3521	350.9842	39305.4570	70608.5530	9450.3601	9450.3071	9814.5520
3	17:07:11	209.2000	75.89%	1562.0821	437.6101	39248.4120	70543.6730	9122.2976	9122.2404	9696.4546
4	17:07:56	222.2175	75.77%	1620.6167	435.1772	39917.5790	70768.9230	9722.4752	9722.4164	10358.3420
5	17:08:41	191.3640	77.15%	1405.5693	363.7239	37567.9700	67593.0490	8709.7120	8709.6690	10236.5220
X		223.7198	76.11%	1539.3724	390.7074	38903.7110	70026.2410	9261.8599	9261.8092	10098.3170
%RSD		11.0206	0.79	5.4398	10.7770	2.3250	1.9460	4.0895	4.0895	3.1755

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:05:41	10385.6890	80.25%	6392.7453	6392.7467	6916.7516	6916.7517	6409.1619	311.6497	709.6301
2	17:06:26	9814.5189	80.90%	6677.2611	6677.2614	6817.4488	6817.4488	4060.8487	302.0980	727.7805
3	17:07:11	9696.4181	81.77%	6476.8814	6476.8818	6481.5082	6481.5082	-2656.0945	200.0214	675.2622
4	17:07:56	10358.3040	81.44%	6382.9833	6382.9820	6730.8938	6730.8937	7475.1575	272.7893	786.3594
5	17:08:41	10236.4910	81.84%	6198.3433	6198.3413	6353.5685	6353.5684	7413.6272	275.9291	701.0386
X		10098.2840	81.24%	6425.6429	6425.6426	6660.0342	6660.0342	4540.5402	272.4975	720.0142
%RSD		3.1755	0.82	2.7012	2.7012	3.5333	3.5333	93.6854	16.0735	5.7820

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:05:41	150978.9700	124921.4000	591095.6000	79.78%	3.1338
2	17:06:26	152815.2300	124131.5900	592497.5700	80.80%	3.0941
3	17:07:11	152048.4300	126710.1200	595510.7400	81.64%	0.0000
4	17:07:56	151712.3600	125074.1100	597275.0500	81.87%	0.0000
5	17:08:41	145686.1100	120842.7500	567939.0400	82.56%	0.0000
X		150648.2200	124335.9900	588863.6000	81.33%	1.2456
%RSD		1.8927	1.7422	2.0289	1.32	136.9353

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:10:28	75.11%	85.0077	32805.2230	377995.4500	49383.4740	56853.7660	T 2864903.2000	149051.7600	M 774890.0600
2	17:11:13	77.79%	90.7547	33373.5420	389640.1700	49660.6400	57283.1200	T 2925114.8000	152359.4600	M 782919.6000
3	17:11:58	77.30%	81.1419	34326.0850	387993.2700	51249.5210	58825.2490	T 2991408.4000	152894.7000	M 794223.6700
4	17:12:43	77.64%	64.0868	33641.3560	390557.9300	50456.5810	59184.8500	T 3073150.5000	152515.1300	M 781248.4900
5	17:13:29	78.01%	65.1762	32897.6570	370252.0100	47738.6520	55127.7830	T 2881529.4000	151169.3700	M 766822.1500
X		77.17%	77.2335	33408.7730	383287.7700	49697.7740	57454.9540	T 2947221.3000	151598.0800	M 780020.7900
%RSD		1.53	15.5475	1.8465	2.3090	2.6470	2.8436	T 2.9085	1.0309	M 1.3014

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:10:28	79.21%	506.9447	14570.6370	15901.7900	230881.9500	574736.5200	T 4088376.1000	107905.4200	5386.1954
2	17:11:13	83.11%	563.6342	14967.8280	16022.0820	234574.5900	594497.5200	T 4247729.4000	112442.9400	5452.4653
3	17:11:58	84.33%	555.3326	14743.3150	17145.6320	237164.8100	601011.4800	T 4225481.1000	112467.8700	5911.0139
4	17:12:43	86.38%	541.8527	14265.5070	17064.3950	238641.5900	604751.5500	T 4283520.0000	113538.0500	5655.5666
5	17:13:29	86.26%	533.9942	13931.5860	16443.1780	230293.6300	579757.6800	T 4089822.6000	107438.8600	5438.2672
X		83.86%	540.3517	14495.7750	16515.4160	234311.3100	590950.9500	T 4186985.8000	110758.6300	5568.7017
%RSD		3.50	4.0601	2.8044	3.4832	1.5806	2.2264	T 2.1908	2.5793	3.8988

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:10:28	3357.6313	7850.3966	3694.5357	10174.8420	468.1149	31.7080	5.6494	5.8543	83.46%
2	17:11:13	3382.8259	7657.2356	3797.0992	10186.5900	460.6292	8.1177	6.5138	1.8568	86.43%
3	17:11:58	3493.7526	7894.5078	3853.6585	10397.9750	475.7967	-31.2982	-7.9288	7.3230	87.33%
4	17:12:43	3401.1317	7947.0845	3712.6918	10582.9330	518.5020	39.1153	13.0063	-7.3695	88.84%
5	17:13:29	3245.1918	7654.3311	3596.5138	9683.3238	469.7265	21.7861	16.8285	-7.3043	88.47%
X		3376.1057	7800.7111	3730.8998	10205.1330	478.5539	13.8858	6.8138	0.0721	86.91%
%RSD		2.6490	1.7519	2.6522	3.2993	4.8012	200.2073	138.7316	9786.5900	2.47

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:10:28	279.9268	50.8484	112.8361	43.3942	98.5346	82.00%	50.5352	15.1348	67.1153
2	17:11:13	296.6630	54.9424	94.4555	21.4515	68.9100	84.49%	63.5161	-38.7694	69.6642
3	17:11:58	258.4299	62.8937	99.0049	21.1550	67.9618	85.71%	68.5777	-34.3934	79.2327
4	17:12:43	279.6186	39.1234	71.7807	20.7985	52.5937	86.95%	63.1940	-33.8520	58.1370
5	17:13:29	217.1992	39.0808	82.9946	32.1010	66.6044	87.64%	67.1242	-29.5224	62.2248
X		266.3675	49.3777	92.2143	27.7800	70.9209	85.36%	62.5894	-24.2805	67.2748
%RSD		11.5068	20.9240	16.9648	35.7784	23.6975	2.61	11.3806	91.7439	11.9316

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:10:28	42.8395	84.99%	276.1477	78.9123	7755.8238	14605.1580	1905.5834	1905.5782	2314.7528
2	17:11:13	55.5442	86.94%	347.5729	128.8382	8126.6906	14663.1080	1918.5603	1918.5570	2258.1750
3	17:11:58	37.9252	87.02%	281.2772	102.9494	8125.4944	14833.5370	2048.5133	2048.5109	2173.5166
4	17:12:43	69.7029	88.13%	325.9957	62.0249	8227.9981	15595.2300	2152.6518	2152.6508	2141.0772
5	17:13:29	48.3214	87.95%	286.7536	101.8372	8185.7267	14227.5360	1873.6643	1873.6626	2083.1185
X		50.8667	87.01%	303.5494	94.9124	8084.3467	14784.9140	1979.7946	1979.7920	2194.1280
%RSD		24.3782	1.43	10.3797	26.8674	2.3333	3.4101	5.9294	5.9295	4.2152

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:10:28	2314.7490	87.85%	1402.0999	1402.0995	1242.1028	1242.1028	4445.1409	-12.0014	-6.0212
2	17:11:13	2258.1731	88.40%	1345.6454	1345.6459	1276.4386	1276.4386	-3655.1964	4.5936	0.5905
3	17:11:58	2173.5151	88.26%	1345.0537	1345.0542	1394.7516	1394.7516	-3159.1047	19.0133	28.0202
4	17:12:43	2141.0766	88.60%	1503.1809	1503.1813	1453.6590	1453.6590	-2861.2453	18.2084	29.1643
5	17:13:29	2083.1173	88.94%	1384.7212	1384.7213	1318.1930	1318.1930	3943.9138	18.8260	62.7067
X		2194.1262	88.41%	1396.1402	1396.1404	1337.0290	1337.0290	-257.2984	9.7280	22.8921
%RSD		4.2151	0.46	4.6396	4.6396	6.4742	6.4742	1584.8055	139.7650	119.3156

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:10:28	30639.2520	25112.3410	119665.4200	88.62%	0.0000
2	17:11:13	31312.1810	26046.2840	122573.7100	87.46%	0.0000
3	17:11:58	31702.2630	25927.3420	121990.3600	87.35%	0.0000
4	17:12:43	31474.1390	25779.6010	120900.6700	88.02%	0.0000
5	17:13:29	30879.2060	24495.2500	117591.7400	88.68%	0.0000
X		31201.4080	25472.1640	120544.3800	88.03%	0.0000
%RSD		1.3946	2.5707	1.6501	0.71	0.0000

MF9L79A-Sb 06/04/2019 17:14:31

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:15:16	73.38%	1055.0345	1029756.5000	T 2460164.5000	316535.7500	368109.7200	TM 13494916.0000	1184779.2000	TM 3925419.1000
2	17:16:01	72.99%	1015.2091	1043905.6000	T 2451279.5000	314255.2900	360677.1200	TM 13574210.0000	T 1207016.2000	TM 3965424.8000
3	17:16:46	73.20%	1036.9331	1048429.1000	T 2478487.7000	316501.9600	367762.1100	TM 13426908.0000	1223113.6000	TM 4014168.9000
4	17:17:31	72.45%	1040.8024	1035687.9000	T 2472067.4000	315985.6800	367056.0300	TM 13467927.0000	1224650.7000	TM 3994320.1000
5	17:18:17	72.73%	994.5846	1000993.1000	T 2381276.9000	304605.7000	351631.3600	TM 13072524.0000	1165161.0000	TM 3819719.9000
X		72.95%	1028.5127	1031754.4000	T 2448655.2000	313576.8800	363047.2700	TM 13407297.0000	T 1200944.1000	TM 3943810.6000
%RSD		0.50	2.3077	1.8077	T 1.5971	1.6265	1.9471	TM 1.4524	T 2.1360	TM 1.9520

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:15:16	71.74%	2674.5319	87533.2380	85356.3660	M 1186280.0000	T 2905849.2000	TM 20494263.0000	M 542302.2300	30862.7250
2	17:16:01	71.29%	2557.9892	87548.3090	86946.8860	M 1171488.1000	T 2841308.0000	TM 20405955.0000	M 545671.5400	31015.2060
3	17:16:46	69.75%	2471.1582	87089.5090	87807.4860	M 1187772.6000	T 2920805.2000	TM 20811479.0000	M 549126.6000	31638.2040
4	17:17:31	69.35%	2642.9489	88210.5570	85594.0160	M 1164977.7000	T 2857946.3000	TM 20388693.0000	M 539241.7200	30818.6920
5	17:18:17	69.47%	2611.4306	84294.5180	83189.7450	M 1133160.5000	T 2793525.1000	TM 19722838.0000	TM 540224.7300	30051.1070
X		70.32%	2591.6118	86935.2260	85778.9000	M 1168735.8000	T 2863886.8000	TM 20364646.0000	TM 543313.3600	30877.1870
%RSD		1.58	3.0835	1.7593	2.0522	M 1.8928	T 1.7887	TM 1.9498	TM 0.7504	1.8351

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:15:16	16234.2420	39504.1520	19117.0380	44347.0810	2971.3023	827.9039	341.9578	0.7419	81.25%
2	17:16:01	16133.8360	38833.4450	18690.6170	44818.1070	2642.0199	767.6253	359.6191	6.8944	81.69%
3	17:16:46	16054.9850	39613.1770	18567.2450	44268.0030	2852.1328	836.4338	360.4902	9.4440	80.67%
4	17:17:31	16456.2010	39067.1870	18597.4020	45170.0010	2929.5040	769.5472	339.7936	13.7137	80.63%
5	17:18:17	15694.7740	37962.2350	17697.2260	42360.9920	2831.1983	807.9083	364.0021	4.5406	79.50%
X		16114.8070	38996.0390	18533.9060	44192.8370	2845.2314	801.8837	353.1725	7.0669	80.75%
%RSD		1.7308	1.6910	2.7903	2.4609	4.4643	4.0054	3.2195	69.4121	1.02

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:15:16	1278.4574	218.6225	416.5033	128.6522	314.6363	73.36%	4772.1687	-121.5555	4541.9945
2	17:16:01	1237.3768	214.3980	398.4791	137.8404	303.4607	73.63%	4825.4458	-89.6999	4654.5990
3	17:16:46	1275.7412	249.6027	416.6632	149.4903	353.8038	72.71%	4832.6771	-79.6587	4750.5637
4	17:17:31	1262.3069	229.9937	403.2723	106.5778	303.7031	72.84%	4674.2828	-167.9311	4660.7118
5	17:18:17	1272.2506	163.4866	416.7864	120.7320	309.3404	72.55%	4513.2908	-51.6455	4537.8371
X		1265.2266	215.2207	410.3408	128.6585	316.9889	73.02%	4723.5731	-102.0982	4629.1412
%RSD		1.3220	14.8558	2.1459	12.7043	6.6528	0.63	2.8263	43.5698	1.9418

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:15:16	1179.4677	78.14%	1498.3321	5796.6270	45213.8200	81512.9530	9679.3638	9679.3443	10631.7040
2	17:16:01	1205.0780	77.54%	1511.2547	5669.9260	45641.9790	82544.2070	9201.1652	9201.1227	10327.8130
3	17:16:46	1191.3820	77.74%	1641.9279	5863.0320	45487.8490	82308.9410	9453.4044	9453.3610	10636.8240
4	17:17:31	1229.8943	77.53%	1495.0433	5687.0715	45659.2540	82218.0980	9428.9135	9428.8667	10498.2940
5	17:18:17	1135.2379	77.09%	1468.7297	5634.2350	43187.4980	79424.3660	9388.7692	9388.7279	10125.3760
X		1188.2120	77.61%	1523.0575	5730.1783	45038.0800	81601.7130	9430.3232	9430.2825	10444.0020
%RSD		2.9500	0.49	4.4793	1.6730	2.3309	1.5642	1.8120	1.8121	2.0889

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:15:16	10631.6850	81.06%	6721.5435	6721.5470	6766.6941	6766.6942	5686.2962	4364.9424	10951.1080
2	17:16:01	10327.7840	81.95%	6825.3562	6825.3601	6917.0265	6917.0266	-1660.9041	4614.3736	11174.9010
3	17:16:46	10636.7950	82.14%	6655.4778	6655.4789	6823.1813	6823.1813	266.6061	4489.9518	10949.9140
4	17:17:31	10498.2620	82.27%	6662.8310	6662.8312	6709.8750	6709.8750	9491.4577	4384.0994	11354.9100
5	17:18:17	10125.3490	81.26%	6491.3966	6491.3991	6783.7818	6783.7818	6234.2269	4288.3856	10667.6380
X		10443.9750	81.73%	6671.3210	6671.3233	6800.1117	6800.1118	4003.5365	4428.3506	11019.6940
%RSD		2.0889	0.66	1.8196	1.8196	1.1326	1.1326	114.4465	2.8557	2.3576

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:15:16	156672.0600	129196.6400	612148.2600	79.92%	0.0000
2	17:16:01	157302.9400	129257.0100	614687.0000	80.71%	0.0000
3	17:16:46	158572.4000	130579.8500	617722.9000	81.79%	0.0000
4	17:17:31	156500.3600	130036.0900	613840.4600	82.19%	0.0000
5	17:18:17	152559.9300	125876.5700	592421.4200	80.44%	0.0000
X		156321.5400	128989.2300	610164.0100	81.01%	0.0000
%RSD		1.4423	1.4205	1.6590	1.17	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:20:05	72.71%	275.5678	197258.0000	T 2071282.5000	268330.4100	306813.5200	TM 9797038.9000	556136.9500	TM 4637908.9000
2	17:20:49	72.34%	302.7062	195452.4300	T 2047156.5000	269226.9700	308209.1200	TM 9821478.0000	550591.5300	TM 4545502.1000
3	17:21:35	72.73%	261.2112	197888.0400	T 2077192.8000	266097.1700	308695.6500	TM 9930445.3000	557533.3300	TM 4620487.4000
4	17:22:19	73.81%	331.1861	196889.8900	T 2049923.0000	262368.7300	302842.0000	TM 9649483.3000	548163.0700	TM 4581046.6000
5	17:23:04	73.99%	274.8284	188120.4500	T 2013622.3000	255093.5400	289414.6800	TM 9451707.7000	540972.1700	TM 4438617.6000
x		73.12%	289.1000	195121.7600	T 2051835.4000	264223.3600	303195.0000	TM 9730030.6000	550679.4100	TM 4564712.5000
%RSD		1.00	9.6620	2.0575	T 1.2201	2.1758	2.6515	TM 1.9018	1.2091	TM 1.7321

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:20:05	70.10%	2659.9387	70866.3120	45395.9620	M 989604.0000	T 2936439.5000	TM 17536437.0000	M 472154.6700	25231.3320
2	17:20:49	71.16%	2589.2000	69967.0160	45915.9500	M 1008109.0000	T 2940564.8000	TM 17335929.0000	M 474963.4900	25391.0620
3	17:21:35	71.57%	2738.6990	69878.5950	45623.3390	M 1005606.0000	T 2970034.8000	TM 17679011.0000	M 478490.4800	25665.9220
4	17:22:19	71.31%	2467.8332	69813.9470	46172.2760	M 994744.9900	T 2941497.9000	TM 17515417.0000	M 466213.4100	25332.7610
5	17:23:04	71.38%	2365.3803	67690.3420	44544.3060	M 978230.3600	T 2841151.5000	TM 17068670.0000	M 463922.5600	24856.4590
x		71.10%	2564.2102	69643.2420	45530.3670	M 995258.8800	T 2925937.7000	TM 17427093.0000	M 471148.9200	25295.5070
%RSD		0.81	5.8190	1.6836	1.3715	M 1.2248	T 1.6830	TM 1.3457	M 1.2825	1.1603

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:20:05	14134.4140	36136.0590	16909.4040	45709.9900	2343.5190	17.3886	8.0055	3.5503	79.11%
2	17:20:49	14190.1510	35611.5920	16869.1970	46150.4240	2307.3025	2.3555	16.4395	0.0381	80.03%
3	17:21:35	13944.5040	35446.9450	16798.2990	46969.2230	2485.9874	7.9930	34.5883	-11.5741	79.68%
4	17:22:19	14253.9430	34675.8240	16178.2060	46233.9440	2419.5278	30.3454	14.2450	3.0530	80.56%
5	17:23:04	13845.9890	33998.7070	16297.6500	44569.5710	2352.2404	34.5192	11.1212	9.5764	79.97%
x		14073.8000	35173.8250	16610.5510	45926.6310	2381.7154	18.5203	16.8799	0.9287	79.87%
%RSD		1.2218	2.3876	2.0774	1.9230	2.9813	74.8759	61.6118	839.7085	0.66

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:20:05	1091.9253	230.8470	413.7646	148.6236	453.9072	71.70%	724.4698	-27.0801	741.5924
2	17:20:49	1030.0586	281.2212	410.4199	170.7463	430.5965	72.04%	802.3601	-62.9399	733.9330
3	17:21:35	1049.8425	222.2011	485.6214	150.4997	409.3465	72.51%	630.5369	-66.5884	724.0441
4	17:22:19	998.5449	220.2841	442.4471	149.3210	416.2412	72.91%	681.4769	-49.1096	710.1988
5	17:23:04	933.4024	290.0808	415.3718	113.7476	425.0285	72.63%	745.7468	-26.2739	613.9981
x		1020.7547	248.9268	433.5249	146.5876	427.0230	72.36%	716.9181	-46.3984	704.7533
%RSD		5.8209	13.6204	7.3375	14.0182	4.0016	0.67	9.0683	41.2717	7.3890

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:20:05	269.6021	75.41%	2420.3867	477.9881	34511.3410	62318.0840	7548.7244	7548.6919	9343.3467
2	17:20:49	265.0682	75.93%	2563.3452	445.9378	35212.3470	61278.5130	7890.5675	7898.5499	8674.8902
3	17:21:35	214.7709	75.36%	2567.7557	491.5716	35276.5960	62828.7460	8064.0577	8064.0238	8747.3588
4	17:22:19	235.6864	76.82%	2362.6602	512.4689	34536.6130	62022.4970	7851.9382	7851.9173	9118.0708
5	17:23:04	252.5443	77.38%	2437.2931	434.1265	32912.1380	60093.2220	7445.9894	7445.9633	8535.9866
x		247.7344	76.18%	2470.2882	472.4186	34489.8070	61708.2120	7761.8554	7761.8274	8883.9306
%RSD		9.1809	1.17	3.6948	6.8341	2.7631	1.7225	3.3056	3.3056	3.7725

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:20:05	9343.3226	79.40%	5501.6690	5501.6787	5822.9840	5822.9842	9939.1641	211.1728	467.0160
2	17:20:49	8674.8728	79.06%	5402.6173	5402.6278	5593.2739	5593.2742	298.6880	175.6591	474.3447
3	17:21:35	8747.3367	79.27%	5417.7912	5417.8033	5770.2963	5770.2965	8192.7463	186.6362	487.0786
4	17:22:19	9118.0563	79.33%	5591.6119	5591.6208	5654.6631	5654.6633	9026.0334	177.4895	489.2860
5	17:23:04	8535.9687	80.71%	5147.6745	5147.6826	5317.9339	5317.9341	2345.5957	187.2751	557.7930
x		8883.9114	79.55%	5412.2728	5412.2826	5631.8302	5631.8305	5960.4455	187.6465	495.1037
%RSD		3.7725	0.83	3.0680	3.0680	3.5094	3.5094	72.8092	7.5437	7.3160

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:20:05	155879.2000	127591.8000	607336.0300	75.80%	0.0000
2	17:20:49	157041.0000	127035.6000	606803.0100	75.14%	0.0000
3	17:21:35	158479.6300	126725.3900	609052.5600	74.80%	3.3425
4	17:22:19	156868.4600	128051.8800	610333.0200	76.09%	0.0000
5	17:23:04	148544.0000	122913.9600	581932.7800	77.42%	0.0000
x		155362.4600	126463.7300	603091.4800	75.85%	0.6685
%RSD		2.5251	1.6201	1.9749	1.34	223.6068

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:24:51	73.55%	333.1334	153578.6100	1566176.5000	199909.8800	229027.3300	TM 10874786.0000	563257.1900	TM 3807452.8000
2	17:25:35	73.16%	327.3416	156062.7900	1598794.7000	202340.0300	236009.2500	TM 11013487.0000	578782.4800	TM 3901411.1000
3	17:26:19	72.71%	328.8898	157252.9000	1608696.1000	202468.4800	231281.7200	TM 10834471.0000	572213.5700	TM 3880048.7000
4	17:27:04	73.38%	342.7064	159403.2900	1622230.1000	207612.3400	236139.5200	TM 11037307.0000	591600.8000	TM 3990410.5000
5	17:27:48	72.92%	283.9255	155350.3100	1565820.8000	202379.3300	232754.6700	TM 10743249.0000	585785.6400	TM 3835784.1000
x		73.14%	323.1993	156329.5800	1592343.6000	202942.0100	233042.5000	TM 10900660.0000	578327.9300	TM 3883021.4000
%RSD		0.46	7.0406	1.3904	1.5981	1.3917	1.3173	TM 1.1350	1.9265	TM 1.8129

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:24:51	69.77%	2501.3325	68132.8760	70282.8410	M 851328.6900	1768004.4000	TM 14932094.0000	M 404764.9100	21170.7830
2	17:25:35	69.74%	2510.0446	66631.9350	71273.3570	M 854873.3300	1788660.6000	TM 15082624.0000	M 404412.6500	21158.1070
3	17:26:19	69.20%	2464.1301	66988.1850	71188.5980	M 865199.8500	1785272.1000	TM 14980076.0000	M 403957.1300	21202.1110
4	17:27:04	68.42%	2491.3817	63504.1720	70798.3560	M 864412.2100	1808257.0000	TM 15119576.0000	M 408855.3100	21445.8320
5	17:27:48	67.69%	2536.3364	63900.2450	70612.6390	M 843692.8000	1760468.6000	TM 14779256.0000	M 398206.1100	20703.1600
x		68.96%	2500.6451	65831.4830	70831.1580	M 855901.3800	1782132.5000	TM 14978725.0000	M 404039.2200	21135.9990
%RSD		1.30	1.0546	3.0778	0.5790	M 1.0611	1.0512	TM 0.8994	M 0.9416	1.2726

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:24:51	13062.2960	27193.4190	12455.4460	48601.5090	1572.6255	31.1678	17.7387	2.5803	78.82%
2	17:25:35	13457.1670	27299.2390	13141.4520	49460.1190	1444.4791	2.1088	9.1249	2.6607	78.55%
3	17:26:19	13544.2910	26330.9850	12821.5730	48499.9270	1508.3780	28.7070	15.6291	4.8425	78.58%
4	17:27:04	13749.6050	26853.7650	12459.9810	48682.4270	1466.6369	45.8155	23.2555	7.0630	78.57%
5	17:27:48	13252.2870	26231.7500	12480.9370	48403.0600	1460.1326	28.3100	29.9368	1.8033	78.18%
x		13413.1290	26781.8310	12671.8760	48729.4080	1490.4504	27.2218	19.1370	3.7900	78.54%
%RSD		1.9771	1.8179	2.4057	0.8656	3.4659	57.9483	41.1537	56.7530	0.29

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:24:51	1117.3635	148.1063	372.9937	88.0924	277.5234	72.25%	215.8291	-38.3089	189.5523
2	17:25:35	1101.6176	141.5175	339.6510	101.3279	210.0373	72.56%	198.2782	-61.9604	170.7201
3	17:26:19	1142.6245	138.9633	385.1150	85.2726	252.2752	71.68%	207.2346	6.6456	190.6764
4	17:27:04	1057.4592	175.4747	388.6198	98.7445	262.5404	71.64%	162.5725	-82.4615	197.0636
5	17:27:48	1019.9059	125.9353	318.8061	95.4047	221.8974	71.86%	170.7945	-50.4513	203.6105
x		1087.7941	145.9994	361.0371	93.7684	244.8548	72.00%	190.9418	-45.3073	190.3646
%RSD		4.5038	12.5616	8.4517	7.3303	11.5051	0.55	12.1402	73.4711	6.4719

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:24:51	279.0587	77.00%	1616.1164	419.6006	31219.2050	58518.8190	8031.5369	8031.5019	8643.6509
2	17:25:35	256.6477	77.01%	1576.4934	457.9073	32105.2600	58271.7040	8091.1043	8091.0655	9411.4143
3	17:26:19	293.5477	76.57%	1766.2862	411.2233	32258.2810	58520.2820	7931.5623	7931.5144	8859.3046
4	17:27:04	295.7794	77.07%	1716.8296	405.6988	32331.1610	58284.7020	8090.0074	8089.9637	9300.4409
5	17:27:48	297.6570	76.96%	1595.6020	515.3313	31225.3370	55909.2470	7809.0819	7809.0353	8965.4955
x		284.5381	76.92%	1654.2655	441.9523	31827.8490	57900.9510	7990.6586	7990.6162	9036.0612
%RSD		6.0556	0.26	5.0039	10.3672	1.7557	1.9342	1.5082	1.5082	3.5040

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:24:51	8643.6283	81.13%	5632.8071	5632.8095	5650.8739	5650.8739	-575.4159	198.7598	604.8260
2	17:25:35	9411.3872	81.56%	5838.3759	5838.3751	5968.7806	5988.7806	868.7333	212.5359	552.7453
3	17:26:19	8859.2725	82.27%	5759.8244	5759.8256	5955.1733	5955.1733	5142.5306	155.0647	577.1765
4	17:27:04	9300.4108	82.19%	5923.7406	5923.7419	5808.6359	5808.6359	5574.8947	198.0753	501.3709
5	17:27:48	8965.4632	82.64%	5739.0571	5739.0565	5672.4131	5672.4131	3571.5002	251.7288	555.5747
x		9036.0324	81.96%	5778.7606	5778.7617	5815.1753	5815.1754	2916.4486	203.2329	558.3387
%RSD		3.5040	0.74	1.8919	1.8919	2.6801	2.6801	92.0660	17.0542	6.8201

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:24:51	69863.7600	57029.1710	270934.0600	80.19%	0.0000
2	17:25:35	71053.8920	57355.7460	272785.9200	81.13%	0.0000
3	17:26:19	70660.9780	57765.4400	274193.2300	81.78%	0.0000
4	17:27:04	71877.4640	58219.1450	277174.5200	81.72%	0.0000
5	17:27:48	67793.3410	55389.8160	265043.9400	82.85%	0.0000
x		70249.8870	57151.8640	272026.3300	81.53%	0.0000
%RSD		2.2108	1.8920	1.6616	1.19	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:29:35	71.78%	303.5541	134145.2000	1452234.4000	184051.3700	214366.1400	TM 8905962.3000	519982.4000	TM 3156621.5000
2	17:30:20	72.67%	273.7025	131766.3600	1447708.2000	182967.0500	214728.5800	TM 8987855.7000	512451.4900	TM 3101024.2000
3	17:31:05	72.29%	273.5540	132540.2100	1449048.3000	183630.5500	212102.3500	TM 8969876.8000	511276.2000	TM 3092318.2000
4	17:31:51	73.18%	263.9377	130713.6200	1423435.3000	184355.7700	211096.1900	TM 8940566.7000	500190.6600	TM 3031000.4000
5	17:32:36	74.24%	280.3187	126516.2100	1375148.0000	177034.8500	203656.3900	TM 8525915.8000	483346.5100	TM 2937710.6000
X		72.83%	279.0134	131136.3200	1429514.8000	182407.9200	211189.9300	TM 8866035.4000	505449.4500	TM 3063735.0000
%RSD		1.29	5.3438	2.1885	2.2725	1.6712	2.1203	TM 2.1729	2.8160	TM 2.7205

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:29:35	66.19%	2621.0112	48035.8880	84191.4900	M 728015.5000	1630736.4000	TM 12870086.0000	M 337713.5800	17524.1690
2	17:30:20	66.66%	2701.6400	50274.4620	84113.8740	M 734639.5400	1660404.3000	TM 12987324.0000	M 341714.3500	17580.5840
3	17:31:05	67.25%	2581.3563	50159.5450	84610.2540	M 726859.9300	1639119.4000	TM 12716643.0000	M 337861.9800	18055.1850
4	17:31:51	68.04%	2651.5796	49317.5120	84044.6330	M 714145.2900	1628294.7000	TM 12429069.0000	M 331853.5600	17768.7660
5	17:32:36	67.94%	2618.3130	46490.0780	82520.2020	M 696544.5800	1593318.7000	TM 12159889.0000	M 327814.5300	17462.8490
X		67.22%	2634.7800	48855.4970	83896.0910	M 720040.9700	1630374.7000	TM 12632602.0000	M 335391.6000	17678.3110
%RSD		1.19	1.7045	3.2677	0.9535	M 2.0948	1.4885	TM 2.6674	M 1.6426	1.3563

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:29:35	10798.4100	36342.3060	17059.2730	44378.1580	1096.8119	19.6635	22.8281	12.6050	75.98%
2	17:30:20	11258.4460	37676.7530	17385.9950	44016.6830	1097.8980	12.0415	17.3831	6.2427	74.86%
3	17:31:05	11069.2160	36806.9790	17388.5690	43979.5430	1107.8109	12.4298	17.2118	7.0054	75.78%
4	17:31:51	10979.3340	36401.0240	17474.4670	43956.7700	1016.7170	30.4765	19.4808	-3.0359	75.51%
5	17:32:36	11320.7440	34970.2080	16657.8950	42271.4770	1056.5686	32.2538	17.1858	0.2436	75.82%
X		11085.2580	36439.4540	17193.2400	43720.5260	1075.1613	21.3730	18.8179	4.6121	75.59%
%RSD		1.6094	2.6873	1.9701	1.8940	3.5457	45.0749	12.9688	132.7070	0.59

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:29:35	1002.7448	132.0871	328.7299	86.9812	246.5427	71.01%	228.1810	55.6363	260.7505
2	17:30:20	969.9335	130.1060	328.6117	80.8972	224.4167	70.64%	245.9516	-59.4253	254.9941
3	17:31:05	1032.7826	143.8266	339.6594	53.4934	267.6706	69.55%	234.7990	4.2324	246.9172
4	17:31:51	911.7583	133.1280	324.5042	67.0056	172.3606	70.34%	236.9575	15.0172	248.0369
5	17:32:36	979.4645	112.2209	244.6786	118.3433	227.0662	70.55%	206.3579	4.2147	200.2912
X		979.3367	130.2737	313.2368	81.3442	227.6113	70.42%	230.4494	3.9350	242.1980
%RSD		4.5035	8.7610	12.3662	30.0006	15.5740	0.77	6.4623	1048.6044	9.9446

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:29:35	257.1168	75.93%	1676.7306	395.3654	30440.0920	52983.1780	7063.2088	7063.1688	7270.7479
2	17:30:20	229.0830	74.68%	1714.0564	325.7477	30353.0130	53335.6060	6903.8990	6903.8594	7456.0010
3	17:31:05	229.3035	74.51%	1637.0646	367.2040	29719.2680	54289.9520	6893.5142	6893.4847	7732.9767
4	17:31:51	218.3015	74.00%	1872.4963	372.4995	29963.4580	53756.4560	6812.2285	6812.1918	7402.5206
5	17:32:36	240.8631	74.48%	1574.3308	427.4521	28709.2150	53094.2060	6469.1714	6469.1446	6968.4167
X		234.9335	74.72%	1695.1157	377.6538	29837.0090	53491.8800	6828.4044	6828.3699	7366.1326
%RSD		6.2768	0.97	6.6058	9.9285	2.3291	1.0016	3.2283	3.2283	3.7869

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:29:35	7270.7232	81.23%	4742.7714	4742.7704	4778.1669	4778.1669	4496.5070	120.5158	413.5687
2	17:30:20	7455.9753	79.96%	4782.4086	4782.4096	4972.3474	4972.3475	6752.0126	179.4802	409.4194
3	17:31:05	7732.9569	78.43%	4873.2937	4873.2946	4791.5363	4791.5363	7624.8832	165.3984	406.5100
4	17:31:51	7402.4966	78.92%	4952.5284	4952.5329	5152.3321	5152.3322	297.0589	147.1748	447.6179
5	17:32:36	6968.3994	78.27%	4620.1577	4620.1625	4706.5304	4706.5305	944.2135	166.2242	414.0370
X		7366.1103	79.37%	4794.2320	4794.2340	4880.1826	4880.1827	4022.9350	155.7587	418.2306
%RSD		3.7869	1.56	2.6466	2.6466	3.7080	3.7080	82.4493	14.6435	3.9973

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:29:35	115598.4700	93427.5060	443979.3300	81.67%	0.0000
2	17:30:20	114856.7000	92684.5190	442536.8900	79.51%	0.0000
3	17:31:05	114138.8900	92286.3350	444218.1500	78.05%	0.0000
4	17:31:51	113635.9400	93613.3890	443107.1400	77.04%	0.0000
5	17:32:36	109225.5200	90546.3530	428918.0900	76.16%	0.0000
X		113491.1000	92511.6200	440551.9200	78.49%	0.0000
%RSD		2.2002	1.3234	1.4841	2.77	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:34:23	71.60%	280.6641	192202.4700	1590733.8000	201653.8800	237306.1400	TM 9786470.5000	514376.5300	TM 4644334.7000
2	17:35:09	73.29%	241.3762	190215.5200	T 1584462.9000	205698.2700	234054.7500	TM 9604018.5000	527124.2400	TM 4655710.8000
3	17:35:54	73.15%	284.7493	191551.8400	1606189.0000	202920.9200	235436.2300	TM 9655264.8000	533418.3100	TM 4731954.0000
4	17:36:40	72.47%	256.9553	191909.8900	1602014.7000	206204.0100	234236.5800	TM 9656721.6000	529658.4500	TM 4722946.4000
5	17:37:24	72.23%	258.0577	187564.3500	1581574.2000	199081.6500	232908.0700	TM 9471284.0000	522515.6300	TM 4643645.0000
X		72.55%	264.3605	190688.8100	T 1592995.0000	203111.7400	234788.3500	TM 9634751.8000	525418.6300	TM 4679718.2000
%RSD		0.96	6.8308	0.9989	T 0.6759	1.4492	0.7107	TM 1.1787	1.3961	TM 0.9392

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:34:23	68.40%	2355.2208	67948.5300	52194.6610	M 956153.0400	T 2560839.3000	TM 16843705.0000	M 450902.4200	22958.5020
2	17:35:09	68.79%	2312.1751	68272.9090	52001.2180	M 968404.7400	T 2571990.1000	TM 16966947.0000	M 467291.6900	23267.4810
3	17:35:54	68.31%	2113.0719	67161.8330	51654.2780	M 966494.0000	2520213.2000	TM 16962330.0000	M 455736.0400	22450.2710
4	17:36:40	69.12%	2243.6238	67555.8100	51160.9940	M 960403.0900	T 2525174.5000	TM 16514829.0000	M 449109.7500	22320.8890
5	17:37:24	68.27%	2179.3120	65870.2630	50618.2970	M 945500.4900	T 2499071.8000	TM 16573830.0000	M 454928.6300	22702.9470
X		68.58%	2240.6807	67361.8690	51525.8900	M 959391.0700	T 2535457.8000	TM 16772328.0000	M 455593.7100	22740.0180
%RSD		0.53	4.3665	1.3840	1.2452	M 0.9555	T 1.1899	TM 1.2815	M 1.5573	1.6845

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:34:23	13131.0100	24912.4720	11982.1170	32896.1320	2351.4685	25.6675	21.3074	-0.2250	77.47%
2	17:35:09	13574.0130	25500.0390	12078.8080	32901.4790	2196.5761	4.8992	28.6764	-5.9346	78.55%
3	17:35:54	12847.6900	25905.3920	11666.9250	33063.8240	2313.6126	14.8727	28.6655	-4.8648	78.70%
4	17:36:40	12961.8230	25714.3300	12007.6380	32681.5540	2417.7095	16.5108	23.1876	8.0466	78.70%
5	17:37:24	12815.4020	24661.8480	12060.0480	32468.6890	2248.8248	7.8287	1.5452	7.9974	79.02%
X		13065.9060	25338.8160	11959.1070	32802.3360	2305.6383	13.9558	20.6764	1.0039	78.49%
%RSD		2.5701	2.0958	1.4040	0.7033	3.7465	58.2234	54.1017	673.0119	0.76

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:34:23	908.0655	228.1391	376.7341	113.6055	378.7437	70.83%	294.5042	-66.3478	300.0336
2	17:35:09	802.4644	195.8752	363.0245	122.6668	358.5263	71.25%	333.0995	-8.6002	291.7318
3	17:35:54	734.8137	218.6294	365.5125	125.7345	330.5801	71.43%	290.0464	14.4306	276.0308
4	17:36:40	779.4962	171.8456	371.2601	118.6731	255.3068	71.77%	340.1916	-49.7976	297.2055
5	17:37:24	769.9543	235.9102	361.1184	107.4949	309.2143	72.82%	281.2308	-51.2089	247.8337
X		798.9588	210.0799	367.5299	117.6350	326.4742	71.62%	307.8161	-32.3048	282.5671
%RSD		8.2197	12.4358	1.7428	6.1750	14.6410	1.05	8.7274	104.6128	7.6160

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:34:23	192.7995	74.32%	1284.8923	350.8946	30977.9430	55630.2340	7966.2731	7966.1809	8722.8956
2	17:35:09	247.6927	75.49%	1410.3323	388.2628	30254.1830	55967.1260	7657.0670	7657.0293	8673.7434
3	17:35:54	229.0736	76.43%	1327.0246	451.1212	31414.3310	55388.0980	7751.5881	7751.5445	8578.7430
4	17:36:40	232.1653	76.48%	1306.0007	424.4918	31234.4020	55197.2100	7861.6426	7861.5934	8806.9127
5	17:37:24	255.9496	77.68%	1225.7032	434.4379	29828.6930	53711.8160	7604.0781	7604.0381	8423.4226
X		231.5361	76.08%	1310.7906	409.8416	30741.9110	55178.8970	7768.1199	7768.0772	8641.1435
%RSD		10.4997	1.65	5.1327	9.8086	2.1956	1.5751	1.9040	1.9040	1.7020

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:34:23	8722.8679	79.19%	5752.4411	5752.4486	5476.5755	5476.5757	342.5924	155.0861	406.0490
2	17:35:09	8673.7174	80.14%	5158.1248	5158.1298	5832.4325	5832.4326	8652.6598	199.7409	496.2682
3	17:35:54	8578.7140	81.74%	5385.4259	5385.4288	5662.1964	5662.1965	-5156.3427	155.5189	385.5428
4	17:36:40	8806.8795	82.41%	5508.5883	5508.5916	5796.3551	5796.3552	2012.0321	267.6105	512.2847
5	17:37:24	8423.3960	82.71%	5321.2580	5321.2604	5778.6612	5778.6613	7650.8222	188.6665	482.6154
X		8641.1150	81.24%	5425.1676	5425.1719	5709.2442	5709.2443	2700.3528	193.3246	456.5520
%RSD		1.7020	1.87	4.0985	4.0985	2.5372	2.5372	209.2381	23.8064	12.4655

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:34:23	197971.4200	162191.9500	771887.7000	76.50%	0.0000
2	17:35:09	197830.0700	161236.1800	770696.7500	78.09%	3.2015
3	17:35:54	195310.9400	160742.6000	764900.7300	80.55%	0.0000
4	17:36:40	196995.5100	161669.3900	766939.0200	81.10%	3.0824
5	17:37:24	191409.2300	155992.6900	747061.9900	81.72%	0.0000
X		195903.4300	160366.5600	764297.2400	79.59%	1.2568
%RSD		1.3916	1.5607	1.3132	2.78	136.9716

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:39:09	72.15%	267.6306	166505.4400	1528689.3000	192818.8300	222469.8600	TM 9593028.9000	546645.6100	TM 3960315.8000
2	17:39:55	72.43%	292.9730	167461.8200	1497974.4000	190679.1800	219979.4600	TM 9736541.1000	534562.6900	TM 3912566.6000
3	17:40:40	72.73%	323.8589	167902.6200	1524418.9000	193973.1000	222637.7400	TM 9712976.0000	536962.1000	TM 3869311.5000
4	17:41:24	73.55%	252.8610	166314.0400	1498482.9000	191967.4000	221321.8200	TM 9694645.6000	531792.5300	TM 3827258.2000
5	17:42:10	73.40%	269.9638	161452.6000	1475508.0000	188530.5900	219046.0300	TM 9548008.7000	523841.8100	TM 3701807.5000
X		72.85%	281.4575	165927.3100	1505014.7000	191593.8200	221090.9800	TM 9657040.0000	534760.9500	TM 3854251.9000
%RSD		0.83	9.8454	1.5589	1.4481	1.0924	0.7067	TM 0.8484	1.5482	TM 2.5568

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:39:09	67.19%	2660.5095	62361.8640	75631.4550	M 837093.6700	1474103.5000	TM 14503799.0000	M 391584.5600	17327.6480
2	17:39:55	67.86%	2810.6958	60989.3020	75603.0470	M 827130.7100	1470812.2000	TM 14468855.0000	M 393944.5700	17724.7850
3	17:40:40	68.30%	2861.3496	60282.4970	75048.0380	M 825430.3900	1481855.9000	TM 14719237.0000	M 393938.0800	17795.6730
4	17:41:24	68.65%	2789.4948	61302.1140	73539.6320	M 824357.0100	1471038.2000	TM 14392610.0000	M 388358.0700	17885.1170
5	17:42:10	69.46%	2697.2059	58774.8970	73927.8760	M 805611.8300	1440442.9000	TM 14228504.0000	M 388790.8700	17413.5770
X		68.29%	2763.8511	60742.1350	74750.0100	M 823924.7200	1467650.5000	TM 14462601.0000	M 391323.2300	17629.3600
%RSD		1.25	2.9989	2.1902	1.2926	M 1.3858	1.0801	TM 1.2335	M 0.6879	1.3888

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:39:09	11650.7080	31258.7200	14437.8230	42499.7970	1590.7914	28.3739	22.6903	2.3441	76.42%
2	17:39:55	12062.6710	31410.0410	14427.0090	43166.4640	1645.6193	23.9375	22.5821	4.4172	76.75%
3	17:40:40	11562.0210	31408.3720	14852.6060	43025.8130	1683.5511	17.9367	30.0966	0.8718	77.48%
4	17:41:24	11551.7500	31659.8350	15056.9340	42216.1830	1613.1247	16.9086	29.0318	-0.1889	77.28%
5	17:42:10	11634.4470	30782.5350	14540.0890	41697.2120	1739.2094	22.2072	36.7298	-2.3771	77.10%
X		11692.3190	31303.9000	14662.8920	42521.0940	1654.4592	21.8728	28.2261	1.0134	77.00%
%RSD		1.8091	1.0385	1.9067	1.4128	3.5591	21.2944	20.8817	253.1093	0.55

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:39:09	1067.5389	243.4772	488.2002	138.2295	325.6362	70.79%	316.0186	-73.6203	273.9433
2	17:39:55	1223.7972	195.9196	447.1788	175.8651	398.0919	70.57%	342.5717	-97.3225	334.7561
3	17:40:40	1118.1270	241.5575	430.7851	154.4080	320.5905	70.82%	258.0791	-54.9292	302.2811
4	17:41:24	1091.1943	207.8272	440.3363	137.1511	422.2319	71.17%	335.4965	5.6920	304.4040
5	17:42:10	1071.1379	197.6615	416.3073	160.6743	339.6544	71.46%	289.7540	-74.8120	327.5434
X		1114.3590	217.2886	444.5615	153.2656	361.2410	70.96%	308.3840	-58.9984	308.5856
%RSD		5.7788	10.8083	6.0746	10.5846	12.7339	0.49	11.2796	66.3746	7.7734

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:39:09	267.2068	76.42%	1806.6487	461.2385	28294.9440	49116.5990	7334.9604	7334.9227	7777.8947
2	17:39:55	280.1514	75.28%	1915.7965	464.4780	27744.8320	50557.3960	7327.0909	7327.0475	8075.2030
3	17:40:40	293.4814	75.81%	1829.2489	511.5628	28367.2110	49637.9970	7009.2222	7009.1928	7894.2537
4	17:41:24	252.7814	75.21%	1935.8217	475.5957	27569.0670	50008.1250	7246.7646	7246.7293	8343.1236
5	17:42:10	293.5488	75.25%	1908.7953	419.5447	27163.5720	48813.7350	6994.7911	6994.7601	7739.2877
X		277.4340	75.59%	1879.2622	466.4839	27827.9250	49626.7700	7182.5658	7182.5305	7965.9525
%RSD		6.3385	0.69	3.0545	7.0693	1.8184	1.4008	2.3457	2.3456	3.1136

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:39:09	7777.8707	81.27%	4988.1638	4988.1649	5077.2041	5077.2041	10160.5120	164.2777	472.2534
2	17:39:55	8075.1743	80.79%	5029.2072	5029.2117	5309.1588	5309.1589	6.7750	157.3094	459.1547
3	17:40:40	7894.2338	79.72%	5090.9334	5090.9381	5553.6886	5553.6887	18139.2260	143.1761	413.8718
4	17:41:24	8343.0992	79.72%	5085.6256	5085.6321	5307.0823	5307.0824	2838.3047	185.4850	504.8567
5	17:42:10	7739.2672	79.35%	5251.5001	5251.5072	4927.8878	4927.8880	978.3342	195.4239	433.0148
X		7965.9290	80.17%	5089.0860	5089.0908	5235.0043	5235.0044	6424.6304	169.1344	456.6303
%RSD		3.1136	1.02	1.9690	1.9691	4.5952	4.5952	119.2792	12.5273	7.7134

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:39:09	235057.4100	192568.6800	916478.0900	80.80%	0.0000
2	17:39:55	235680.0800	192940.5600	917785.9600	78.90%	0.0000
3	17:40:40	236058.4800	193308.5500	918296.0800	77.81%	3.2129
4	17:41:24	235942.1300	192242.4400	915854.4100	77.10%	0.0000
5	17:42:10	230732.6000	187401.2500	894771.6000	76.58%	0.0000
X		234694.1400	191692.3000	912637.2300	78.24%	0.6426
%RSD		0.9579	1.2686	1.0996	2.14	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:43:56	73.30%	236.1878	112836.0700	1204789.5000	154475.5900	174324.5900	TM 7979230.3000	440296.5600	TM 2592089.3000
2	17:44:40	74.03%	223.6848	112088.0400	1185657.3000	152819.3200	177897.7800	TM 7880547.1000	437715.3300	TM 2601433.2000
3	17:45:25	74.28%	222.5185	112848.1000	1196180.9000	153726.0900	177759.4200	TM 7883913.3000	446588.2900	TM 2615162.8000
4	17:46:10	73.66%	193.6268	114391.8900	1201228.5000	154170.2500	176762.6800	TM 7954605.0000	455180.9500	TM 2648246.2000
5	17:46:55	73.01%	214.3085	110526.8800	1167781.5000	150436.5100	174066.0900	TM 7712555.4000	443749.3200	TM 2579007.9000
x		73.66%	218.0653	112538.1900	1191127.5000	153125.5500	176162.1100	TM 7882170.2000	444706.0900	TM 2607187.9000
%RSD		0.70	7.2187	1.2463	1.2517	1.0631	1.0503	TM 1.3221	1.5189	TM 1.0156

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:43:56	69.20%	2539.3823	49095.4490	49822.0360	M 639985.8000	1297271.1000	TM 11269344.0000	M 299056.4100	15232.5110
2	17:44:40	69.65%	2549.1175	47393.9600	49100.8310	M 636153.0700	1275576.1000	TM 11206689.0000	M 302085.8400	14955.7420
3	17:45:25	69.31%	2546.4147	45252.5220	48421.6120	M 638639.0300	1285581.4000	TM 11235152.0000	M 302311.1700	15286.8370
4	17:46:10	67.82%	2594.0969	48973.2270	49339.7710	M 633674.3000	1277891.1000	TM 11207841.0000	M 303110.0400	15568.9010
5	17:46:55	68.22%	2481.1904	46107.4140	47070.7920	M 624830.5500	1245600.7000	TM 10795518.0000	M 291649.3600	14967.6490
x		68.84%	2542.0404	47364.5140	48751.0080	M 634656.5500	1276384.1000	TM 11142909.0000	M 299642.5700	15202.3280
%RSD		1.14	1.5844	3.5994	2.1872	M 0.9454	1.5026	TM 1.7578	M 1.5773	1.6716

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:43:56	10025.1790	28868.7660	13882.9240	34757.7380	1121.5609	0.2987	24.8489	-2.1569	76.25%
2	17:44:40	9823.5816	29190.8590	13531.3070	34818.3100	1090.2160	15.5435	20.4958	3.5414	75.66%
3	17:45:25	9699.4313	29603.8420	13724.5490	34944.9940	1209.7671	27.5916	19.3379	0.1274	75.98%
4	17:46:10	9433.4701	29824.8730	13642.0090	35419.7750	1137.1299	21.7180	22.8767	1.4837	75.42%
5	17:46:55	9479.1947	28197.9600	13335.7410	34131.2760	1044.7190	10.6049	25.1859	-2.9458	75.10%
x		9692.1533	29137.2600	13623.3060	34814.4190	1120.6786	15.1514	22.5490	0.0100	75.68%
%RSD		2.5301	2.2028	1.5095	1.3268	5.4472	69.1674	11.4957	26594.0100	0.60

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:43:56	1010.8994	241.6072	358.9865	140.1156	328.4002	72.21%	190.5192	-42.2066	236.3002
2	17:44:40	1267.6385	202.7857	422.6519	110.4394	313.5776	71.76%	207.6467	-56.6393	188.1478
3	17:45:25	1071.9393	236.7181	355.2185	155.0476	369.3306	71.30%	232.6905	9.9349	199.0292
4	17:46:10	1060.8654	176.7198	411.5077	124.8555	343.2241	71.16%	160.7214	-29.6745	170.2245
5	17:46:55	1175.5216	238.4306	395.1447	101.0044	326.3739	71.20%	194.6793	55.0252	212.1215
x		1117.3728	219.2523	388.7019	126.2925	336.1813	71.52%	197.2514	-12.7121	201.1646
%RSD		9.2310	13.0063	7.8438	17.3062	6.3383	0.63	13.2937	355.9225	12.3924

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:43:56	223.5699	74.98%	1572.2957	479.9797	23789.7430	42393.0340	5612.6531	5612.623	6146.1161
2	17:44:40	243.7338	75.95%	1477.4035	448.0771	24066.2820	42186.4500	5434.4985	5434.4725	6067.4324
3	17:45:25	204.8891	75.91%	1418.5488	510.0245	23514.7830	42656.4450	5692.2570	5692.2271	6349.6408
4	17:46:10	212.7324	75.98%	1410.6144	519.3096	23548.3300	42958.1850	5429.2681	5429.2395	6066.2886
5	17:46:55	163.6658	76.40%	1356.8905	486.9707	23157.9480	41503.8580	5213.0979	5213.0684	5685.2602
x		209.7182	75.85%	1447.1506	488.8723	23615.4170	42339.6040	5476.3549	5476.3261	6062.9476
%RSD		14.1092	0.69	5.6642	5.7136	1.4322	1.2978	3.3974	3.3974	3.9704

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:43:56	6146.0963	79.92%	3928.0650	3928.0674	3961.2271	3961.2271	-2742.8785	153.5097	417.0459
2	17:44:40	6067.4150	80.42%	3896.4339	3896.4350	4088.8385	4088.8385	3431.4286	143.9541	369.4264
3	17:45:25	6349.6207	80.84%	3947.0110	3947.0114	4040.9054	4040.9054	6589.5799	126.1199	329.5611
4	17:46:10	6066.2694	80.93%	4087.3770	4087.3766	3855.1361	3855.1361	6904.9987	158.7937	335.7236
5	17:46:55	5685.2409	81.74%	3768.3239	3768.3241	3793.8938	3793.8938	1469.2777	132.6823	359.9107
x		6062.9285	80.77%	3925.4422	3925.4429	3948.0002	3948.0002	3130.4813	143.0120	362.3335
%RSD		3.9704	0.83	2.9108	2.9108	3.1283	3.1283	127.3348	9.5888	9.5921

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:43:56	104163.1800	85675.4000	406140.1400	78.67%	3.1778
2	17:44:40	103628.2500	86005.6630	404582.9900	79.81%	0.0000
3	17:45:25	104972.1900	86162.1460	408069.6000	80.66%	0.0000
4	17:46:10	105407.7800	86566.8910	409679.1600	81.16%	0.0000
5	17:46:55	101265.9900	84459.1530	395902.1900	81.64%	0.0000
x		103887.4800	85773.8510	404874.8200	80.39%	0.6356
%RSD		1.5598	0.9348	1.3271	1.46	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:48:40	72.55%	303.2063	167815.7000	1569009.8000	198980.2900	229764.7300	TM 10584426.0000	605209.7400	TM 3924756.1000
2	17:49:25	72.56%	296.8321	169586.0400	1599857.8000	204420.3900	231505.0700	TM 10712893.0000	610833.5500	TM 4009045.8000
3	17:50:10	72.16%	290.4418	171656.3900	1620518.2000	202919.1400	239150.1700	TM 10633246.0000	610447.3800	TM 3993786.8000
4	17:50:54	72.72%	262.5710	169684.4800	1598642.6000	202185.6200	236303.4900	TM 10687148.0000	616116.6100	TM 4010578.6000
5	17:51:40	72.59%	280.5978	162070.7400	1537529.2000	193164.0800	224978.2500	TM 10239685.0000	594303.7700	TM 3800542.3000
x		72.52%	286.7298	168162.6700	1585111.5000	200333.9000	232340.3400	TM 10571480.0000	607382.2100	TM 3947741.9000
%RSD		0.29	5.5379	2.1805	2.0388	2.2330	2.3926	TM 1.8162	1.3611	TM 2.2665

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:48:40	66.01%	2942.6077	55994.9040	78339.4110	M 1017708.1000	T 2575338.4000	TM 17866035.0000	M 469552.3800	22897.3090
2	17:49:25	66.28%	2745.7174	58333.2900	77505.3260	M 1015472.4000	2554483.8000	TM 17830562.0000	M 469755.9100	23538.3900
3	17:50:10	66.56%	2742.0639	58186.4030	78073.8860	M 1019265.3000	T 2593579.0000	TM 17927711.0000	M 476487.5300	23427.6180
4	17:50:54	65.49%	2648.5642	56377.8190	77890.6770	M 1029454.4000	T 2577586.1000	TM 17861192.0000	M 474743.5900	23225.6140
5	17:51:40	66.25%	2548.6064	54484.3070	73902.6610	M 971777.1900	T 2445822.7000	TM 16913874.0000	M 449367.8600	22537.0950
x		66.12%	2725.5119	56675.3450	77142.3920	M 1010735.5000	T 2549362.0000	TM 17679875.0000	M 467981.4500	23125.2050
%RSD		0.61	5.3494	2.8429	2.3804	M 2.2189	T 2.3349	TM 2.4302	M 2.3167	1.7699

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:48:40	12759.8520	32927.7740	15433.5660	43181.6080	1879.7944	31.2223	17.4385	5.2136	74.68%
2	17:49:25	13180.1610	32887.8950	15082.9780	42316.5250	1872.5120	16.7595	27.4159	2.6339	75.63%
3	17:50:10	12863.2030	32853.2090	15885.3320	43118.3440	1870.2251	23.6073	10.5031	21.7597	75.51%
4	17:50:54	13498.9590	33049.1490	15441.3050	42485.0910	1856.9116	26.3014	27.4478	-5.2152	75.74%
5	17:51:40	12023.5780	30845.5710	14447.5150	40644.1670	1669.4274	29.2648	25.3212	-3.9642	75.02%
x		12865.1510	32512.7190	15258.1390	42349.1470	1829.7741	25.4311	21.6253	4.0856	75.32%
%RSD		4.2932	2.8755	3.5072	2.4228	4.9196	22.2018	34.4749	264.4860	0.60

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:48:40	1132.7653	180.4165	326.5349	145.4448	345.0757	68.82%	285.0033	13.4272	263.1334
2	17:49:25	1307.6063	202.4399	416.2528	157.8177	285.6319	69.43%	259.8323	5.0922	245.5591
3	17:50:10	1240.0172	165.2846	393.6105	99.1753	283.4113	69.03%	301.1341	-48.2912	259.7280
4	17:50:54	1171.3193	147.0763	408.0043	112.2539	253.2097	69.78%	244.4804	38.1037	263.3696
5	17:51:40	1218.7829	92.7716	295.5697	116.0759	271.2506	69.88%	299.1552	-58.5654	239.4116
x		1214.0982	157.5978	367.9944	126.1535	287.7158	69.39%	277.9211	-10.0467	254.2404
%RSD		5.5072	26.3610	14.6023	19.4060	12.0084	0.66	8.9690	413.8615	4.3436

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:48:40	241.8258	74.01%	1551.5370	415.3582	33556.1700	62573.5750	7813.7462	7813.6960	8516.1525
2	17:49:25	216.8469	74.42%	1546.5546	386.5594	33816.4990	61439.2390	7613.6234	7613.5761	8700.8436
3	17:50:10	254.9615	74.74%	1639.5284	427.8441	34334.6700	61486.5100	7777.6208	7777.5715	8490.0220
4	17:50:54	241.2903	74.79%	1525.2983	563.2509	34293.5770	61694.3860	7773.0961	7773.0469	8987.4415
5	17:51:40	221.6346	75.61%	1361.2953	380.6771	32338.6880	57843.3730	7378.6029	7378.5608	8033.9220
x		235.3118	74.71%	1524.8427	434.7379	33667.9210	61007.4170	7671.3379	7671.2902	8545.6763
%RSD		6.6934	0.79	6.6464	17.1296	2.4118	2.9947	2.3586	2.3586	4.0751

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:48:40	8516.1196	79.89%	5507.9841	5507.9865	5591.5658	5591.5659	3522.0568	198.6375	451.5047
2	17:49:25	8700.8110	80.14%	5726.1492	5726.1493	5689.0544	5689.0544	9133.0007	169.8632	522.2837
3	17:50:10	8489.9896	80.60%	5491.9727	5491.9734	5828.9500	5828.9500	-186.5779	217.1899	543.2351
4	17:50:54	8987.4073	80.65%	5411.2989	5411.2994	5558.5143	5558.5143	7863.0417	193.5277	517.4932
5	17:51:40	8033.8944	80.94%	5533.6624	5533.6628	5302.9962	5302.9962	6097.2752	195.3617	450.8736
x		8545.6444	80.44%	5534.2135	5534.2143	5594.2161	5594.2162	5285.7593	194.9160	497.0781
%RSD		4.0751	0.52	2.1076	2.1076	3.4637	3.4637	70.2542	8.6602	8.6496

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:48:40	149424.5200	123532.3300	587906.3000	78.94%	0.0000
2	17:49:25	150988.2300	124308.0200	587334.9600	80.09%	0.0000
3	17:50:10	151491.9600	123607.5800	589337.2800	80.33%	0.0000
4	17:50:54	151885.5800	123735.5300	588115.7900	80.43%	3.1082
5	17:51:40	142700.4800	118441.3600	559006.9400	80.79%	0.0000
x		149298.1500	122724.9600	582340.2500	80.12%	0.6216
%RSD		2.5485	1.9669	2.2434	0.88	223.6068

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:53:26	73.65%	246.0377	106473.9800	1220547.6000	154022.5800	180853.9000	TM 8167228.4000	490958.7700	TM 2539472.0000
2	17:54:10	72.77%	222.7781	109185.4400	1239366.5000	158708.3600	180991.8300	TM 8223708.1000	489109.1900	TM 2524437.0000
3	17:54:54	72.61%	230.5213	108143.1800	1232287.4000	157574.7500	179870.6000	TM 8213662.6000	490150.3700	TM 2546906.8000
4	17:55:40	74.56%	233.8096	108962.2400	1223579.0000	158405.3400	182324.7200	TM 8210131.4000	494743.8100	TM 2585659.3000
5	17:56:25	72.11%	202.7941	107794.7100	1189396.1000	153458.6200	175957.3600	TM 7908722.5000	485933.9800	TM 2469111.0000
X		73.14%	227.1882	108111.9100	1221035.3000	156433.9300	179999.6800	TM 8144690.6000	490179.2200	TM 2533117.2000
%RSD		1.32	7.0453	0.9984	1.5702	1.5990	1.3459	TM 1.6412	0.6500	TM 1.6706

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:53:26	66.70%	2715.3178	46934.8360	46507.6590	M 688403.3400	1925636.9000	TM 12208124.0000	M 317022.2500	15383.0430
2	17:54:10	67.24%	2805.0467	47340.5070	45565.8520	M 689004.3900	1903374.3000	TM 12000760.0000	M 320125.4300	16068.3140
3	17:54:54	67.16%	2412.0730	46486.2280	46480.3920	M 689028.1800	1927310.8000	TM 12050868.0000	M 318570.8600	15869.4810
4	17:55:40	66.32%	2696.5231	48337.1860	45895.7480	M 701727.3800	1941986.7000	TM 12054953.0000	M 317723.0900	15637.1280
5	17:56:25	67.29%	2610.1897	46152.7500	43701.3230	M 662686.2100	1879372.9000	TM 11594267.0000	M 304744.0500	14661.3650
X		66.94%	2647.8301	47050.3010	45630.1950	M 686169.9000	1915536.3000	TM 11981794.0000	M 315637.1400	15523.8660
%RSD		0.63	5.6221	1.8026	2.5198	M 2.0799	1.2777	TM 1.9209	M 1.9638	3.5171

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:53:26	9738.2060	28590.4090	13311.7070	36083.0070	1312.0192	12.3565	21.9681	4.0438	74.65%
2	17:54:10	9841.3388	28621.2260	13617.7080	36600.8890	1379.4317	-16.9727	37.7643	1.6808	74.86%
3	17:54:54	9513.7429	28433.6060	13001.5760	36926.0870	1339.8055	10.9364	44.6908	-7.3141	74.62%
4	17:55:40	9605.0103	28571.9750	13339.8810	37046.2910	1196.4644	40.9952	16.2539	11.9280	74.86%
5	17:56:25	9480.2661	27457.0980	13285.2920	35439.1660	1146.0544	19.9599	6.0110	4.9112	75.33%
X		9635.7128	28334.8630	13311.2330	36419.0880	1274.7551	13.4551	25.3376	3.0499	74.86%
%RSD		1.5805	1.7502	1.6429	1.8196	7.7728	154.7497	62.2889	227.4887	0.38

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:53:26	1072.7339	195.9282	461.1191	126.3114	350.7452	70.29%	233.9860	-95.4609	235.7460
2	17:54:10	1044.9812	154.0836	359.5707	98.1672	283.3783	70.63%	234.4279	-32.9689	234.4391
3	17:54:54	1183.5771	216.0748	322.1497	132.8413	332.1850	70.67%	292.3710	-135.1188	230.0562
4	17:55:40	1080.4510	150.3146	434.1069	104.7615	292.8070	70.99%	250.0009	-26.4062	258.1415
5	17:56:25	1026.5627	196.9742	394.0276	100.7213	297.9820	71.37%	211.0280	-45.5834	219.6569
X		1081.6612	182.6751	394.1948	112.5605	311.4195	70.79%	244.3628	-67.1077	235.6079
%RSD		5.6329	15.8665	14.1592	14.1070	9.2106	0.58	12.3688	69.5546	5.9814

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:53:26	220.4450	75.27%	1432.1166	473.5949	25856.1990	46914.8990	5586.6235	5586.5839	6232.2918
2	17:54:10	181.4484	75.73%	1400.5628	493.7145	25855.9190	47179.4130	5765.1335	5765.0943	6127.4050
3	17:54:54	189.1755	76.34%	1471.4593	486.9636	25568.8460	46789.0650	5802.4817	5802.4460	6234.4108
4	17:55:40	198.0389	76.50%	1393.2245	420.9975	26273.6310	47227.8320	5680.6459	5680.6091	6445.7360
5	17:56:25	203.5631	76.86%	1337.8551	454.2657	25006.3040	44747.5640	5515.3363	5515.2994	6232.4171
X		198.5342	76.14%	1407.0437	465.9072	25712.1800	46571.7550	5670.0442	5670.0065	6254.4521
%RSD		7.4927	0.84	3.5175	6.2835	1.8195	2.2243	2.1162	2.1162	1.8596

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:53:26	6232.2651	81.88%	4004.8255	4004.8236	4291.2406	4291.2406	3178.0863	115.8820	386.2644
2	17:54:10	6127.3799	82.12%	4032.8710	4032.8688	4178.0767	4178.0766	4307.7782	118.0018	317.6411
3	17:54:54	6234.3878	82.15%	3912.0019	3911.9993	4208.0907	4208.0906	7036.6078	141.2041	399.4983
4	17:55:40	6445.7108	82.64%	4179.3761	4179.3740	4018.8434	4018.8434	-639.6755	157.2328	323.8454
5	17:56:25	6232.3920	83.23%	3810.4300	3810.4282	3865.0759	3865.0759	4131.8077	155.7429	384.6005
X		6254.4271	82.40%	3987.9009	3987.8988	4112.2655	4112.2654	3602.9209	137.6127	362.3699
%RSD		1.8596	0.65	3.4617	3.4617	4.1300	4.1300	76.9512	14.4578	10.6240

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:53:26	97726.9550	79973.5930	379759.1800	82.96%	0.0000
2	17:54:10	97286.0130	80342.1310	378879.0700	83.33%	0.0000
3	17:54:54	97738.6620	80803.2650	381069.1700	83.66%	0.0000
4	17:55:40	99169.1710	81700.3910	386523.5300	83.76%	0.0000
5	17:56:25	95384.5090	77413.0170	369171.2200	84.25%	0.0000
X		97461.0620	80046.4800	379080.4400	83.59%	0.0000
%RSD		1.3963	2.0082	1.6582	0.58	0.0000

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	17:58:11	68.81%	796072.0300	TM 45568772.0000	TM 32393572.0000	TM 4188109.4000	TM 4860554.6000	TM 64931083.0000	TM 23863477.0000	M 956930.5600
2	17:58:56	69.09%	789720.6800	TM 46289587.0000	TM 33062591.0000	TM 4268531.7000	TM 4910404.8000	TM 65654515.0000	TM 24093799.0000	M 966565.6600
3	17:59:41	69.00%	775145.0600	TM 46784870.0000	TM 32754756.0000	TM 4254363.9000	TM 4951683.1000	TM 66084251.0000	TM 24256051.0000	M 964947.1000
4	18:00:26	69.60%	771707.2300	TM 47426168.0000	TM 32984212.0000	TM 4300685.9000	TM 5009166.2000	TM 66778239.0000	TM 24691995.0000	M 970294.1300
5	18:01:11	69.70%	752681.9400	TM 45845834.0000	TM 32717469.0000	TM 4245772.6000	TM 4918265.0000	TM 65811452.0000	TM 24147274.0000	M 954606.7300
X		69.24%	777065.3900	TM 46383046.0000	TM 32782520.0000	TM 4251492.7000	TM 4930014.8000	TM 65851908.0000	TM 24210519.0000	M 962668.8400
%RSD		0.56	2.1805	TM 1.6025	TM 0.8004	TM 0.9676	TM 1.1148	TM 1.0188	TM 1.2595	M 0.6899

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	17:58:11	71.26%	19.6443	T 4664270.6000	T 4919827.2000	TM 3947379.2000	T 6812340.0000	TM 67683879.0000	M 1694007.5000	T 6619353.7000
2	17:58:56	73.86%	1.3806	T 4654705.1000	T 4882403.7000	TM 3937594.9000	T 6713494.4000	TM 66633261.0000	M 1680482.0000	T 6600540.1000
3	17:59:41	76.07%	10.6647	T 4629356.7000	T 4843864.8000	TM 3950274.6000	T 6855455.9000	TM 67587552.0000	M 1712749.0000	T 6621147.3000
4	18:00:26	77.13%	7.0140	T 4593574.6000	T 4851645.9000	TM 3943262.3000	T 6773864.4000	TM 66809301.0000	M 1697897.5000	T 6633428.1000
5	18:01:11	77.14%	-9.2062	T 4545574.3000	T 4813173.1000	TM 3914343.3000	T 6701374.8000	TM 66757226.0000	M 1683047.6000	T 6542423.5000
X		75.09%	5.8995	T 4617496.3000	T 4862183.0000	TM 3938570.9000	T 6771305.9000	TM 67094244.0000	M 1693636.7000	T 6603378.5000
%RSD		3.36	182.0658	T 1.0531	T 0.8342	TM 0.3645	T 0.9629	TM 0.7446	M 0.7634	T 0.5459

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	17:58:11	1396264.6000	T 3308218.4000	1507448.6000	932803.8100	696788.2300	21551.9940	8986.9347	34.8447	71.93%
2	17:58:56	1386462.2000	T 3285650.6000	1528792.1000	936305.5300	698066.9500	21792.3980	9242.1073	22.0084	73.73%
3	17:59:41	1380804.1000	T 3315173.3000	1523833.1000	944767.0100	701723.8400	21812.3840	9209.9155	42.1518	75.09%
4	18:00:26	1403672.8000	T 3265490.5000	1500627.9000	933715.9900	699464.7100	21557.4020	9168.7040	29.1477	76.25%
5	18:01:11	1357526.8000	T 3238366.0000	1489834.7000	923458.9500	683285.9400	21637.4650	8946.9226	38.5105	76.89%
X		1384946.1000	T 3282579.8000	1510107.3000	934210.2600	695865.9300	21670.3290	9110.9168	33.3326	74.78%
%RSD		1.2765	T 0.9605	1.0706	0.8181	1.0443	0.5787	1.4789	23.8419	2.67

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	17:58:11	70.4952	82.8529	157.1066	46.2480	164.1883	73.03%	561477.1000	-1666.2897	549809.9000
2	17:58:56	71.7747	104.2266	136.1687	68.5156	126.3115	75.01%	572152.7500	437.6832	560770.1600
3	17:59:41	60.6447	56.3237	121.1846	41.1678	144.8785	75.46%	582143.9400	-645.8829	570358.2500
4	18:00:26	46.6387	65.5083	182.2932	53.8915	159.9494	75.90%	589031.5200	-1104.6019	575228.3000
5	18:01:11	78.1374	80.5809	130.6409	49.6397	101.9207	77.91%	563201.6200	-1000.6440	551968.2600
X		65.5381	77.8985	145.4788	51.8925	139.4497	75.46%	573601.3900	-795.9471	561626.9700
%RSD		18.7395	23.5301	16.7937	20.0330	18.4323	2.32	2.0780	98.1057	1.9805

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	17:58:11	1118001.6000	77.13%	36.9919	T 3593461.2000	694714.4500	1259821.3000	168.7481	168.7474	29.5417
2	17:58:56	1122818.1000	78.98%	54.8174	T 3575020.9000	703025.2100	1277377.8000	159.4073	159.4068	28.9753
3	17:59:41	1136200.0000	79.98%	35.3027	T 3631920.0000	714090.0400	1300100.5000	170.2438	170.2433	19.6688
4	18:00:26	1132911.5000	81.47%	52.8414	T 3591638.4000	709119.1800	1281719.2000	221.8850	221.8845	22.3824
5	18:01:11	1099461.1000	82.51%	36.8992	T 3504663.3000	692147.5100	1252361.0000	224.4278	224.4272	51.4071
X		1121878.4000	80.01%	43.3705	T 3579340.7000	702619.2800	1274276.0000	188.9424	188.9418	30.3950
%RSD		1.2958	2.63	22.1271	T 1.3037	1.3240	1.4792	16.6827	16.6827	41.0759

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	17:58:11	29.5416	80.77%	6.1902	6.1902	-5.8805	-5.8805	7649.3470	T 5492103.4000	T 13492458.0000
2	17:58:56	28.9753	82.24%	-9.9038	-9.9038	-5.9375	-5.9375	4356.3383	T 5578857.3000	T 13618588.0000
3	17:59:41	19.6687	82.84%	1.9328	1.9329	-5.9591	-5.9591	11067.3470	T 5629540.5000	T 13774672.0000
4	18:00:26	22.3823	83.88%	-1.6121	-1.6121	-0.0233	-0.0233	5302.5508	T 5618342.4000	T 13824602.0000
5	18:01:11	51.4070	85.23%	-8.1436	-8.1435	-3.1060	-3.1060	7531.2843	T 5459567.2000	T 13395777.0000
X		30.3950	82.99%	-2.3073	-2.3073	-4.1813	-4.1813	7181.3735	T 5555682.2000	T 13621219.0000
%RSD		41.0759	2.03	292.7015	292.7060	62.7969	62.7969	36.1465	T 1.3708	T 1.3353

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	17:58:11	T 4464045.2000	T 3856062.5000	T 18032225.0000	78.91%	3.1683
2	17:58:56	T 4432197.8000	T 3874366.5000	T 18088600.0000	80.76%	3.0955
3	17:59:41	T 4508978.2000	T 3912960.0000	T 18313834.0000	81.26%	3.0766
4	18:00:26	T 4512292.7000	T 3905132.9000	T 18288590.0000	82.17%	6.0850
5	18:01:11	T 4399771.4000	T 3801269.6000	T 17748104.0000	83.71%	2.9866
X		T 4463457.1000	T 3869958.3000	T 18094271.0000	81.36%	3.6824
%RSD		T 1.0913	T 1.1568	T 1.2653	2.18	36.5157

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:02:57	76.18%	35.1117	8422.8671	297.8875	30.3203	50.2153	267.0907	1935.0104	-0.8283
2	18:03:43	77.37%	34.0005	6010.5083	95.5857	17.4433	-23.9600	13.9948	1356.0838	3.2121
3	18:04:27	77.11%	10.7771	5099.4932	204.2520	-0.8520	0.1323	-154.7887	1392.4987	-12.1031
4	18:05:13	79.61%	31.3505	4272.3867	130.7589	22.5003	-0.7320	-73.7120	651.5668	3.1594
5	18:05:58	80.23%	32.8292	3718.4023	117.1650	33.9969	16.5807	-128.9494	597.2707	21.8353
x		78.10%	28.8138	5504.7315	169.1298	20.6818	8.4473	-15.2729	1186.4861	3.0551
%RSD		2.22	35.3267	33.5524	48.9298	66.1064	324.9754	1116.8687	47.3936	400.0780

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:02:57	86.43%	1.3078	5.3810	16.6195	149.1563	48.4317	-7069.5627	26.3887	63.3448
2	18:03:43	87.98%	-4.7327	-18.4394	-75.6584	10.3043	37.8659	-6220.1646	39.0126	58.4187
3	18:04:27	89.12%	-13.3205	-35.3696	-20.2876	137.8766	50.8214	-5291.7232	18.1905	32.1909
4	18:05:13	90.53%	0.3947	54.8898	-16.8479	39.1821	13.1183	-5696.8170	-78.7800	11.5697
5	18:05:58	91.07%	0.2821	-124.6026	5.9501	-79.9062	56.5919	-4586.9813	37.5739	8.5237
x		89.03%	-3.2137	-23.6282	-18.0449	51.3226	41.3659	-5773.0498	8.4771	34.8096
%RSD		2.12	190.6392	278.8722	197.9409	185.1392	41.5447	16.2611	584.1334	73.3760

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:02:57	9.1413	193.9136	37.4861	-103.5899	15.4925	-2.5654	-1.1785	-6.1837	87.45%
2	18:03:43	8.7635	120.9496	27.4275	-71.4384	4.6931	-6.5529	-0.1654	-6.5516	89.30%
3	18:04:27	8.5811	136.0440	4.4390	-69.5874	20.2754	2.0212	-0.1558	-4.7567	89.51%
4	18:05:13	11.0183	99.4123	22.8648	-68.9049	25.9402	23.9914	4.4687	-4.1893	91.17%
5	18:05:58	10.9042	54.7117	3.3664	-77.6877	38.2893	22.4091	10.8489	-6.9932	91.44%
x		9.0697	121.0062	19.1167	-78.2416	20.9381	7.8607	2.7636	-5.7349	89.77%
%RSD		12.2378	42.1443	77.7672	18.6443	59.4644	182.4129	181.7560	20.9926	1.80

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:02:57	-3.9139	-0.6272	3.5307	-1.9930	1.2253	87.93%	26.8611	-5.6033	24.8379
2	18:03:43	-1.2925	13.2873	-2.2289	-1.9930	-4.4724	89.69%	22.0506	19.8498	25.7771
3	18:04:27	29.3145	-0.6949	-2.2394	3.5704	-4.4724	90.15%	36.9770	-74.4160	20.0673
4	18:05:13	1.2167	-3.4794	0.4503	0.7426	-4.4724	91.56%	42.0019	-75.3220	54.0501
5	18:05:58	-4.2736	-3.4794	11.3759	6.2058	-1.7397	91.51%	39.3561	-78.5511	39.1321
x		4.2102	1.0013	2.1777	1.3065	-2.7863	90.16%	33.4493	-42.8085	32.7729
%RSD		337.4575	700.2136	260.1165	273.8813	91.0015	1.66	25.6225	108.5918	42.2387

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:02:57	10.5785	90.00%	30.0262	1584.2390	0.4191	15.1920	0.0000	0.0000	-1.5084
2	18:03:43	4.7824	91.08%	-6.0027	1205.6449	3.0839	12.4385	0.0000	0.0000	-1.5084
3	18:04:27	12.9062	92.00%	-6.0510	925.5786	0.3823	15.1067	0.0000	0.0000	1.1448
4	18:05:13	16.2221	91.63%	-8.7531	708.8888	5.7877	12.4639	0.0000	0.0000	-1.5084
5	18:05:58	19.4226	91.28%	4.9259	700.6840	5.8260	7.1102	2.6777	2.6777	-1.5084
x		12.7824	91.20%	2.8291	1025.0071	3.0998	12.4623	0.5355	0.5355	-0.9778
%RSD		43.6977	0.83	568.6066	36.5159	87.2043	26.3364	223.6068	223.6068	121.3550

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:02:57	-1.5084	95.55%	-17.2064	-17.2065	-6.3752	-6.3752	-3388.4842	17.8209	96.6864
2	18:03:43	-1.5084	95.17%	-6.5951	-6.5952	-3.7427	-3.7427	4671.4895	19.0300	75.6923
3	18:04:27	1.1448	94.39%	-0.9924	-0.9924	-3.6957	-3.6957	2505.4622	11.5946	48.7252
4	18:05:13	-1.5084	94.21%	-0.8981	-0.8981	-3.6777	-3.6777	2564.3866	33.0079	96.3071
5	18:05:58	-1.5084	93.91%	4.5660	4.5660	-3.6568	-3.6568	-8.9739	-7.0868	47.4138
x		-0.9778	94.65%	-4.2252	-4.2252	-4.2296	-4.2296	1268.7760	14.8733	72.9650
%RSD		121.3548	0.72	195.5020	195.5015	28.3673	28.3673	243.2763	97.8849	33.2576

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:02:57	114.7611	99.5967	409.0618	98.88%	5.0568
2	18:03:43	107.3466	69.0316	364.5428	97.72%	0.0000
3	18:04:27	69.4557	38.4388	231.5500	96.20%	0.0000
4	18:05:13	62.1569	73.0251	121.1807	94.61%	0.0000
5	18:05:58	69.6387	27.2462	206.7515	93.55%	0.0000
x		84.6718	61.4677	266.6174	96.19%	1.0114
%RSD		28.8324	47.0532	44.3175	2.27	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:07:45	71.23%	330.4549	174715.9200	1602197.6000	207473.5500	243078.2200	TM 11296194.0000	620331.1000	TM 3898073.7000
2	18:08:30	71.51%	294.0042	175557.1400	1610791.5000	206683.5700	242858.2200	TM 11202888.0000	623949.7100	TM 3929742.1000
3	18:09:15	70.96%	291.4829	174285.1800	1656144.8000	209425.5700	240064.3800	TM 11278219.0000	629894.1900	TM 3992204.8000
4	18:09:59	70.91%	311.0196	173141.7700	1626172.7000	207426.7400	240353.2900	TM 11302977.0000	632623.3700	TM 3998310.4000
5	18:10:44	70.73%	327.1404	163736.8400	1559426.9000	195796.2400	227952.3100	TM 10578851.0000	616315.1800	TM 3865567.8000
X		71.07%	310.8204	172287.3700	1610946.7000	205361.1400	238861.2800	TM 11131826.0000	624622.7100	TM 3936779.8000
%RSD		0.43	5.8193	2.8200	2.1959	2.6502	2.6181	TM 2.7999	1.0730	TM 1.4744

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:07:45	70.53%	2704.0235	65315.2160	83015.6290	M 889352.0200	1518776.6000	TM 15842023.0000	M 419622.2900	19253.8870
2	18:08:30	69.97%	2697.4779	64826.8450	82759.3580	M 882660.0700	1515926.6000	TM 15527777.0000	M 418614.6400	18969.2400
3	18:09:15	68.70%	3199.4913	63993.2710	83858.7630	M 896949.9600	1533417.6000	TM 15516169.0000	M 417660.4900	19618.7970
4	18:09:59	68.18%	2880.1549	65713.1510	84174.6970	M 884178.3800	1539670.1000	TM 15577896.0000	M 423434.5900	19648.2030
5	18:10:44	67.19%	2614.8747	61350.7410	79780.8070	M 855215.3400	1450011.2000	TM 15180558.0000	M 404694.7700	18402.8110
X		68.91%	2819.2045	64239.8450	82717.8510	M 881671.1600	1511560.4000	TM 15528885.0000	M 416805.3600	19178.5870
%RSD		1.96	8.2840	2.7051	2.1062	M 1.7930	2.3686	TM 1.5169	M 1.7073	2.6913

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:07:45	12677.9710	34182.0060	16050.7870	45405.7350	1349.4319	33.9982	11.1949	5.5795	79.38%
2	18:08:30	12986.2280	33811.9220	15668.3190	43839.0410	1622.9931	15.0004	12.3538	9.0991	78.60%
3	18:09:15	12235.4880	34608.1680	15667.9240	44548.8540	1536.9815	44.6818	29.9626	-5.7946	77.87%
4	18:09:59	12718.4920	33978.5250	15918.2300	44810.4170	1599.8873	28.5021	14.6603	13.8696	77.85%
5	18:10:44	12415.5510	32625.3960	15804.4850	42736.1080	1378.6813	23.7061	14.7779	15.3435	77.17%
X		12605.7460	33841.2030	15821.9490	44268.0310	1497.5950	29.1777	16.5893	7.6194	78.18%
%RSD		2.2988	2.1926	1.0446	2.3143	8.4352	38.1262	45.9935	110.7851	1.08

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:07:45	1167.0445	238.4395	415.9843	130.3685	388.3498	72.92%	383.1926	-90.9748	351.0198
2	18:08:30	1330.0730	231.6998	485.1304	169.1799	323.2245	71.67%	353.4491	11.4828	330.8641
3	18:09:15	1237.0864	216.6375	448.0208	163.4615	443.9859	71.41%	340.3500	22.6616	349.7561
4	18:09:59	1287.5856	240.1483	455.0788	126.4247	332.1732	71.32%	340.3699	-86.7948	320.7198
5	18:10:44	1186.1832	211.4689	484.8464	120.3422	316.8232	71.08%	339.4156	-13.8840	365.4116
X		1241.5945	227.6788	457.8121	141.9554	360.9113	71.68%	351.3554	-31.5019	343.5543
%RSD		5.4910	5.6934	6.3024	15.9331	15.0773	1.01	5.3291	171.5807	5.1546

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:07:45	303.8254	76.78%	2159.8999	809.1921	28974.9090	51523.0860	7677.8540	7677.8228	8639.6858
2	18:08:30	274.3725	75.85%	2024.0050	765.5691	29054.2850	52724.1550	7377.0705	7377.0385	8287.3580
3	18:09:15	244.8740	76.04%	1865.4793	669.4675	28939.8740	52316.5810	7639.9605	7639.9245	8518.3626
4	18:09:59	285.9386	76.23%	1923.6182	707.3965	28803.0230	52634.9930	7644.5496	7644.5175	8194.1176
5	18:10:44	257.8878	76.25%	1821.0025	615.4461	28253.7670	49874.7860	7607.6034	7607.5666	7927.4794
X		273.3797	76.23%	1958.8010	713.4143	28805.1710	51814.7200	7589.4088	7589.3740	8313.4007
%RSD		8.4573	0.46	6.9263	10.7345	1.1156	2.2836	1.5980	1.5980	3.3611

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:07:45	8639.6648	80.62%	5446.0394	5446.0437	5595.5424	5595.5425	299.3885	239.4368	612.4086
2	18:08:30	8287.3323	80.67%	5629.4827	5629.4884	5352.7280	5352.7282	2895.8188	256.6787	604.8453
3	18:09:15	8518.3385	80.46%	5506.4907	5506.4943	5710.5233	5710.5234	892.3142	234.2073	600.0113
4	18:09:59	8194.0970	80.17%	5284.9578	5284.9595	5407.4290	5407.4291	6505.9523	176.3770	552.6358
5	18:10:44	7927.4564	80.79%	5395.3940	5395.3948	5158.8519	5158.8520	9358.7617	180.8727	495.1947
X		8313.3778	80.54%	5452.4729	5452.4761	5445.0150	5445.0150	3990.4471	217.5145	573.0192
%RSD		3.3612	0.30	2.3489	2.3489	3.9493	3.9493	96.7056	16.7789	8.6226

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:07:45	251270.0500	206073.7800	979612.8100	78.93%	0.0000
2	18:08:30	256340.1900	208929.6400	994488.9100	78.55%	0.0000
3	18:09:15	254704.2700	210540.8800	995771.3900	79.08%	0.0000
4	18:09:59	255431.5500	208421.2200	991660.1400	79.47%	0.0000
5	18:10:44	242738.7300	199879.5900	944105.4500	80.49%	0.0000
X		252096.9600	206769.0200	981127.7400	79.30%	0.0000
%RSD		2.2102	2.0170	2.2078	0.93	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:12:30	70.65%	313.7149	124611.3500	1563704.3000	197124.4500	227267.8300	TM 11842446.0000	590320.6700	TM 3365217.8000
2	18:13:15	71.28%	302.8933	123636.6400	1537829.9000	196163.6200	225350.8100	TM 11777085.0000	594630.2100	TM 3350878.7000
3	18:14:00	71.49%	339.7828	124306.9800	1566818.2000	196573.4500	225924.0600	TM 11820516.0000	593617.0900	TM 3314246.5000
4	18:14:45	70.77%	315.8223	124291.9800	1525610.7000	198100.0500	227879.2000	TM 11765537.0000	600676.5300	TM 3343101.8000
5	18:15:31	71.90%	304.2541	120007.0600	1478350.2000	189694.1000	218417.6100	TM 11283251.0000	586751.3800	TM 3275661.9000
X		71.22%	315.2935	123370.8000	1534462.7000	195531.1300	224967.9000	TM 11697767.0000	593199.1800	TM 3329821.3000
%RSD		0.72	4.6993	1.5512	2.3362	1.7096	1.6887	TM 1.9989	0.8759	TM 1.0669

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:12:30	66.91%	2413.7616	79447.3780	27789.1720	M 897509.5000	1990902.6000	TM 15675723.0000	M 416582.1700	21979.1590
2	18:13:15	67.58%	2378.8459	78322.5700	27317.8010	M 891240.5000	2006130.5000	TM 15881285.0000	M 418151.6300	21952.2900
3	18:14:00	67.38%	2289.8729	78140.8710	27588.5170	M 883997.3900	1983620.1000	TM 15615815.0000	M 409404.1100	22287.5530
4	18:14:45	67.95%	2391.4402	75925.9610	27212.9780	M 883456.0700	1971002.0000	TM 15187531.0000	M 402240.6500	21547.9660
5	18:15:31	67.31%	2269.9630	75515.9090	27054.2590	M 867559.1400	1925823.1000	TM 15140406.0000	M 402474.2400	20919.9430
X		67.42%	2348.7767	77470.5380	27392.5460	M 884752.5200	1975495.6000	TM 15500152.0000	M 409770.5600	21737.3820
%RSD		0.57	2.7451	2.1686	1.0768	M 1.2671	1.5457	TM 2.0821	M 1.8372	2.4249

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:12:30	12582.7540	26151.7680	12569.9750	27356.4070	1829.8087	-15.5557	21.4018	3.1898	77.35%
2	18:13:15	12682.7080	26197.9680	12785.5460	27093.6070	1745.5560	10.2893	19.0998	4.1340	77.70%
3	18:14:00	12347.9080	26412.7470	12467.0500	28318.6470	1790.0256	19.1016	4.8217	6.2883	77.85%
4	18:14:45	12172.4920	25912.0310	12228.8280	27850.3730	1761.7889	12.6607	23.3708	5.0579	78.16%
5	18:15:31	11816.1780	25023.0780	11701.4430	26919.8660	1768.3723	0.1973	24.5704	-1.3674	77.88%
X		12320.4080	25939.5180	12350.5700	27507.7800	1779.1103	5.3386	18.6529	3.4605	77.79%
%RSD		2.8028	2.0907	3.3558	2.0844	1.8280	253.1417	42.9167	84.7240	0.38

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:12:30	1328.6173	144.6504	367.7647	79.8792	297.6969	70.51%	200.1099	-15.6943	198.7506
2	18:13:15	1094.1000	147.0020	358.4138	99.5946	244.2660	71.17%	203.9915	-24.5999	177.3996
3	18:14:00	1188.3955	123.3780	371.2463	82.5247	274.4834	71.27%	196.4948	62.2176	158.0555
4	18:14:45	1177.6883	152.3882	375.2776	81.8953	306.0476	71.98%	210.4857	-53.5225	186.0025
5	18:15:31	1110.8806	116.5557	327.1255	99.2791	223.0903	71.43%	173.7817	-47.9712	166.1909
X		1179.9363	136.7949	359.9656	88.6348	269.1168	71.27%	196.9727	-15.9141	177.2798
%RSD		7.8502	11.5508	5.3858	11.1805	13.0658	0.74	7.0883	291.7396	9.0501

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:12:30	184.1475	75.70%	1126.8665	449.5350	33148.2040	59473.3520	8390.6122	8390.5718	9628.5458
2	18:13:15	184.1386	75.65%	1070.7549	386.8627	33267.7580	59560.6390	8309.4937	8309.4444	9120.9963
3	18:14:00	152.6921	76.11%	1087.2860	413.9100	33273.7830	59977.8540	8386.7465	8386.6984	9446.7239
4	18:14:45	156.8652	76.07%	1038.8803	407.7165	32785.3340	59756.1800	8683.6849	8683.6368	9341.4831
5	18:15:31	154.9890	76.26%	1157.2265	348.2875	32352.0890	57933.6030	8464.8355	8464.7898	8897.2643
X		156.5665	75.96%	1096.2028	401.2623	32965.4340	59340.3260	8447.0746	8447.0282	9287.0027
%RSD		11.4314	0.35	4.2488	9.2793	1.2025	1.3650	1.6956	1.6956	3.0673

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:12:30	9628.5180	80.19%	6305.2675	6305.2658	6130.2580	6130.2579	10744.5090	254.6386	638.9640
2	18:13:15	9120.9637	81.20%	6145.8704	6145.8687	6256.6359	6256.6359	3007.3671	227.2847	551.8196
3	18:14:00	9446.6913	81.50%	6015.7521	6015.7507	6132.9518	6132.9517	3609.8965	244.7009	658.0317
4	18:14:45	9341.4520	81.28%	6274.6652	6274.6618	6015.8842	6015.8841	3411.0078	226.4735	577.9792
5	18:15:31	8897.2354	81.34%	5910.5563	5910.5542	6023.3498	6023.3497	15889.6200	210.8836	593.1944
X		9286.9721	81.10%	6130.4223	6130.4203	6111.8159	6111.8159	7332.4801	232.7962	603.9978
%RSD		3.0673	0.64	2.7430	2.7430	1.6112	1.6112	78.5837	7.3445	7.2445

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:12:30	55739.6680	44388.5170	213180.3600	80.77%	0.0000
2	18:13:15	55415.9480	44005.3030	210485.1100	81.80%	0.0000
3	18:14:00	54907.4420	44781.3560	212358.8900	82.02%	3.0480
4	18:14:45	54262.8820	43354.9170	210609.9500	82.47%	0.0000
5	18:15:31	53434.6110	43837.9040	207582.8700	82.12%	0.0000
X		54752.1100	44073.5990	210843.4400	81.84%	0.6096
%RSD		1.6876	1.2307	1.0220	0.79	223.6068

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:17:19	71.23%	170.9624	202615.3000	TM 14005172.0000	M 1808067.4000	TM 2072799.5000	T 6107722.2000	404968.1000	TM 5189216.4000
2	18:18:04	71.26%	193.0368	198484.9700	TM 14190173.0000	M 1808955.6000	TM 2090363.8000	T 6093083.6000	404697.0800	TM 5270764.3000
3	18:18:49	71.55%	189.6813	198141.5900	TM 14264004.0000	TM 1815859.0000	TM 2084800.2000	T 6096780.8000	407028.6800	TM 5306733.3000
4	18:19:33	71.89%	186.3066	203551.1800	TM 14238841.0000	TM 1819602.3000	TM 2091585.1000	T 6133268.1000	403507.3600	TM 5278535.2000
5	18:20:17	73.27%	199.2862	192320.9200	TM 13484851.0000	TM 1745405.8000	TM 2003333.3000	T 5936860.7000	389875.1300	TM 5006525.7000
X		71.84%	187.8547	199022.7900	TM 14036608.0000	TM 1799578.0000	TM 2068576.4000	T 6073543.1000	402015.2700	TM 5210355.0000
%RSD		1.17	5.6375	2.2385	TM 2.3129	TM 1.7039	TM 1.7994	T 1.2843	1.7173	TM 2.3424

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:17:19	68.00%	5071.2803	29768.7270	77567.7990	M 835472.8600	T 2776094.3000	TM 14621070.0000	M 403370.9700	17664.4190
2	18:18:04	68.00%	5053.6164	28857.1300	78524.7610	M 828126.5000	T 2760206.2000	TM 14521874.0000	M 402420.5000	17149.3580
3	18:18:49	68.66%	5144.2374	28725.3400	78831.9700	M 827510.0900	T 2726677.6000	TM 14432662.0000	M 404471.0000	17319.3680
4	18:19:33	68.58%	5212.6396	28520.6620	79793.2780	M 835362.2600	T 2787003.9000	TM 14616354.0000	M 405880.5500	17675.3170
5	18:20:17	70.17%	4916.7110	29392.7350	74436.4030	M 798450.5200	T 2692851.7000	TM 14004485.0000	M 387102.5500	16229.1630
X		68.68%	5079.6969	29052.9190	77830.8420	M 824984.4400	T 2748566.8000	TM 14439289.0000	M 400649.1100	17207.5250
%RSD		1.29	2.1823	1.7692	2.6430	M 1.8562	T 1.4037	TM 1.7667	M 1.9173	3.4389

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:17:19	49492.5680	19404.4930	9331.1973	27326.7040	1267.6987	-6.6189	9.3253	4.6189	76.09%
2	18:18:04	48402.4670	18876.4310	9312.5941	27733.4660	1327.0962	18.3713	19.3948	-2.0326	75.98%
3	18:18:49	49132.5430	18933.4940	9058.5589	27729.4810	1242.0156	29.1338	11.4333	-0.1894	77.28%
4	18:19:33	50274.6240	19674.5110	8960.6253	27766.8300	1347.7857	9.4765	42.3227	-1.2318	77.08%
5	18:20:17	47799.9980	18853.3910	9158.8011	26566.4140	1130.8129	16.4673	11.3655	4.0037	77.61%
X		49020.4400	19148.4640	9164.3553	27424.5790	1263.0818	13.3660	18.7683	1.0337	76.81%
%RSD		1.9566	1.9357	1.7471	1.8696	6.7682	98.8190	73.1030	296.9994	0.95

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:17:19	788.5512	288.8002	360.6392	118.2739	344.4856	70.44%	75.4007	22.0397	80.6021
2	18:18:04	697.5829	231.0752	405.0804	138.8701	323.6462	70.53%	113.2114	-64.6033	80.3420
3	18:18:49	732.7101	184.8410	353.6991	117.1981	358.7667	70.76%	88.5069	-93.5900	90.0158
4	18:19:33	786.4165	218.4397	262.1745	147.6992	351.4113	71.00%	95.4737	-41.1122	97.1047
5	18:20:17	727.1695	223.3539	283.4928	149.8323	372.1479	71.67%	79.3580	-68.8657	81.3185
X		746.4860	229.3020	333.0172	134.3747	350.0915	70.88%	90.3901	-49.2263	85.8766
%RSD		5.3241	16.4241	17.6730	11.7133	5.1381	0.69	16.5633	89.3310	8.6835

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:17:19	182.7746	75.82%	802.2355	356.3490	18663.8810	33855.8620	7867.2763	7867.2256	7124.1883
2	18:18:04	192.5197	76.21%	807.8206	338.2235	18109.0270	33329.9800	7557.4671	7557.4182	7056.1174
3	18:18:49	174.6163	76.90%	890.9320	376.8878	18830.4860	33187.9530	7514.2317	7514.1821	7388.1106
4	18:19:33	177.9627	76.13%	903.6295	374.5289	18820.3590	33235.2770	7367.2068	7367.1619	7358.7601
5	18:20:17	175.4545	76.25%	709.9376	331.9666	17890.9260	32383.2860	7531.6044	7531.5622	6661.4730
X		180.6656	76.26%	822.9110	355.5912	18462.9360	33198.4710	7567.5572	7567.5101	7117.7299
%RSD		4.0677	0.52	9.5222	5.7505	2.3542	1.5907	2.4205	2.4205	4.1154

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:17:19	7124.1608	81.83%	4667.5419	4667.5453	4311.1239	4311.1239	6735.0990	72.3543	266.1085
2	18:18:04	7056.0900	82.30%	4573.8187	4573.8224	4320.7088	4320.7089	13675.3510	80.9758	210.0530
3	18:18:49	7388.0813	83.17%	4562.4775	4562.4830	4412.7450	4412.7451	6061.5692	85.4358	160.2711
4	18:19:33	7358.7332	81.87%	4345.6038	4345.6088	4341.8250	4341.8251	10486.7140	48.8475	192.3003
5	18:20:17	6661.4506	81.53%	4625.8437	4625.8514	4334.8811	4334.8812	5415.4536	70.2463	158.9314
X		7117.7032	82.14%	4555.0571	4555.0622	4344.2567	4344.2568	8474.8372	71.5719	197.5329
%RSD		4.1153	0.78	2.7319	2.7319	0.9234	0.9234	41.4264	19.7520	22.3053

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:17:19	58303.6050	47153.2240	223337.8500	80.27%	0.0000
2	18:18:04	57893.2470	47143.0720	223760.9200	80.57%	0.0000
3	18:18:49	58004.9090	46901.3380	224328.6200	80.55%	0.0000
4	18:19:33	58228.8390	47016.2290	223886.8000	79.40%	0.0000
5	18:20:17	55638.7800	45546.0570	215815.4300	78.04%	0.0000
X		57613.8760	46751.9840	222225.9200	79.77%	0.0000
%RSD		1.9378	1.4587	1.6204	1.35	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:22:06	72.81%	192.7017	134157.2400	1324106.5000	168934.8500	194433.1500	TM 7841089.5000	453052.7500	TM 2302086.9000
2	18:22:51	73.23%	215.9386	134275.3600	1306097.8000	168808.0800	195021.3900	TM 7732252.3000	449474.7400	TM 2321936.3000
3	18:23:36	74.29%	211.5923	131607.2700	1317921.0000	168960.8000	196931.9700	TM 7742749.7000	455536.4600	TM 2349973.7000
4	18:24:21	73.68%	179.2309	131707.8800	1274835.2000	167127.0000	190985.8500	TM 7545564.5000	451390.4400	TM 2318583.9000
5	18:25:06	73.59%	194.6205	125872.7300	1228601.0000	158148.4500	182204.4200	TM 7150891.7000	438628.7900	TM 2222831.3000
X		73.52%	198.8168	131524.1000	1290312.3000	166395.8400	191915.3600	TM 7602509.5000	449616.6400	TM 2303082.4000
%RSD		0.75	7.5236	2.5918	3.0515	2.8092	3.0419	TM 3.6060	1.4531	TM 2.0864

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:22:06	69.61%	3069.3252	42751.2250	38081.0420	M 621083.7700	1326627.1000	TM 11050653.0000	M 287469.3700	14714.9590
2	18:22:51	70.16%	3185.4413	42017.1190	39427.0920	M 627024.2300	1341105.5000	TM 11032530.0000	M 292831.9700	14975.8850
3	18:23:36	69.34%	3175.2836	42863.6520	39364.7210	M 625921.8100	1333160.7000	TM 11182927.0000	M 296642.0800	14994.8840
4	18:24:21	70.52%	3078.2869	41857.0120	39163.6910	M 622482.9200	1319836.6000	TM 11041736.0000	M 290413.2000	14274.4670
5	18:25:06	68.64%	2992.6798	38854.8830	36921.2560	M 588779.1500	1257243.8000	TM 10434318.0000	M 273544.3600	13946.5510
X		69.66%	3100.2033	41668.7780	38591.5610	M 617058.3800	1315594.7000	TM 10948433.0000	M 288180.2000	14581.3490
%RSD		1.05	2.5954	3.9204	2.8010	M 2.5920	2.5506	TM 2.6845	M 3.0693	3.1459

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:22:06	9673.5472	33972.5660	15953.7080	51207.1880	1338.0280	46.9160	26.0561	6.8579	75.74%
2	18:22:51	9916.3249	34641.9590	16089.1340	51192.6610	1416.4891	29.0518	28.3433	-3.1195	75.46%
3	18:23:36	10076.3790	33788.3410	16665.7480	50693.1030	1189.6216	22.1644	12.7231	18.2751	75.20%
4	18:24:21	9802.7594	33600.6010	15643.2330	49571.1800	1257.8482	22.6613	31.7866	-7.5291	75.11%
5	18:25:06	9338.7643	31808.3350	15180.9430	47350.6050	1231.4208	13.6635	24.0273	-5.2230	75.15%
X		9761.5549	33562.3600	15906.5530	50002.9470	1286.6816	26.8914	24.5873	1.8523	75.33%
%RSD		2.8577	3.1472	3.4545	3.2499	7.0369	46.3295	29.4107	577.4078	0.35

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:22:06	1411.2339	348.8849	525.7959	165.4498	434.7962	71.34%	124.6852	22.7226	112.6397
2	18:22:51	1309.6585	258.7278	555.9669	197.2942	458.0110	70.86%	125.7901	-86.5938	132.5812
3	18:23:36	1340.9636	243.6341	555.1971	154.6528	511.2694	72.13%	132.4626	51.5003	134.3844
4	18:24:21	1466.9078	251.9553	562.4849	148.9959	432.9782	71.25%	128.4045	11.4653	118.0412
5	18:25:06	1272.3737	261.0860	464.5520	161.8557	474.9415	71.87%	126.0589	135.1478	150.1397
X		1360.2275	272.8576	532.7993	165.6497	462.3993	71.49%	127.4803	26.8484	129.5572
%RSD		5.7687	15.7733	7.6391	11.3506	7.0014	0.71	2.4294	297.1489	11.4154

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:22:06	193.7634	75.45%	1425.2710	672.1048	25669.4550	45917.9330	4799.3231	4799.3032	5163.7594
2	18:22:51	211.7286	74.62%	1474.3439	636.1285	25473.3690	46171.7890	4928.9080	4928.8805	5437.6245
3	18:23:36	152.5663	75.04%	1430.0663	738.9965	24966.6920	45819.6440	4744.7156	4744.6973	5255.5785
4	18:24:21	159.8469	75.18%	1422.5665	739.3439	25125.1230	45721.6980	4568.2067	4568.1829	5201.9153
5	18:25:06	130.9008	74.86%	1354.3554	625.5206	23992.0970	42314.4160	4502.3010	4502.2724	4870.4061
X		169.7612	75.03%	1421.3206	682.4188	25045.3470	45189.0960	4708.6909	4708.6685	5185.8568
%RSD		19.1818	0.42	3.0240	8.0021	2.5988	3.5754	3.6836	3.6837	3.9578

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:22:06	5163.7466	79.28%	3323.1982	3323.2009	3540.4441	3540.4442	5705.2162	127.8438	385.1703
2	18:22:51	5437.6103	78.63%	3415.0706	3415.0738	3558.4183	3558.4184	3845.2070	140.0901	338.2169
3	18:23:36	5255.5664	78.59%	3361.3588	3361.3600	3605.4054	3605.4054	10455.8540	182.0043	361.4221
4	18:24:21	5201.8990	80.03%	3381.3967	3381.3975	3508.2716	3508.2716	6250.8417	124.4847	337.1342
5	18:25:06	4870.3874	80.76%	3056.0328	3056.0331	3146.7695	3146.7695	-4703.9880	103.1092	275.8914
X		5185.8419	79.46%	3307.4114	3307.4130	3471.8618	3471.8618	4310.6261	135.5064	339.5670
%RSD		3.9578	1.17	4.3662	4.3662	5.3313	5.3313	129.6591	21.5560	11.9801

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:22:06	100136.7600	80559.9470	382574.3900	77.60%	6.4436
2	18:22:51	101088.4500	81716.1310	388052.7900	76.70%	3.2593
3	18:23:36	100138.6700	79777.8570	384237.9400	77.84%	3.2118
4	18:24:21	98407.8660	80830.2730	383386.5300	79.50%	0.0000
5	18:25:06	92118.3500	75493.9080	358664.2300	80.56%	0.0000
X		98378.0190	79675.6230	379383.1800	78.44%	2.5830
%RSD		3.6904	3.0600	3.1026	1.99	104.4256

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:26:53	72.25%	291.3756	88239.5660	1573413.6000	201926.1700	227206.3700	TM 10338804.0000	690559.2200	TM 3928283.2000
2	18:27:39	72.73%	304.9446	91441.6040	1605575.2000	204017.9700	235365.8900	TM 10547188.0000	702276.1400	TM 3959715.5000
3	18:28:24	71.93%	294.0923	91981.2050	1682820.4000	212231.9200	242487.2900	TM 10943688.0000	716286.6200	TM 4057755.7000
4	18:29:10	72.91%	322.9056	93502.0090	1654991.4000	209826.4400	247162.2100	TM 11181638.0000	723727.8800	TM 4047117.8000
5	18:29:55	74.10%	325.4857	89877.6490	1577893.4000	202024.1300	237114.5500	TM 10634066.0000	694320.5700	TM 3888206.1000
X		72.79%	307.7608	91008.4070	1618938.8000	206005.3300	237867.2600	TM 10729077.0000	705434.0800	TM 3976215.7000
%RSD		1.14	5.1549	2.2179	2.9810	2.3001	3.1755	TM 3.1098	2.0137	TM 1.8648

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:26:53	66.63%	2250.7622	50117.5920	27651.9650	M 697311.2000	1768157.0000	TM 12457412.0000	M 334405.8300	14495.4500
2	18:27:39	66.92%	2174.1732	52224.6930	28538.2130	M 716365.4200	1811957.4000	TM 12605666.0000	M 345733.9900	14910.3290
3	18:28:24	66.84%	2526.6459	51941.5780	28886.3110	M 737827.0900	1881635.9000	TM 12935132.0000	M 359101.2800	15575.2340
4	18:29:10	67.29%	2235.7834	53569.9460	29773.6310	M 738233.5900	1886532.2000	TM 12848407.0000	M 349275.4900	14800.7520
5	18:29:55	68.45%	2308.4793	52042.5780	29203.4060	M 703271.6000	1804841.8000	TM 12499956.0000	M 343681.6700	15152.9990
X		67.23%	2299.1688	51979.2780	28810.7050	M 718601.7800	1830624.8000	TM 12669315.0000	M 346439.6500	14986.9530
%RSD		1.08	5.9085	2.3683	2.7463	M 2.6480	2.8178	TM 1.6761	M 2.5869	2.7017

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:26:53	11169.5480	22633.7420	10663.0610	25146.8620	1112.5707	19.4789	-3.0349	16.2650	75.22%
2	18:27:39	11377.3160	23056.8920	10927.5120	25104.6120	1208.7751	35.9754	16.1525	3.7722	75.45%
3	18:28:24	11815.0580	23776.5620	11261.9840	26628.7460	1211.1362	17.0476	8.2622	21.8815	75.22%
4	18:29:10	11463.6960	23489.8770	11488.9730	26497.0910	1235.8127	32.4947	18.3168	-8.6898	75.96%
5	18:29:55	10870.6410	22790.5250	10908.4890	25810.6800	1164.7807	32.0274	28.3722	-1.9929	75.73%
X		11339.2520	23149.5200	11050.0040	25837.5980	1180.6151	27.4048	13.6138	6.2472	75.52%
%RSD		3.0920	2.0632	2.9408	2.7882	4.1009	31.1141	86.3052	202.7811	0.43

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:26:53	1335.1522	131.0698	328.1987	92.2942	195.7794	69.09%	140.6263	-20.9322	131.0206
2	18:27:39	1344.3588	85.6508	329.3588	56.9349	218.5990	69.81%	160.0255	-97.3298	174.5058
3	18:28:24	1296.3989	141.2820	300.0904	74.7359	237.5920	69.24%	140.7942	-45.6207	140.1429
4	18:29:10	1293.9196	98.9232	382.9962	80.9061	228.3188	69.91%	145.2055	-120.4984	137.8723
5	18:29:55	1275.9840	154.2984	347.0246	57.0465	240.1365	69.41%	137.4165	-55.5051	159.8475
X		1309.1627	122.2448	337.5337	72.3835	224.0852	69.49%	144.8136	-67.9773	148.6778
%RSD		2.2304	23.6761	9.0263	21.2738	8.0119	0.51	6.1760	59.2493	12.0938

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:26:53	210.3690	74.46%	1051.1800	223.4555	25888.3860	46970.9350	7648.6820	7648.6356	7610.9922
2	18:27:39	183.2769	75.24%	1024.7157	208.3643	25677.9930	47691.4200	7393.7250	7393.6905	8228.2485
3	18:28:24	185.4721	73.86%	902.6268	252.7782	27006.0560	48693.1000	7405.5460	7405.5128	8231.7696
4	18:29:10	145.5539	73.67%	888.1743	189.4743	27354.7490	49801.8370	7842.0602	7842.0266	7982.1381
5	18:29:55	188.0011	73.23%	971.3875	200.6383	26629.1180	47392.0290	7179.7641	7179.7294	7923.3040
X		182.5346	74.09%	967.6169	214.9421	26511.2610	48109.8640	7493.9555	7493.9190	7995.2905
%RSD		12.7935	1.05	7.4510	11.3973	2.7020	2.3678	3.4132	3.4132	3.2085

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:26:53	7610.9644	80.04%	5145.9474	5145.9476	5205.7702	5205.7703	4485.0053	232.8116	462.4825
2	18:27:39	8228.2254	79.57%	5184.6303	5184.6331	5435.9133	5435.9134	1560.3305	201.9995	531.9471
3	18:28:24	8231.7475	77.93%	5349.2832	5349.2871	5382.4752	5382.4753	1748.1513	190.0129	513.4572
4	18:29:10	7982.1176	77.56%	5508.3975	5508.4029	5547.9490	5547.9491	10008.3890	201.2613	473.3723
5	18:29:55	7923.2810	77.60%	5219.6690	5219.6765	5341.3445	5341.3446	4504.9113	185.8517	515.3893
X		7995.2672	78.54%	5281.5855	5281.5894	5382.6904	5382.6905	4461.3575	202.3874	499.3297
%RSD		3.2086	1.50	2.8029	2.8029	2.3344	2.3344	76.4646	9.0894	5.9686

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:26:53	47803.7030	38983.0540	185299.5900	79.96%	0.0000
2	18:27:39	48593.7380	40276.0070	188558.1600	78.44%	0.0000
3	18:28:24	50677.0230	41612.4110	196022.2000	76.43%	3.2708
4	18:29:10	50394.6160	41276.0610	195690.1500	75.58%	0.0000
5	18:29:55	49100.0300	40307.3910	189283.7800	74.74%	3.3451
X		49313.8220	40490.9850	190970.7700	77.03%	1.3232
%RSD		2.4568	2.5390	2.4647	2.78	136.9450

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:31:39	73.34%	293.2396	265856.6300	T 2341679.2000	298952.0500	346382.9400	TM 13067333.0000	962460.2300	TM 4388180.8000
2	18:32:25	74.10%	353.4872	271635.1300	T 2372510.5000	300856.4000	347477.6500	TM 13043204.0000	994558.5000	TM 4451646.5000
3	18:33:09	72.78%	335.0052	281598.8300	T 2445700.7000	310352.0200	357381.5300	TM 13180335.0000	1018288.5000	TM 4601385.2000
4	18:33:55	71.89%	337.4541	282160.9200	T 2428194.8000	312085.8900	359185.5200	TM 13229541.0000	1026183.0000	TM 4645333.7000
5	18:34:40	73.57%	318.8183	252866.7000	T 2131101.8000	273612.6700	313835.2100	TM 11329720.0000	932841.2200	TM 4137884.5000
x		73.14%	327.6009	270823.6400	T 2343837.4000	299171.8000	344852.5700	TM 12770027.0000	986866.2900	TM 4444886.2000
%RSD		1.15	6.9605	4.4936	T 5.3788	5.1456	5.2950	TM 6.3340	3.9593	TM 4.5301

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:31:39	69.10%	4183.7040	74724.3220	52868.0800	M 1011332.6000	T 4077103.6000	TM 17883194.0000	M 480973.8300	30259.3260
2	18:32:25	69.55%	4193.0653	78021.4060	53489.5290	M 1027732.9000	T 4161929.5000	TM 17972138.0000	M 482246.7000	30766.0730
3	18:33:09	69.18%	4533.4979	80391.5230	54598.9150	M 1032860.0000	T 4220058.2000	TM 18318843.0000	M 490798.2700	30561.3740
4	18:33:55	68.72%	4227.4520	78982.9610	53880.3990	M 1038485.4000	T 4247762.5000	TM 18282491.0000	M 486857.9100	30971.4220
5	18:34:40	69.53%	3751.7613	68728.3290	47020.1500	M 879725.5800	T 3705100.0000	TM 15628667.0000	M 421061.6900	27102.6900
x		69.22%	4177.8961	76169.7080	52371.4150	M 998027.2900	T 4082390.7000	TM 17617067.0000	M 472387.6800	29932.1770
%RSD		0.49	6.6716	6.1097	5.8364	M 6.7037	T 5.4085	TM 6.4006	M 6.1295	5.3570

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:31:39	16625.2800	69394.1260	32233.3640	97407.8200	2194.7580	76.2491	36.0971	-1.7234	78.96%
2	18:32:25	16917.3120	69141.7950	32087.0120	97659.8910	2239.2287	77.5661	65.0324	-2.8694	79.17%
3	18:33:09	17250.7200	72063.4630	33208.6580	99203.8640	2197.0290	74.0571	34.8373	8.8574	79.44%
4	18:33:55	16977.6070	69737.2850	33066.7230	98954.7020	2221.2565	88.4142	51.1977	4.7249	79.06%
5	18:34:40	15137.8410	62462.1550	29451.6560	88044.2090	2002.2619	52.7160	52.4631	4.8474	78.50%
x		16581.7520	68559.7650	32009.4850	96254.0970	2170.9068	73.8005	47.9255	2.7674	79.03%
%RSD		5.0489	5.2528	4.7261	4.8369	4.4240	17.6457	26.2931	178.1148	0.44

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:31:39	2204.7386	419.7140	826.5455	357.7008	795.9198	67.98%	307.6797	-63.7825	346.2375
2	18:32:25	2347.2298	457.8825	797.9826	341.7561	808.0898	68.55%	343.6259	-44.1669	273.8660
3	18:33:09	2307.4414	439.1127	811.3184	319.6373	790.4005	68.92%	319.6311	-107.3997	297.9230
4	18:33:55	2239.0177	411.0181	924.4171	362.5524	881.3389	68.56%	317.9825	-43.8672	257.2318
5	18:34:40	2003.0350	445.2312	672.6257	259.2003	651.0361	68.95%	259.3732	-27.8960	268.3842
x		2220.2925	434.5917	806.5779	328.1694	785.3570	68.59%	309.6585	-57.4225	288.7285
%RSD		6.0217	4.3858	11.1452	12.8095	10.6358	0.57	10.0254	53.4597	12.2680

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:31:39	568.4855	72.36%	3917.6385	821.3928	55327.9820	97785.6840	8467.9121	8467.8553	9345.0428
2	18:32:25	593.4593	72.28%	3688.6911	814.2651	56699.4140	102774.0100	8443.2909	8443.2259	9615.5883
3	18:33:09	614.5144	73.15%	3909.9330	848.4383	57751.5870	103094.0300	8551.9641	8551.8981	9713.4781
4	18:33:55	617.5743	72.64%	3804.9059	819.3767	58211.7260	102509.0200	8501.8917	8501.8189	9489.5294
5	18:34:40	450.1317	72.89%	3401.7689	660.2082	51739.4540	91509.0760	7976.5692	7976.4953	8829.5335
x		568.8330	72.66%	3744.5875	792.7362	55946.0330	99534.3640	8388.3256	8388.2587	9398.6344
%RSD		12.1667	0.50	5.6897	9.4946	4.6472	5.0103	2.7867	2.7868	3.6904

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:31:39	9345.0051	78.37%	6028.9131	6028.9300	6495.5470	6495.5474	14250.2080	384.1593	1023.3785
2	18:32:25	9615.5437	79.18%	6319.4800	6319.4960	6188.1425	6188.1428	17154.0510	406.4456	1007.9633
3	18:33:09	9713.4329	80.15%	6447.6250	6447.6387	6489.7501	6489.7504	8157.9886	417.2418	1067.4235
4	18:33:55	9489.4803	80.38%	6127.3449	6127.3581	6353.1867	6353.1870	10091.1410	396.5674	1017.3156
5	18:34:40	8829.4841	81.29%	5492.7260	5492.7357	5678.0844	5678.0846	11525.2220	407.6293	971.6457
x		9398.5892	79.87%	6083.2178	6083.2317	6240.9421	6240.9425	12235.7220	402.4087	1017.5453
%RSD		3.6904	1.41	6.0522	6.0522	5.4274	5.4274	28.8894	3.1205	3.3761

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:31:39	113341.9700	92162.1800	439541.5300	72.86%	0.0000
2	18:32:25	115860.6100	94909.7680	451316.7500	74.13%	0.0000
3	18:33:09	115854.1700	95832.9220	453065.4600	75.81%	3.2979
4	18:33:55	118999.0100	97625.4380	462696.9900	75.96%	0.0000
5	18:34:40	103489.4200	84646.1320	403579.1700	77.59%	0.0000
x		113509.0400	93035.2880	442039.9800	75.27%	0.6596
%RSD		5.2415	5.4689	5.2078	2.42	223.6068

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:36:25	73.45%	177.1281	66640.1920	1141332.8000	146179.4800	171719.1400	TM 7043670.6000	583847.8000	TM 2610940.0000
2	18:37:10	73.14%	209.7490	70069.4740	1203711.6000	157842.2400	177308.0000	TM 7481901.0000	617985.3900	TM 2762926.6000
3	18:37:56	72.90%	226.9196	71404.1370	1242272.2000	157834.7800	182713.5900	TM 7696393.2000	627879.7600	TM 2808871.6000
4	18:38:40	73.20%	219.3988	70527.3030	1219788.8000	155479.2100	182321.8700	TM 7570512.9000	615740.8700	TM 2719812.6000
5	18:39:25	74.66%	198.3937	64230.3990	1073313.0000	139282.4400	159861.0600	TM 6603954.1000	572570.1100	TM 2437275.5000
X		73.47%	206.3178	68574.3010	1176083.7000	151323.6300	174784.7300	TM 7279286.3000	603604.7900	TM 2667965.3000
%RSD		0.94	9.4550	4.4152	5.8329	5.4655	5.4138	TM 6.1874	3.9699	TM 5.5604

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:36:25	67.58%	2578.0482	38816.5590	22094.5400	M 550431.1800	1405502.2000	TM 9811524.6000	M 260624.3500	12948.6240
2	18:37:10	66.72%	2461.1799	41650.4420	22949.1390	M 578735.9000	1484790.1000	TM 10208417.0000	M 278061.7300	13616.4050
3	18:37:56	66.15%	2553.6123	42297.3950	24504.4950	M 596234.4300	1534920.5000	TM 10507788.0000	M 283357.9500	14299.6380
4	18:38:40	67.83%	2617.1799	42254.9410	24527.7680	M 585956.8400	1531779.2000	TM 10498917.0000	M 281730.9000	14178.6030
5	18:39:25	68.23%	2266.2761	37104.6050	20655.5080	514405.7300	1357131.6000	TM 9179018.9000	M 241514.8600	12610.5870
X		67.30%	2495.2593	40424.7880	22946.2900	M 565152.8200	1462824.7000	TM 10041133.0000	M 269057.9600	13530.7710
%RSD		1.26	5.6220	5.7972	7.1947	M 5.8521	5.3927	TM 5.5701	M 6.6380	5.4857

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:36:25	8995.0875	22937.1930	11013.7070	27351.5770	1087.9962	4.8575	16.2498	0.5856	74.67%
2	18:37:10	8840.0723	24365.8840	11545.2260	29620.3400	1246.3166	43.5617	33.3754	1.8011	74.55%
3	18:37:56	9667.8834	24507.1160	12009.9960	30244.8160	1255.1837	29.5523	38.1112	-14.0513	74.27%
4	18:38:40	9421.4801	24898.3830	11575.0270	29952.2260	1222.4664	16.5125	2.6325	1.7687	74.45%
5	18:39:25	8623.2157	21927.3580	10559.6500	26727.2190	1122.9401	9.3068	16.2476	7.3978	74.49%
X		9109.5678	23727.1870	11340.7210	28779.2360	1186.9806	20.7582	21.3233	-0.4996	74.49%
%RSD		4.6937	5.2688	4.9522	5.6244	6.4341	76.1440	67.1705	1606.3322	0.20

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:36:25	1008.4807	122.8395	354.6040	101.0858	274.7302	71.39%	166.1991	71.9211	123.1581
2	18:37:10	1185.1543	127.0627	367.4707	74.1855	291.0178	70.53%	137.9885	20.2405	134.0487
3	18:37:56	1165.7167	89.6309	365.4417	67.5266	278.1957	70.26%	146.0960	-8.3722	133.5995
4	18:38:40	1049.4190	182.9345	404.1785	112.9613	240.4684	69.88%	180.2253	-62.4322	167.2819
5	18:39:25	799.8413	123.2214	287.0126	94.5242	247.9915	71.12%	124.0976	-25.6909	127.7296
X		1041.7224	129.1378	355.7415	90.0567	266.4807	70.64%	150.9213	-0.8667	137.1635
%RSD		14.8418	26.0706	12.0110	20.9639	8.0175	0.88	14.8242	5828.1121	12.7046

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:36:25	153.0111	75.03%	734.5173	284.2832	22808.0190	40543.2610	5150.2455	5150.2125	5597.1966
2	18:37:10	141.5031	75.28%	712.2943	276.7974	23608.1980	42454.8620	5441.9555	5441.9212	5736.8891
3	18:37:56	179.1334	74.15%	834.0584	311.1682	24011.7180	44805.7620	5794.2446	5794.2084	6330.7553
4	18:38:40	177.5628	73.89%	827.2940	315.9010	23744.2160	43935.5750	5692.1659	5692.1333	6459.5009
5	18:39:25	126.9020	73.98%	631.2519	329.0441	21608.5230	39435.3410	4810.5652	4810.5390	5663.3416
X		155.6225	74.46%	747.8832	303.4388	23172.1350	42234.9600	5377.8353	5377.8029	5957.5367
%RSD		14.6008	0.86	11.3419	7.2715	4.2481	5.3272	7.4953	7.4953	6.7994

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:36:25	5597.1751	80.97%	3708.5506	3708.5500	3809.4721	3809.4721	-814.5646	136.7529	346.8856
2	18:37:10	5736.8674	81.14%	3768.3297	3768.3287	4034.6118	4034.6118	6096.5679	140.3365	310.7408
3	18:37:56	6330.7315	79.88%	3875.9640	3875.9642	4013.9575	4013.9575	8865.4590	122.2388	322.7934
4	18:38:40	6459.4787	79.11%	3911.6471	3911.6485	4170.4347	4170.4347	8113.6555	146.6393	376.6061
5	18:39:25	5663.3231	78.94%	3534.2412	3534.2435	3643.4615	3643.4616	4381.8026	97.4658	280.9416
X		5957.5152	80.00%	3759.7466	3759.7470	3934.3875	3934.3875	5328.5841	128.6867	327.5935
%RSD		6.7994	1.28	3.9925	3.9924	5.2757	5.2757	72.3739	15.2445	11.0673

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:36:25	47214.7460	39082.6960	185220.4600	81.34%	0.0000
2	18:37:10	50481.2310	41289.9280	197308.7700	81.72%	0.0000
3	18:37:56	51423.7860	41677.3830	199388.5400	79.80%	0.0000
4	18:38:40	51013.8030	41917.0110	198394.6700	78.39%	0.0000
5	18:39:25	46075.5860	37217.5330	177624.0700	77.57%	0.0000
X		49241.8300	40236.9100	191587.3000	79.76%	0.0000
%RSD		4.9298	5.0408	5.0568	2.26	0.0000

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:41:10	72.43%	304.9166	212076.3700	T 2710802.3000	347104.3400	399514.0000	TM 8985023.1000	430874.5800	TM 5224319.0000
2	18:41:55	72.32%	249.8209	224610.1900	T 2852784.0000	358993.1300	417471.5900	TM 9325756.8000	451052.2400	TM 5495509.8000
3	18:42:40	72.58%	252.7484	226313.7700	T 2927383.2000	369874.1400	429196.5900	TM 9670608.1000	462424.5100	TM 5700775.1000
4	18:43:24	73.67%	276.2636	224780.0600	T 2885848.5000	363797.5900	421913.9500	TM 9497363.4000	471371.3300	TM 5702041.9000
5	18:44:09	72.63%	252.9414	217118.0600	T 2739763.8000	337886.7500	396357.8900	TM 8910511.6000	444333.9000	TM 5331822.0000
X		72.73%	267.3382	220979.6900	T 2823316.3000	355531.1900	412890.8000	TM 9277852.6000	452011.3100	TM 5490893.6000
%RSD		0.75	8.8098	2.7735	T 3.3249	3.6358	3.4689	TM 3.5151	3.4802	TM 3.9169

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:41:10	67.42%	2295.2174	71119.9640	33579.2620	M 1237766.6000	T 2682811.7000	TM 21855537.0000	M 584859.7100	23856.7950
2	18:41:55	68.20%	2706.3442	73817.7270	34518.1530	M 1303788.0000	T 2807269.7000	TM 22958858.0000	M 615749.6200	25052.6370
3	18:42:40	68.08%	2531.4161	75435.2670	34858.2070	M 1343806.4000	T 2858200.6000	TM 23602034.0000	M 628123.7400	25259.6120
4	18:43:24	67.20%	2693.0406	76516.3370	36121.2260	M 1336132.3000	T 2820021.9000	TM 23478126.0000	M 632636.3800	25111.0310
5	18:44:09	68.03%	2408.3882	68748.5630	32524.3960	M 1247166.7000	2612653.2000	TM 21681197.0000	M 583982.7100	23795.8960
X		67.79%	2526.8813	73127.5710	34320.2490	M 1293732.0000	T 2756191.4000	TM 22715151.0000	M 609070.4300	24615.1940
%RSD		0.66	7.0667	4.3508	3.9487	M 3.8077	T 3.7652	TM 3.9597	M 3.8317	2.9428

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:41:10	13156.6530	24116.7270	11602.8410	32075.5080	2683.7260	8.6800	20.6806	8.3210	75.21%
2	18:41:55	14189.4290	24612.8450	11565.6590	33502.5230	2849.5073	-4.9830	14.8583	-1.0467	76.44%
3	18:42:40	13953.5860	25346.8900	12260.8830	34771.0940	2726.3868	2.5486	15.9316	2.2054	76.70%
4	18:43:24	14045.5420	24821.8140	12472.2140	35393.7320	2741.7085	11.0481	20.4084	6.7004	76.67%
5	18:44:09	12427.2620	23804.4430	11213.9050	31524.0370	2418.4585	12.1837	3.7358	3.2205	77.01%
X		13554.4940	24540.5440	11823.1000	33453.3790	2683.9574	5.1955	15.1229	3.8801	76.41%
%RSD		5.5116	2.4585	4.4332	4.9851	5.9797	120.9517	45.4789	95.7305	0.92

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:41:10	871.0541	281.6018	457.2398	216.7042	471.6010	67.94%	151.2353	-44.8207	155.8479
2	18:41:55	848.6577	307.2045	472.8592	150.3294	497.4831	69.34%	149.8755	-37.2628	159.8790
3	18:42:40	915.4875	270.6811	485.5824	206.9820	525.6743	68.48%	169.1324	-60.2829	168.0317
4	18:43:24	947.9552	304.3403	449.9505	192.5128	492.5135	68.82%	171.3417	-30.8705	135.0325
5	18:44:09	811.6419	262.8079	452.8244	120.8449	414.3445	70.69%	150.0036	-32.0418	130.6108
X		878.9593	285.3271	463.6912	177.4747	480.3233	69.06%	158.3177	-41.0557	149.8804
%RSD		6.1286	6.9559	3.2560	22.8524	8.6651	1.52	6.8986	29.4116	10.8450

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:41:10	147.1819	72.01%	1382.8619	393.9414	26676.9140	49415.7350	7678.4169	7678.3839	8198.3503
2	18:41:55	163.2100	73.27%	1360.3988	316.2397	27941.5940	49329.6870	7624.0140	7623.9884	9150.7318
3	18:42:40	186.9116	73.24%	1383.2446	468.5780	28885.9280	51768.6060	7775.2380	7775.2045	9300.5622
4	18:43:24	173.5277	74.19%	1469.8214	322.0526	28536.5880	51879.0800	7569.7653	7569.7337	8945.3566
5	18:44:09	162.0315	75.10%	1517.9611	291.5158	26260.8580	48190.1710	7318.8830	7318.8510	8184.1739
X		166.5726	73.56%	1424.0576	358.4655	27660.3760	49916.6560	7593.2634	7593.2319	8755.8350
%RSD		8.8536	1.57	4.6579	20.2008	4.1515	3.5919	2.2538	2.2538	6.0600

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:41:10	8198.3292	75.82%	5427.3279	5427.3385	5988.7273	5988.7276	2312.3838	152.7538	342.8312
2	18:41:55	9150.7120	76.53%	5492.9927	5493.0007	5961.4250	5961.4252	7362.2074	162.9411	404.1869
3	18:42:40	9300.5382	77.12%	5593.7025	5593.7115	6103.5209	6103.5211	7270.7230	153.4033	401.6036
4	18:43:24	8945.3343	77.98%	5626.4330	5626.4398	5823.7059	5823.7061	1733.5737	122.1474	372.9186
5	18:44:09	8184.1524	79.15%	5466.8071	5466.8130	5453.6404	5453.6405	8378.5006	165.2020	407.7741
X		8755.8132	77.32%	5521.4526	5521.4607	5866.2039	5866.2041	5411.4777	151.2895	385.8629
%RSD		6.0600	1.67	1.5394	1.5393	4.2822	4.2822	57.8468	11.3777	7.1948

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:41:10	75932.6280	61864.0610	295917.7500	72.04%	0.0000
2	18:41:55	79502.7940	65167.9240	308990.1000	73.64%	0.0000
3	18:42:40	82595.3360	67926.0410	322137.4300	73.94%	0.0000
4	18:43:24	82671.0750	66860.8760	320174.0200	75.51%	0.0000
5	18:44:09	77194.0710	62683.8190	297578.6100	76.93%	0.0000
X		79579.1810	64900.5440	308959.5800	74.41%	0.0000
%RSD		3.8552	4.0181	3.9609	2.52	0.0000

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Jser Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:45:54	73.48%	201.7003	156036.3400	T 1662354.9000	211946.5300	242678.7300	TM 7962109.9000	393506.3200	TM 3955376.5000
2	18:46:39	73.12%	197.2511	165034.8200	1747723.8000	221878.3600	257234.5900	TM 8413495.9000	425371.4100	TM 4298232.6000
3	18:47:25	73.02%	219.2460	170694.2000	T 1816185.3000	232229.9000	264450.9300	TM 8647585.7000	435229.3400	TM 4415296.5000
4	18:48:09	73.29%	223.6208	175992.7300	T 1881847.4000	235142.8600	269940.8100	TM 8814644.8000	436098.9300	TM 4441252.8000
5	18:48:54	73.88%	217.8874	162582.9600	T 1711956.6000	218006.9100	251302.7100	TM 8163479.0000	413188.8000	TM 4127033.0000
X		73.36%	211.9411	166068.2100	T 1764013.6000	223840.9100	257121.5500	TM 8400263.1000	420678.9600	TM 4247438.3000
%RSD		0.47	5.5115	4.6032	T 4.9026	4.3398	4.1731	TM 4.1285	4.2289	TM 4.8267

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:45:54	67.25%	2642.1292	59168.0460	28716.1460	M 845113.8500	1696461.9000	TM 15030546.0000	M 404794.7800	19208.7290
2	18:46:39	67.09%	2610.5453	62692.3510	30527.6140	M 899445.3700	1813676.5000	TM 15945492.0000	M 425743.7700	20996.4580
3	18:47:25	67.19%	2491.6123	63231.7480	31075.1800	M 921916.3400	1844938.1000	TM 16211103.0000	M 435718.3900	20726.5390
4	18:48:09	67.35%	2785.5482	64977.4150	31923.4540	M 955986.9100	1899633.1000	TM 16486062.0000	M 443151.1700	21467.9070
5	18:48:54	67.56%	2559.9668	61472.9520	29216.6290	M 877492.4600	1784611.7000	TM 15355219.0000	M 409803.4700	19903.1120
X		67.29%	2617.9604	62308.5020	30291.8050	M 899990.9900	1807864.2000	TM 15805685.0000	M 423842.3100	20460.5490
%RSD		0.27	4.1866	3.4686	4.3578	M 4.6925	4.1744	TM 3.8100	M 3.8721	4.4058

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:45:54	10769.5020	37438.8370	17803.8730	31526.9140	1994.9389	-2.0370	17.3802	-7.3555	74.82%
2	18:46:39	11025.7650	38482.0250	17964.3300	33170.2090	2079.6554	5.7855	10.5578	-0.6123	75.01%
3	18:47:25	11926.1990	39707.9720	18779.3750	34654.3810	2342.4837	16.6474	9.3882	12.7984	75.31%
4	18:48:09	12087.3760	40924.7290	19650.1940	35135.3780	2147.8311	5.3990	18.4459	-0.6636	75.15%
5	18:48:54	10970.7620	38132.9640	17786.0640	32800.8070	1925.9764	-11.5021	2.6315	2.7772	74.91%
X		11355.9210	38937.3060	18396.7550	33457.5380	2098.1771	2.8585	11.6807	1.3889	75.04%
%RSD		5.3228	3.5502	4.4068	4.3541	7.6408	364.9582	55.2601	530.0652	0.26

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:45:54	1135.2705	329.2961	463.5734	212.5531	409.0909	70.43%	251.3582	23.2276	199.8164
2	18:46:39	1119.1264	305.7361	454.2048	247.8424	480.2298	69.98%	219.4875	-31.2344	216.2692
3	18:47:25	1117.5540	341.9790	489.9301	201.7893	418.9587	70.33%	225.1041	-4.4862	183.9885
4	18:48:09	1219.0550	333.5999	544.8608	192.7273	540.9006	69.64%	198.8902	32.4266	230.1501
5	18:48:54	918.0194	271.5204	416.3840	143.7800	420.9987	70.02%	179.2623	-72.7726	207.6421
X		1101.8051	316.4263	473.7906	199.7384	454.0357	70.08%	214.8205	-10.5678	207.5733
%RSD		10.0650	9.0004	10.0643	18.8377	12.3483	0.45	12.7073	404.9155	8.3504

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:45:54	156.3268	74.97%	1259.4278	443.0269	24268.7360	42968.4400	6099.2195	6099.1811	6843.1330
2	18:46:39	184.5299	74.81%	1252.5829	411.1303	25726.9300	46907.0050	6436.4991	6436.4606	7494.4846
3	18:47:25	137.4302	75.37%	1451.1373	417.8453	26959.8550	48145.5000	6905.2180	6905.1762	7691.0160
4	18:48:09	179.6203	75.16%	1329.5216	494.9355	27443.4620	48759.4180	6763.9594	6763.9198	7776.1397
5	18:48:54	168.9803	74.75%	1220.7000	441.6138	25381.0830	46187.7400	6187.3625	6187.3288	7122.2742
X		165.3775	75.01%	1302.6739	441.7103	25956.0130	46593.6210	6478.4517	6478.4133	7385.4095
%RSD		11.4953	0.34	7.0629	7.4567	4.8923	4.8592	5.4243	5.4243	5.3362

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:45:54	6843.1071	80.81%	4106.6958	4106.6967	4294.7996	4294.7996	-524.0087	175.1265	292.6966
2	18:46:39	7494.4576	80.34%	4513.2821	4513.2822	4576.0286	4576.0286	12991.4530	138.1283	431.8945
3	18:47:25	7690.9880	81.01%	4445.3320	4445.3328	4524.6391	4524.6391	8499.5354	178.8159	377.6884
4	18:48:09	7776.1123	80.59%	4584.1580	4584.1603	4735.4547	4735.4547	1574.3178	124.2897	410.6165
5	18:48:54	7122.2509	79.77%	4186.5195	4186.5220	4402.2835	4402.2835	10593.3840	125.4597	345.3004
X		7385.3832	80.50%	4367.1975	4367.1988	4506.6411	4506.6411	6626.9363	148.3640	371.6393
%RSD		5.3362	0.59	4.7898	4.7898	3.7339	3.7339	88.1216	17.9992	14.8068

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:45:54	92317.6040	76118.0200	360065.7700	80.33%	0.0000
2	18:46:39	100485.4100	82153.9250	389598.2800	80.26%	0.0000
3	18:47:25	102670.1100	83605.0280	400579.0900	80.63%	0.0000
4	18:48:09	104083.3100	85937.3990	408271.7600	79.51%	0.0000
5	18:48:54	96516.3640	79906.1440	377672.8500	78.49%	0.0000
X		99214.5620	81544.1030	387237.5500	79.84%	0.0000
%RSD		4.8367	4.5904	4.9266	1.08	0.0000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:50:40	73.37%	198.5582	303209.7100	TM 7959138.6000	M 1017738.4000	M 1192186.8000	T 5535866.0000	287460.5800	TM 6143155.3000
2	18:51:26	73.37%	210.9921	309217.9800	TM 8267122.6000	M 1061922.7000	M 1221685.6000	T 5700868.8000	297238.6900	TM 6312335.7000
3	18:52:11	75.04%	203.5326	305449.4400	TM 8107493.4000	M 1055776.4000	M 1222193.9000	T 5613527.0000	298810.1300	TM 6338519.0000
4	18:52:57	72.75%	207.8568	311552.0200	TM 8368455.4000	M 1067810.4000	M 1245610.4000	T 5710275.7000	304721.2400	TM 6358663.5000
5	18:53:41	75.07%	177.9874	294209.1100	TM 7790846.5000	M 1007137.9000	M 1159637.9000	T 5340102.9000	290675.5900	TM 6028272.5000
X		73.92%	199.7854	304727.6500	TM 8098611.3000	M 1042077.2000	M 1208262.9000	T 5580128.1000	295781.2400	TM 6236189.2000
%RSD		1.44	6.5331	2.2026	TM 2.8658	M 2.6528	M 2.7424	T 2.7208	2.3087	TM 2.3120

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:50:40	68.92%	3065.8803	61430.1450	62162.8980	M 1157482.7000	1887290.0000	TM 20287736.0000	M 555411.6100	20900.2300
2	18:51:26	69.17%	2909.8049	62410.7900	65272.8990	M 1223143.2000	2005618.2000	TM 21475012.0000	M 584721.4000	21096.0370
3	18:52:11	70.32%	2945.0901	61689.4840	64996.2650	M 1222944.3000	2002837.6000	TM 21660280.0000	M 588268.7300	21754.9490
4	18:52:57	69.73%	2974.8705	62700.9370	66197.8690	M 1228539.8000	2017786.2000	TM 21591408.0000	M 595813.0600	21923.8190
5	18:53:41	70.14%	2869.5057	58970.0490	62713.5710	M 1163158.7000	1893721.4000	TM 20363942.0000	M 558412.5500	20669.9330
X		69.65%	2953.0303	61440.2810	64268.7000	M 1199053.7000	1961450.7000	TM 21075676.0000	M 576525.4700	21268.9940
%RSD		0.87	2.5182	2.3997	2.7076	M 2.9595	3.3163	TM 3.2655	M 3.1877	2.5642

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:50:40	12395.0780	23313.1520	11771.8490	30363.4590	1923.8045	1.5823	5.9549	13.3769	76.25%
2	18:51:26	13091.8210	24547.9960	11832.0270	30513.5170	1934.9875	29.0487	9.2223	14.0951	77.12%
3	18:52:11	13324.7120	24798.1060	12012.5550	31431.9190	1971.6505	13.6320	3.7160	13.9456	77.25%
4	18:52:57	13042.9590	23754.3990	11837.5200	30693.1730	2015.3900	19.4726	18.9746	-6.9423	77.97%
5	18:53:41	12256.7980	23204.5130	11272.0990	29631.4330	1800.0899	0.3984	4.7866	21.2130	78.05%
X		12822.2730	23923.6530	11745.2100	30526.7000	1929.1845	12.8268	8.5309	11.1377	77.33%
%RSD		3.6498	3.0091	2.3781	2.1201	4.1761	94.5932	72.5893	95.2365	0.95

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:50:40	1714.1588	306.5322	656.6030	239.4678	585.5707	69.88%	153.6490	-95.2064	158.2392
2	18:51:26	1831.1126	362.4714	513.7314	259.2400	570.1757	69.76%	168.0296	-71.9848	163.7917
3	18:52:11	1805.1642	307.1834	675.0176	217.1152	591.8604	70.15%	201.7672	-103.3561	171.2412
4	18:52:57	1831.8170	368.7375	670.5345	236.1621	588.3495	70.44%	188.8857	-20.3682	201.7632
5	18:53:41	1586.6662	310.5223	613.8363	143.6146	547.8134	70.95%	174.9928	-50.0275	158.7554
X		1753.7838	331.0894	625.9446	219.1200	576.7540	70.24%	177.4648	-68.1886	170.7581
%RSD		5.9943	9.5509	10.7392	20.4340	3.1511	0.68	10.4792	49.7199	10.6015

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:50:40	231.6989	74.21%	757.6666	539.7656	19452.3470	35139.6290	6680.4160	6680.3904	7304.8686
2	18:51:26	194.3925	74.03%	766.0743	510.6427	20542.9210	35812.4540	6269.7843	6269.7585	7587.4823
3	18:52:11	233.4280	74.69%	903.0706	533.1345	20368.3770	36708.7220	6367.8103	6367.7874	7666.7952
4	18:52:57	226.2616	74.79%	832.2033	542.8496	20863.7420	36969.3900	6622.2213	6622.2011	7905.9866
5	18:53:41	171.6610	75.80%	787.5647	439.7827	19381.7680	34162.0320	6069.2727	6069.2490	7216.5449
X		211.4884	74.70%	809.3159	513.2350	20121.8310	35758.4450	6401.9009	6401.8773	7536.3355
%RSD		12.9202	0.92	7.3942	8.3685	3.3193	3.2202	3.9468	3.9468	3.7066

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:50:40	7304.8518	77.71%	4664.3031	4664.3148	4724.0326	4724.0329	10062.4480	74.8055	237.4364
2	18:51:26	7587.4636	77.78%	4869.1679	4869.1795	4808.8370	4808.8372	2406.3586	97.9164	242.4718
3	18:52:11	7666.7787	77.98%	4882.2526	4882.2653	5092.5260	5092.5263	8265.2798	94.9065	289.5234
4	18:52:57	7905.9722	77.59%	4746.9800	4746.9882	5035.6797	5035.6799	16151.9620	105.7122	324.2894
5	18:53:41	7216.5280	79.43%	4479.0722	4479.0810	4532.5755	4532.5757	12140.6870	95.5196	174.5588
X		7536.3189	78.10%	4728.3552	4728.3658	4838.7302	4838.7304	9805.3469	93.7720	253.6560
%RSD		3.7066	0.97	3.5088	3.5088	4.7464	4.7464	51.7308	12.2035	22.4056

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:50:40	146612.2000	122960.0200	583983.2200	72.80%	0.0000
2	18:51:26	152315.5500	126110.6400	600137.1300	73.11%	0.0000
3	18:52:11	154767.5800	128961.3900	611543.3400	72.92%	0.0000
4	18:52:57	153642.8700	128226.0600	606575.3400	74.12%	0.0000
5	18:53:41	144153.0900	120001.7900	570335.3700	75.43%	0.0000
X		150298.2600	125251.9800	594514.8800	73.68%	0.0000
%RSD		3.0955	2.9916	2.8676	1.51	0.0000

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	18:55:27	75.85%	290.3043	111664.6800	1295195.5000	165065.4700	195195.7200	TM 9801071.4000	496431.2800	TM 3169539.0000
2	18:56:12	74.99%	311.3458	115591.9100	1352287.0000	173985.6400	197942.2200	TM 10237076.0000	522579.8600	TM 3242394.0000
3	18:56:56	74.66%	367.5858	114386.9100	1378122.1000	174230.0400	200093.3300	TM 10077688.0000	510543.1100	TM 3301854.8000
4	18:57:41	74.51%	333.6328	115922.5700	1358438.7000	175313.3500	205929.4900	TM 10199391.0000	525553.0400	TM 3364554.3000
5	18:58:26	74.57%	320.5574	112834.5000	1345026.1000	169757.0800	195908.9200	TM 9753852.2000	507389.5000	TM 3203261.0000
X		74.92%	324.6852	114080.1200	1345813.9000	171670.3200	199013.9400	TM 10013816.0000	512499.3600	TM 3256320.6000
%RSD		0.74	8.8431	1.5900	2.2926	2.4794	2.1665	TM 2.2397	2.3090	TM 2.3950

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	18:55:27	68.43%	1893.7407	71773.8730	23071.3520	M 794833.8100	1907721.1000	TM 13952182.0000	M 372732.6500	20072.2380
2	18:56:12	68.36%	2091.9365	75103.6270	23094.0440	M 807067.0900	1936158.7000	TM 14282753.0000	M 376436.5300	20582.2600
3	18:56:56	67.49%	2066.4699	77076.8970	24406.6190	M 838677.8900	1988477.1000	TM 14648238.0000	M 388499.6600	20647.2210
4	18:57:41	66.68%	1982.8370	76519.1350	24027.6990	M 827600.9400	1992460.4000	TM 14639446.0000	M 386635.7900	20580.6940
5	18:58:26	66.79%	1990.7450	74414.9340	23310.5200	M 805716.7400	1898311.4000	TM 14139294.0000	M 371467.4100	20173.0470
X		67.55%	2005.1458	74977.6930	23582.0470	M 814779.3000	1944625.7000	TM 14332383.0000	M 379154.4100	20411.0920
%RSD		1.23	3.8959	2.7801	2.5542	M 2.1912	2.2693	TM 2.1458	M 2.0893	1.3085

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	18:55:27	12108.5660	23576.4520	11403.0900	23079.0560	1850.7510	14.8764	14.8259	7.7581	76.56%
2	18:56:12	12478.2930	23441.0660	11175.9280	23078.6440	1830.1191	12.4038	9.2750	2.1807	76.73%
3	18:56:56	12416.7920	24293.0260	11408.2850	24073.6250	2043.2498	10.7094	13.7191	8.8610	76.76%
4	18:57:41	12246.4990	23908.7230	11161.2300	24341.0080	1795.2759	7.0448	21.5633	8.9914	76.57%
5	18:58:26	11759.4880	23665.5700	11149.4500	23318.5570	1852.6678	19.2581	18.2121	1.1916	76.65%
X		12201.9270	23776.9680	11259.5970	23578.1780	1874.4127	12.8585	15.5191	5.7965	76.65%
%RSD		2.3504	1.4093	1.1875	2.5032	5.1837	35.5643	29.9636	65.5368	0.12

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	18:55:27	1070.8708	104.4110	289.8447	83.1812	235.2551	71.16%	183.9013	-13.0223	181.6211
2	18:56:12	989.8460	107.7617	323.7856	79.8130	153.1882	70.99%	158.2340	-74.5818	168.0765
3	18:56:56	1005.9356	145.3185	359.0530	76.7442	271.0613	70.46%	171.2363	-59.1122	180.7307
4	18:57:41	953.7555	161.7892	286.5863	110.4964	211.4126	71.09%	156.3016	1.4959	142.2120
5	18:58:26	1004.2780	111.6978	315.3791	97.4619	188.7521	70.32%	161.1369	-55.8895	162.1210
X		1004.9372	126.1956	314.9298	89.5394	211.9339	70.81%	166.1620	-40.2220	166.9522
%RSD		4.2206	20.4237	9.3363	15.8013	21.1393	0.55	6.8998	81.1652	9.6661

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	18:55:27	153.2606	74.97%	789.0959	262.0172	30209.1540	56664.4230	8153.9106	8153.8711	9010.1362
2	18:56:12	156.3515	75.03%	951.2270	208.9328	31850.1980	56705.7030	8179.0166	8178.9772	9114.0823
3	18:56:56	178.5276	75.07%	920.7003	304.5823	31648.7750	57211.8600	8640.5536	8640.5107	9258.6768
4	18:57:41	160.9444	75.09%	857.4350	261.5473	31790.6430	57760.2490	8530.3613	8530.3187	9469.8590
5	18:58:26	141.2707	74.94%	805.4247	251.8014	31030.0610	54099.6890	8093.7505	8093.7030	9039.5750
X		158.0710	75.02%	864.7766	257.7762	31305.7660	56488.3850	8319.5185	8319.4761	9178.4659
%RSD		8.5760	0.08	8.1574	13.2188	2.2175	2.4918	2.9788	2.9788	2.0608

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	18:55:27	9010.1100	79.45%	5884.1682	5884.1693	5983.9558	5983.9558	4086.2349	192.1615	536.3454
2	18:56:12	9114.0560	79.48%	6126.3390	6126.3380	5998.1059	5998.1059	11965.5470	210.0529	492.0518
3	18:56:56	9258.6492	79.66%	6317.1572	6317.1573	6031.3921	6031.3921	9505.2591	204.3604	498.2399
4	18:57:41	9469.8306	79.71%	6229.9334	6229.9315	6213.1683	6213.1682	2452.2399	233.0431	560.6945
5	18:58:26	9039.5431	80.37%	5978.0226	5978.0238	5653.7299	5653.7300	2484.9290	210.8098	543.6152
X		9178.4378	79.73%	6107.1241	6107.1240	5976.0704	5976.0704	6098.8420	210.0855	526.1893
%RSD		2.0608	0.47	2.9055	2.9055	3.3854	3.3854	71.6731	7.0667	5.6568

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	18:55:27	45844.4280	37357.8170	178188.6300	79.05%	0.0000
2	18:56:12	47232.9200	38404.0260	183312.9100	79.83%	0.0000
3	18:56:56	47177.0720	38880.7410	183579.9800	79.63%	3.1396
4	18:57:41	47223.0060	38810.9290	183331.9600	80.37%	0.0000
5	18:58:26	46107.9620	36866.2890	178336.0400	79.95%	0.0000
X		46717.0780	38063.9600	181349.9000	79.76%	0.6279
%RSD		1.4621	2.3767	1.5556	0.61	223.6068

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	19:00:12	68.66%	801899.3800	TM 45736177.0000	TM 32171791.0000	TM 4174493.4000	TM 4875324.9000	TM 64931375.0000	TM 23640732.0000	M 938979.9300
2	19:00:57	69.78%	801096.6000	TM 46530091.0000	TM 32501828.0000	TM 4276145.2000	TM 4928511.8000	TM 66773217.0000	TM 24835066.0000	M 975857.1400
3	19:01:41	69.41%	797535.5800	TM 48000139.0000	TM 33608729.0000	TM 4363205.5000	TM 5037488.3000	TM 68153336.0000	TM 24719078.0000	M 968841.7700
4	19:02:27	70.09%	779042.9800	TM 47799732.0000	TM 33142963.0000	TM 4249549.5000	TM 4968084.6000	TM 67664439.0000	TM 24496706.0000	M 966183.8300
5	19:03:12	70.00%	751333.6400	TM 45371154.0000	TM 32031921.0000	TM 4153053.1000	TM 4826807.2000	TM 65429670.0000	TM 23838864.0000	M 939613.8500
X		69.59%	786181.6400	TM 46687459.0000	TM 32691447.0000	TM 4243289.4000	TM 4927243.3000	TM 66590407.0000	TM 24306089.0000	M 957895.3000
%RSD		0.84	2.7456	TM 2.5395	TM 2.0441	TM 1.9849	TM 1.6552	TM 2.0875	TM 2.2038	M 1.8106

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	19:00:12	71.92%	-1.5358	T 4530909.2000	T 4805255.2000	TM 3896431.2000	T 6744663.0000	TM 66831847.0000	M 1679454.6000	T 6585625.0000
2	19:00:57	74.04%	-12.1730	T 4691853.4000	T 4959752.8000	TM 3982663.8000	T 6847584.7000	TM 68470461.0000	M 1715803.2000	T 6804708.2000
3	19:01:41	76.07%	20.5381	T 4667169.3000	T 4950720.7000	TM 4032093.9000	T 6874260.5000	TM 68392051.0000	M 1723165.0000	T 6751598.1000
4	19:02:27	77.71%	3.6186	T 4652719.5000	T 4890862.0000	TM 3984484.6000	T 6891684.9000	TM 68682687.0000	M 1720229.4000	T 6702801.7000
5	19:03:12	78.20%	9.8825	T 4487846.3000	T 4748724.3000	TM 3897309.2000	T 6604126.1000	TM 66562673.0000	M 1669853.0000	T 6492224.2000
X		75.59%	4.0661	T 4606099.5000	T 4871063.0000	TM 3958596.5000	T 6792463.8000	TM 67787944.0000	M 1701701.0000	T 6667391.4000
%RSD		3.46	301.3225	T 1.9688	T 1.8899	TM 1.5089	T 1.7625	TM 1.4838	M 1.4727	T 1.9056

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	19:00:12	1381732.7000	T 3321262.8000	1518229.0000	920690.8800	691404.2400	21575.4240	8848.2907	28.6657	70.60%
2	19:00:57	1410180.5000	T 3394761.8000	1539070.2000	950234.3900	700879.2800	22028.4170	9392.6998	25.7679	73.08%
3	19:01:41	1427282.9000	T 3413878.1000	1546410.5000	950810.0500	708368.5700	22067.9890	9041.0044	13.4505	74.85%
4	19:02:27	1419033.1000	T 3381646.2000	1540662.2000	946972.6600	701163.4800	21870.7380	9434.7798	25.1023	75.60%
5	19:03:12	1374818.9000	T 3272394.6000	1508325.6000	921250.7600	680878.0700	21388.0880	8898.4599	32.5240	75.93%
X		1402609.6000	T 3356788.7000	1530539.5000	937991.7500	696538.7300	21786.1310	9123.0469	25.1021	74.01%
%RSD		1.6506	T 1.7437	1.0697	1.6640	1.5258	1.3542	3.0146	28.4486	2.98

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	19:00:12	50.8537	49.2244	159.9008	57.5815	121.5201	71.91%	562505.8500	-411.0583	551208.7400
2	19:00:57	62.5386	74.8901	155.0171	42.2433	185.9574	73.77%	571580.6200	-1235.0677	558158.1100
3	19:01:41	57.6277	83.3041	161.8527	31.3785	189.0639	74.96%	585979.7500	-352.6781	573252.2300
4	19:02:27	79.9112	49.2878	179.5796	17.7766	150.3196	76.08%	585068.3800	239.5445	575176.9700
5	19:03:12	89.2384	58.8170	145.6967	50.3945	168.9416	76.67%	563882.1800	-806.8765	552748.1900
X		68.0339	63.1047	160.4094	39.8749	163.1605	74.68%	573803.3600	-513.2272	562108.8500
%RSD		23.5217	24.4068	7.7323	39.4601	17.1252	2.55	1.9604	107.1722	2.0225

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	19:00:12	1108844.8000	75.51%	47.9827	T 3550850.7000	690657.7800	1261035.2000	280.5163	280.5155	33.7958
2	19:00:57	1123656.3000	78.11%	49.2693	T 3589965.4000	709858.6200	1286006.9000	230.7589	230.7586	36.3430
3	19:01:41	1143277.5000	78.62%	23.4335	T 3670082.8000	714773.9300	1303896.5000	220.6411	220.6406	32.5389
4	19:02:27	1129631.2000	80.35%	53.7931	T 3636443.2000	716321.6300	1295826.0000	230.3832	230.3829	59.7904
5	19:03:12	1097733.0000	80.68%	53.4722	T 3513771.9000	691993.5800	1251447.2000	257.6180	257.6174	31.7020
X		1120628.6000	78.66%	45.5902	T 3592222.8000	704721.1100	1279642.4000	243.9835	243.9830	38.8340
%RSD		1.5877	2.63	27.7364	T 1.7545	1.7692	1.7613	10.0923	10.0922	30.5026

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	19:00:12	33.7957	78.08%	-8.1159	-8.1159	-5.7739	-5.7739	3984.1762	T 5496517.0000	T 13461957.0000
2	19:00:57	36.3429	79.34%	-8.6796	-8.6795	-5.8254	-5.8254	12156.3310	T 5635767.0000	T 13810585.0000
3	19:01:41	32.5388	80.93%	-9.3567	-9.3567	9.6006	9.6006	-23.1913	T 5680543.7000	T 13932132.0000
4	19:02:27	59.7903	81.66%	-15.7851	-15.7850	12.5067	12.5067	4371.9026	T 5715411.2000	T 14068341.0000
5	19:03:12	31.7020	82.97%	-16.2192	-16.2192	-5.9613	-5.9613	-44.0727	T 5514634.4000	T 13443132.0000
X		38.8340	80.59%	-11.6313	-11.6313	0.9093	0.9093	4089.0291	T 5608574.7000	T 13743229.0000
%RSD		30.5026	2.39	34.5366	34.5367	1024.6372	1024.6370	121.7670	T 1.7541	T 2.0422

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	19:00:12	T 4415630.5000	T 3841849.1000	T 17886691.0000	76.41%	0.0000
2	19:00:57	T 4540967.5000	T 3947351.0000	T 18328566.0000	77.71%	0.0000
3	19:01:41	T 4563144.5000	T 3956551.8000	T 18472471.0000	78.83%	3.1714
4	19:02:27	T 4565011.6000	T 3981133.7000	T 18592544.0000	79.47%	6.2914
5	19:03:12	T 4403038.8000	T 3814388.9000	T 17841894.0000	80.74%	6.1928
X		T 4497558.6000	T 3908254.9000	T 18224433.0000	78.63%	3.1311
%RSD		T 1.8057	T 1.9144	T 1.8774	2.11	99.6874

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K	44Ca
1	19:04:58	76.85%	49.1334	7477.6903	367.9033	30.5057	69.2332	10.4998	1362.6921	-13.8031
2	19:05:42	76.61%	33.4891	5682.6554	235.4650	24.1078	25.5277	-261.6233	1535.7132	-20.8198
3	19:06:28	77.24%	31.2954	3894.7715	132.7149	17.5033	0.3625	-273.9684	1185.9438	-22.3086
4	19:07:13	79.53%	38.3790	3496.1295	143.8273	22.6643	29.0418	-335.9769	712.5072	12.3872
5	19:07:59	78.93%	28.0125	3096.6810	130.8995	10.6785	5.1427	-253.8366	1248.1222	81.7170
x		77.83%	36.0619	4729.5855	202.1620	21.0919	25.8616	-222.9811	1208.9957	7.4345
%RSD		1.68	22.7980	38.6196	50.6165	35.2814	105.3784	60.3046	25.4580	589.2449

Run	Time	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe	57Fe	59Co
1	19:04:58	84.75%	-10.0791	265.0508	27.4219	309.9053	71.7239	-3368.7529	5.6338	33.6425
2	19:05:42	85.99%	-1.4895	32.2011	-20.0818	22.1274	55.0168	-2968.6256	31.7088	-32.2597
3	19:06:28	87.78%	-10.3873	-6.5873	-82.2653	157.9435	9.9157	-4232.7099	63.8825	-0.6790
4	19:07:13	89.73%	-7.7867	-31.5430	-38.1562	-38.5808	80.6934	-3746.7112	12.9754	-12.8672
5	19:07:59	91.47%	0.2236	-51.6145	-46.1202	-11.5937	54.0975	-2574.1327	66.3189	22.5655
x		87.94%	-5.9038	41.5014	-31.8403	87.9603	54.2895	-3378.1864	36.1039	14.9843
%RSD		3.09	83.8875	310.4016	125.9871	165.1553	50.1979	19.1861	77.9397	138.5923

Run	Time	60Ni	63Cu	65Cu	66Zn	75As	78Se	82Se	83Kr	89Y
1	19:04:58	12.6016	251.3058	30.8687	-74.5610	-11.6409	21.9913	-10.1902	2.3140	84.44%
2	19:05:42	20.9138	138.1456	32.4118	-82.4763	3.5332	35.8736	-0.2582	-5.9635	86.30%
3	19:06:28	8.8895	108.1668	30.8388	-124.5051	20.9304	25.4404	11.1638	-6.3267	88.04%
4	19:07:13	11.2380	76.2391	-1.4433	-123.2171	7.8774	-17.4516	5.4194	-6.7236	90.03%
5	19:07:59	-0.0029	86.0529	12.0788	-93.2199	10.6837	18.9308	0.7786	-3.8526	89.29%
x		10.7280	131.9820	20.9510	-99.5959	6.2767	16.9569	1.3827	-4.1105	87.62%
%RSD		70.0738	53.6564	71.9013	23.2180	189.3953	119.5202	570.5623	91.4451	2.59

Run	Time	94Mo	95Mo	96Mo	97Mo	98Mo	103Rh	107Ag	108Mo O	109Ag
1	19:04:58	-0.6926	-0.5372	-5.0225	12.6873	-4.4724	85.69%	26.3563	7.7746	28.3899
2	19:05:42	-3.8021	-0.5901	-2.1345	0.8938	1.2986	86.83%	23.0740	-35.5470	19.5180
3	19:06:28	4.5718	-0.6382	-2.1811	3.6903	1.2113	87.93%	11.4308	-13.1961	20.7631
4	19:07:13	1.4052	4.8473	3.3036	-1.9930	-4.4724	90.13%	22.0296	-72.1660	10.5843
5	19:07:59	-4.1288	-0.7014	3.3006	0.7777	1.0616	90.95%	37.1402	-81.0909	18.9045
x		-0.5293	0.4761	-0.5468	3.2112	-1.0747	88.31%	24.0062	-38.8451	19.6320
%RSD		690.6938	513.4112	677.2341	176.4351	288.7339	2.50	38.4581	97.4948	32.2543

Run	Time	111Cd	115In	118Sn	121Sb	135Ba	137Ba	150Sm	150Nd	156Gd
1	19:04:58	10.2835	88.08%	-0.1520	1719.4741	6.1689	12.9330	0.0000	0.0000	-1.5084
2	19:05:42	21.1189	88.74%	-0.2364	1364.6531	0.5486	-0.9912	0.0000	0.0000	-1.5084
3	19:06:28	7.3846	88.93%	-3.0574	1134.1994	11.6794	12.8834	2.7534	2.7534	-1.5084
4	19:07:13	18.6658	90.35%	-11.4763	845.2463	-2.2341	10.0279	2.7475	2.7475	-1.5084
5	19:07:59	10.5179	89.47%	5.2736	744.2490	0.5629	4.5580	0.0000	0.0000	1.2491
x		13.5942	89.11%	-1.9297	1161.5644	3.3451	7.8822	1.1002	1.1002	-0.9569
%RSD		43.7251	0.95	317.6861	34.0975	166.5253	76.3620	136.9308	136.9308	128.8745

Run	Time	156Dy	159Tb	160Dy	160Gd	164Dy	164Er	165Ho	203Tl	205Tl
1	19:04:58	-1.5084	91.53%	-13.3333	-13.3333	-6.2622	-6.2622	4537.1160	20.8710	4.3711
2	19:05:42	-1.5084	92.19%	-18.9588	-18.9588	-6.2771	-6.2771	964.2716	-20.7631	22.1336
3	19:06:28	-1.5084	91.29%	11.3979	11.3978	-3.5156	-3.5156	6741.1583	-13.0352	23.8992
4	19:07:13	-1.5084	91.16%	-15.9318	-15.9318	4.7224	4.7224	380.8959	0.2865	40.6026
5	19:07:59	1.2491	90.75%	-4.7880	-4.7880	-6.2289	-6.2289	5271.7080	-12.8539	-27.8692
x		-0.9569	91.38%	-8.3228	-8.3228	-3.5123	-3.5123	3579.0300	-5.0989	12.6274
%RSD		128.8743	0.58	146.8517	146.8513	135.3504	135.3504	77.5912	321.0516	206.0599

Run	Time	206Pb	207Pb	208Pb	209Bi	220Bkg
1	19:04:58	71.8472	50.9411	195.9058	95.22%	0.0000
2	19:05:42	73.7290	47.4133	235.5756	94.26%	0.0000
3	19:06:28	36.2345	-44.2100	107.4089	92.96%	0.0000
4	19:07:13	44.0387	6.2155	38.3613	91.64%	0.0000
5	19:07:59	45.1998	4.4073	108.4789	91.04%	0.0000
x		54.2098	12.9535	137.1461	93.02%	0.0000
%RSD		31.9484	299.4067	57.1879	1.88	0.0000

ICP-MS Digestion Log for ISM02.4 200.8 - Soil

Sample ID	Matrix	Method	Prep Date	Amount Sample Used(g)	Final Sample Volume	Initials
PBS1	ASTM Type II H_2O	200.8	05/30/2019	NA	500 mL	KFB
LCS1	ASTM Type II H_2O			NA		
MF9L61	Soil			1.0284		
MF9L69				1.0393		
MF9L70				1.0739		
MF9L74				1.0442		
MF9L75				1.0291		
MF9L76				1.0106		
MF9L77				1.0959		
MF9L78				1.0285		
MF9L79				1.0859		
MF9L79S				1.0808		
MF9L79D				1.0857		
MF9M24				1.0643		
MF9L62				1.0276		
MF9L63				1.0966		
MF9L64				1.0365		
MF9L65				1.0509		
MF9L66				4.5055		
MF9L67				1.0256		
MF9L71				1.0101		
MF9L72				1.0626		
MF9L73				1.0761		
MF9M33				1.0502		

Hood ID: ICP-MS 34
Hot Block ID: ICP-MS #2
Thermometer ID: 170728011

Date/time in/Temp.: 05/31/2019; 08:50; 91.9°C
Date/time out/Temp.: 05/31/2019; 09:50; 95.2°C

Balance ID: 102683

PREPARED BY:
Kristie Bitner

START DATE:
05/30/2019
END DATE
05/31/2019
WORKORDER(S):
1914095
1914424
SDG:
MF9L61
CASE:
48266
METHOD/MATRIX:
200.8/Soil
BATCH:
EMS/5459
HBN #:
239773
MA:
NA

QC ID	QC Type	Matrix Source	Spike Source	Pipette ID	Volume Spiked	Initials	Method Reagents	Dispenser or Pipette ID
PBS1	PBS	ASTM Type II H_2O	NA	NA	NA	KFB	1:1 HNO3 / Lot# 1218050,1218090	Dispenser 16E76305
LCS1	LCS	ASTM Type II H_2O	#46587	J51995H	1000 µL		4 mL of #47816	
MF9L61S	MS	MF9L61	#40907	J51995H	1000 µL		1:4 HCl /Lot #4218020	Dispenser 16D68333
MF9L61D	MD	MF9L61	NA	NA	NA		10 mL of #47916	

Started prep on 05/30/2019 at 15:36. Samples in Metals Prep Lab. Rinsed digestion tubes (SCP Science lot # 319679-4539, 100 mL), watch glasses and caps with ASTM Type II water. Weighed and transferred samples into digestion tubes, sample MF9L66 has <30% solids. Covered samples 05/30/2019 16:50 05/31/2019 08:25 Spiked as indicated above, added 4 mL of 1:1 HNO_3 and 10 mL of 1:4 HCl to each sample and covered each sample with a ribbed watch glass. Placed samples into a block digester with a setpoint of 104.0 °C. See times and temperatures above. Heated samples to ~95°C (±5°C), refluxing for ~30 minutes. Removed samples from the block digester and allowed to cool. Brought samples to volume with ASTM Type II water, capped and shook samples to mix. Allowed samples to settle out. A five-fold dilution of the sample digestates will be performed by the ICP-MS analyst immediately prior to analysis in order to reduce the chloride concentration. The chloride concentration adjustment is reflected in this digestion log by documentation of the final sample volume as 500 mL in accordance with SOW requirements. Finished on 05/31/2019 at 10:30. Verified by: JTK 06/04/2019

0553

Initial ICP-MS CLP Prep Information-Soil	Prepared by: Kristine Bitner
SDG/Case: MF9L61 / 48266	Batch/HBN: EMS/5459 · 239773
Start Date/Time: 05/30/2019 15:36-16:30	End Date/Time: 05/31/2019 08:25 10:30
Hood/Temp/Date/Time: 05/31/2019 / 08:50 / 91.9°C to 09:50/99.2°C	
Balance ID: 102683	
Reagents used: 1:1 HNO_3 #47816 1:4 HCl #47916	
Pipettes used: JSL995H	

Sample ID:	Weight g	Volume mL	Spike
PBS1	1	500 mL	
LCS1	1		1mL #46587
MF9L61	1.0284		
MF9L69	1.0393		
MF9L70	1.0739		
MF9L74	1.0442		
MF9L75	1.0291		
MF9L76	1.0106		
MF9L77	1.0959		
MF9L78	1.0285		
MF9L79	1.0859		
MF9L79S	1.0808		1mL #46907
MF9L79D	1.0857		
MF9M24	1.0643		
MF9L62	1.0276		
MF9L63	1.0966		
MF9L64	1.0365		
MF9L65	1.0509		
MF9L66 (30% solids)	4.5055		
MF9L67	1.0256		
MF9L71	1.0101		
MF9L72	1.0626		
MF9L73	1.0761		
MF9M33	1.0502		
		KB 05/31/2019	

Kristine Bitner 05/31/2019

ICP-MS Analysis Log for ISM02.4 200.8-Soil

Run # MS219048

Work order ID	Sample #'s	Analytes	Prep Batch/HBN #	Prep Date/Time	Analysis Batch/HBN #	Account #
1914328	MF9L44-51, 56-58, MF9M29-32	See Soil Below	EMS/5463; 240089	05/30/2019 08:43	EMS/5472; 240614	8201

Analytes: Soil: 9Be, 51V, 52Cr, 59Co, 60Ni, 63Cu, 66Zn, 75As, 82Se, 107Ag, 111Cd, 121Sb, 137Ba, 205Tl, 208Pb

Soil Conversion Factor : (µg/L)(0.1 L/1.0 g or sample wt.)(5x dil.)= 0.5 µg/g sample weight

CALIBRATION AND QC STANDARDS UTILIZED:		ID #	Book/Page
S0	ICB / CCB (1% HNO_3)	47769	Horizon
S01	(S)	1000X of 46587	Horizon
S02	(S10)	5X of 48076	Horizon
S03	(S50)	48076	Horizon
S04	(S200)	48077	Horizon
S05	(S500)	48078	Horizon
S06	(S2500)	48079	Horizon
S07	(S5000)	48080	Horizon
S08	(S50000)	NA	Horizon
S09	(S100000)	NA	Horizon
ICV		48081	Horizon
ICSA		48082	Horizon
ICSAB		48083	Horizon
CCV		48084	Horizon
Internal Standards		47919	Horizon
Rinse		48085	Horizon

SDG/Case: MF9L61 / 48266

MA No.: NA
Prep Method: 200.8
Analysis Method: ISM02.4
Instrument ID: ICPM02
Results File: MS219048
Analyst: John Kershisnik
Analysis Date: 05/31/2019 Start time: 13:48
05/31/2019 End time: 17:22

Scanning Mode: Peak Jumping
Sweeps: 40
Channels per Mass: 1
Acquisition Duration: 40427
Channel Spacing: 0.02
Replicates: 5

Instrument Parameters:

Major		Minor		Global	
Extraction:	-125	**Lens 2:**	-36.9	**Standard Resolution:**	120
Lens 1:	4.7	**Lens 3:**	-108.2	**High Resolution:**	90
Focus:	22.4	**Forward Power:**	1404	**Analogue Detector:**	1853
D1:	-29.8	**Horizontal:**	76	**PC Detector:**	3078
Pole Bias:	1.0	**Vertical:**	515		
Hexapole Bias:	-3.0	**D2:**	-160		
Nebulizer:	0.77	**DA:**	-80.0		
Sample Depth:	130	**Cool:**	13.0		
		Auxiliary:	0.9		

Comments: S01 was prepared by taking 50 µL of #46587 (Horizon) and adding 0.5 mL conc. HNO_3 #46748 (Horizon) and bringing to 50 mL final volume, capping and shaking to mix.

S02 was prepared by taking 8.0 mL of S0, and adding 2.0 mL of S03, #48076 (Horizon), and mixing in an analysis tube.

A Cross Calibration was performed using solution #46681 (Horizon), before the performance report.

A Performance report was done to tune the instrument using "CLP" solution #47140 (Horizon), before calibration.

Performance tune passed criteria.

Pipettes NC25070 (1-10 mL), J51995H (0.1 mL - 1 mL), 3184971 (10 - 100 µL), 501003 (0.5 - 10 µL) were used during analysis.

MF9L60A was post spiked for Sb by spiking 100 µL of 2 µg/mL solution #46587 into 10 mL of 5x diluted sample, capping and shaking to mix, for a target of 20 µg/L.

MF9L60A was post spiked for Se by spiking 100 µL of 5 µg/mL solution #46587 into 10 mL of 5x diluted sample, capping and shaking to mix, for a target of 50 µg/L.

MF9L60A was post spiked for As by spiking 39 µL of 10 µg/mL solution #44269 into 10 mL of 5x diluted sample, capping and shaking to mix, for a target of 39 µg/L.

Dilutions: Serial dilution for soil done by pipetting 2 mL of 5x diluted sample MF9L58 into 8 mL of S0 into a polypropylene tube, capping and shaking to mix.

Soil samples were diluted 5x prior to analysis to reduce the chloride concentration by mixing 2 mL of sample with 8 mL of ASTM Type II water, capping and shaking to mix.

Sample MF9L48 was diluted 2x for chromium by mixing 4 mL of sample with 4 mL of S0 in a polypropylene tube, capping and shaking.

Sample MF9L56 was diluted 2x for chromium and lead by mixing 4 mL of sample with 4 mL of S0 in a polypropylene tube, capping and shaking.

Sample MF9M32 was diluted 5x for chromium and lead by mixing 2 mL of sample with 8 mL of S0 in a polypropylene tube, capping and shaking.

Verified by: Kristie Bitner 06/06/2019

Run MS219048 Summary/Log		9Be	51V	52Cr	59Co	60Ni	63Cu	66Zn	75As	82Se	107Ag	111Cd
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
S0	06/04/2019 15:39:16	0	0	0	0	0	0	0	0	0	0	0
S01	06/04/2019 15:44:03	1.0194	5.1496	1.8803	0.9857	1.0745	2.0163	1.8243	1.0474	4.9435	0.9574	0.9829
S02	06/04/2019 15:48:46	10.664	9.9623	10.072	9.9929	10.817	10.346	10.433	10.822	10.332	9.9021	10.236
S03	06/04/2019 15:53:32	51.198	48.256	48.45	48.607	52.162	50.142	51.204	52.821	50.307	48.423	49.935
S04	06/04/2019 15:58:17	200.89	192.66	193.11	195.19	206.16	200.38	204.13	207.3	195.96	194.82	198.96
S05	06/04/2019 16:03:02	524.03	499.42	498.83	506.94	525.99	511.88	521.11	527.78	501.58	502.23	511.44
S06	06/04/2019 16:07:47	2585.6	2487.5	2496.1	2513	2640.1	2541	2547.8	2532.3	0.1958	0.171	2493.9
S07	06/04/2019 16:12:32	4954.8	5006.6	5002.4	4993	4927.1	4978.3	4973.8	4980.7	0.6397	0.1993	5001.9
ICV	06/04/2019 16:17:19	104.19	99.248	99.543	102.24	107.79	104.37	213.65	213	204.75	99.096	102.48
ICB	06/04/2019 16:22:05	0.1105	0.0013	-0.0481	0.0076	0.0097	0.0918	-0.2318	0.0393	0.0537	0.0482	0.0354
ICSA	06/04/2019 16:26:51	0.3631	-2.2755	19.605	1.3653	6.4071	7.2802	11.101	-0.2404	-2.0174	0.0242	0.3868
ICSAB	06/04/2019 16:31:38	20.089	17.967	39.884	21.047	26.163	25.694	28.955	19.761	16.89	17.588	18.799
CCV1	06/04/2019 16:36:22	2392.6	2540.4	2484.2	2457.5	2473.4	2336.1	2375	2508.8	266.12	238.84	2420.6
CCB1	06/04/2019 16:41:07	0.1323	0.0628	0.0057	0.0398	0.046	0.3485	-0.1962	0.1322	0.2473	0.0245	0.0611
PBS1	06/04/2019 16:45:53	0.0982	-0.1257	0.3905	-0.001	0.0298	0.2098	-0.1767	0.0475	0.0926	0.0157	0.0242
LCS1	06/04/2019 16:50:38	2.2227	10.184	4.2214	1.9876	2.1169	4.1403	4.2601	2.205	10.33	1.9742	2.1224
MF9L79	06/04/2019 16:55:25	1.0954	37.43	39.622	9.4759	26.315	24.035	106.05	7.8226	0.5988	0.1253	0.4821
MF9L79S	06/04/2019 17:00:11	12.592	139.73	77.197	106.71	125.98	69.767	200.25	15.008	15.596	9.5573	10.893
MF9L79D	06/04/2019 17:04:56	1.1789	37.585	39.076	9.6917	26.218	24.133	109.72	8.0746	0.5461	0.1251	0.4716
MF9L79L	06/04/2019 17:09:43	0.244	7.9482	8.3546	2.0526	5.9815	5.5275	25.459	1.7014	0.1957	0.0256	0.1072
MF9L79A-Sb	06/04/2019 17:14:31	3.2497	47.667	43.393	11.381	28.551	27.632	110.25	10.116	10.145	1.9302	2.5049
MF9L61	06/04/2019 17:19:20	0.9134	38.186	23.032	9.3239	24.935	24.924	114.57	8.4678	0.4849	0.2929	0.5223
MF9L69	06/04/2019 17:24:06	1.0212	36.096	35.831	7.7907	23.764	18.977	121.56	5.299	0.5497	0.078	0.5998
MF9L70	06/04/2019 17:28:51	0.8816	26.788	42.44	6.5162	19.64	25.821	109.07	3.8225	0.5405	0.0942	0.4953
MF9L74	06/04/2019 17:33:38	0.8353	36.935	26.065	8.3819	23.149	17.955	81.831	8.1973	0.5939	0.1258	0.4881
MF9L75	06/04/2019 17:38:25	0.8893	33.305	37.814	6.4981	20.715	22.182	106.08	5.8821	0.8108	0.126	0.5849
MF9L76	06/04/2019 17:43:11	0.689	25.97	24.661	5.6035	17.172	20.646	86.851	3.9844	0.6477	0.0806	0.4421
MF9L77	06/04/2019 17:47:56	0.906	31.076	39.024	8.5239	22.793	23.038	105.65	6.5054	0.6212	0.1136	0.4961
MF9L78	06/04/2019 17:52:40	0.7178	25.798	23.083	5.7221	17.072	20.078	90.854	4.5322	0.7278	0.0999	0.4185
CCV2	06/04/2019 17:57:27	2455.2	2531.8	2459.6	2434	2453.7	2326	2330.6	2474	261.7	234.39	2365.1
CCB2	06/04/2019 18:02:13	0.091	-0.013	-0.0091	0.0128	0.0172	0.0857	-0.1952	0.0744	0.0794	0.0137	0.0269
MF9M24	06/04/2019 18:07:00	0.9821	35.223	41.844	7.0692	22.335	23.98	110.43	5.3244	0.4765	0.1436	0.5763
MF9L62	06/04/2019 18:11:45	0.9962	42.478	13.857	8.0123	21.828	18.381	68.623	6.3253	0.5358	0.0805	0.3301
MF9L63	06/04/2019 18:16:33	0.5936	15.93	39.372	6.3427	86.85	13.568	68.415	4.4907	0.5391	0.0369	0.3809
MF9L64	06/04/2019 18:21:20	0.6282	22.847	19.522	5.3747	17.295	23.782	124.74	4.5746	0.7063	0.0521	0.3579
MF9L65	06/04/2019 18:26:08	0.9724	28.501	14.574	5.5242	20.09	16.404	64.456	4.2188	0.391	0.0592	0.3848
MF9L66	06/04/2019 18:30:54	1.0351	41.765	26.493	11.033	29.378	48.581	240.12	7.7183	1.3766	0.1265	1.1992
MF9L67	06/04/2019 18:35:40	0.6519	22.165	11.608	4.9874	16.139	16.813	71.795	4.2201	0.6125	0.0617	0.3281
MF9L71	06/04/2019 18:40:25	0.8447	40.096	17.361	9.0731	24.015	17.389	83.455	9.5423	0.4344	0.0647	0.3512
MF9L72	06/04/2019 18:45:09	0.6696	34.164	15.324	7.5417	20.119	27.591	83.466	7.4597	0.3355	0.0878	0.3486
MF9L73	06/04/2019 18:49:56	0.6312	33.688	32.511	7.8397	22.717	16.952	76.154	6.8589	0.245	0.0725	0.4459
MF9M33	06/04/2019 18:54:42	1.0259	41.111	11.929	7.5235	21.618	16.848	58.82	6.6641	0.4458	0.0679	0.3332
CCV3	06/04/2019 18:59:27	2484	2525.6	2464.1	2457.6	2485	2378.6	2340	2476.4	262.05	234.47	2362.5
CCB3	06/04/2019 19:04:13	0.1139	0.0228	-0.0161	0.0055	0.019	0.0935	-0.2485	0.0223	0.0397	0.0098	0.0287

Run MS219048 Summary/Log		121Sb	137Ba	205Tl	208Pb	6Li	45Sc	89Y	103Rh	115In	159Tb	209Bi
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
S0	06/04/2019 15:39:16	0	0	0	0	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
S01	06/04/2019 15:44:03	1.9048	9.9856	0.9491	0.9058	99.89%	98.81%	100.02%	100.20%	101.31%	102.45%	103.22%
S02	06/04/2019 15:48:46	9.2268	10.495	9.778	9.8821	102.35%	101.50%	101.39%	101.22%	100.27%	99.92%	98.88%
S03	06/04/2019 15:53:32	44.602	50.335	47.682	48.303	100.45%	98.46%	100.00%	100.22%	101.74%	103.12%	104.34%
S04	06/04/2019 15:58:17	186.89	198.36	191.11	192.79	98.00%	95.99%	95.58%	95.33%	95.55%	95.64%	94.42%
S05	06/04/2019 16:03:02	485.53	503.76	503.31	500.43	91.90%	88.19%	88.38%	88.24%	89.34%	90.83%	91.20%
S06	06/04/2019 16:07:47	2505.2	2471.7	2479.6	2480.4	82.79%	80.58%	79.08%	79.97%	79.93%	81.39%	81.26%
S07	06/04/2019 16:12:32	4999.4	5013.8	5010.3	5010.1	78.33%	77.36%	75.37%	76.21%	77.55%	80.83%	81.88%
ICV	06/04/2019 16:17:19	194.37	100.17	203.43	200.9	78.95%	80.24%	77.33%	77.51%	77.41%	79.51%	79.47%
ICB	06/04/2019 16:22:05	0.3514	0.0134	0.0251	0.0104	81.47%	82.59%	80.68%	81.16%	81.14%	83.61%	86.24%
ICSA	06/04/2019 16:26:51	1.2911	1.5748	0.028	4.4562	62.26%	65.81%	65.17%	65.39%	70.86%	74.49%	70.89%
ICSAB	06/04/2019 16:31:38	20.289	22.457	21.51	25.605	61.43%	66.28%	66.81%	66.83%	72.64%	76.87%	72.51%
CCV1	06/04/2019 16:36:22	2501	2513.1	2572.3	2559.5	65.03%	75.01%	74.75%	74.74%	79.86%	83.72%	81.99%
CCB1	06/04/2019 16:41:07	0.7146	0.0325	0.0497	0.0385	74.01%	89.41%	90.33%	91.00%	93.18%	97.90%	102.24%
PBS1	06/04/2019 16:45:53	0.1961	0.0225	0.0057	0.0478	72.45%	83.57%	86.32%	86.91%	89.39%	93.65%	96.27%
LCS1	06/04/2019 16:50:38	4.0085	19.708	1.7898	1.9144	74.37%	82.79%	85.47%	86.09%	88.23%	92.07%	94.41%
MF9L79	06/04/2019 16:55:25	0.306	136.63	0.1321	83.287	69.68%	69.08%	81.05%	73.01%	78.44%	83.98%	84.31%
MF9L79S	06/04/2019 17:00:11	4.9628	548.59	9.8567	83.903	70.19%	68.37%	78.25%	71.16%	75.26%	78.42%	76.61%
MF9L79D	06/04/2019 17:04:56	0.2694	135.77	0.1344	82.224	70.25%	67.48%	78.30%	70.94%	76.11%	81.24%	81.33%
MF9L79L	06/04/2019 17:09:43	0.0654	28.666	0.0043	16.832	77.17%	83.86%	86.91%	85.36%	87.01%	88.41%	88.03%
MF9L79A-Sb	06/04/2019 17:14:31	3.9506	158.22	2.0567	85.198	72.95%	70.32%	80.75%	73.02%	77.61%	81.73%	81.01%
MF9L61	06/04/2019 17:19:20	0.3257	119.65	0.0924	84.21	73.12%	71.10%	79.87%	72.36%	76.18%	79.55%	75.85%
MF9L69	06/04/2019 17:24:06	0.3047	112.26	0.1042	37.983	73.14%	68.96%	78.54%	72.00%	76.92%	81.96%	81.53%
MF9L70	06/04/2019 17:28:51	0.2604	103.72	0.0781	61.515	72.83%	67.22%	75.59%	70.42%	74.72%	79.36%	78.49%
MF9L74	06/04/2019 17:33:38	0.2826	106.99	0.0852	106.72	72.55%	68.58%	78.49%	71.62%	76.08%	81.24%	79.59%
MF9L75	06/04/2019 17:38:25	0.3216	96.221	0.0852	127.43	72.85%	68.29%	77.00%	70.96%	75.59%	80.17%	78.24%
MF9L76	06/04/2019 17:43:11	0.337	82.092	0.0676	56.533	73.66%	68.84%	75.68%	71.52%	75.84%	80.77%	80.39%
MF9L77	06/04/2019 17:47:56	0.2997	118.29	0.0928	81.313	72.52%	66.12%	75.32%	69.39%	74.71%	80.44%	80.12%
MF9L78	06/04/2019 17:52:40	0.3212	90.298	0.0676	52.931	73.14%	66.94%	74.86%	70.79%	76.14%	82.40%	83.59%
CCV2	06/04/2019 17:57:27	2467.7	2470.7	2542.2	2526.5	69.24%	75.09%	74.78%	75.46%	80.01%	82.99%	81.36%
CCB2	06/04/2019 18:02:13	0.7067	0.0242	0.0136	0.0372	78.10%	89.03%	89.77%	90.16%	91.20%	94.64%	96.19%
MF9M24	06/04/2019 18:07:00	0.4919	100.46	0.107	137	71.07%	68.91%	78.17%	71.68%	76.23%	80.54%	79.30%
MF9L62	06/04/2019 18:11:45	0.2766	115.05	0.1127	29.44	71.22%	67.42%	77.79%	71.27%	75.96%	81.10%	81.84%
MF9L63	06/04/2019 18:16:33	0.2452	64.368	0.0369	31.03	71.84%	68.68%	76.81%	70.88%	76.26%	82.14%	79.77%
MF9L64	06/04/2019 18:21:20	0.4705	87.617	0.0634	52.974	73.52%	69.66%	75.33%	71.49%	75.03%	79.46%	78.44%
MF9L65	06/04/2019 18:26:08	0.1482	93.28	0.0932	26.665	72.78%	67.23%	75.52%	69.49%	74.09%	78.54%	77.03%
MF9L66	06/04/2019 18:30:54	0.5465	192.99	0.1899	61.723	73.13%	69.22%	79.03%	68.59%	72.66%	79.87%	75.27%
MF9L67	06/04/2019 18:35:40	0.2092	81.889	0.0611	26.752	73.47%	67.30%	74.49%	70.64%	74.46%	80.00%	79.76%
MF9L71	06/04/2019 18:40:25	0.2471	96.783	0.072	43.14	72.73%	67.79%	76.41%	69.06%	73.56%	77.32%	74.41%
MF9L72	06/04/2019 18:45:09	0.3045	90.34	0.0694	54.07	73.36%	67.29%	75.04%	70.08%	75.01%	80.50%	79.84%
MF9L73	06/04/2019 18:49:56	0.3538	69.332	0.0473	83.013	73.92%	69.65%	77.33%	70.24%	74.70%	78.10%	73.68%
MF9M33	06/04/2019 18:54:42	0.1777	109.53	0.0982	25.322	74.92%	67.55%	76.65%	70.80%	75.02%	79.73%	79.76%
CCV3	06/04/2019 18:59:27	2476.6	2481.1	2565	2544.7	69.59%	75.59%	74.01%	74.68%	78.66%	80.59%	78.63%
CCB3	06/04/2019 19:04:13	0.8008	0.0153	0.0024	0.0192	77.83%	87.94%	87.62%	88.31%	89.11%	91.38%	93.02%

STANDARD REPORT

Working Standard - 1:1 HNO3

1:1 HNO3		Description - 1:1 HNO3 ICPMS reagent
Standard: 47816	**Created By:** Penny A. Foote	**Amount:** 1 L
MFG: DR	**Create Date:** 05/21/2019 09:05AM	**Expires:** 11/21/2019
MFG Lot: Not Provided		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** 1:1 HNO3 ICP-MS

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	500 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
44226	Ultra-HNO3	Ultra Nitric Acid	1218050-10/16/2018	70 mL	05/31/2021
46748	Ultra-HNO3	Ultra Nitric Acid	1218090-03/26/2019	430 mL	09/21/2021

Working Standard - 1:4 HCl

1:4 HCl		Description - 1:4 HCl ICPMS reagent
Standard: 47916	**Created By:** Daphne Robinson	**Amount:** 1 L
MFG: DR	**Create Date:** 05/28/2019 08:05AM	**Expires:** 11/28/2019
MFG Lot: Not Provided		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** 1:4 HCl ICP-MS

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	800 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
44227	Ultra-HCl	Ultra Hydrochloric Acid	Ultra-HCl 4218020	200 mL	03/23/2023

Stock Standard - ISM-MS-LOW

ISM-MS-LOW — **Description - ISM02.4 ICP-MS LCS/Low STD**

Standard: 46587
MFG: Inorganic Ventures
MFG Lot: P2-MEB676784
Part ID: ALS-54

Created By: Kristie F. Bitner
Create Date: 03/14/2019 01:03PM

Amount: 250 mL
Expires: 03/04/2023
Usable: Yes
Lab Lot: IP-PS-19-010

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	20 ug/mL
2	7440-36-0	Antimony	2 ug/mL
3	7440-38-2	Arsenic	1 ug/mL
4	7440-39-3	Barium	10 ug/mL
5	7440-41-7	Beryllium	1 ug/mL
6	7440-43-9	Cadmium	1 ug/mL
7	7440-70-2	Calcium	500 ug/mL
8	7440-47-3	Chromium	2 ug/mL
9	7440-48-4	Cobalt	1 ug/mL
10	7440-50-8	Copper	2 ug/mL
11	7439-89-6	Iron	200 ug/mL
12	7439-92-1	Lead	1 ug/mL
13	7439-95-4	Magnesium	500 ug/mL
14	7439-96-5	Manganese	1 ug/mL
15	7440-02-0	Nickel	1 ug/mL
16	7440-09-7	Potassium	500 ug/mL
17	7782-49-2	Selenium	5 ug/mL
18	7440-22-4	Silver	1 ug/mL
19	7440-23-5	Sodium	500 ug/mL
20	7440-28-0	Thallium	1 ug/mL
21	7440-62-2	Vanadium	5 ug/mL
22	7440-66-6	Zinc	2 ug/mL

Stock Standard - ICPMS CLP MS

ICPMS CLP MS — **Description - ICPMS CLP Matrix Spike**

Standard: 40907
MFG: Inorganic Ventures
MFG Lot: N2-MEB665684
Part ID: CLP-MS-SPK-REV1

Created By: Kristie F. Bitner
Create Date: 03/08/2018 10:03AM

Amount: 125 mL
Expires: 02/21/2021
Usable: Yes
Lab Lot: IP-PS-18-006

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	200 ug/mL
2	7440-36-0	Antimony	10 ug/mL
3	7440-38-2	Arsenic	4 ug/mL
4	7440-39-3	Barium	200 ug/mL
5	7440-41-7	Beryllium	5 ug/mL
6	7440-43-9	Cadmium	5 ug/mL
7	7440-47-3	Chromium	20 ug/mL
8	7440-48-4	Cobalt	50 ug/mL
9	7440-50-8	Copper	25 ug/mL
10	7439-92-1	Lead	2 ug/mL
11	7439-96-5	Manganese	50 ug/mL
12	7440-02-0	Nickel	50 ug/mL
13	7782-49-2	Selenium	10 ug/mL
14	7440-22-4	Silver	5 ug/mL
15	7440-28-0	Thallium	5 ug/mL
16	7440-62-2	Vanadium	50 ug/mL
17	7440-66-6	Zinc	50 ug/mL

Working Standard - S0 1% HNO3

S0 1% HNO3		Description - 1% HNO3
Standard: 47769	**Created By:** Daphne Robinson	**Amount:** 2 L
MFG: DR	**Create Date:** 05/17/2019 12:05PM	**Expires:** 11/17/2019
MFG Lot: Not Provided		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** S0 1% HNO3

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	1980 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
46748	Ultra-HNO3	Ultra Nitric Acid	1218090-03/26/2019	20 mL	09/21/2021

Working Standard - ICP-MS S50

ICP-MS S50 — **Description - ICP-MS S50 CLP**

Standard: 48076
MFG: JTK
MFG Lot: Not Provided
Pipette ID: Not Provided

Created By: John T Kershisnik
Create Date: 06/04/2019 12:06AM

Amount: 200 mL
Expires: 06/18/2019
Usable: Yes
Lab Lot: 06/04/19 JTK

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	50 ug/L
2	7440-36-0	Antimony	50 ug/L
3	7440-38-2	Arsenic	50 ug/L
4	7440-39-3	Barium	50 ug/L
5	7440-41-7	Beryllium	50 ug/L
6	7440-43-9	Cadmium	50 ug/L
7	7440-70-2	Calcium	50 ug/L
8	7440-47-3	Chromium	50 ug/L
9	7440-48-4	Cobalt	50 ug/L
10	7440-50-8	Copper	50 ug/L
11	7439-89-6	Iron	50 ug/L
12	7439-92-1	Lead	50 ug/L
13	7439-95-4	Magnesium	50 ug/L
14	7439-96-5	Manganese	50 ug/L
15	7440-02-0	Nickel	50 ug/L
16	7440-09-7	Potassium	50 ug/L
17	7782-49-2	Selenium	50 ug/L
18	7440-22-4	Silver	50 ug/L
19	7440-23-5	Sodium	50 ug/L
20	7440-28-0	Thallium	50 ug/L
21	7440-62-2	Vanadium	50 ug/L
22	7440-66-6	Zinc	50 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
4304	ASTMType2Wat	ASTM Type 2 Deionized Water	ASTMType2Water	197.5 mL	12/31/2025
40902	6020Cal1	ICPMS EPA 6020 Cal#1	IP-PS-18-002	0.5 mL	01/25/2020
47106	Ultra-HNO3	Ultra Nitric Acid	1218101-04/22/2019	2 mL	11/15/2021

Working Standard - ICP-MS S200

ICP-MS S200 — **Description - ICP-MS S200 CLP**

Standard: 48077
MFG: JTK
MFG Lot: Not Provided
Pipette ID: Not Provided
Created By: John T Kershisnik
Create Date: 06/04/2019 12:06AM
Amount: 100 mL
Expires: 06/18/2019
Usable: Yes
Lab Lot: 06/04/19 JTK

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	200 ug/L
2	7440-36-0	Antimony	200 ug/L
3	7440-38-2	Arsenic	200 ug/L
4	7440-39-3	Barium	200 ug/L
5	7440-41-7	Beryllium	200 ug/L
6	7440-43-9	Cadmium	200 ug/L
7	7440-70-2	Calcium	200 ug/L
8	7440-47-3	Chromium	200 ug/L
9	7440-48-4	Cobalt	200 ug/L
10	7440-50-8	Copper	200 ug/L
11	7439-89-6	Iron	200 ug/L
12	7439-92-1	Lead	200 ug/L
13	7439-95-4	Magnesium	200 ug/L
14	7439-96-5	Manganese	200 ug/L
15	7440-02-0	Nickel	200 ug/L
16	7440-09-7	Potassium	200 ug/L
17	7782-49-2	Selenium	200 ug/L
18	7440-22-4	Silver	200 ug/L
19	7440-23-5	Sodium	200 ug/L
20	7440-28-0	Thallium	200 ug/L
21	7440-62-2	Vanadium	200 ug/L
22	7440-66-6	Zinc	200 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
4304	ASTMType2Wat	ASTM Type 2 Deionized Water	ASTMType2Water	98 mL	12/31/2025
40902	6020Cal1	ICPMS EPA 6020 Cal#1	IP-PS-18-002	1 mL	01/25/2020
47106	Ultra-HNO3	Ultra Nitric Acid	1218101-04/22/2019	1 mL	11/15/2021

Working Standard - ICP-MS S500

ICP-MS S500		Description - ICP-MS S500 CLP
Standard: 48078	**Created By:** John T Kershisnik	**Amount:** 100 mL
MFG: JTK	**Create Date:** 06/04/2019 12:06AM	**Expires:** 06/18/2019
MFG Lot: Not Provided		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** 06/04/19 JTK

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	500 ug/L
2	7440-36-0	Antimony	500 ug/L
3	7440-38-2	Arsenic	500 ug/L
4	7440-39-3	Barium	500 ug/L
5	7440-41-7	Beryllium	500 ug/L
6	7440-43-9	Cadmium	500 ug/L
7	7440-70-2	Calcium	500 ug/L
8	7440-47-3	Chromium	500 ug/L
9	7440-48-4	Cobalt	500 ug/L
10	7440-50-8	Copper	500 ug/L
11	7439-89-6	Iron	500 ug/L
12	7439-92-1	Lead	500 ug/L
13	7439-95-4	Magnesium	500 ug/L
14	7439-96-5	Manganese	500 ug/L
15	7440-02-0	Nickel	500 ug/L
16	7440-09-7	Potassium	500 ug/L
17	7782-49-2	Selenium	500 ug/L
18	7440-22-4	Silver	500 ug/L
19	7440-23-5	Sodium	500 ug/L
20	7440-28-0	Thallium	500 ug/L
21	7440-62-2	Vanadium	500 ug/L
22	7440-66-6	Zinc	500 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
4304	ASTMType2Wat	ASTM Type 2 Deionized Water	ASTMType2Water	96.5 mL	12/31/2025
40902	6020Cal1	ICPMS EPA 6020 Cal#1	IP-PS-18-002	2.5 mL	01/25/2020
47106	Ultra-HNO3	Ultra Nitric Acid	1218101-04/22/2019	1 mL	11/15/2021

Working Standard - MS ISM S2500

MS ISM S2500		Description - ICP-MS S2500 CLP
Standard: 48079	**Created By:** John T Kershisnik	**Amount:** 50 mL
MFG: JTK	**Create Date:** 06/04/2019 12:06AM	**Expires:** 06/18/2019
MFG Lot: Not Provided		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** 06/04/19 JTK

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	2500 ug/L
2	7440-36-0	Antimony	2500 ug/L
3	7440-38-2	Arsenic	2500 ug/L
4	7440-39-3	Barium	2500 ug/L
5	7440-41-7	Beryllium	2500 ug/L
6	7440-43-9	Cadmium	2500 ug/L
7	7440-70-2	Calcium	2500 ug/L
8	7440-47-3	Chromium	2500 ug/L
9	7440-48-4	Cobalt	2500 ug/L
10	7440-50-8	Copper	2500 ug/L
11	7439-89-6	Iron	2500 ug/L
12	7439-92-1	Lead	2500 ug/L
13	7439-95-4	Magnesium	2500 ug/L
14	7439-96-5	Manganese	2500 ug/L
15	7440-02-0	Nickel	2500 ug/L
16	7440-09-7	Potassium	2500 ug/L
17	7440-23-5	Sodium	2500 ug/L
18	7440-28-0	Thallium	2500 ug/L
19	7440-62-2	Vanadium	2500 ug/L
20	7440-66-6	Zinc	2500 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
4304	ASTMType2Wat	ASTM Type 2 Deionized Water	ASTMType2Water	43.25 mL	12/31/2025
42163	DATACHEM-1	ICPMS 20 ppm (No Ag or Se)	IP-PS-18-022	6.25 mL	05/29/2021
47106	Ultra-HNO3	Ultra Nitric Acid	1218101-04/22/2019	0.5 mL	11/15/2021

Working Standard - MS ISM S5000

MS ISM S5000		Description - ICP-MS S5000 CLP
Standard: 48080	**Created By:** John T Kershisnik	**Amount:** 50 mL
MFG: JTK	**Create Date:** 06/04/2019 12:06AM	**Expires:** 06/18/2019
MFG Lot: Not Provided		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** 06/04/19 JTK

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	5000 ug/L
2	7440-36-0	Antimony	5000 ug/L
3	7440-38-2	Arsenic	5000 ug/L
4	7440-39-3	Barium	5000 ug/L
5	7440-41-7	Beryllium	5000 ug/L
6	7440-43-9	Cadmium	5000 ug/L
7	7440-70-2	Calcium	5000 ug/L
8	7440-47-3	Chromium	5000 ug/L
9	7440-48-4	Cobalt	5000 ug/L
10	7440-50-8	Copper	5000 ug/L
11	7439-89-6	Iron	5000 ug/L
12	7439-92-1	Lead	5000 ug/L
13	7439-95-4	Magnesium	5000 ug/L
14	7439-96-5	Manganese	5000 ug/L
15	7440-02-0	Nickel	5000 ug/L
16	7440-09-7	Potassium	5000 ug/L
17	7440-23-5	Sodium	5000 ug/L
18	7440-28-0	Thallium	5000 ug/L
19	7440-62-2	Vanadium	5000 ug/L
20	7440-66-6	Zinc	5000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
4304	ASTMType2Wat	ASTM Type 2 Deionized Water	ASTMType2Water	37 mL	12/31/2025
42163	DATACHEM-1	ICPMS 20 ppm (No Ag or Se)	IP-PS-18-022	12.5 mL	05/29/2021
47106	Ultra-HNO3	Ultra Nitric Acid	1218101-04/22/2019	0.5 mL	11/15/2021

Working Standard - ICPMS CLPICV

ICPMS CLPICV		Description - ICP-MS ICV CLP
Standard: 48081	**Created By:** John T Kershisnik	**Amount:** 100 mL
MFG: JTK	**Create Date:** 06/04/2019 12:06AM	**Expires:** 06/18/2019
MFG Lot: Not Provided		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** 06/04/19 JTK

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	504.2 ug/L
2	7440-36-0	Antimony	198.8 ug/L
3	7440-38-2	Arsenic	199.8 ug/L
4	7440-39-3	Barium	99.4 ug/L
5	7440-41-7	Beryllium	99 ug/L
6	7440-43-9	Cadmium	99.2 ug/L
7	7440-70-2	Calcium	2005.2 ug/L
8	7440-47-3	Chromium	98 ug/L
9	7440-48-4	Cobalt	99.8 ug/L
10	7440-50-8	Copper	98.4 ug/L
11	7439-89-6	Iron	1016.4 ug/L
12	7439-92-1	Lead	200.4 ug/L
13	7439-95-4	Magnesium	1214.8 ug/L
14	7439-96-5	Manganese	99.8 ug/L
15	7440-02-0	Nickel	100.6 ug/L
16	7440-09-7	Potassium	2004.2 ug/L
17	7782-49-2	Selenium	205.8 ug/L
18	7440-22-4	Silver	100.2 ug/L
19	7440-23-5	Sodium	2019.4 ug/L
20	7440-28-0	Thallium	205.6 ug/L
21	7440-62-2	Vanadium	100.2 ug/L
22	7440-66-6	Zinc	205 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
4304	ASTMType2Wat	ASTM Type 2 Deionized Water	ASTMType2Water	97 mL	12/31/2025
25667	CLPICP-ICV1	CLP-ICP/ICPMS-ICV-1	IP-PS-14-039	2 mL	08/12/2020
47106	Ultra-HNO3	Ultra Nitric Acid	1218101-04/22/2019	1 mL	11/15/2021

Working Standard - ICP-MS ICSA

ICP-MS ICSA		Description - ICP-MS ICSA CLP
Standard: 48082	**Created By:** John T Kershisnik	**Amount:** 100 mL
MFG: JTK	**Create Date:** 06/04/2019 12:06AM	**Expires:** 06/18/2019
MFG Lot: Not Provided		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** 06/04/19 JTK

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	100000 ug/L
2	7440-36-0	Antimony	1.5 ug/L
3	7440-38-2	Arsenic	0.1 ug/L
4	7440-39-3	Barium	1.2 ug/L
5	7440-43-9	Cadmium	0.7 ug/L
6	7440-70-2	Calcium	100000 ug/L
7	7440-44-0	Carbon	200000 ug/L
8	16887-00-6	Chloride	1000000 ug/L
9	7440-47-3	Chromium	21 ug/L
10	7440-48-4	Cobalt	1 ug/L
11	7440-50-8	Copper	8 ug/L
12	7439-89-6	Iron	100000 ug/L
13	7439-92-1	Lead	4 ug/L
14	7439-95-4	Magnesium	100000 ug/L
15	7439-96-5	Manganese	7 ug/L
16	7439-98-7	Molybdenum	2000 ug/L
17	7440-02-0	Nickel	6 ug/L
18	7723-14-0	Phosphorus	100000 ug/L
19	7440-09-7	Potassium	100000 ug/L
20	7782-49-2	Selenium	0.3 ug/L
21	7440-23-5	Sodium	100000 ug/L
22	63705-05-5	Sulfur	100000 ug/L
23	7440-32-6	Titanium	2000 ug/L
24	7440-62-2	Vanadium	0.5 ug/L
25	7440-66-6	Zinc	11 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
4304	ASTMType2Wat	ASTM Type 2 Deionized Water	ASTMType2Water	89 mL	12/31/2025
42007	CLPMS-ICS-A	CLP-ICP-MS-ICS-Part A (0803)	IP-PS-18-019	10 mL	05/11/2022
47106	Ultra-HNO3	Ultra Nitric Acid	1218101-04/22/2019	1 mL	11/15/2021

Working Standard - ICP-MS ICSAB

ICP-MS ICSAB — **Description - ICP-MS ICSAB CLP**

Standard: 48083 | **Created By:** John T Kershisnik | **Amount:** 100 mL
MFG: JTK | **Create Date:** 06/04/2019 12:06AM | **Expires:** 06/18/2019
MFG Lot: Not Provided | **Usable:** Yes
Pipette ID: Not Provided | **Lab Lot:** 06/04/19 JTK

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	100000 ug/L
2	7440-36-0	Antimony	22 ug/L
3	7440-38-2	Arsenic	19 ug/L
4	7440-39-3	Barium	21.7 ug/L
5	7440-41-7	Beryllium	19 ug/L
6	7440-43-9	Cadmium	20 ug/L
7	7440-70-2	Calcium	100000 ug/L
8	7440-44-0	Carbon	200000 ug/L
9	16887-00-6	Chloride	1000000 ug/L
10	7440-47-3	Chromium	40 ug/L
11	7440-48-4	Cobalt	20 ug/L
12	7440-50-8	Copper	25 ug/L
13	7439-89-6	Iron	100000 ug/L
14	7439-92-1	Lead	25 ug/L
15	7439-95-4	Magnesium	100000 ug/L
16	7439-96-5	Manganese	27 ug/L
17	7439-98-7	Molybdenum	2000 ug/L
18	7440-02-0	Nickel	24 ug/L
19	7723-14-0	Phosphorus	100000 ug/L
20	7440-09-7	Potassium	100000 ug/L
21	7782-49-2	Selenium	19 ug/L
22	7440-22-4	Silver	18 ug/L
23	7440-23-5	Sodium	100000 ug/L
24	63705-05-5	Sulfur	100000 ug/L
25	7440-28-0	Thallium	21 ug/L
26	7440-32-6	Titanium	2000 ug/L
27	7440-62-2	Vanadium	19 ug/L
28	7440-66-6	Zinc	29 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
4304	ASTMType2Wat	ASTM Type 2 Deionized Water	ASTMType2Water	79 mL	12/31/2025
25669	CLPMS-ICS-B	CLP-ICP-MS-ICS-Part B (0803)	IP-PS-14-041	10 mL	08/12/2020
42007	CLPMS-ICS-A	CLP-ICP-MS-ICS-Part A (0803)	IP-PS-18-019	10 mL	05/11/2022
47106	Ultra-HNO3	Ultra Nitric Acid	1218101-04/22/2019	1 mL	11/15/2021

Working Standard - ISM MS CCV

ISM MS CCV — **Description - ICP-MS CLP CCV**

Standard: 48084 | **Created By:** John T Kershisnik | **Amount:** 200 mL
MFG: JTK | **Create Date:** 06/04/2019 12:06AM | **Expires:** 06/18/2019
MFG Lot: Not Provided | **Usable:** Yes
Pipette ID: ICP-MS ISM CCV | **Lab Lot:** 06/04/19 JTK

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	50000 ug/L
2	7440-36-0	Antimony	2500 ug/L
3	7440-38-2	Arsenic	2500 ug/L
4	7440-39-3	Barium	2500 ug/L
5	7440-41-7	Beryllium	2500 ug/L
6	7440-43-9	Cadmium	2500 ug/L
7	7440-70-2	Calcium	50000 ug/L
8	7440-47-3	Chromium	2500 ug/L
9	7440-48-4	Cobalt	2500 ug/L
10	7440-50-8	Copper	2500 ug/L
11	7439-89-6	Iron	50000 ug/L
12	7439-92-1	Lead	2500 ug/L
13	7439-95-4	Magnesium	50000 ug/L
14	7439-96-5	Manganese	2500 ug/L
15	7440-02-0	Nickel	2500 ug/L
16	7440-09-7	Potassium	50000 ug/L
17	7440-23-5	Sodium	50000 ug/L
18	7440-28-0	Thallium	2500 ug/L
19	7440-62-2	Vanadium	2500 ug/L
20	7440-66-6	Zinc	2500 ug/L
21	7782-49-2	Selenium	250 ug/L
22	7440-22-4	Silver	250 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
4304	ASTMType2Wat	ASTM Type 2 Deionized Water	ASTMType2Water	170.05 mL	12/31/2025
42163	DATACHEM-1	ICPMS 20 ppm (No Ag or Se)	IP-PS-18-022	25 mL	05/29/2021
43313	Al stock	10,000 ug/mL Al Stock	SPEX Al 10,000 ug/mL	0.95 mL	08/30/2019
43328	Se Stock Low	1,000 ug/mL Se Stock	SPEX Se 1,000 ug/mL	0.05 mL	08/30/2019
43389	Fe Stock	10,000 ug/mL Fe Stock	SPEX Fe 10,000 ug/mL	0.95 mL	08/30/2019
47106	Ultra-HNO3	Ultra Nitric Acid	1218101-04/22/2019	2 mL	11/15/2021
47273	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	0.05 mL	03/30/2020
47887	IV-STOCK-2	ISM02.4 Standard	ICP-CLP	0.95 mL	05/23/2020

Working Standard - X-5 X-Cal

X-5 X-Cal — **Description - X-5 X-Cal in 1% HNO3**

Standard: 46681 | **Created By:** Kristie F. Bitner | **Amount:** 250 mL
MFG: KFB | **Create Date:** 03/20/2019 01:03PM | **Expires:** 08/30/2019
MFG Lot: Not Provided | **Usable:** Yes
Pipette ID: Not Provided | **Lab Lot:** X-5 X-Cal

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L
2	7429-90-5	Aluminum	250 ug/L
3	7440-38-2	Arsenic	250 ug/L
4	7440-39-3	Barium	250 ug/L
5	7440-41-7	Beryllium	250 ug/L
6	7440-69-9	Bismuth	250 ug/L
7	7440-43-9	Cadmium	250 ug/L
8	7440-70-2	Calcium	10250 ug/L
9	7440-46-2	Cesium	250 ug/L
10	7440-47-3	Chromium	250 ug/L
11	7440-48-4	Cobalt	250 ug/L
12	7440-50-8	Copper	250 ug/L
13	7440-55-3	Gallium	250 ug/L
14	7440-74-6	Indium	250 ug/L
15	7439-89-6	Iron	250 ug/L
16	7439-92-1	Lead	250 ug/L
17	7439-93-2	Lithium	250 ug/L
18	7439-95-4	Magnesium	250 ug/L
19	7439-96-5	Manganese	250 ug/L
20	7440-02-0	Nickel	250 ug/L
21	7440-09-7	Potassium	250 ug/L
22	7440-17-7	Rubidium	250 ug/L
23	7782-49-2	Selenium	250 ug/L
24	7440-22-4	Silver	250 ug/L
25	7440-23-5	Sodium	250 ug/L
26	7440-24-6	Strontium	250 ug/L
27	7440-28-0	Thallium	250 ug/L
28	7440-61-1	Uranium	250 ug/L
29	7440-62-2	Vanadium	250 ug/L
30	7440-66-6	Zinc	1000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	240.8125 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
43225	IMS MES2	Multi-element Solution #2	IP-PS-18-032	6.25 mL	08/30/2019
43316	Ca Stock	10,000 ug/mL Ca Stock	SPEX Ca 10,000 ug/mL	0.25 mL	08/30/2019
44226	Ultra-HNO3	Ultra Nitric Acid	1218050-10/16/2018	2.5 mL	05/31/2021
45322	Zn Stock Low	1,000 ug/mL Zn Stock	SPEX Zn 1,000 ug/mL	0.1875 mL	11/30/2019

Working Standard - Varian Tune

Varian Tune		Description - Varian Tune X5 in 1% HNO3
Standard: 47140	**Created By:** Kristie F. Bitner	**Amount:** 200 mL
MFG: KFB	**Create Date:** 04/17/2019 08:04AM	**Expires:** 11/08/2019
MFG Lot: Not Provided		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** Varian Tune X5

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L
2	7440-39-3	Barium	100 ug/L
3	7440-41-7	Beryllium	100 ug/L
4	7440-45-1	Cerium	100 ug/L
5	7440-48-4	Cobalt	100 ug/L
6	7440-74-6	Indium	100 ug/L
7	7439-92-1	Lead	100 ug/L
8	7439-95-4	Magnesium	100 ug/L
9	7440-28-0	Thallium	100 ug/L
10	7440-29-1	Thorium	100 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	196 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
44226	Ultra-HNO3	Ultra Nitric Acid	1218050-10/16/2018	2 mL	05/31/2021
44289	Var-Tune Std	Var Tune Std/CLP, 200.8 Tune	IP-PS-18-038	2 mL	11/08/2019

Working Standard - X-5 ISS

X-5 ISS — **Description - X-5 ISS in 1% HNO3**

Standard: 47919
MFG: KFB
MFG Lot: Not Provided
Pipette ID: Not Provided

Created By: Kristie F. Bitner
Create Date: 05/28/2019 11:05AM

Amount: 2 L
Expires: 03/04/2020
Usable: Yes
Lab Lot: X-5 ISS ICP-MS

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L
2	7440-69-9	Bismuth	200 ug/L
3	7440-60-0	Holmium	200 ug/L
4	7440-74-6	Indium	200 ug/L
5	7439-93-2(6)	Lithium-6	200 ug/L
6	7440-16-6	Rhodium	200 ug/L
7	7440-20-2	Scandium	200 ug/L
8	7440-27-9	Terbium	200 ug/L
9	7440-65-5	Yttrium	200 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	1940 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
42162	6020ISS	ICPMS EPA 6020 ISS	IP-PS-18-021	40 mL	03/04/2020
46748	Ultra-HNO3	Ultra Nitric Acid	1218090-03/26/2019	20 mL	09/21/2021

Working Standard - 2%/0.05%Rins

2%/0.05%Rins		Description - 2% HNO3/0.05% HCl Rinse
Standard: 48085	**Created By:** John T Kershisnik	**Amount:** 4 L
MFG: JTK	**Create Date:** 06/04/2019 12:06AM	**Expires:** 12/04/2019
MFG Lot: Not Provided		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** 2% HNO3/0.05%

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	0 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	3918 mL	11/07/2025
32254	REAGENT	Solvent/Reagent	REAGENT	0 mL	01/01/2025
44227	Ultra-HCl	Ultra Hydrochloric Acid	Ultra-HCl 4218020	2 mL	03/23/2023
47106	Ultra-HNO3	Ultra Nitric Acid	1218101-04/22/2019	80 mL	11/15/2021

STANDARD REPORT

Constituent

Stock Standard - CLPICP-ICV1

CLPICP-ICV1 — **Description - CLP-ICP/ICPMS-ICV-1**

Standard: 25667
MFG: QATS Laboratory
MFG Lot: ICV1-0307
Part ID: Not Provided

Created By: John T Kershisnik
Create Date: 10/16/2014 05:10PM

Amount: 500 mL
Expires: 08/12/2020
Usable: Yes
Lab Lot: IP-PS-14-039

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	25210 ug/L
2	7440-36-0	Antimony	9940 ug/L
3	7440-38-2	Arsenic	9990 ug/L
4	7440-39-3	Barium	4970 ug/L
5	7440-41-7	Beryllium	4950 ug/L
6	7440-43-9	Cadmium	4960 ug/L
7	7440-70-2	Calcium	100260 ug/L
8	7440-47-3	Chromium	4900 ug/L
9	7440-48-4	Cobalt	4990 ug/L
10	7440-50-8	Copper	4920 ug/L
11	7439-89-6	Iron	50820 ug/L
12	7439-92-1	Lead	10020 ug/L
13	7439-95-4	Magnesium	60740 ug/L
14	7439-96-5	Manganese	4990 ug/L
15	7440-02-0	Nickel	5030 ug/L
16	7440-09-7	Potassium	100210 ug/L
17	7782-49-2	Selenium	10290 ug/L
18	7440-22-4	Silver	5010 ug/L
19	7440-23-5	Sodium	100970 ug/L
20	7440-28-0	Thallium	10280 ug/L
21	7440-62-2	Vanadium	5010 ug/L
22	7440-66-6	Zinc	10250 ug/L

STANDARD REPORT

Constituent

Stock Standard - CLPMS-ICS-B

CLPMS-ICS-B — **Description - CLP-ICP-MS-ICS-Part B (0803)**

Standard: 25669
MFG: QATS Laboratory
MFG Lot: ICSB-0803
Part ID: Not Provided

Created By: John T Kershisnik
Create Date: 10/16/2014 05:10PM

Amount: 250 mL
Expires: 08/12/2020
Usable: Yes
Lab Lot: IP-PS-14-041

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	0 ug/L
2	7440-36-0	Antimony	205 ug/L
3	7440-38-2	Arsenic	189 ug/L
4	7440-39-3	Barium	205 ug/L
5	7440-41-7	Beryllium	190 ug/L
6	7440-43-9	Cadmium	193 ug/L
7	7440-70-2	Calcium	0 ug/L
8	7440-44-0	Carbon	0 ug/L
9	16887-00-6	Chloride	0 ug/L
10	7440-47-3	Chromium	190 ug/L
11	7440-48-4	Cobalt	190 ug/L
12	7440-50-8	Copper	170 ug/L
13	7439-89-6	Iron	0 ug/L
14	7439-92-1	Lead	210 ug/L
15	7439-95-4	Magnesium	0 ug/L
16	7439-96-5	Manganese	200 ug/L
17	7439-98-7	Molybdenum	0 ug/L
18	7440-02-0	Nickel	180 ug/L
19	7723-14-0	Phosphorus	0 ug/L
20	7440-09-7	Potassium	0 ug/L
21	7782-49-2	Selenium	187 ug/L
22	7440-22-4	Silver	180 ug/L
23	7440-23-5	Sodium	0 ug/L
24	63705-05-5	Sulfur	0 ug/L
25	7440-28-0	Thallium	210 ug/L
26	7440-32-6	Titanium	0 ug/L
27	7440-62-2	Vanadium	185 ug/L
28	7440-66-6	Zinc	180 ug/L

STANDARD REPORT

Constituent

Stock Standard - REAGENT

REAGENT		Description - Solvent/Reagent
Standard: 32254	**Created By:** Neil A. Edwards	**Amount:** 1 L
MFG: NA	**Create Date:** 01/01/2016 12:01AM	**Expires:** 01/01/2025
MFG Lot: NA		**Usable:** Yes
Part ID: NA		**Lab Lot:** REAGENT

Pos.	Analyte	Name	Concentration
1	REAGENT	Solvent/Reagent	1 mg/L

STANDARD REPORT

Constituent

Stock Standard - 6020Cal1

6020Cal1 — **Description - ICPMS EPA 6020 Cal#1**

Standard: 40902
MFG: Inorganic Ventures
MFG Lot: M2-MEB657244
Part ID: 6020CAL-1

Created By: Kristie F. Bitner
Create Date: 03/08/2018 10:03AM

Amount: 125 mL
Expires: 01/25/2020
Usable: Yes
Lab Lot: IP-PS-18-002

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	20 mg/L
2	7440-36-0	Antimony	20 mg/L
3	7440-38-2	Arsenic	20 mg/L
4	7440-39-3	Barium	20 mg/L
5	7440-41-7	Beryllium	20 mg/L
6	7440-43-9	Cadmium	20 mg/L
7	7440-70-2	Calcium	20 mg/L
8	7440-47-3	Chromium	20 mg/L
9	7440-48-4	Cobalt	20 mg/L
10	7440-50-8	Copper	20 mg/L
11	7439-89-6	Iron	20 mg/L
12	7439-92-1	Lead	20 mg/L
13	7439-95-4	Magnesium	20 mg/L
14	7439-96-5	Manganese	20 mg/L
15	7440-02-0	Nickel	20 mg/L
16	7440-09-7	Potassium	20 mg/L
17	7782-49-2	Selenium	20 mg/L
18	7440-22-4	Silver	20 mg/L
19	7440-23-5	Sodium	20 mg/L
20	7440-28-0	Thallium	20 mg/L
21	7440-62-2	Vanadium	20 mg/L
22	7440-66-6	Zinc	20 mg/L

STANDARD REPORT

Constituent

Stock Standard - CLPMS-ICS-A

CLPMS-ICS-A — **Description - CLP-ICP-MS-ICS-Part A (0803)**

Standard: 42007
MFG: QATS Laboratory
MFG Lot: ICSA-0803
Part ID: Not Provided

Created By: Kristie F. Bitner
Create Date: 05/25/2018 01:05PM

Amount: 1000 mL
Expires: 05/11/2022
Usable: Yes
Lab Lot: IP-PS-18-019

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	1000000 ug/L
2	7440-36-0	Antimony	15 ug/L
3	7440-38-2	Arsenic	1 ug/L
4	7440-39-3	Barium	12 ug/L
5	7440-43-9	Cadmium	7 ug/L
6	7440-70-2	Calcium	1000000 ug/L
7	7440-44-0	Carbon	2000000 ug/L
8	16887-00-6	Chloride	10000000 ug/L
9	7440-47-3	Chromium	210 ug/L
10	7440-48-4	Cobalt	10 ug/L
11	7440-50-8	Copper	80 ug/L
12	7439-89-6	Iron	1000000 ug/L
13	7439-92-1	Lead	40 ug/L
14	7439-95-4	Magnesium	1000000 ug/L
15	7439-96-5	Manganese	70 ug/L
16	7439-98-7	Molybdenum	20000 ug/L
17	7440-02-0	Nickel	60 ug/L
18	7723-14-0	Phosphorus	1000000 ug/L
19	7440-09-7	Potassium	1000000 ug/L
20	7782-49-2	Selenium	3 ug/L
21	7440-23-5	Sodium	1000000 ug/L
22	63705-05-5	Sulfur	1000000 ug/L
23	7440-32-6	Titanium	20000 ug/L
24	7440-62-2	Vanadium	5 ug/L
25	7440-66-6	Zinc	110 ug/L

STANDARD REPORT

Constituent

Stock Standard - 6020ISS

6020ISS		Description - ICPMS EPA 6020 ISS
Standard: 42162	**Created By:** Kristie F. Bitner	**Amount:** 500 mL
MFG: Inorganic Ventures	**Create Date:** 06/07/2018 04:06PM	**Expires:** 03/04/2020
MFG Lot: N2-MEB666949		**Usable:** Yes
Part ID: 6020ISS		**Lab Lot:** IP-PS-18-021

Pos.	Analyte	Name	Concentration
1	7440-69-9	Bismuth	10 ug/mL
2	7440-60-0	Holmium	10 ug/mL
3	7440-74-6	Indium	10 ug/mL
4	7439-93-2(6)	Lithium-6	10 ug/mL
5	7440-16-6	Rhodium	10 ug/mL
6	7440-20-2	Scandium	10 ug/mL
7	7440-27-9	Terbium	10 ug/mL
8	7440-65-5	Yttrium	10 ug/mL

STANDARD REPORT

Constituent

Stock Standard - DATACHEM-1

DATACHEM-1 — **Description - ICPMS 20 ppm (No Ag or Se)**

Standard: 42163
MFG: Inorganic Ventures
MFG Lot: N2-MEB668394
Part ID: DATACHEM-1

Created By: Kristie F. Bitner
Create Date: 06/07/2018 04:06PM

Amount: 500 mL
Expires: 05/29/2021
Usable: Yes
Lab Lot: IP-PS-18-022

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	20 ug/mL
2	7440-36-0	Antimony	20 ug/mL
3	7440-38-2	Arsenic	20 ug/mL
4	7440-39-3	Barium	20 ug/mL
5	7440-41-7	Beryllium	20 ug/mL
6	7440-43-9	Cadmium	20 ug/mL
7	7440-70-2	Calcium	20 ug/mL
8	7440-47-3	Chromium	20 ug/mL
9	7440-48-4	Cobalt	20 ug/mL
10	7440-50-8	Copper	20 ug/mL
11	7439-89-6	Iron	20 ug/mL
12	7439-92-1	Lead	20 ug/mL
13	7439-95-4	Magnesium	20 ug/mL
14	7439-96-5	Manganese	20 ug/mL
15	7440-02-0	Nickel	20 ug/mL
16	7440-09-7	Potassium	20 ug/mL
17	7440-23-5	Sodium	20 ug/mL
18	7440-28-0	Thallium	20 ug/mL
19	7440-62-2	Vanadium	20 ug/mL
20	7440-66-6	Zinc	20 ug/mL

STANDARD REPORT

Constituent

Stock Standard - IMS MES2

IMS MES2	Description - Multi-element Solution #2

Standard: 43225
MFG: SPEX
MFG Lot: CL5-199MKBY
Part ID: CLMS-2

Created By: Kristie F. Bitner
Create Date: 08/20/2018 04:08PM

Amount: 125 mL
Expires: 08/30/2019
Usable: Yes
Lab Lot: IP-PS-18-032

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	10 mg/L
2	7440-38-2	Arsenic	10 mg/L
3	7440-39-3	Barium	10 mg/L
4	7440-41-7	Beryllium	10 mg/L
5	7440-69-9	Bismuth	10 mg/L
6	7440-43-9	Cadmium	10 mg/L
7	7440-70-2	Calcium	10 mg/L
8	7440-46-2	Cesium	10 mg/L
9	7440-47-3	Chromium	10 mg/L
10	7440-48-4	Cobalt	10 mg/L
11	7440-50-8	Copper	10 mg/L
12	7440-55-3	Gallium	10 mg/L
13	7440-74-6	Indium	10 mg/L
14	7439-89-6	Iron	10 mg/L
15	7439-92-1	Lead	10 mg/L
16	7439-93-2	Lithium	10 mg/L
17	7439-95-4	Magnesium	10 mg/L
18	7439-96-5	Manganese	10 mg/L
19	7440-02-0	Nickel	10 mg/L
20	7440-09-7	Potassium	10 mg/L
21	7440-17-7	Rubidium	10 mg/L
22	7782-49-2	Selenium	10 mg/L
23	7440-22-4	Silver	10 mg/L
24	7440-23-5	Sodium	10 mg/L
25	7440-24-6	Strontium	10 mg/L
26	7440-28-0	Thallium	10 mg/L
27	7440-61-1	Uranium	10 mg/L
28	7440-62-2	Vanadium	10 mg/L
29	7440-66-6	Zinc	10 mg/L

STANDARD REPORT

Constituent

Stock Standard - Al stock

Al stock		**Description - 10,000 ug/mL Al Stock**
Standard: 43313	**Created By:** Joanna C. Sanchez	**Amount:** 125 mL
MFG: SPEX CertiPrep	**Create Date:** 08/20/2018 12:08AM	**Expires:** 08/30/2019
MFG Lot: AM17-91ALY	**Verified By:** Oliver Anderson	**Usable:** Yes
Part ID: PLAL2-3Y	**Verify Date:** 08/30/2018 12:08PM	**Lab Lot:** SPEX Al 10,000 ug/mL

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	10000 ug/mL

00534

STANDARD REPORT

Constituent

Stock Standard - Ca Stock

Ca Stock			**Description - 10,000 ug/mL Ca Stock**
Standard: 43316	**Created By:** Joanna C. Sanchez	**Amount:** 125 mL
MFG: SPEX CertiPrep	**Create Date:** 08/20/2018 12:08AM	**Expires:** 08/30/2019
MFG Lot: AW17-52CAY	**Verified By:** Oliver Anderson	**Usable:** Yes
Part ID: PLCA2-3Y	**Verify Date:** 08/30/2018 12:08PM	**Lab Lot:** SPEX Ca 10,000 ug/mL

Pos.	Analyte	Name	Concentration
1	7440-70-2	Calcium	10000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Se Stock Low

Se Stock Low			Description - 1,000 ug/mL Se Stock
Standard: 43328	**Created By:** Joanna C. Sanchez	**Amount:** 30 mL	
MFG: SPEX CertiPrep	**Create Date:** 08/20/2018 12:08AM	**Expires:** 08/30/2019	
MFG Lot: 23-115SEM	**Verified By:** Oliver Anderson	**Usable:** Yes	
Part ID: PLSE2-2M	**Verify Date:** 08/30/2018 12:08PM	**Lab Lot:** SPEX Se 1,000 ug/mL	

Pos.	Analyte	Name	Concentration
1	7782-49-2	Selenium	1000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Fe Stock

Fe Stock			Description - 10,000 ug/mL Fe Stock
Standard: 43389	**Created By:** Joanna C. Sanchez	**Amount:** 125 mL	
MFG: SPEX CertiPrep	**Create Date:** 08/30/2018 12:08AM	**Expires:** 08/30/2019	
MFG Lot: AP17-129FEY	**Verified By:** Oliver Anderson	**Usable:** Yes	
Part ID: PLFE2-3Y	**Verify Date:** 09/04/2018 11:09AM	**Lab Lot:** SPEX Fe 10,000 ug/mL	

Pos.	Analyte	Name	Concentration
1	7439-89-6	Iron	10000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Var-Tune Std

Var-Tune Std	Description - Var Tune Std/CLP, 200.8 Tune

Standard: 44289
MFG: Inorganic Ventures
MFG Lot: M2-MEB656650
Part ID: VAR-TS-MS

Created By: Kristie F. Bitner
Create Date: 10/19/2018 03:10PM

Amount: 125 mL
Expires: 11/08/2019
Usable: Yes
Lab Lot: IP-PS-18-038

Pos.	Analyte	Name	Concentration
1	7440-39-3	Barium	10 mg/L
2	7440-41-7	Beryllium	10 mg/L
3	7440-45-1	Cerium	10 mg/L
4	7440-48-4	Cobalt	10 mg/L
5	7440-74-6	Indium	10 mg/L
6	7439-92-1	Lead	10 mg/L
7	7439-95-4	Magnesium	10 mg/L
8	7440-28-0	Thallium	10 mg/L
9	7440-29-1	Thorium	10 mg/L

STANDARD REPORT

Constituent

Stock Standard - Zn Stock Low

Zn Stock Low		**Description - 1,000 ug/mL Zn Stock**
Standard: 45322	**Created By:** Rex Bagley	**Amount:** 30 mL
MFG: SPEX CertiPrep	**Create Date:** 11/26/2018 11:11PM	**Expires:** 11/30/2019
MFG Lot: 23-176ZNM	**Verified By:** Joanna C. Sanchez	**Usable:** Yes
Part ID: PLZN2-2M	**Verify Date:** 12/19/2018 01:12PM	**Lab Lot:** SPEX Zn 1,000 ug/mL

Pos.	Analyte	Name	Concentration
1	7440-66-6	Zinc	1000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Ag Stock

Ag Stock			Description - 1,000 ug/mL Ag Stock
Standard: 47273	**Created By:** Joanna C. Sanchez	**Amount:** 125 mL	
MFG: Spex CertiPrep	**Create Date:** 04/08/2019 12:04AM	**Expires:** 03/30/2020	
MFG Lot: 23-165AGY	**Verified By:** Oliver Anderson	**Usable:** Yes	
Part ID: PLAG2-2Y	**Verify Date:** 04/25/2019 11:04AM	**Lab Lot:** Ag 1,000 ug/mL	

Pos.	Analyte	Name	Concentration
1	7440-22-4	Silver	1000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - IV-STOCK-2

IV-STOCK-2		**Description - ISM02.4 Standard**
Standard: 47887	**Created By:** Oliver Anderson	**Amount:** 500 mL
MFG: Inorganic Ventures	**Create Date:** 05/03/2018 12:05AM	**Expires:** 05/23/2020
MFG Lot: M2-MEB663066	**Verified By:** Rex Bagley	**Usable:** Yes
Part ID: IV-STOCK-2	**Verify Date:** 05/24/2019 09:05AM	**Lab Lot:** ICP-CLP

Pos.	Analyte	Name	Concentration
1	7440-70-2	Calcium	10000 ug/mL
2	7440-09-7	Potassium	10000 ug/mL
3	7439-95-4	Magnesium	10000 ug/mL
4	7440-23-5	Sodium	10000 ug/mL

STANDARD REPORT

Constituent

Solvent Standard - ASTM H2O

ASTM H2O		Description - ASTM Type II Water
Standard: 109	**Created By:** ALS Support (Lims)	**Amount:** 1000 L
MFG: DCL In House	**Create Date:** 10/06/2005 09:10AM	**Expires:** 11/07/2025
MFG Lot: Not Provided		**Usable:** Yes
Part ID: Not Provided		**Lab Lot:** LAB 109

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - ASTMType2Wat

ASTMType2Wat		Description - ASTM Type 2 Deionized Water
Standard: 4304	**Created By:** Unknown (6057)	**Amount:** 1 L
MFG: NA	**Create Date:** 06/01/2009 04:06PM	**Expires:** 12/31/2025
MFG Lot: NA		**Usable:** Yes
Part ID: NA		**Lab Lot:** ASTMType2Water

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

Solvent Standard - Ultra-HNO3

Ultra-HNO3		**Description - Ultra Nitric Acid**
Standard: 44226	**Created By:** Penny A. Foote	**Amount:** 3 L
MFG: BDH Aristar Ultra	**Create Date:** 10/16/2018 09:10AM	**Expires:** 05/31/2021
MFG Lot: 1218050		**Usable:** Yes
Part ID: 87003-658		**Lab Lot:** 1218050-10/16/2018 PAF

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

Solvent Standard - Ultra-HCl

Ultra-HCl		**Description - Ultra Hydrochloric Acid**
Standard: 44227	**Created By:** Penny A. Foote	**Amount:** 2000 mL
MFG: BDH Aristar Ultra	**Create Date:** 10/17/2018 09:10AM	**Expires:** 03/23/2023
MFG Lot: 4218020		**Usable:** Yes
Part ID: 87003-218		**Lab Lot:** Ultra-HCl 4218020

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - Ultra-HNO3

Ultra-HNO3		Description - Ultra Nitric Acid
Standard: 46748	**Created By:** Penny A. Foote	**Amount:** 1 L
MFG: BDH Aristar Ultra	**Create Date:** 03/26/2019 09:03AM	**Expires:** 09/21/2021
MFG Lot: 1218090		**Usable:** Yes
Part ID: 87003-658		**Lab Lot:** 1218090-03/26/2019 PAF

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - Ultra-HNO3

Ultra-HNO3		Description - Ultra Nitric Acid
Standard: 47106	**Created By:** Penny A. Foote	**Amount:** 8 L
MFG: BDH Aristar Ultra	**Create Date:** 04/12/2019 10:04AM	**Expires:** 11/15/2021
MFG Lot: 1218101		**Usable:** Yes
Part ID: 87003-658		**Lab Lot:** 1218101-04/22/2019 PAF

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

4/27/19

005468

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L61

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095001

% Solids: 59.7 Date Received: 05/15/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.11	J	06/06/2019	14:03

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L62

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424001

% Solids: 51.7 Date Received: 05/18/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.045	J	06/06/2019	14:16

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L63

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424002

% Solids: 70.8 Date Received: 05/18/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.020	J	06/06/2019	14:17

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L64

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424003

% Solids: 39.8 Date Received: 05/18/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.074	J	06/06/2019	14:19

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L65

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424004

% Solids: 46.4 Date Received: 05/18/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.048	J	06/06/2019	14:20

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L66

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424005

% Solids: 24.1 Date Received: 05/18/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.066	J	06/06/2019	14:21

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L67

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424006

% Solids: 40.3 Date Received: 05/18/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.061	J	06/06/2019	14:22

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L69

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095002

% Solids: 54.0 Date Received: 05/15/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.074	J	06/06/2019	14:04

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L70

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095003

% Solids: 51.0 Date Received: 05/15/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.11	J	06/06/2019	14:05

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L71

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424007

% Solids: 62.5 Date Received: 05/18/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.057	J	06/06/2019	14:23

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L72

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424008

% Solids: 65.1 Date Received: 05/18/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.040	J	06/06/2019	14:24

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L73

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424009

% Solids: 55.6 Date Received: 05/18/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.032	J	06/06/2019	14:25

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L74

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095004

% Solids: 58.5 Date Received: 05/15/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.074	J	06/06/2019	14:06

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L75

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095005

% Solids: 52.9 Date Received: 05/15/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.11	J	06/06/2019	14:07

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L76

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095006

% Solids: 39.6 Date Received: 05/15/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.11	J	06/06/2019	14:09

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L77

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095007

% Solids: 52.3 Date Received: 05/15/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.11	J	06/06/2019	14:10

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L78

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095008

% Solids: 43.8 Date Received: 05/15/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.10	J	06/06/2019	14:11

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L79

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095009

% Solids: 52.8 Date Received: 05/15/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.11	J	06/06/2019	14:12

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9M24

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095012

% Solids: 53.5 Date Received: 05/15/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.11	J	06/06/2019	14:15

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9M33

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424010

% Solids: 49.3 Date Received: 05/18/2019

Analytical Method: CVAA

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.047	J	06/06/2019	14:27

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

Comments:

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Initial Calibration Verification Source: EPA ICV-5(0415)

Continuing Calibration Verification Source: 48129

Run Batch: AACV02-2019-0606-2 Analytical Method: CVAA

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV				ID: CCV1				ID: CCV2		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Mercury	4.0	4.0	101		5	5.0	100		5.0	99	

FORM 3-IN
BLANKS

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Preparation Blank Matrix: Soil

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

Analytical Method: CVAA Preparation Batch: 240582

Run Batch: AACV02-2019-0606-2 Preparation Method: 7471B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB	Q	ID: CCB1	Q	ID: CCB2	Q	ID:	Q	ID: PBS1	Q
Mercury	0.50	U	0.50	U	0.50	U			0.10	U

FORM 5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MF9L79S

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Analytical Method: CVAA

% Solids: 52.8

Concentration Units (ug/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	0.90		0.11	J	0.82	96	

FORM 6-IN
DUPLICATES

EPA SAMPLE NO.
MF9L79D

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Analytical Method: CVAA

% Solids: 52.8

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

Analyte	Control Limit	Sample (S)	Q	Duplicate (D)	Q	RPD	Q
Mercury		0.11	J	0.093	J		

FORM 9-IN
METHOD DETECTION LIMIT

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Analytical Method: CVAA Instrument ID: AACV02

Preparation Method: 7471B

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

Analyte	Wavelength/Mass	MDL	Date Analyzed
Mercury	253.65	0.0055	03/01/2019

FORM 12-IN
ANALYSIS LOG

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: AACV02 Analytical Method: CVAA

Start Date: 06/06/2019 End Date: 06/06/2019

Run Batch: AACV02-2019-0606-2

EPA Sample No.	D/F	Time	Analytes																										
			Hg																										
S0	1.0	1350	X																										
S01	1.0	1351	X																										
S02	1.0	1353	X																										
S03	1.0	1354	X																										
S04	1.0	1355	X																										
S05	1.0	1356	X																										
ICV	1.0	1357	X																										
ICB	1.0	1358	X																										
CCV1	1.0	1400	X																										
CCB1	1.0	1401	X																										
PBS1	1.0	1402	X																										
MF9L61	1.0	1403	X																										
MF9L69	1.0	1404	X																										
MF9L70	1.0	1405	X																										
MF9L74	1.0	1406	X																										
MF9L75	1.0	1407	X																										
MF9L76	1.0	1409	X																										
MF9L77	1.0	1410	X																										
MF9L78	1.0	1411	X																										
MF9L79	1.0	1412	X																										
MF9L79S	1.0	1413	X																										
MF9L79D	1.0	1414	X																										
MF9M24	1.0	1415	X																										
MF9L62	1.0	1416	X																										
MF9L63	1.0	1417	X																										
MF9L64	1.0	1419	X																										
MF9L65	1.0	1420	X																										
MF9L66	1.0	1421	X																										
MF9L67	1.0	1422	X																										
MF9L71	1.0	1423	X																										
MF9L72	1.0	1424	X																										
MF9L73	1.0	1425	X																										

FORM 12-IN
ANALYSIS LOG

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: AACV02 Analytical Method: CVAA

Start Date: 06/06/2019 End Date: 06/06/2019

Run Batch: AACV02-2019-0606-2

EPA Sample No.	D/F	Time	Analytes																										
			Hg																										
MF9M33	1.0	1427	X																										
CCV2	1.0	1428	X																										
CCB2	1.0	1429	X																										

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: AACV02 Start Date: 06/06/2019

Analytical Method: CVAA Run Batch: AACV02-2019-0606-2

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Mercury	0.0	0.0010		0.20	0.21	6	0.50	0.50	0

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: AACV02 Start Date: 06/06/2019

Analytical Method: CVAA Run Batch: AACV02-2019-0606-2

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Mercury	1.0	1.0	1	5.0	5.0	-1	10.0	10.0	0

FORM 16-IN
INITIAL CALIBRATION SUMMARY

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: AACV02 Start Date: 06/06/2019

Analytical Method: CVAA Run Batch: AACV02-2019-0606-2

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Mercury	1.000	8340	134	LR	None

00575

Hg Analysis Run Log
Pg 1 of 3

Report Generated By CETAC QuickTrace
Analyst: shaina.wiest
Worksheet file: C:\Program Files\QuickTrace\Worksheets\2019\AACV02-2019-0606-2.wsz
Date Started: 6/6/2019 1:21:42 PM
Comment: 240883

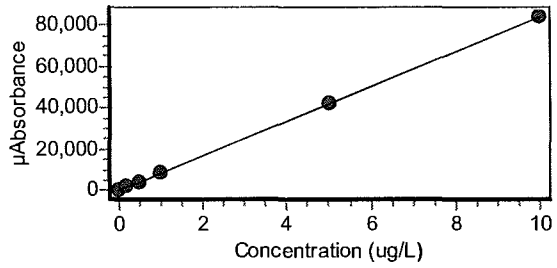
Inst. ID
AACV02

Results

Sample Name	Dil factor.	Type	Date/Time	Conc (ug/L)	µAbs	Flags	Results	% Difference
S0	1	STD	06/06/19 01:50:52 pm	0.0000	143		0.0010	N/A
S01	1	STD	06/06/19 01:51:59 pm	0.2000	1898		0.2113	5.7%
S02	1	STD	06/06/19 01:53:07 pm	0.5000	4306		0.4999	0.0%
S03	1	STD	06/06/19 01:54:15 pm	1.0000	8525		1.0056	0.6%
S04	1	STD	06/06/19 01:55:23 pm	5.0000	41571		4.9659	-0.7%
S05	1	STD	06/06/19 01:56:32 pm	10.0000	83712		10.0162	0.2%

Calibration

Equation: A = 134.353 + 8344.214C
R2: 0.99998
SEE: 166.3649
Flags:



ICV	1	ICV	06/06/19 01:57:42 pm	4.0206	33683	
% Recovery 100.51						
ICB	1	ICB	06/06/19 01:58:51 pm	-0.0101	50	
CCV1	1	CCV	06/06/19 02:00:00 pm	4.9968	41829	
% Recovery 99.94						
CCB1	1	CCB	06/06/19 02:01:10 pm	-0.0097	53	

00577

Sample Name	Dil Factor	Type	Date/Time	Conc (ug/L)	µAbs	Flags
PBS1	1	PBK	06/06/19 02:02:17 pm	-0.0004	131	
MF9L61	1	UNK	06/06/19 02:03:24 pm	0.3535	3084	
MF9L69	1	UNK	06/06/19 02:04:31 pm	0.2143	1923	
MF9L70	1	UNK	06/06/19 02:05:39 pm	0.2960	2604	
MF9L74	1	UNK	06/06/19 02:06:47 pm	0.2393	2131	
MF9L75	1	UNK	06/06/19 02:07:54 pm	0.3493	3049	
MF9L76	1	UNK	06/06/19 02:09:01 pm	0.2375	2116	
MF9L77	1	UNK	06/06/19 02:10:08 pm	0.3023	2657	
MF9L78	1	UNK	06/06/19 02:11:15 pm	0.2290	2045	
MF9L79	1	UNK	06/06/19 02:12:23 pm	0.3203	2807	
MF9L79S % Recovery 96.52	1	MSK	06/06/19 02:13:30 pm	2.7334	22942	
MF9L79D	1	UNK	06/06/19 02:14:37 pm	0.2827	2493	
MF9M24	1	UNK	06/06/19 02:15:44 pm	0.3344	2925	
MF9L62	1	UNK	06/06/19 02:16:51 pm	0.1322	1237	
MF9L63	1	UNK	06/06/19 02:17:59 pm	0.0731	745	
MF9L64	1	UNK	06/06/19 02:19:07 pm	0.1546	1424	
MF9L65	1	UNK	06/06/19 02:20:14 pm	0.1262	1187	

00578

Sample Name	Dil factor	Type	Date/Time	Conc (ug/L)	µAbs	Flags
MF9L66	1	UNK	06/06/19 02:21:21 pm	0.3456	3018	
MF9L67	1	UNK	06/06/19 02:22:29 pm	0.1416	1315	
MF9L71	1	UNK	06/06/19 02:23:37 pm	0.1820	1653	
MF9L72	1	UNK	06/06/19 02:24:44 pm	0.1348	1259	
MF9L73	1	UNK	06/06/19 02:25:52 pm	0.1048	1009	
MF9M33	1	UNK	06/06/19 02:27:00 pm	0.1377	1283	
CCV2	1	CCV	06/06/19 02:28:09 pm	4.9732	41632	
% Recovery 99.46						
CCB2	1	CCB	06/06/19 02:29:18 pm	-0.0092	57	

00579

Analysis Parameters

Instrument M-7500 Mercury Analyzer

Conditions

Gas flow (mL/min)	Sample Uptake (s)	Rinse (s)	Read delay (s)	Replicates (#)	Replicate time (s)	Pump speed (%)	Wavelength (nm)
225	20.00	40.00	35.00	1	2.00	90	253.65

ASX Pump Rate (%)
100

Instrumental Zero

Zero before first sample: No

Zero periodically: Yes

Before each calibration.

Baseline Correction

#1 Start time (s)	#1 End time (s)	#2 Start time (s)	#2 End time (s)
7.00	12.00		

Standby Mode

Enabled: Yes

Standby Options: gas off, lamp off

Autodilution

Enabled: No

Condition:

Tube # range:

If no autodilution tubes remaining

Calibration

Settings

Algorithm	Through blank	Weighted fit	Cal. Type	Racalibration rate	Reslope rate	Reslope standard
Linear	No	No	Normal	0	0	N/A

Limits

Calibration slope		Reslope		Coeff. of Determination
Lower (%)	Upper (%)	Lower (%)	Upper (%)	
20	150	75	125	0.99500

Error action: Stop analysis

QC

GLP Override: Yes

QC Tests

PBK

Concentration (ug/L)
0.2000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

CCB

Concentration (ug/L)
0.2000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

ICB

Concentration (ug/L)
0.2000

Failure flag: Z

Error action for manually inserted QC: Stop analysis

CCV

Concentration (ug/L)	Low Limit %	High Limit %
5.0000	85.0000	115.0000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

ICV

Concentration (ug/L)	Low Limit %	High Limit %
4.0000	85.0000	115.0000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

MSK

Concentration (ug/L)	Low Limit %	High Limit %
2.5000	75.0000	125.0000

Failure flag: N

Error action for manually inserted QC: Flag and continue

60581

ALS SLC – ISM02.4 – Mercury in Soil: Digestion & Analysis:

Workorder and Sample Information + Prep-Batching Information

Workorder ID	HBN	SDG	Case
1914795	240582	MF9L61	48216
1914824	↓	↓	↓
		6/6/19	
		AW	

Preparation Information

Preparer Name:	Shaina West		
Prep Start Date:	6/6/19	Prep Start Time:	0800

Method Information

Sample IDs are verified by matching the laboratory and client sample labels.
0.5g - 0.6g representative sample aliquots are weighed, then transferred into digestion vessels, rinsing each weighing-dish with 5mL ASTM Type II H_2O into the appropriate vessel. Weights are recorded on the batch sheet or an electronic spreadsheet. **Balance ID:** 102683
10mL of ASTM Type II H_2O is added to digestion vessels for stds and QCs. Mercury Standards and QCs are spiked as indicated below. Hg concentration in standards and samples is based on a final aqueous volume of 100mL.

Prepared Standard Name	Hg Spike Used	Spiking Volume	Spike ID No.	Pipette Used	[Hg] µg/L
S0	NONE	NONE	NONE	NONE	0
S01	STD B:	200µL	480130	Hg-A	0.2
S02	0.1 µg/mL	500µL	↓	↓	0.5
S03	STD A:	100µL	480129	Hg-100	1.0
S04/CCV	1.0 µg/mL	500µL		Hg-A	5.0
S05		1000µL	↓	↓	10.0
ICB/CCB/PBS	NONE	NONE	NONE	NONE	0
ICV	STD:ICV5 ~~0508~~ 0415	1000µL	480916	Hg-A	4.0
MS	STD A	250µL	480129	↓	0.5 µg/g
MD	NONE	Hg target = Parent sample [Hg]			
MS/MD IDs:	MF9L79S MF9L79D				

6/6/19 AW

5mL of freshly prepared aqua-regia (3:1 HCl + HNO_3) is added to each vessel.

HCl	Lot: 58025	Manufacturer:	OmniTrace
HNO_3	Lot: 213500	Manufacturer:	JTBaker

Samples, QCs, and standards are digested for two minutes on a hot block set to maintain a representative H_2O temp-blank at 90 ± 3 °C.

HB #: 22A	Hood #: 22	Thermometer ID: 510	
On this hotblock:	All		
Start Time	End Time	Start Temp	End Temp
0955	0957	90.8 °C	91.3 °C
HB #:	Hood #:	Thermometer ID:	
On this hotblock:			
Start Time	~~End Time~~	~~Start Temp~~	End Temp
		°C	°C

6/6/19 AW

Allow all digestion vessels to cool. Then 50mL ASTM Type II H_2O and 15 mL 5% $KMnO_4$ is added to each vessel. Purple $KMnO_4$ color should persist for 15 minutes. If not then add additional 5% $KMnO_4$ to each vessel. All standards, QCs, and samples must be given equal $KMnO_4$.

5% $KMnO_4$	Start time: 1010	End time: 1025
	Mercury Reagents Log	Entry ID: 205
	Made: 5/29/19	Expires: 5/29/20
Was additional $KMnO_4$ used?	NO	How much? NA

Samples, QCs, and standards are digested for thirty minutes on a hot block set to maintain a representative H_2O temp-blank at 90 ± 3 °C.

HB #: 22A	Hood #: 22	Thermometer ID: 510	
On this hotblock:	All		
Start Time	End Time	Start Temp	End Temp
1027	1057	89.6 °C	92.4 °C
HB #:	Hood #:	Thermometer ID:	
On this hotblock:			
Start Time	~~End Time~~	Start Temp	End Temp
		°C	°C

6/6/19 AW

Allow samples to cool before analysis. 50mL ASTM Type II H_2O is added to each spiked standard and 55mL ASTM Type II H_2O is added to each weighed sample and QC.

Preparation Comments:

6/6/19 AW

Analysis Information

Analyst Name:	Shaina West		
Date Received for Analysis:	6/6/19	Time Received:	1245

12% NH_2OH•HCl is added just prior to analysis in order to reduce any remaining $KMnO_4$ from the digestion. 6 mL 12% NH_2OH•HCl is added to all standards and samples for each 15mL 5% $KMnO_4$ that were used in digestion. Mix standards and samples well by shaking capped vessels. All $KMnO_4$ color should be gone. The final volume of standards and samples is 100 mL sample + 36 mL reagents + additional reagents if required as noted in the preparation info. Because calibration standards receive the same reagents as samples the Hg concentration in all standards, QCs, and samples is calculated from the final aqueous volume of 100mL for analysis regardless of digestion reagents.

12% NH_2OH•HCl	Mercury Reagents Log	Entry ID: 204
	Made: 5/23/19	Expires: 5/23/20

CVAA Instrument Information

Type: Cold vapor atomic absorption	Wavelength: 253.7 nm
Instrument Name: CETAC M-7500	Lab ID: AACV02

Reagent Information

10% $SnCl_2$ +7% HCl	Mercury Reagents Log	Entry ID: 207
	Made: 5/31/19	Expires: 5/31/20
5% HCl + 5% HNO_3	Mercury Reagents Log	Entry ID: 206
	Made: 5/29/19	Expires: 5/29/30

Run Information #1 – SDG:

Run Date: 6/6/19	Start Time: 1350	End Time: 1429
Analysis HBN: 240583	Data ID:	HG02-2019-060602

Run Information #2 – SDG:

Run Date:	Start Time:	End Time:
Analysis HBN:	Data ID:	

Run Information #3 – SDG:

Run Date:	Start Time:	End Time:
Analysis HBN:	Data ID:	

Dilution Information

Sample	Dilution	Pipette(s)	Reason

06/06/19 AW

Sample Result Information

Conversion: (µg/L result)(0.1 L)(1/grams of sample)(dilution factor) = (µg/g final result). Final reported results may include percent solids correction. In this case the instrument result is divided by %solids.
QC Control Limits: Calibration R^2 0.995 minimum; Standards ± 30%; ICV,CCV ± 15%; MS ± 25%; Sample/MD-RPD 20%
CRQL: 0.1 mg/kg [Hg]
All data is scanned and saved by SDG.
Mercury reagents are saved to an online logbook.
ALS SOP: IT-EP-CASC-HG

Additional Information

Comments:

06/06/19 AW

ISM02.4-7471B Hg-Soil: Electronic Physical Description Log

File Location: \\Alsltws013\INORGANIC			File Name: PD-HGS-MF9L61-240582
HBN: 240582	Case: 48266	SDG: MF9L61	Mercury in EPA-CLP soil
Workorder ID(s): 1914095,1914424			Preparer: Shaina Wiest

ISM02.4-7471B Mercury Standards Preparation Description

Sample ID.	Solution used	Amount	Description of solution	Std. final volume	Std. final conc.
S0, ICB, CCBs, PBS	NA	NA	NA	100mL sample + 36mL reagents	0 µg/L Hg
S01	Hg STD B (48130)	200 µL	STD B = 0.1 mg/L Hg		0.2 µg/L Hg
S02	↓	500 µL	↓		0.5 µg/L Hg
S03	Hg STD A (48129)	100 µL	STD A = 1.0 mg/L Hg		1.0 µg/L Hg
S04, CCVs	↓	500 µL	↓		5.0 µg/L Hg
S05	↓	1000 µL	↓		10 µg/L Hg
ICV	ICV5-0415 (48086)	1000 µL	Hg CLP-ICV = 0.4 mg/L Hg		4.0 µg/L Hg
MS	Hg STD A (48129)	250 µL	STD A = 1.0 mg/L Hg		2.5 µg/L Hg
MD	NA	NA	NA	↓	NA

ISM02.4-7471B Mercury Samples Preparation Description

	EPA Sample ID	Matrix	Method **	Prep Date and Time	Amount of Sample Used (g)	Final Volume of Samples (mL)	pH
Calibration Standards	S0	ASTM Type II H_2O	ISM02.4 7471B	6/6/2019 9:00	NA	100mL + 36mL reagents	NA
	S01	↓	↓	↓	↓	↓	↓
	S02						
	S03						
	S04/CCVs						
	S05						
	ICV						
	ICB/CCBs						
	PBS						
	MF9L61	Soil			0.5382		
	MF9L69				0.5363		
	MF9L70				0.5202		
	MF9L74				0.5507		
	MF9L75				0.5831		
	MF9L76				0.5403		
	MF9L77				0.5440		
	MF9L78				0.5126		
	MF9L79				0.5735		
	MF9L79S				0.5748		
	MF9L79D				0.5743		
	MF9M24				0.5515		
	MF9L62				0.5697		
	MF9L63				0.5245		
	MF9L64				0.5218		
	MF9L65				0.5655		
	MF9L66				2.1611		
	MF9L67				0.5746		
	MF9L71				0.5120		
	MF9L72				0.5228		
	MF9L73				0.5858		
	MF9M33	↓	↓	↓	0.5922	↓	↓

Method Summary: ~0.5g of soil is mixed with 5mL water and digested with 5mL aqua-regia for 2 minutes, then mixed with 50mL water and 15mL potassium permanganate and digested for 30 minutes. Samples are cooled and treated with hydroxylamine-hydrochloride, then analyzed for mercury by CVAA.

Notes: sample MF9L66 weighed at 2.1611g due to being under 30% solids.

STANDARD REPORT

Working Standard - Hg B Cal Sol

Hg B Cal Sol		Description - Hg B Calibration Solution
Standard: 48130	**Created By:** Shaina Wiest	**Amount:** 50 mL
MFG: ALS	**Create Date:** 06/06/2019 08:06AM	**Expires:** 06/13/2019
MFG Lot: Not Provided		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** HgB

Pos.	Analyte	Name	Concentration
1	7439-97-6	Mercury	0.1 ug/mL

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	48.5 mL	11/07/2025
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	1 mL	04/02/2021
48127	Hg Working	Hg CCV/Calibration Working	HgWS	0.5 mL	06/13/2019

STANDARD REPORT

Working Standard - Hg A Cal Sol

Hg A Cal Sol		Description - Hg A Calibration Solution
Standard: 48129	**Created By:** Shaina Wiest	**Amount:** 50 mL
MFG: ALS	**Create Date:** 06/06/2019 08:06AM	**Expires:** 06/13/2019
MFG Lot: Not Provided		**Usable:** Yes
Pipette ID: Not Provided		**Lab Lot:** HgA

Pos.	Analyte	Name	Concentration
1	7439-97-6	Mercury	1 ug/mL

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	44 mL	11/07/2025
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	1 mL	04/02/2021
48127	Hg Working	Hg CCV/Calibration Working	HgWS	5 mL	06/13/2019

Stock Standard - Hg EPA ICV

Hg EPA ICV		Description - Hg EPA ICV
Standard: 48086	**Created By:** Shaina Wiest	**Amount:** 250 mL
MFG: EPA Reference Material	**Create Date:** 06/05/2019 07:06AM	**Expires:** 06/05/2029
MFG Lot: ICV5-0508 Hg		**Usable:** Yes
Part ID: EPA ICV5-0415		**Lab Lot:** IHg-CLPICV

Pos.	Analyte	Name	Concentration
1	7439-97-6	Mercury	400 ug/L

STANDARD REPORT

Constituent

Stock Standard - Hg WS Stock

Hg WS Stock		Description - Hg CCV/Cal Stock Solution
Standard: 44877	**Created By:** Shaina Wiest	**Amount:** 125 mL
MFG: Inorganic Ventures	**Create Date:** 11/26/2018 08:11AM	**Expires:** 11/26/2019
MFG Lot: K2-HG03002		**Usable:** Yes
Part ID: AAHG1		**Lab Lot:** InorganicVenturesHg1000

Pos.	Analyte	Name	Concentration
1	7439-97-6	Mercury	1000 mg/L

STANDARD REPORT

Constituent

Working Standard - Hg Working

Hg Working	Description - Hg CCV/Calibration Working

Standard: 48127 **Created By:** Shaina Wiest **Amount:** 50 mL
MFG: ALS **Create Date:** 06/06/2019 08:06AM **Expires:** 06/13/2019
MFG Lot: Not Provided **Usable:** Yes
Pipette ID: Not Provided **Lab Lot:** HgWS

Pos.	Analyte	Name	Concentration
1	7439-97-6	Mercury	10 ug/mL

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	48.5 mL	11/07/2025
44877	Hg WS Stock	Hg CCV/Cal Stock Solution	InorganicVenturesHg10	0.5 mL	11/26/2019
46909	HNO3	Concentrated Nitric Acid	HNO3 (213500)	1 mL	04/02/2021

STANDARD REPORT

Constituent

Solvent Standard - ASTM H2O

ASTM H2O			Description - ASTM Type II Water
Standard: 109	**Created By:** ALS Support (Lims)	**Amount:** 1000 L	
MFG: DCL In House	**Create Date:** 10/06/2005 09:10AM	**Expires:** 11/07/2025	
MFG Lot: Not Provided		**Usable:** Yes	
Part ID: Not Provided		**Lab Lot:** LAB 109	

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - HNO3

HNO3			Description - Concentrated Nitric Acid
Standard: 46909	**Created By:** Emilee Sandoval	**Amount:** 2.5 L	
MFG: JT Baker	**Create Date:** 04/02/2019 12:04PM	**Expires:** 04/02/2021	
MFG Lot: 0000213500		**Usable:** Yes	
Part ID: Not Provided		**Lab Lot:** HNO3 (213500)	

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

ALS Reagent Report

ID Number: 205 Description: 5% Potassium Permanganate

Analyst: Shaina Wiest

Date Created: 5/29/2019 Expiration Date: 5/29/2020

Pipettes Used:

Balanced Used: 102887

Materials Used, Manufacturer, Lots, Amounts, Final Concentrations if applicable

Dissolve 100g potassium permanganate crystals into 2L ASTM type II water. Made 3x 2-Liter Bottles =6L.
Alfa Aesar 99.0% KMNO4 Lot: U04D025.

00591

ALS SLC - ISM02.4 Mercury in Soil Analysis Log Pg 1 of 1

Electronic Log Information

File Location: \\Alsltws013\INORGANIC File Name: AN-HGS-MMF9L61-240883

Sample & Case Information

ALS workorder ID	EPA Sample Names	Case	SDG	Account	No. of Samples
1914095	MF9L61,69,70,74,75,76,77,78,79, M24	48266	MF9L61	8201	20
1914424	MF9L62,63,64,65,66,67,71,72,73, M33	48266	MF9L61	8201	

Sample Preparation Information

1) Preparation Group ID: EHG(HBN:) 240582
2) Physical Description Location: \\Alsltws013\INORGANIC
3) Preparation Date/Time: 06/06/2019 08:00
4) HCl lot used: 58225
5) HNO_3 lot used: 213500
6) Permanganate used: Mercury Reagents log ID #205
7) Preparer:Shaina Wiest

Analysis and Data Information

1) Analysis Group ID: EHG (HBN:)240883
2) Data Result File Name: AACV02-2019-0606-2
3) Analysis Date/Start-time: 06/06/2019 13:50 END:14:29
4) 12% NH_2OH•HCl Entry: Mercury Reagents log ID #204
5) 10% SnCl2 Entry: Mercury Reagents log ID #207
6) 5% HNO3 + 5% HCl Entry: Mercury Reagents log ID #206
7) Analyst: Shaina Wiest

Analysis Instrument

1) Instrument Type: Cold Vapor Atomic Absorption
2) Instrument Name: CETAC M-7500
3) Instrument ID: AACV02
4) Reading Wavelength: 253.65 nm
5) Running Condition of Instrument: Good

Calibration Data and Calculations

1) Correlation Coefficient: 0.99998
2) equation $A = n_1 + n_2C$ n_1 134.353
3) then $C = (A - n_1) / n_2$ n_2 8344.214
4) Calculated mercury concentrations (µg/L)

Stds.	µAbs	Result	Target	% Difference
S0	142.91	0.0010	0.0	NA
S01	1897.7	0.2113	0.2	5.7%
S02	4305.7	0.4999	0.5	0.0%
S03	8525.2	1.0056	1.0	0.6%
S04	41571	4.9659	5.0	-0.7%
S05	83712	10.0162	10.0	0.2%

Conversion

(µg/L result)(0.1 L)(1/grams of sample)(dilution factor) = (µg/g final result). Final reported results may include percent solids correction. In this case the instrument result is divided by %solids.

Comments

None were required.

Sample ID	Dilution	Reason	Pipettes used
None were required.			

Method Information

1) Method/SOP: ISM02.4 Mercury in Soil: SOP (IT-EP-CASC-HG)
2) Method Detection Limit (MDL) = 0.0055 mg/kg [Hg]; Effective 03/01/2019 - 03/01/2020
3) Contract Required Quantitation Limit (CRQL) = 0.1 mg/kg [Hg]
4) Method Control Limits: Calibration Stds ±30% difference; ICV/CCV ±15% of target; MS ±25% of target

Hg Analysis Run Log
Pg 1 of 3

Report Generated By CETAC QuickTrace
Analyst: shaina.wiest
Worksheet file: C:\Program Files\QuickTrace\Worksheets\2019\AACV02-2019-0606-2.wsz
Date Started: 6/6/2019 1:21:42 PM
Comment: 240883

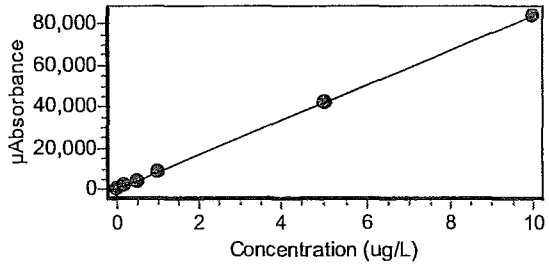
Inst. ID
AACV02

Results

Sample Name	Dil factor.	Type	Date/Time	Conc (ug/L)	µAbs	Flags	results	% Difference
S0	1	STD	06/06/19 01:50:52 pm	0.0000	143		0.0010	N/A
S01	1	STD	06/06/19 01:51:59 pm	0.2000	1898		0.2113	5.7%
S02	1	STD	06/06/19 01:53:07 pm	0.5000	4306		0.4999	0.0%
S03	1	STD	06/06/19 01:54:15 pm	1.0000	8525		1.0056	0.6%
S04	1	STD	06/06/19 01:55:23 pm	5.0000	41571		4.9659	-0.7%
S05	1	STD	06/06/19 01:56:32 pm	10.0000	83712		10.0162	0.2%

Calibration

Equation: A = 134.353 + 8344.214C
R2: 0.99998
SEE: 166.3649
Flags:



ICV	1	ICV	06/06/19 01:57:42 pm	4.0206	33683	
% Recovery 100.51						
ICB	1	ICB	06/06/19 01:58:51 pm	-0.0101	50	
CCV1	1	CCV	06/06/19 02:00:00 pm	4.9968	41829	
% Recovery 99.94						
CCB1	1	CCB	06/06/19 02:01:10 pm	-0.0097	53	

00593

Sample Name	Dil factor	Type	Date/Time	Conc (ug/L)	µAbs	Flags
PBS1	1	PBK	06/06/19 02:02:17 pm	-0.0004	131	
MF9L61	1	UNK	06/06/19 02:03:24 pm	0.3535	3084	
MF9L69	1	UNK	06/06/19 02:04:31 pm	0.2143	1923	
MF9L70	1	UNK	06/06/19 02:05:39 pm	0.2960	2604	
MF9L74	1	UNK	06/06/19 02:06:47 pm	0.2393	2131	
MF9L75	1	UNK	06/06/19 02:07:54 pm	0.3493	3049	
MF9L76	1	UNK	06/06/19 02:09:01 pm	0.2375	2116	
MF9L77	1	UNK	06/06/19 02:10:08 pm	0.3023	2657	
MF9L78	1	UNK	06/06/19 02:11:15 pm	0.2290	2045	
MF9L79	1	UNK	06/06/19 02:12:23 pm	0.3203	2807	
MF9L79S % Recovery 96.52	1	MSK	06/06/19 02:13:30 pm	2.7334	22942	
MF9L79D	1	UNK	06/06/19 02:14:37 pm	0.2827	2493	
MF9M24	1	UNK	06/06/19 02:15:44 pm	0.3344	2925	
MF9L62	1	UNK	06/06/19 02:16:51 pm	0.1322	1237	
MF9L63	1	UNK	06/06/19 02:17:59 pm	0.0731	745	
MF9L64	1	UNK	06/06/19 02:19:07 pm	0.1546	1424	
MF9L65	1	UNK	06/06/19 02:20:14 pm	0.1262	1187	

00594

Sample Name	Dil factor	Type	Date/Time	Conc (ug/L)	µAbs	Flags
MF9L66	1	UNK	06/06/19 02:21:21 pm	0.3456	3018	
MF9L67	1	UNK	06/06/19 02:22:29 pm	0.1416	1315	
MF9L71	1	UNK	06/06/19 02:23:37 pm	0.1820	1653	
MF9L72	1	UNK	06/06/19 02:24:44 pm	0.1348	1259	
MF9L73	1	UNK	06/06/19 02:25:52 pm	0.1048	1009	
MF9M33	1	UNK	06/06/19 02:27:00 pm	0.1377	1283	
CCV2	1	CCV	06/06/19 02:28:09 pm	4.9732	41632	
% Recovery 99.46						
CCB2	1	CCB	06/06/19 02:29:18 pm	-0.0092	57	

00595

ALS Reagent Report

ID Number: 204 Description: 12% Hydroxylamine Hydrochloride

Analyst: Shaina Wiest

Date Created: 5/23/2019 Expiration Date: 5/23/2020

Pipettes Used:

Balanced Used: 102887

Materials Used, Manufacturer, Lots, Amounts, Final Concentrations if applicable

240g hydroxylamine hydrochloride was dissolved into 2L ASTM type II water. Total of 2L (1x 2L) was prepared.
Hydroxylamine Hydrochloride: J.T. Baker lot #215387.

00596

ALS Reagent Report

ID Number: 207 Description: 10% Stannous Chloride in 7% Hydrochloric Acid

Analyst: Shaina Wiest

Date Created: 5/31/2019 Expiration Date: 5/31/2020

Pipettes Used: Acid Dispenser

Balanced Used: 102887

Materials Used, Manufacturer, Lots, Amounts, Final Concentrations if applicable

200g tin chloride dissolved in 140mL HCl and diluted to 2L with ASTM Type II water.
Tin(II) chloride dihydrate, reagent grade - Alfa Aesar - Lot: W13E014.
Hydrochloric acid - EMD OmniTrace - Lot: 58225.
2x (2L bottles) = 2L prepared.

00597

ALS Reagent Report

ID Number: 206 Description: Hg - CVAA rinse

Analyst: Emilee Sandoval

Date Created: 5/29/2019 Expiration Date: 5/29/2020

Pipettes Used: acid dispensers

Balanced Used:

Materials Used, Manufacturer, Lots, Amounts, Final Concentrations if applicable

5% Nitric Acid (lot 213500) + 5% Hydrochloric Acid (lot 58225) in 2L final volume with DDI water. 8L (4 x 2L-bottles) made total.

00598

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L61

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095001

% Solids: 59.7 Date Received: 05/15/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.083	J*	05/27/2019	15:18

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L62

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424001

% Solids: 51.7 Date Received: 05/18/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.87	U*	05/27/2019	15:34

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L63

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424002

% Solids: 70.8 Date Received: 05/18/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.63	J*	05/27/2019	15:34

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L64

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424003

% Solids: 39.8 Date Received: 05/18/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.29	J*	05/27/2019	15:35

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L65

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424004

% Solids: 46.4 Date Received: 05/18/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.93	U*	05/27/2019	15:37

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L66

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424005

% Solids: 24.1 Date Received: 05/18/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.24	J*	05/30/2019	18:41

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L67

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424006

% Solids: 40.3 Date Received: 05/18/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	1.2	U*	05/27/2019	15:39

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L69

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095002

% Solids: 54.0 Date Received: 05/15/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.91	U*	05/27/2019	15:21

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L70

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095003

% Solids: 51.0 Date Received: 05/15/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.92	U*	05/27/2019	15:21

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L71

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424007

% Solids: 62.5 Date Received: 05/18/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.075	J*	05/27/2019	15:39

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L72

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424008

% Solids: 65.1 Date Received: 05/18/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.043	J*	05/27/2019	15:42

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L73

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424009

% Solids: 55.6 Date Received: 05/18/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.53	J*	05/27/2019	15:42

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L74

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095004

% Solids: 58.5 Date Received: 05/15/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.084	J*	05/27/2019	15:22

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L75

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095005

% Solids: 52.9 Date Received: 05/15/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.88	U*	05/27/2019	15:22

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L76

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095006

% Solids: 39.6 Date Received: 05/15/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.11	J*	05/27/2019	15:25

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L77

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095007

% Solids: 52.3 Date Received: 05/15/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.092	J*	05/27/2019	15:25

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L78

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095008

% Solids: 43.8 Date Received: 05/15/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.24	J*	05/27/2019	15:26

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9L79

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095009

% Solids: 52.8 Date Received: 05/15/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.055	J*	05/27/2019	15:26

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9M24

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914095012

% Solids: 53.5 Date Received: 05/15/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	0.20	J*	05/27/2019	15:30

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

Comments:

FORM 1-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9M33

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Lab Sample ID: 1914424010

% Solids: 49.3 Date Received: 05/18/2019

Analytical Method: Spectrophotometry

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
57-12-5	Cyanide	1.0	U*	05/27/2019	15:43

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

Comments:

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Initial Calibration Verification Source: EPA-ICV6-0400

Continuing Calibration Verification Source: ALS-47915

Run Batch: 20190527001&3 Analytical Method: Spectrophotometry

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV				ID: CCV1				ID: CCV2		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Cyanide	99	94.0	95		200	201	101		195	97	

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Initial Calibration Verification Source:

Continuing Calibration Verification Source: ALS-47915

Run Batch: 20190527001&3 Analytical Method: Spectrophotometry

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID:				ID: CCV3				ID: CCV4		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Cyanide					200	190	95		203	102	

FORM 2-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Initial Calibration Verification Source: EPA-ICV6-0400

Continuing Calibration Verification Source: ALS-47915

Run Batch: 20190530002 Analytical Method: Spectrophotometry

Concentration Units: ug/L

	Initial Calibration Verification				Continuing Calibration Verification						
	ID: ICV2				ID: CCV5				ID: CCV6		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	Found	%R	%RSD
Cyanide	99	95.0	96		200	211	106		204	102	

FORM 3-IN
BLANKS

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Preparation Blank Matrix: Soil

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

Analytical Method: Spectrophotometry Preparation Batch: 240053

Run Batch: 20190527001&3 Preparation Method: Micro-distillation_Soil

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB	Q	ID: CCB1	Q	ID: CCB2	Q	ID: CCB3	Q	ID: PBS	Q
Cyanide	41.7	U	41.7	U	41.7	U	41.7	U	0.48	U

FORM 3-IN
BLANKS

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Preparation Blank Matrix:

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

Analytical Method: Spectrophotometry Preparation Batch: 240053

Run Batch: 20190527001&3 Preparation Method: Micro-distillation_Soil

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID:	Q	ID: CCB4	Q	ID:	Q	ID:	Q	ID:	Q
Cyanide			6.0	J						

FORM 3-IN
BLANKS

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Preparation Blank Matrix: Soil

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

Analytical Method: Spectrophotometry Preparation Batch: 240691

Run Batch: 20190530002 Preparation Method: Micro-distillation_Soil

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank/Leachate Extraction Blank	
Analyte	ID: ICB2	Q	ID: CCB5	Q	ID: CCB6	Q	ID:	Q	ID: PBS2	Q
Cyanide	41.7	U	41.7	U	41.7	U			0.50	U

FORM 5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MF9L79S

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Analytical Method: Spectrophotometry

% Solids: 52.8

Concentration Units (ug/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
Cyanide	75-125	0.59	J	0.055	J	2.1	25	*

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

EPA SAMPLE NO.
MF9L79A

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Analytical Method: Spectrophotometry

% Solids: 52.8

Concentration Units (ug/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
Cyanide		2.2		0.055	J	1.7	123	

FORM 6-IN
DUPLICATES

EPA SAMPLE NO.
MF9L79D

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Matrix: Soil Analytical Method: Spectrophotometry

% Solids: 52.8

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

Analyte	Control Limit	Sample (S)	Q	Duplicate (D)	Q	RPD	Q
Cyanide		0.055	J	0.85	U		

FORM 9-IN
METHOD DETECTION LIMIT

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Analytical Method: Spectrophotometry Instrument ID: WET01

Preparation Method: Micro-distillation_Soil

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

Analyte	Wavelength/Mass	MDL	Date Analyzed
Cyanide	570.00	0.028	04/23/2019

FORM 12-IN
ANALYSIS LOG

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: WET01 Analytical Method: Spectrophotometry

Start Date: 05/27/2019 End Date: 05/27/2019

Run Batch: 20190527001&3

EPA Sample No.	D/F	Time	Analytes																										
			Cn																										
S0	1.0	1505	X																										
S01	1.0	1508	X																										
S02	1.0	1508	X																										
S03	1.0	1509	X																										
S04	1.0	1510	X																										
S05	1.0	1512	X																										
S06	1.0	1513	X																										
ICV	1.0	1513	X																										
ICB	1.0	1514	X																										
CCV1	1.0	1516	X																										
CCB1	1.0	1517	X																										
PBS	1.0	1518	X																										
MF9L61	1.0	1518	X																										
MF9L69	1.0	1521	X																										
MF9L70	1.0	1521	X																										
MF9L74	1.0	1522	X																										
MF9L75	1.0	1522	X																										
MF9L76	1.0	1525	X																										
MF9L77	1.0	1525	X																										
MF9L78	1.0	1526	X																										
MF9L79	1.0	1526	X																										
MF9L79S	1.0	1529	X																										
MF9L79D	1.0	1529	X																										
MF9M24	1.0	1530	X																										
CCV2	1.0	1531	X																										
CCB2	1.0	1533	X																										
MF9L62	1.0	1534	X																										
MF9L63	1.0	1534	X																										
MF9L64	1.0	1535	X																										
MF9L65	1.0	1537	X																										
MF9L66	1.0	1538																											
MF9L67	1.0	1539	X																										

FORM 12-IN
ANALYSIS LOG

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: WET01 Analytical Method: Spectrophotometry

Start Date: 05/27/2019 End Date: 05/27/2019

Run Batch: 20190527001&3

EPA Sample No.	D/F	Time	Analytes																											
			Cn																											
MF9L71	1.0	1539	X																											
MF9L72	1.0	1542	X																											
MF9L73	1.0	1542	X																											
MF9M33	1.0	1543	X																											
CCV3	1.0	1543	X																											
CCB3	1.0	1546	X																											
MF9L79A	1.0	1604	X																											
CCV4	1.0	1607	X																											
CCB4	1.0	1607	X																											

FORM 12-IN
ANALYSIS LOG

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: WET01 Analytical Method: Spectrophotometry

Start Date: 05/30/2019 End Date: 05/30/2019

Run Batch: 20190530002

EPA Sample No.	D/F	Time	Analytes																										
			Cn																										
S0	1.0	1828	X																										
S01	1.0	1831	X																										
S02	1.0	1831	X																										
S03	1.0	1832	X																										
S04	1.0	1832	X																										
S05	1.0	1835	X																										
S06	1.0	1835	X																										
ICV2	1.0	1836	X																										
ICB2	1.0	1837	X																										
CCV5	1.0	1839	X																										
CCB5	1.0	1840	X																										
PBS2	1.0	1841	X																										
MF9L66	1.0	1841	X																										
CCV6	1.0	1844	X																										
CCB6	1.0	1844	X																										

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: WET01 Start Date: 05/27/2019

Analytical Method: Spectrophotometry Run Batch: 20190527001&3

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	0.0	-0.89		10.0	9.4	-6	50.0	51.8	4

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: WET01 Start Date: 05/27/2019

Analytical Method: Spectrophotometry Run Batch: 20190527001&3

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	100	98.2	-2	200	202	1	300	300	0

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: WET01 Start Date: 05/27/2019

Analytical Method: Spectrophotometry Run Batch: 20190527001&3

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	400	399	0						

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: WET01 Start Date: 05/30/2019

Analytical Method: Spectrophotometry Run Batch: 20190530002

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	0.0	-1.3		10.0	9.0	-10	50.0	48.2	-4

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: WET01 Start Date: 05/30/2019

Analytical Method: Spectrophotometry Run Batch: 20190530002

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	100	101	1	200	204	2	300	305	2

FORM 15-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: WET01 Start Date: 05/30/2019

Analytical Method: Spectrophotometry Run Batch: 20190530002

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	400	394	-1						

FORM 16-IN
INITIAL CALIBRATION SUMMARY

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: WET01 Start Date: 05/27/2019

Analytical Method: Spectrophotometry Run Batch: 20190527001&3

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Cyanide	0.9999	813	8.37	LR	None

FORM 16-IN
INITIAL CALIBRATION SUMMARY

Lab Name: ALS Environmental (SLC) Contract: EPW14027

Lab Code: ALS Case No.: 48266 MA No.: SDG No.: MF9L61

Instrument ID: WET01 Start Date: 05/30/2019

Analytical Method: Spectrophotometry Run Batch: 20190530002

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Cyanide	0.9997	831	3.21	LR	None

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EPA-CLP Cyanide Data and Analysis Run Log Page 1A of 4A

dilution

Method: CYN2 - Unit [µg/L] - Cyanide - EPA SOW

Smp#/[Dil Fact]	Sample ID	Conc.	OD	Analysis Time
DIL-1	RBL	0.0000	0.0159	3:04:18 PM
DIL-1	RBL	0.0000	0.0100	3:04:36 PM
DIL-1	RBL	0.0000	0.0170	3:05:30 PM
ST-1	Std-1	0.0000	-0.0114	3:05:48 PM
ST-2	Std-2	10.0000	0.0013	3:08:30 PM
ST-3	Std-3	50.0000	0.0534	3:08:48 PM
ST-4	Std-4	100.0000	0.1105	3:09:42 PM
ST-5	Std-5	200.0000	0.2387	3:10:00 PM
ST-6	Std-6	300.0000	0.3589	3:12:42 PM
ST-7	Std-7	400.0000	0.4802	3:13:00 PM
1	ICV	93.988	0.1053	3:13:54 PM
2	ICB	-0.171	-0.0105	3:14:12 PM
3	CCV1	201.402	0.2374	3:16:54 PM
4	CCB1	1.943	-0.0079	3:17:12 PM
5	PBS	-0.334	-0.0107	3:18:06 PM
6	MF9L61	4.626	-0.0046	3:18:24 PM
7	MF9L69	-14.377	-0.0280	3:21:06 PM
8	MF9L70	-30.145	-0.0474	3:21:24 PM
9	MF9L74	4.157	-0.0052	3:22:18 PM
10	MF9L75	1.048	-0.0090	3:22:36 PM
11	MF9L76	3.732	-0.0057	3:25:18 PM
12	MF9L77	4.463	-0.0048	3:25:36 PM
13	MF9L78	9.911	0.0019	3:26:30 PM
14	MF9L79	2.628	-0.0071	3:26:48 PM
15	MF9L79S	27.921	0.0240	3:29:30 PM
16	MF9L79D	-39.091	-0.0584	3:29:48 PM
17	MF9M24	9.178	0.0010	3:30:42 PM
18	CCV2	194.734	0.2292	3:31:00 PM
19	CCB2	1.861	-0.0080	3:33:42 PM
20	MF9L62	0.611	-0.0096	3:34:00 PM
21	MF9L63	39.458	0.0382	3:34:54 PM
22	MF9L64	11.131	0.0034	3:35:12 PM
23	MF9L65	1.347	-0.0087	3:37:54 PM
24	MF9L66	5.602	-0.0034	3:38:12 PM
25	MF9L67	-15.009	-0.0288	3:39:06 PM
26	MF9L71	4.137	-0.0052	3:39:24 PM

Analysis Date 05/27/2019

CH 06/05/2019

CH 06/05/2019

CH 06/05/2019

MF9L66 Redistilled and reanalyzed due to less than 30% solids.

Report Date: 05/27/2019 Calibrant Run Date: 05/27/2019 Calibrant Code: CN
Exp. Date: 12/30/2099 Plan #: 20190527001 Run Date: 05/27/2019 Operator: WATERLAB
Plan Description: EPA-CLP CN MF9L61 ← Data File ID Page:1A

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EPA-CLP Cyanide Data and Analysis Run Log Page 2A of 4A

Dilution

Method: CYN2 - Unit [µg/L] - Cyanide - EPA SOW

Smp#/[Dil Fact]	Sample ID	Conc.	OD	Analysis Time
27	MF9L72	2.756	-0.0069	3:42:06 PM
28	MF9L73	24.457	0.0198	3:42:24 PM
29	MF9M33	0.154	-0.0101	3:43:18 PM
30	CCV3	189.612	0.2229	3:43:36 PM
31	CCB3	2.105	-0.0077	3:46:18 PM

CH 05/05/2019

Analysis Date 05/27/2019

CH 05/05/2019

Report Date: 05/27/2019 Calibrant Run Date: 05/27/2019 Calibrant Code: CN

Exp. Date: 12/30/2099 Plan #: 20190527001 Run Date: 05/27/2019 Operator: WATERLAB

Plan Description: EPA-CLP CN MF9L61 ← Data File ID

0054

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EPA-CLP Cyanide Data and Analysis Run Log Page 3A of 4A

Method: CYN2 - Unit [µg/L] - Cyanide - EPA SOW

Smp#/[Dil Fact] (Dilution)	Sample ID	Conc.	OD	Analysis Time (Analysis Date 05/27/2019)
DIL-1	RBL	0.0000	0.0123	4:02:50 PM
DIL-1	RBL	0.0000	0.0101	4:03:08 PM
DIL-1	RBL	0.0000	0.0199	4:04:02 PM
***	Std-1	0.0000	-0.0114	***
***	Std-2	10.0000	0.0013	***
***	Std-3	50.0000	0.0534	***
***	Std-4	100.0000	0.1105	***
***	Std-5	200.0000	0.2387	***
***	Std-6	300.0000	0.3589	***
***	Std-7	400.0000	0.4802	***
1	MF9L79A	104.933	0.1187	4:04:20 PM
2	CCV4	203.301	0.2397	4:07:02 PM
3	CCB4	6.037	-0.0029	4:07:20 PM

Not recalibrated

CH 06/05/2019

CH 06/05/2019

CH 06/05/2019

Report Date: 05/27/2019 Calibrant Run Date: 05/27/2019 Calibrant Code: CN
Exp. Date: 12/30/2099 Plan #: 20190527003 Run Date: 05/27/2019 Operator: WATERLAB
Plan Description: EPA-CLP CN MF9L61 PDS ← Data File ID

CH 06/05/2019
00641

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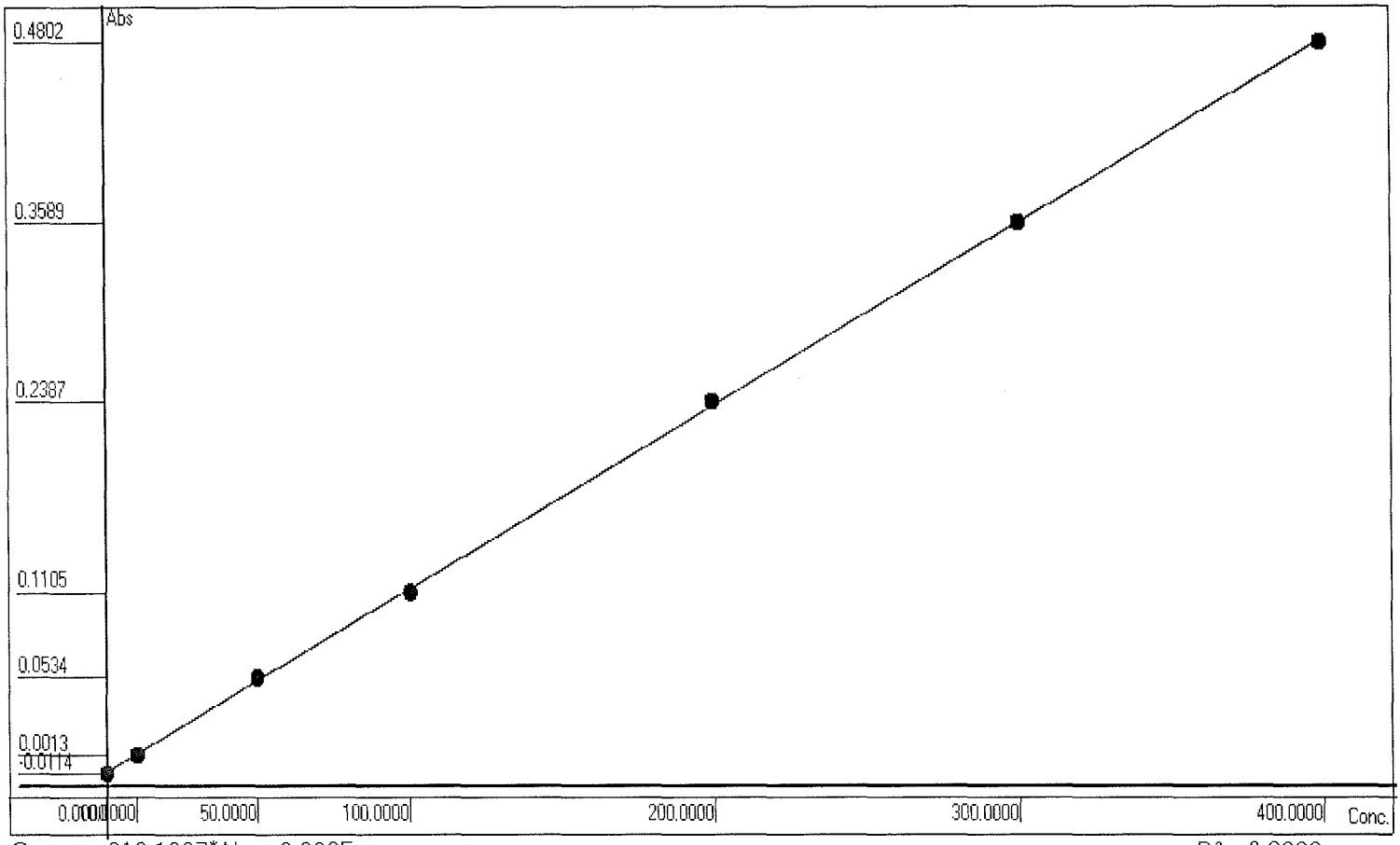
EPA-CLP Cyanide Data and Analysis Run Log Page 4A of 4A

Calibrant Report - CYN2 - Unit [µg/L]



Conc.= +813.1237*Abs +8.3825 R^2 = 0.9999

IS M02.4 cyanide
SDG: MF9L61
Instrument ID: WET01
Analyst: Christopher R Hansen
Date of Analysis: 05/27/2019

Point	OD	Conc.	Recalc Conc	% Error
1	-0.0114	0.0000	-0.8871	-88.7100
2	0.0013	10.0000	9.4396	-5.6040
3	0.0534	50.0000	51.8033	3.6066
4	0.1105	100.0000	98.2327	-1.7673
5	0.2387	200.0000	202.4751	1.2376
6	0.3589	300.0000	300.2126	0.0709
7	0.4802	400.0000	398.8445	-0.2889

RBL
0.0165
0.0000

Report Date: 05/27/2019 Calibrant Run Date: 05/27/2019 Calibrant Code: CN
Exp. Date: 12/30/2099 Plan #: 20190527001 Operator: WESTCO
↑ Data File ID

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EPA-CLP Cyanide Analysis Run Log and Data Page 1B of 2B

Method: CYN2 - Unit [µg/L] - Cyanide - EPA SOW

Smp#/[Dil Fact] (Dilution)	Sample ID	Conc.	OD	Analysis Time	Analysis Date
DIL-1	RBL	0.0000	0.0137	6:27:16 PM	05/30/2019
DIL-1	RBL	0.0000	0.0159	6:27:34 PM	
DIL-1	RBL	0.0000	0.0150	6:28:28 PM	
ST-1	Std-1	0.0000	-0.0054	6:28:46 PM	
ST-2	Std-2	10.0000	0.0070	6:31:28 PM	
ST-3	Std-3	50.0000	0.0542	6:31:46 PM	
ST-4	Std-4	100.0000	0.1175	6:32:40 PM	
ST-5	Std-5	200.0000	0.2418	6:32:58 PM	
ST-6	Std-6	300.0000	0.3631	6:35:40 PM	
ST-7	Std-7	400.0000	0.4703	6:35:58 PM	
1	ICV2	94.980	0.1104	6:36:52 PM	
2	ICB2	-1.152	-0.0052	6:37:10 PM	
3	CCV5	211.383	0.2505	6:39:52 PM	
4	CCB5	-1.911	-0.0062	6:40:10 PM	
5	PBS2	-1.749	-0.0060	6:41:04 PM	
6	MF9L66	21.357	0.0218	6:41:22 PM	
7	CCV6	204.212	0.2419	6:44:04 PM	
8	CCB6	-1.744	-0.0060	6:44:22 PM	

CH 06/05/2019

CH 06/05/2019

Report Date: 05/30/2019 Calibrant Run Date: 05/30/2019 Calibrant Code: CN
Exp. Date: 12/30/2099 Plan #: 20190530002 Run Date: 05/30/2019 Operator: WESTCO
Plan Description: EPA-CLP CN MF9L66 2 ← Run File ID

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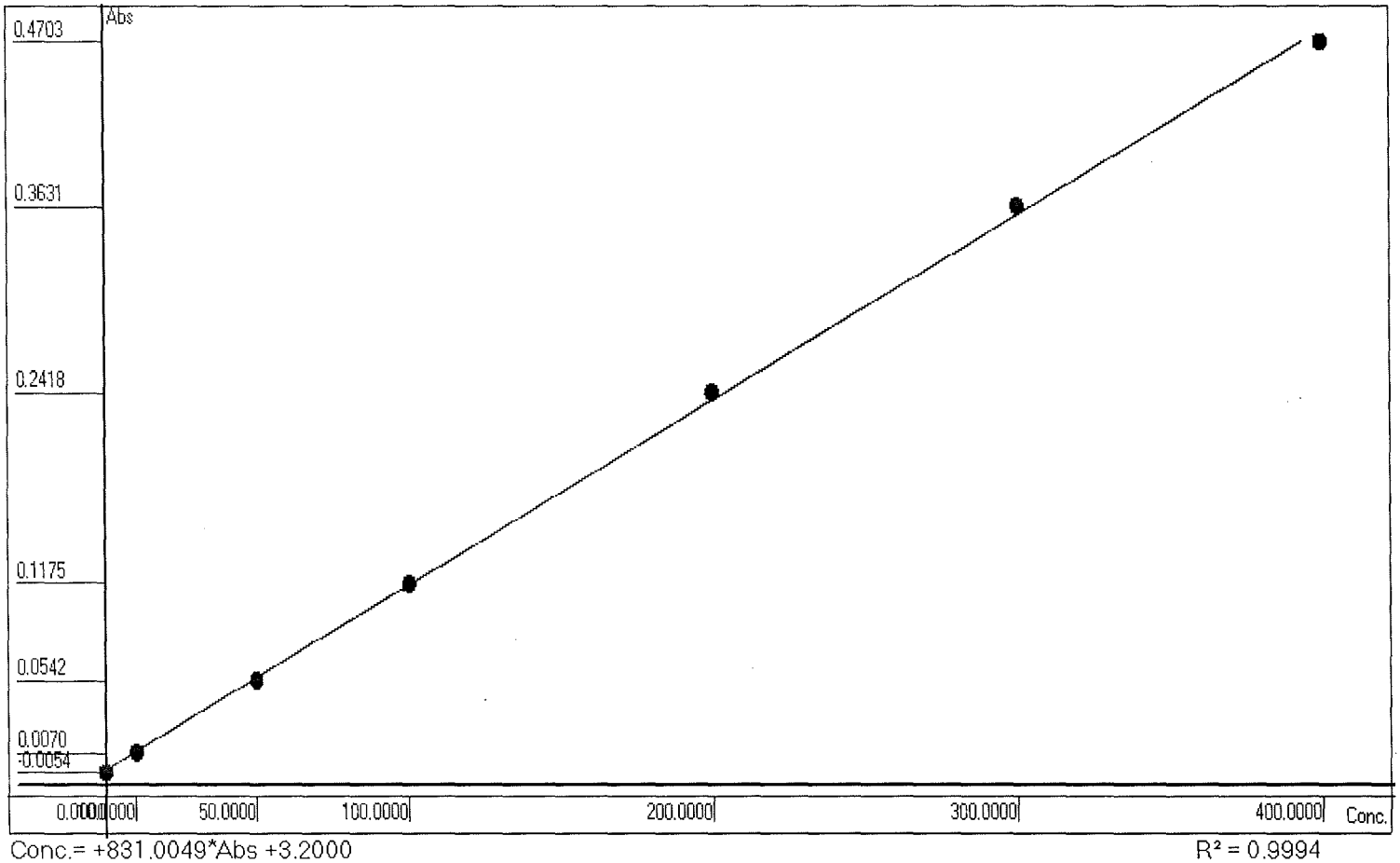
EPA-CLP Cyanide Data and Analysis Run Log Page 2B of 2B

Calibrant Report - CYN2 - Unit [µg/L]



Conc.= +831.0049*Abs +3.2000 R^2 = 0.9994

ISM02.4 cyanide
SDG: MF9L61
Instrument ID: WET01
Analyst: Christopher Rhansen
Date of Analysis: 05/30/2019

Point	OD	Conc.	Recalc Conc	% Error
1	-0.0054	0.0000	-1.2874	-128.7400
2	0.0070	10.0000	9.0170	-9.8300
3	0.0542	50.0000	48.2405	-3.5190
4	0.1175	100.0000	100.8431	0.8431
5	0.2418	200.0000	204.1370	2.0685
6	0.3631	300.0000	304.9379	1.6460
7	0.4703	400.0000	394.0216	-1.4946
				RBL 0.0155 0.0000

Report Date: 05/30/2019 Calibrant Run Date: 05/30/2019 Calibrant Code: CN
Exp. Date: 12/30/2099 Plan #: 20190530002 Operator: WESTCO
Plan Description: CYN-240312 II ← Data File ID

: 0065W

Sample Batching Information

	EPA Sample ID	ALS Sample ID	Initial Matrix	Amount (mL NaOH or g solid)	Final Volume (mL)
Calibration Standards	S0	654922	0.25 N NaOH	6	6
	S01	654923		6	6
	S02	654924		6	6
	S03	654925		6	6
	S04	654926		6	6
	S05	654927		6	6
	S06	654928		6	6
	ICV	654929		6	6
	ICB	654930		6	6
	CCV1	654931		6	6
	CCB1	654932		6	6
	PBS	654933	Blank Sand	0.5183	6
	MF9L61	1914095001	Soil	0.5620	6
	MF9L69	1914095002	Soil	0.5065	6
	MF9L70	1914095003	Soil	0.5342	6
	MF9L74	1914095004	Soil	0.5076	6
	MF9L75	1914095005	Soil	0.5336	6
	MF9L76	1914095006	Soil	0.5250	6
	MF9L77	1914095007	Soil	0.5541	6
	MF9L78	1914095008	Soil	0.5731	6
	MF9L79	1914095009	Soil	0.5479	6
	MF9L79S	1914095010	Soil	0.5345	6
	MF9L79D	1914095011	Soil	0.5589	6
	MF9M24	1914095012	Soil	0.5135	6
	CCV2	654934	0.25 N NaOH	6	6
	CCB2	654935		6	6
	MF9L62	1914424001	Soil	0.5579	6
	MF9L63	1914424002	Soil	0.5297	6
	MF9L64	1914424003	Soil	0.5852	6
	MF9L65	1914424004	Soil	0.5823	6
	~~MF9L66~~	~~1914424005~~	~~Soil~~	~~0.5310~~	~~6~~
	MF9L67	1914424006	Soil	0.5170	6
	MF9L71	1914424007	Soil	0.5300	6
	MF9L72	1914424008	Soil	0.5908	6
	MF9L73	1914424009	Soil	0.5027	6
	MF9M33	1914424010	Soil	0.5013	6
	CCV3	654936	0.25 N NaOH	6	6
	CCB3	654937		6	6

Comments: Sample MF9L66 required redistillation due to having less than 30% solids .

CRH 06/05/2019

Date: 05/27/2019
Time: 10:09
HBN: 240053
Case: 48266
SDG: MF9L61
Christopher R. Hansen

Sample Tracking Information			
File Location: \\Alsltws013\INORGANIC\WaterLab\EPA-CN		File Name:	CN-Soil MF9L61
Workorders: 1914095, 1914424			
HBN: 240053	Case: 48266	SDG: MF9L61	SOP: SC-EP-CASC-CN

Method Summary

Method Summary: 0.5 to 0.6g of each sample is weighed into a micro-distillation sample cup. Weights are recorded. QCs are prepared as described in the table below. 2mL of 0.25N NaOH is added to each collection tube. Tubes are capped with membranes. 0.75mL of the acidic releasing solution is added to each sample cup. Sample cups are immediately assembled with collection tubes and placed on the distillation unit for 30 minutes. Distillation unit is maintained at 120°C ±3°C as measured by an onboard temperature indicator. Times and temperatures are recorded. The tubes are broken down when cooled and the distillate brought to 6mL total volume with 0.25N NaOH. Samples are ready for analysis. (Store covered and at 4°C if not immediately analyzed.)

Cyanide Standards Information

Standard Type	CN Concentration	Horizon ID#	Expiration
Calibration Stock	1,000 µg/mL	47656	10/31/2019
EPA-ICV6-0400	9,900 µg/L	42057	05/30/2028
Working Intermediate	5,000 µg/L	47915	06/03/2019

Distillation Reagents Information

Distillation Reagents:	Log Location	Reagent ID#	Expiration
0.25-N NaOH	Horizon	46867	04/01/2021
Releasing Solution	Electronic Reagent Log	2280	06/05/2019

Preparation Person Information

Name: Christopher R. Hansen	Starting Date/Time:	05/27/2019 10:09

Distillation Info

Block Heater: MD1
Distillation Date/Time
Start 05/27/2019 12:12
End 05/27/2019 12:42
Temperature (°C)
Start 120
End 120

Block Heater: MD2
Distillation Date/Time
Start 05/27/2019 12:12
End 05/27/2019 12:42
Temperature (°C)
Start 120
End 120

Fume Hood: #31

Calibration Standard and QC Preparation Description

Sample ID.	Spike ID	Cyanide	Amount	Final volume	Pipette ID	Matrix	CN Concentration
S0, ICB, CCBs, PBS	N/A		N/A	50mL	NONE	0.25N NaOH	0 µg/L
S01	Working Int.	5,000 µg/L	0.1 mL		WC#3		10 µg/L
S02			0.5 mL		WC#5		50 µg/L
S03			1.0 mL				100 µg/L
S04, CCVs			2.0 mL		WC#8		200 µg/L
S05			3.0 mL				300 µg/L
S06			4.0 mL				400 µg/L
ICV	EPA-ICV6-0400	9,900 µg/L	0.5 mL				99 µg/L
MS	Working Int.	5,000 µg/L	0.12mL	6mL		Sample	100 µg/L
MD	N/A		NA	6mL	NONE		NA

Comments: Sample MF9L66 required redistillation due to having less than 30% solids .

Sample Batching Information

	EPA Sample ID	ALS Sample ID	Initial Matrix	Amount (mL NaOH or g solid)	Final Volume (mL)
Calibration Standards	S0	656682	0.25 N NaOH	6	6
	S01	656683		6	6
	S02	656684		6	6
	S03	656685		6	6
	S04	656686		6	6
	S05	656687		6	6
	S06	656688		6	6
	ICV2	656689		6	6
	ICB2	656690		6	6
	CCV5	656691		6	6
	CCB5	656692		6	6
	PBS2	656693		6	6
	MF9L66	1914424005	Soil	2.1752	6
	CRH				
	06/05/2019				

Comments: Sample MF9L66 had 24.14% solids. As a result the minimum sample weight was 0.5g / 0.2414 = 2.0713g wet weight.

Date: 05/30/2019
Time: 11:00
HBN: 240691
Case: 48266
SDG: MF9L61
CN-Soil MF9L61

Sample Tracking Information			
File Location: \\Alsltws013\INORGANIC\WaterLab\EPA-CN		File Name:	CN-Soil MF9L61
Workorders: 1914095, 1914424			
HBN: 240691	Case: 48266	SDG: MF9L61	SOP: SC-EP-CASC-CN

Method Summary

Method Summary: 0.5 to 0.6g of each sample is weighed into a micro-distillation sample cup. Weights are recorded. QCs are prepared as described in the table below. 2mL of 0.25N NaOH is added to each collection tube. Tubes are capped with membranes. 0.75mL of the acidic releasing solution is added to each sample cup. Sample cups are immediately assembled with collection tubes and placed on the distillation unit for 30 minutes. Distillation unit is maintained at 120°C ±3°C as measured by an onboard temperature indicator. Times and temperatures are recorded. The tubes are broken down when cooled and the distillate brought to 6mL total volume with 0.25N NaOH. Samples are ready for analysis. (Store covered and at 4°C if not immediately analyzed.)

Cyanide Standards Information

Standard Type	CN Concentration	Horizon ID#	Expiration
Calibration Stock	1,000 µg/mL	47656	10/31/2019
EPA-ICV6-0400	9,900 µg/L	42057	05/30/2028
Working Intermediate	5,000 µg/L	47915	06/03/2019

Distillation Reagents Information

Distillation Reagents:	Log Location	Reagent ID#	Expiration
0.25-N NaOH	Horizon	46867	04/01/2021
Releasing Solution	Electronic Reagent Log	2280	06/05/2019

Preparation Person Information

Name: Christopher R. Hansen — Starting Date/Time: 05/30/2019 11:00

Distillation Info

Block Heater: MD1
Distillation Date/Time
Start 05/30/2019 15:00
End 05/30/2019 15:30
Temperature (°C)
Start 120
End 120

Block Heater: MD2
Distillation Date/Time
Start N/A
End N/A
Temperature (°C)
Start N/A
End N/A

Fume Hood: #31

Calibration Standard and QC Preparation Description

Sample ID.	Spike ID	Cyanide	Amount	Final volume	Pipette ID	Matrix	CN Concentration
S0, ICB, CCBs, PBS	N/A		N/A	50mL	NONE	0.25N NaOH	0 µg/L
S01	Working Int.	5,000 µg/L	0.1 mL		WC#3		10 µg/L
S02			0.5 mL		WC#5		50 µg/L
S03			1.0 mL				100 µg/L
S04, CCVs			2.0 mL		WC#8		200 µg/L
S05			3.0 mL				300 µg/L
S06			4.0 mL				400 µg/L
ICV	EPA-ICV6-0400	9,900 µg/L	0.5 mL				99 µg/L
			CRH	06/05/2019			

Comments: Sample MF9L66 had 24.14% solids. As a result the minimum sample weight was 0.5g / 0.2414 = 2.0713g wet weight.

SDG: MF9L61
WO: 1914095, 1914424

EPA-CLP Cyanide Soil: ISM Prep Worksheet

240053

Analyst: 6118
Queue: EWC
Batch: 7833
Instrument: NONE
Date: 05/27/2019 10:09

Spikes	Reagents	Hotblock MD1	Hotblock MD2
Stock 47656	0.25-N NaOH 46867	Start Temp 120 °C	Start Temp 120 °C
Working 47915	Releasing Sol. 2280	Final Temp 120 °C	Final Temp 120 °C
ICV 42057	PO4 Buffer 2685	Times on/off 12:12-12:42	Times on/off 12:12-12:42
	Color Reagent 2555		
	Chloramine T. 2688		

LAB SAMPLE ID	CLIENT ID	INITIAL VOL. OR WEIGHT	FINAL VOL.
654922	S0	6 mL	6 mL
654923	S01		
654924	S02		
654925	S03		
654926	S04		
654927	S05		
654928	S06		
654929	ICV		
654930	ICB		
654931	CCV1		
654932	CCB1		
654933	PBS	0.5183 g	
1914095001	MF9L61	0.5620 g	
1914095002	MF9L69	0.5065 g	
1914095003	MF9L70	0.5342 g	
1914095004	MF9L74	0.5076 g	
1914095005	MF9L75	0.5336 g	
1914095006	MF9L76	0.5250 g	
1914095007	MF9L77	0.5541 g	
1914095008	MF9L78	0.5731 g	
1914095009	MF9L79	0.5479 g	
1914095010	MF9L79S	0.5345 g	
1914095011	MF9L79D	0.5589 g	
1914095012	MF9M24	0.5135 g	
654934	CCV2	6 mL	
654935	CCB2	↓	
1914424001	MF9L62	0.5579 g	
1914424002	MF9L63	0.5297 g	
1914424003	MF9L64	0.5852 g	
1914424004	MF9L65	0.5823 g	
1914424005	MF9L66	~~0.5310 g~~ 2.1752 g CH 05/05/2019	
1914424006	MF9L67	0.5170 g	
1914424007	MF9L71	0.5300 g	
1914424008	MF9L72	0.5908 g	
1914424009	MF9L73	0.5027 g	
1914424010	MF9M33	0.5013 g	
654936	CCV3	6 mL	
654937	CCB3	↓	↓

Start 05/27/2019 10:09

MD1 — 120°C/12:12 – 120°C/12:42

MD2 — 120°C/12:12 – 120°C/12:42

Final volume 05/27/2019 13:50

Calibration prepped with SDG: MF9L37
MD1 – 120°C/13:32 – 120°C/14:02 (05/27/2019)

Christopher R Hansen
06/05/2019

MF9L66
Notified 05/30/2019 that less than 30% solids.
EGRV 6862: 24.14% solids

$\frac{0.5\ g}{0.2414} = 2.0713$ g min wet weight

Actual: 2.1752 g ~~(0.5251 g dry)~~ CH 05/30/2019
= (0.5251 g dry)
CH 05/30/2019 10:15

Start reprep 05/30/2019 11:00

MD1 05/30/2019
120°C/15:00 – 120°C/15:30

: 0649

STANDARD REPORT

Stock Standard - CLPCN-ICV6

CLPCN-ICV6		Description - EPA-CLP CN ICV
Standard: 42057	**Created By:** Christopher R. Hansen	**Amount:** 125 mL
MFG: QATS Laboratory	**Create Date:** 05/30/2018 03:05PM	**Expires:** 05/30/2028
MFG Lot: EPA ICV6-0400		**Usable:** Yes
Part ID: Not Provided		**Lab Lot:** CN ICV

Pos.	Analyte	Name	Concentration
1	57-12-5	Cyanide	9900 ug/L

Working Standard - CN INT

CN INT		Description - CN INT 5000
Standard: 47915	**Created By:** Christopher R. Hansen	**Amount:** 50 mL
MFG: ALS water lab	**Create Date:** 05/27/2019 09:05AM	**Expires:** 06/03/2019
MFG Lot: Not Provided		**Usable:** No
Pipette ID: P-WC#5		**Lab Lot:** CN INT

Pos.	Analyte	Name	Concentration
1	57-12-5	Cyanide	5000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
46867	0.25N NaOH	100g NaOH per 10L DDI water	0.25N NaOH	49.75 mL	04/01/2021
47656	CN stock	CN stock	CN stock	0.25 mL	10/31/2019

STANDARD REPORT

Constituent

Stock Standard - CN stock

CN stock		Description - CN stock
Standard: 47656	**Created By:** Christopher R. Hansen	**Amount:** 120 mL
MFG: Ricca	**Create Date:** 05/13/2019 01:05PM	**Expires:** 10/31/2019
MFG Lot: 1904F05		**Usable:** Yes
Part ID: 2543-4		**Lab Lot:** CN stock

Pos.	Analyte	Name	Concentration
1	57-12-5	Cyanide	1000 ug/mL

STANDARD REPORT

Constituent

Solvent Standard - 0.25N NaOH

0.25N NaOH		Description - 100g NaOH per 10L DDI water
Standard: 46867	**Created By:** Christopher R. Hansen	**Amount:** 10 L
MFG: EMD Millipore	**Create Date:** 04/01/2019 11:04AM	**Expires:** 04/01/2021
MFG Lot: B1505304 751		**Usable:** Yes
Part ID: balance:102887		**Lab Lot:** 0.25N NaOH

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

ALS - SLC Reagent Report

Reagent ID	Date Created	Expiration Date	Final Volume	Units
2280	06/05/2018	06/05/2019		

Analyst: Christopher Hansen

Reagent Description	Comments
Releasing solution for cyanide	77mL sulfuric acid = 139g; very exothermic reaction.

Chemical	Vendor	LotNo
ASTM TYPE II water	ALS	

Pipette Used	Volume Used	Units
Grad. Cyln.	444.0000	mL

Balance ID	Weight	Units

Chemical	Vendor	LotNo
Magnesium Chloride HexaHydrate	Millipore	2937954

Pipette Used	Volume Used	Units
Grad. Cyln.		

Balance ID	Weight	Units
105930	72.3015	g

Chemical	Vendor	LotNo
Magnesium Chloride HexaHydrate	Calbiochem	D00086204

Pipette Used	Volume Used	Units

Balance ID	Weight	Units
105930	56.5494	g

Chemical	Vendor	LotNo
Sulfuric Acid, conc.	Millipore	56134

Pipette Used	Volume Used	Units
Grad. Cyln.	267.0000	mL

Balance ID	Weight	Units

00654

Sample Tracking Information			
File Location:	\\Alsltws013\INORGANIC\WaterLab\EPA-CN	File Name:	CN-Soil MF9L61
Workorders:	1914095, 1914424		
HBN: 240697	Case: 48266	SDG: MF9L61	SOP: SC-EP-CASC-CN

Instrumentation			
Type:	Westco/Unity SmartChem 200		
Designation:	WET01		
Wavelength:	570nm		
Calibration:	Linear		
CRQL(mg/kg):	0.5		
MDL(mg/kg):	0.0274	Expires:	04/23/2020

Analysis Information			
Initial Run ID:	20190527001		
Run Start Date:	05/27/2019		
Start/End Time:	15:04	to	15:46
Calibration R^2:	0.9999		
Additional Run ID:	20190527003		
Run Start Date:	05/27/2019		
Start/End Time:	16:02	to	16:07
Calibration R^2:	same as above		

Analyst Name: Christopher Hansen

Analysis Reagents Information

Distillation Reagents:	Log Location	Reagent ID#	Expiration
0.25-N NaOH	Horizon	46867	04/01/2021
Chloramine-T	Electronic Reagent Log	2688	05/28/2019
Color Solution	Electronic Reagent Log	2555	08/04/2019
Phosphate Buffer	Electronic Reagent Log	2685	05/24/2020

Conversion Factors

1 µg/L = 0.012 mg/kg

(µg/L) (0.006 L/0.5g) (1mg/1000µg) (1000g/kg) = mg/kg

CRQL:

0.5 mg/kg = 41.7 µg/L

(0.5 mg/kg) (1000µg/1mg) (1kg/1000g) = 0.5 µg/g

(0.5 µg/g) (0.5g/0.006L) = 41.7 µg/L

Dilutions

Sample ID	Dilution	Initial mL	Final mL	Diluent	Pipettes
NONE	NONE	NONE	NONE	NONE	NONE

Comments: The first data for sample MF9L66 was not used due to this sample having less than 30% solids. See the micro-distillation procedure log for more information.

Sample Tracking Information			
File Location:	\\Alsltws013\INORGANIC\WaterLab\EPA-CN	File Name:	CN-Soil MF9L61
Workorders:	1914095, 1914424		
HBN: 240700	Case: 48266	SDG: MF9L61	SOP: SC-EP-CASC-CN

Instrumentation			
Type:	Westco/Unity SmartChem 200		
Designation:	WET01		
Wavelength:	570nm		
Calibration:	Linear		
CRQL(mg/kg):	0.5		
MDL(mg/kg):	0.0274	Expires:	04/23/2020

Analysis Information			
Initial Run ID:	20190530002		
Run Start Date:	05/30/2019		
Start/End Time:	18:27	to	18:44
Calibration R^2:	0.9994		
Additional Run ID:	N/A		
Run Start Date:	N/A		
Start/End Time:	N/A	to	N/A
Calibration R^2:	N/A		

Analyst Name: Christopher Hansen

Analysis Reagents Information

Distillation Reagents:	Log Location	Reagent ID#	Expiration
0.25-N NaOH	Horizon	46867	04/01/2021
Chloramine-T	Electronic Reagent Log	2692	05/31/2019
Color Solution	Electronic Reagent Log	2555	08/04/2019
Phosphate Buffer	Electronic Reagent Log	2685	05/24/2020

Conversion Factors

1 µg/L = 0.012 mg/kg

(µg/L) (0.006 L/0.5g) (1mg/1000µg) (1000g/kg) = mg/kg

CRQL:

0.5 mg/kg = 41.7 µg/L

(0.5 mg/kg) (1000µg/1mg) (1kg/1000g) = 0.5 µg/g

(0.5 µg/g) (0.5g/0.006L) = 41.7 µg/L

Dilutions

Sample ID	Dilution	Initial mL	Final mL	Diluent	Pipettes
NONE	NONE	NONE	NONE	NONE	NONE

Comments: The second analysis was only for the redistillation of sample MF9L66. See the micro-distillation procedure log for more information.

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UT 84123

EPA-CLP Cyanide Data and Analysis Run Log Page 1A of 4A

Method: CYN2 - Unit [µg/L] - Cyanide - EPA SOW

Smp#/[Dil Fact] (dilution)	Sample ID	Conc.	OD	Analysis Time (Analysis Date 05/27/2019)
DIL-1	RBL	0.0000	0.0159	3:04:18 PM
DIL-1	RBL	0.0000	0.0100	3:04:36 PM
DIL-1	RBL	0.0000	0.0170	3:05:30 PM
ST-1	Std-1	0.0000	-0.0114	3:05:48 PM
ST-2	Std-2	10.0000	0.0013	3:08:30 PM
ST-3	Std-3	50.0000	0.0534	3:08:48 PM
ST-4	Std-4	100.0000	0.1105	3:09:42 PM
ST-5	Std-5	200.0000	0.2387	3:10:00 PM
ST-6	Std-6	300.0000	0.3589	3:12:42 PM
ST-7	Std-7	400.0000	0.4802	3:13:00 PM
1	ICV	93.988	0.1053	3:13:54 PM
2	ICB	-0.171	-0.0105	3:14:12 PM
3	CCV1	201.402	0.2374	3:16:54 PM
4	CCB1	1.943	-0.0079	3:17:12 PM
5	PBS	-0.334	-0.0107	3:18:06 PM
6	MF9L61	4.626	-0.0046	3:18:24 PM
7	MF9L69	-14.377	-0.0280	3:21:06 PM
8	MF9L70	-30.145	-0.0474	3:21:24 PM
9	MF9L74	4.157	-0.0052	3:22:18 PM
10	MF9L75	1.048	-0.0090	3:22:36 PM
11	MF9L76	3.732	-0.0057	3:25:18 PM
12	MF9L77	4.463	-0.0048	3:25:36 PM
13	MF9L78	9.911	0.0019	3:26:30 PM
14	MF9L79	2.628	-0.0071	3:26:48 PM
15	MF9L79S	27.921	0.0240	3:29:30 PM
16	MF9L79D	-39.091	-0.0584	3:29:48 PM
17	MF9M24	9.178	0.0010	3:30:42 PM
18	CCV2	194.734	0.2292	3:31:00 PM
19	CCB2	1.861	-0.0080	3:33:42 PM
20	MF9L62	0.611	-0.0096	3:34:00 PM
21	MF9L63	39.458	0.0382	3:34:54 PM
22	MF9L64	11.131	0.0034	3:35:12 PM
23	MF9L65	1.347	-0.0087	3:37:54 PM
24	MF9L66	5.602	-0.0034	3:38:12 PM
25	MF9L67	-15.009	-0.0288	3:39:06 PM
26	MF9L71	4.137	-0.0052	3:39:24 PM

CH 06/05/2019

CH 06/05/2019

CH 06/05/2019

MF9L66 Redistilled and reanalyzed due to less than 30% solids.

Report Date: 05/27/2019 Calibrant Run Date: 05/27/2019 Calibrant Code: CN
Exp. Date: 12/30/2099 Plan #: 20190527001 Run Date: 05/27/2019 Operator: WATERLAB
Plan Description: EPA-CLP CN MF9L61 ← Data File ID

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EPA-CLP Cyanide Data and Analysis Run Log Page 2A of 4A

Method: CYN2 - Unit [µg/L] - Cyanide - EPA SOW

Smp#/[Dil Fact] (Dilution)	Sample ID	Conc.	OD	Analysis Time	Analysis Date
27 [1]	MF9L72	2.756	-0.0069	3:42:06 PM	05/27/2019
28	MF9L73	24.457	0.0198	3:42:24 PM	
29	MF9M33	0.154	-0.0101	3:43:18 PM	
30	CCV3	189.612	0.2229	3:43:36 PM	
31	CCB3	2.105	-0.0077	3:46:18 PM	

CH 05/05/2019

CH 05/05/2019

Report Date: 05/27/2019 Calibrant Run Date: 05/27/2019 Calibrant Code: CN

Exp. Date: 12/30/2099 Plan #: 20190527001 Run Date: 05/27/2019 Operator: WATERLAB

Plan Description: EPA-CLP CN MF9L61 ← Data File ID

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EPA-CLP Cyanide Data and Analysis Run Log Page 3A of 4A

Method: CYN2 - Unit [µg/L] - Cyanide - EPA SOW

Smp#/[Dil Fact] (Dilution)	Sample ID	Conc.	OD	Analysis Time (Analysis Date 05/27/2019)
DIL-1	RBL	0.0000	0.0123	4:02:50 PM
DIL-1	RBL	0.0000	0.0101	4:03:08 PM
DIL-1	RBL	0.0000	0.0199	4:04:02 PM
***	Std-1 Not recalibrated	0.0000	-0.0114	***
***	Std-2	10.0000	0.0013	***
***	Std-3	50.0000	0.0534	***
***	Std-4	100.0000	0.1105	***
***	Std-5	200.0000	0.2387	***
***	Std-6	300.0000	0.3589	***
***	Std-7	400.0000	0.4802	***
1	MF9L79A	104.933	0.1187	4:04:20 PM
2	CCV4	203.301	0.2397	4:07:02 PM
3	CCB4	6.037	-0.0029	4:07:20 PM

CH 06/05/2019

CH 06/05/2019

CH 06/05/2019

Report Date: 05/27/2019 Calibrant Run Date: 05/27/2019 Calibrant Code: CN
Exp. Date: 12/30/2099 Plan #: 20190527003 Run Date: 05/27/2019 Operator: WATERLAB
Plan Description: EPA-CLP CN MF9L61 PDS ← Data File ID

CH 06/05/2019
00659

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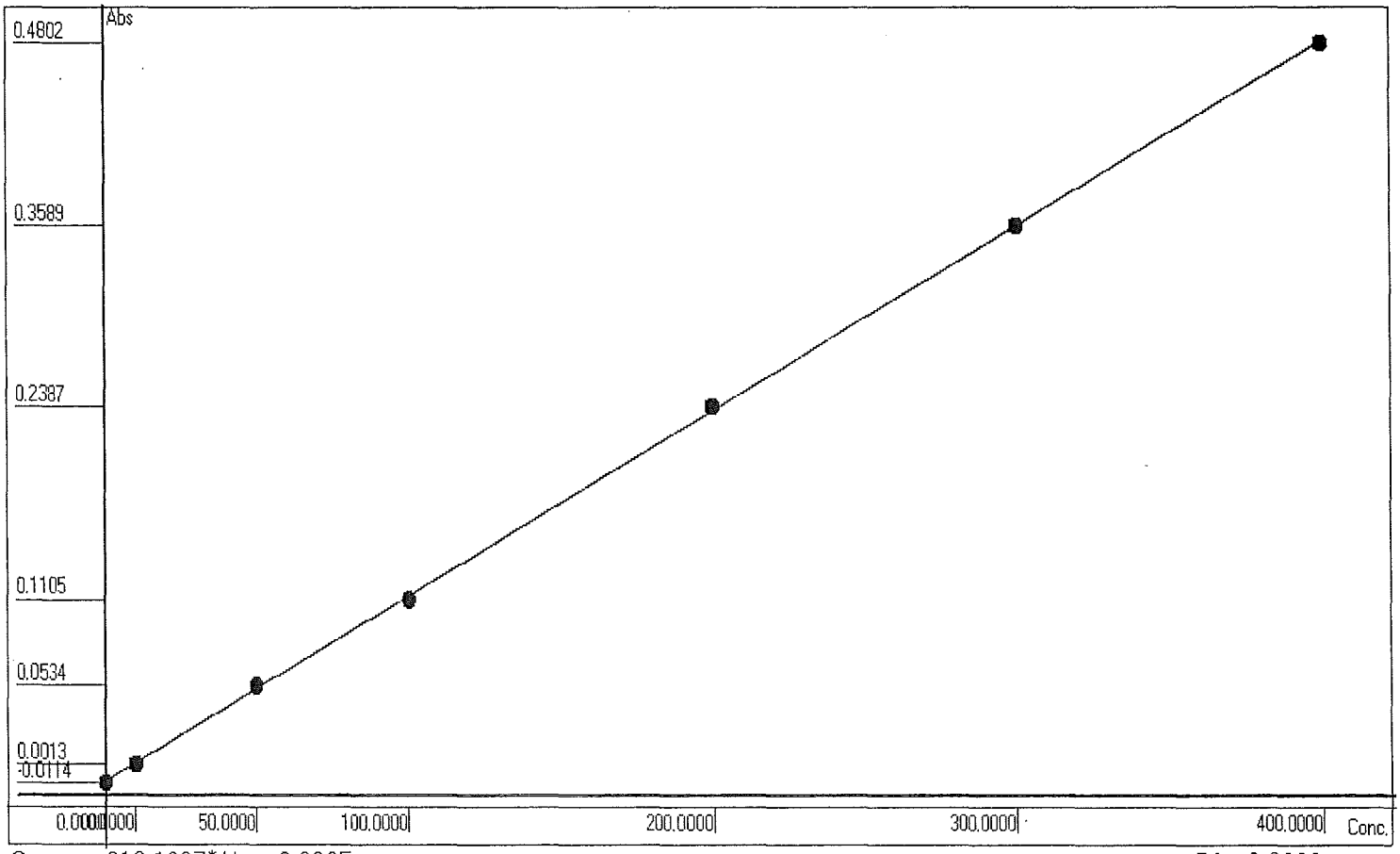
UT 84123

EPA-CLP Cyanide Data and Analysis Run Log Page 4A of 4A

Calibrant Report - CYN2 - Unit [µg/L]



Conc.= +813.1237*Abs +8.3825 R^2 = 0.9999

ISM02.4 cyanide
SDG: MF9L61
Instrument ID: WET01
Analyst: Christopher R Hansen
Date of Analysis: 05/27/2019

Point	OD	Conc.	Recalc Conc	% Error
1	-0.0114	0.0000	-0.8871	-88.7100
2	0.0013	10.0000	9.4396	-5.6040
3	0.0534	50.0000	51.8033	3.6066
4	0.1105	100.0000	98.2327	-1.7673
5	0.2387	200.0000	202.4751	1.2376
6	0.3589	300.0000	300.2126	0.0709
7	0.4802	400.0000	398.8445	-0.2889

RBL
0.0165
0.0000

Report Date: 05/27/2019 Calibrant Run Date: 05/27/2019 Calibrant Code: CN
Exp. Date: 12/30/2099 Plan #: 20190527001 Operator: WESTCO
↑ Data File ID

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EPA-CLP Cyanide Analysis Run Log and Data Page 1B of 2B

Method: CYN2 - Unit [µg/L] - Cyanide - EPA SOW

Smp#/[Dil Fact] (Dilution)	Sample ID	Conc.	OD	Analysis Time (Analysis Date)
DIL-1 1	RBL	0.0000	0.0137	6:27:16 PM 05/30/2019
DIL-1	RBL	0.0000	0.0159	6:27:34 PM
DIL-1	RBL	0.0000	0.0150	6:28:28 PM
ST-1	Std-1	0.0000	-0.0054	6:28:46 PM
ST-2	Std-2	10.0000	0.0070	6:31:28 PM
ST-3	Std-3	50.0000	0.0542	6:31:46 PM
ST-4	Std-4	100.0000	0.1175	6:32:40 PM
ST-5	Std-5	200.0000	0.2418	6:32:58 PM
ST-6	Std-6	300.0000	0.3631	6:35:40 PM
ST-7	Std-7	400.0000	0.4703	6:35:58 PM
1	ICV2	94.980	0.1104	6:36:52 PM
2	ICB2	-1.152	-0.0052	6:37:10 PM
3	CCV5	211.383	0.2505	6:39:52 PM
4	CCB5	-1.911	-0.0062	6:40:10 PM
5	PBS2	-1.749	-0.0060	6:41:04 PM
6	MF9L66	21.357	0.0218	6:41:22 PM
7	CCV6	204.212	0.2419	6:44:04 PM
8	CCB6	-1.744	-0.0060	6:44:22 PM

CH 06/05/2019

CH 06/05/2019

Report Date: 05/30/2019 Calibrant Run Date: 05/30/2019 Calibrant Code: CN
Exp. Date: 12/30/2099 Plan #: 20190530002 Run Date: 05/30/2019 Operator: WESTCO
Plan Description: EPA-CLP CN MF9L66 2 ← Run File ID

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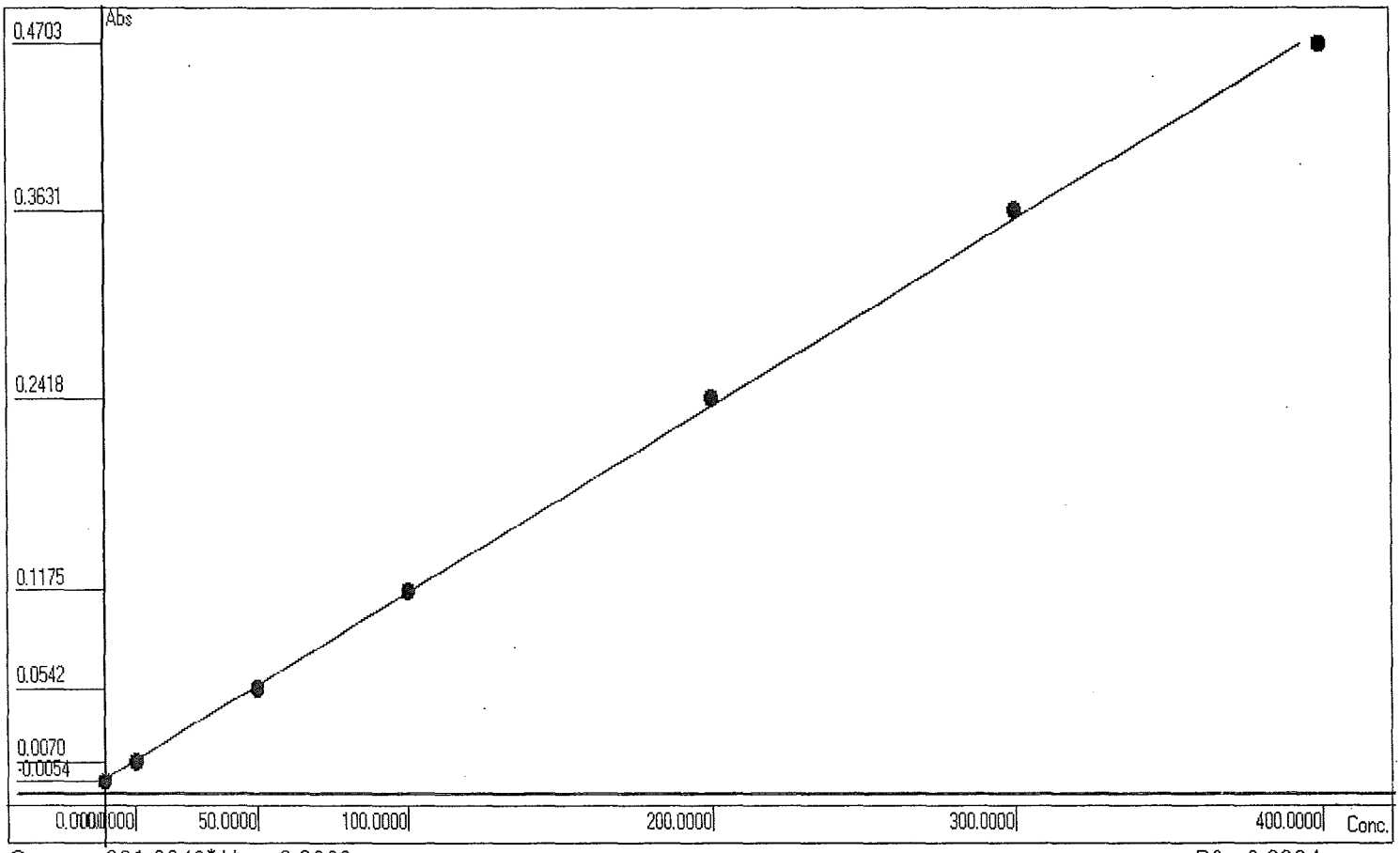
EPA-CLP Cyanide Data and Analysis Run Log Page 2B of 2B

Calibrant Report - CYN2 - Unit [µg/L]



Conc.= +831.0049*Abs +3.2000 R^2 = 0.9994

ISM02.4 cyanide
SDG: MF9L61
Instrument ID: WET01
Analyst: Christopher Rthansen
Date of Analysis: 05/30/2019

Point	OD	Conc.	Recalc Conc	% Error
1	-0.0054	0.0000	-1.2874	-128.7400
2	0.0070	10.0000	9.0170	-9.8300
3	0.0542	50.0000	48.2405	-3.5190
4	0.1175	100.0000	100.8431	0.8431
5	0.2418	200.0000	204.1370	2.0685
6	0.3631	300.0000	304.9379	1.6460
7	0.4703	400.0000	394.0216	-1.4946
				RBL 0.0155 0.0000

Report Date: 05/30/2019 Calibrant Run Date: 05/30/2019 Calibrant Code: CN
Exp. Date: 12/30/2099 Plan #: 20190530002 Operator: WESTCO
Plan Description: CYN-240312 II ← Data file ID

STANDARD REPORT

Solvent Standard - 0.25N NaOH

0.25N NaOH		**Description - 100g NaOH per 10L DDI water**
Standard: 46867	**Created By:** Christopher R. Hansen	**Amount:** 10 L
MFG: EMD Millipore	**Create Date:** 04/01/2019 11:04AM	**Expires:** 04/01/2021
MFG Lot: B1505304 751		**Usable:** Yes
Part ID: balance:102887		**Lab Lot:** 0.25N NaOH

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

ALS - SLC Reagent Report

Reagent ID	Date Created	Expiration Date	Final Volume	Units
2685	05/24/2019	05/24/2020	500.0000	mL

Analyst: Christopher Hansen

Reagent Description

CN - Phosphate Buffer

Comments

Chemical	Vendor	LotNo
SmartChem Probe Rinse	Unity Scientific	188021

Pipette Used	Volume Used	Units
PL-214	0.2500	mL

Balance ID	Weight	Units
	0.0000	g

Chemical	Vendor	LotNo
Sodium Dihydrogen Phosphate	Alfa Aesar	070M0055V

Pipette Used	Volume Used	Units
	0.0000	mL

Balance ID	Weight	Units
105930	69.0852	g

00564

ALS - SLC Reagent Report

Reagent ID	Date Created	Expiration Date	Final Volume	Units
2555	02/04/2019	08/04/2019	500.0000	mL

Analyst: Christopher Hansen

Reagent Description

CN - Pyridine Color Reagent

Comments

Add just enough ASTM Type II water to wet the barbituric acid. Add pyridine. Add concentrated HCl then cool to room temperature. Dilute to final volume with ASTM Type II water.

Chemical	Vendor	LotNo
Barbituric Acid 99%	Aldrich	07021HU

Pipette Used	Volume Used	Units

Balance ID	Weight	Units
105930	7.5036	g

Chemical	Vendor	LotNo
HCl conc.	Millipore	58088

Pipette Used	Volume Used	Units
dispenser	7.5000	mL

Balance ID	Weight	Units

Chemical	Vendor	LotNo
Pyradine	EMD	36282

Pipette Used	Volume Used	Units
Grad. Cyln.	37.5000	mL

Balance ID	Weight	Units

00665

ALS - SLC Reagent Report

Reagent ID	Date Created	Expiration Date	Final Volume	Units
2688	05/27/2019	05/28/2019	25.0000	mL

Analyst: Christopher Hansen

Reagent Description	Comments
CN - Chloramine T	

Chemical	Vendor	LotNo
Chloramine-T	Mallinckrodt	0614B21H11

Pipette Used	Volume Used	Units
	0.0000	mL

Balance ID	Weight	Units
105930	0.2501	g

00566

ALS - SLC Reagent Report

Reagent ID	Date Created	Expiration Date	Final Volume	Units
2692	05/30/2019	05/31/2019	25.0000	mL

Analyst: Christopher Hansen

Reagent Description

CN - Chloramine T

Comments

Chemical	Vendor	LotNo
Chloramine-T	Mallinckrodt	0614B21H11

Pipette Used	Volume Used	Units
	0.0000	mL

Balance ID	Weight	Units
105930	0.2508	g

00667

Batch Worklist

✓ JMD 5/30/19

Batch: EGRV/ 6859 Created: 5/28/2019 10:19 Instrument: HBN: 240110

Rule: Solids/Moisture Determination Analyst: I. Ovalle Status: WP

Workorder: 1914095 [EPACLP_PDF] SDG: MF9L61 Case: 48266

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
1	1914095001	MF9L61				SAMPLE	4		XX-EP-800	5936		5/28/2019	
2	1914095002	MF9L69				SAMPLE	4		XX-EP-800	5936		5/28/2019	
3	1914095003	MF9L70				SAMPLE	4		XX-EP-800	5936		5/28/2019	
4	1914095004	MF9L74				SAMPLE	4		XX-EP-800	5936		5/28/2019	
5	1914095005	MF9L75				SAMPLE	4		XX-EP-800	5936		5/28/2019	
6	1914095006	MF9L76				SAMPLE	4		XX-EP-800	5936		5/28/2019	
7	1914095007	MF9L77				SAMPLE	4		XX-EP-800	5936		5/28/2019	
8	1914095008	MF9L78				SAMPLE	4		XX-EP-800	5936		5/28/2019	
9	1914095009	MF9L79				SAMPLE	4		XX-EP-800	5936		5/28/2019	
11	1914095011	MF9L79D				MD	4		XX-EP-800	5936		5/28/2019	
12	1914095012	MF9M24				SAMPLE	4		XX-EP-800	5936		5/28/2019	

% Moistures & Solids

Analyst: IJO
Queue: EGRV
Batch: 6859
Instrument: GRAV03
Oven ID: Binder 1

Oven Start Time	5/28/2019 11:00	Start Oven Temp:	105°C	Start Desiccator:	5/29/2019 9:30
Oven Finish Time	5/29/2019 9:30	End Oven Temp:	105°C	End Desiccator:	5/29/2019 10:17

Workorder	Dish#	Lab Sample ID	Dish (g)	Dish + Soil (g)	Soil Weight (g)	Dish + DS (g)	Dry Soil (g)	% Solids	% Moistures
1914095	1	1914095001	1.4040	9.9618	8.5578	6.5111	5.1071	59.6777%	40.3223%
1914095	2	1914095002	1.4050	9.9658	8.5608	6.0256	4.6206	53.9739%	46.0261%
1914095	3	1914095003	1.4032	9.9331	8.5299	5.7503	4.3471	50.9631%	49.0369%
1914095	4	1914095004	1.4005	9.8400	8.4395	6.3381	4.9376	58.5058%	41.4942%
1914095	5	1914095005	1.4209	9.6568	8.2359	5.7810	4.3601	52.9402%	47.0598%
1914095	6	1914095006	1.3948	9.6427	8.2479	4.6621	3.2673	39.6137%	60.3863%
1914095	7	1914095007	1.4199	9.8630	8.4431	5.8364	4.4165	52.3090%	47.6910%
1914095	8	1914095008	1.4177	9.6703	8.2526	5.0307	3.6130	43.7801%	56.2199%
1914095	9	1914095009	1.4100	9.9394	8.5294	5.9112	4.5012	52.7728%	47.2272%
1914095	10	1914095011	1.4189	9.9514	8.5325	5.9458	4.5269	53.0548%	46.9452%
1914095	11	1914095012	1.4026	9.8311	8.4285	5.9151	4.5125	53.5386%	46.4614%

Batch Worklist

5/30/19

Batch: EGRV/ 6862 Created: 5/28/2019 10:30 Instrument: HBN: 240114

Rule: Solids/Moisture Determination Analyst: I. Ovalle Status: WP

Workorder: 1914424 [EPACLP_PDF] SDG: MF9L61 Case: 48266

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
1	1914424001	MF9L62				SAMPLE	4		XX-EP-800	5936		5/30/2019	
2	1914424002	MF9L63				SAMPLE	4		XX-EP-800	5936		5/30/2019	
3	1914424003	MF9L64				SAMPLE	4		XX-EP-800	5936		5/30/2019	
4	1914424004	MF9L65				SAMPLE	4		XX-EP-800	5936		5/30/2019	
5	1914424005	MF9L66				SAMPLE	4		XX-EP-800	5936		5/30/2019	
6	1914424006	MF9L67				SAMPLE	4		XX-EP-800	5936		5/30/2019	
7	1914424007	MF9L71				SAMPLE	4		XX-EP-800	5936		5/30/2019	
8	1914424008	MF9L72				SAMPLE	4		XX-EP-800	5936		5/30/2019	
9	1914424009	MF9L73				SAMPLE	4		XX-EP-800	5936		5/30/2019	
10	1914424010	MF9M33				SAMPLE	4		XX-EP-800	5936		5/30/2019	
11	655141	MF9M33(1914424010MD)				MD	4		XX-EP-800	6092		5/30/2019	

% Moistures & Solids

Analyst: IJO
Queue: EGRV
Batch: 6862
Instrument: GRAV03
Oven ID: Binder 1

Oven Start Time	5/28/2019 11:00	Start Oven Temp:	105°C	Start Desiccator:	5/29/2019 9:30
Oven Finish Time	5/29/2019 9:30	End Oven Temp:	105°C	End Desiccator:	5/29/2019 10:13

Workorder	Dish#	Lab Sample ID	Dish (g)	Dish + Soil (g)	Soil Weight (g)	Dish + DS (g)	Dry Soil (g)	% Solids	% Moistures
1914424	1	1914424001	1.4155	9.8984	8.4829	5.8012	4.3857	51.7005%	48.2995%
1914424	2	1914424002	1.4006	9.9952	8.5946	7.4889	6.0883	70.8387%	29.1613%
1914424	3	1914424003	1.4121	9.5274	8.1153	4.6453	3.2332	39.8408%	60.1592%
1914424	4	1914424004	1.3965	9.9209	8.5244	5.3483	3.9518	46.3587%	53.6413%
1914424	5	1914424005	1.4048	9.6591	8.2543	3.3975	1.9927	24.1414%	75.8586%
1914424	6	1914424006	1.4173	9.6547	8.2374	4.7403	3.3230	40.3404%	59.6596%
1914424	7	1914424007	1.3977	9.8644	8.4667	6.6892	5.2915	62.4978%	37.5022%
1914424	8	1914424008	1.4041	9.7562	8.3521	6.8414	5.4373	65.1010%	34.8990%
1914424	9	1914424009	1.3985	9.7510	8.3525	6.0387	4.6402	55.5546%	44.4454%
1914424	10	1914424010	1.3956	9.9924	8.5968	5.6331	4.2375	49.2916%	50.7084%
1914424	11	655141	1.4012	9.9183	8.5171	5.7012	4.3000	50.4867%	49.5133%

ORIGIN ID:KIPA (972) 315-3922
AARON BUGHER
EA ENGINEERING SCIENCE & TECH
405 STATE HIGHWAY 121 BYP
BLDG C SUITE 100
LEWISVILLE, TX 75067
UNITED STATES US

SHIP DATE: 17MAY19
ACTWGT: 45.00 LB
CAD: 5881068/INET4100

BILL SENDER

TO **MEREDITH EDWARDS**
ALS LABORATORY GROUP SLC
960 W LEVOY DR

SALT LAKE CITY UT 84123
(801) 266-7700 REF: 2141_14342168_B_3
INV:
PO: DEPT:

565J1/D66C/23AD

FedEx Express

E

J191019010701uv

5/18/2019 | 851

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 0201 **7752 4387 7936**

X0 BTFA

84123
UT-US **SLC**

31

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: 00672

ORIGIN ID:KIPA (972) 315-3922
AARON BUGHER
EA ENGINEERING SCIENCE & TECH
405 STATE HIGHWAY 121 BYP
BLDG C SUITE 100
LEWISVILLE, TX 75067
UNITED STATES US

SHIP DATE: 14MAY19
ACTWGT: 40.00 LB
CAD: 5881068/INET4100

BILL SENDER

TO **MEREDITH EDWARDS**
ALS LABORATORY GROUP SLC
960 W LEVOY DR
SALT LAKE CITY UT 84123
(801) 266-7700
INV:
PO:
REF: 2141_14342168_B_3
DEPT:

565J1/D66C/23AD

J191019010701uv

FedEx Express

TRK# 0201 **7752 0180 4338**

WED - 15 MAY 10:30A
PRIORITY OVERNIGHT

AX BTFA

84123
SLC
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ELP # 0009

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

SAMPLE TAG INFORMATION SHEET

There are no Sample Tags included with this SDG

Notations concerning the location of the Sample Tags are included in Forms DC-1,, DC-2 and in the SDG Administrative Narrative (if it is required).

Sample Delivery Group (SDG)
Cover Sheet

SDG Number: MF9L61

Laboratory Name: ALS Laboratory Group (SLC)

Laboratory Code: ALS

Contract No.: EPW14027

Case No.: 48266

Analysis Price: N/A

SDG Turnaround: 21

Modified Analysis Requested: NO

Program: ISM02.4

Modification Reference No.: N/A

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) MF9L61	7) MF9L67	13) MF9L74	19) MF9M24
2) MF9L62	8) MF9L69	14) MF9L75	20) MF9M33
3) MF9L63	9) MF9L70	15) MF9L76	21)
4) MF9L64	10) MF9L71	16) MF9L77	22)
5) MF9L65	11) MF9L72	17) MF9L78	23)
6) MF9L66	12) MF9L73	18) MF9L79	24)

MF9L61

First Sample in SDG

MF9M33

Last Sample in SDG

05/15/19

First Sample Receipt Date

05/18/19

Last Sample Receipt Date

Note: *There are a maximum of 20 field samples (excluding PE samples) in an SDG. Attach the TR/COC records to this form in alphanumeric order (the order listed above on this form).*

Signature: /S/ Roxanne Olson

Date: 5/16/2019 8:47:40 AM

(/S/ is an electronic signature that complies with 21 CFR Part 11)

EPA Sample Receipt

Client: U. S. EPA Region 6 Contract: EPW14027 Case: **48266** SDG: **MF9L61** MOD: None

Due to Client: **Sat, Jun 08, 2019** TAT: 21 Date Reported: Not Reported Status: **CLOSED**

Workorder Information Program: ISM02.4 Region: 6 EDD Level: 3

Work Order	Received	PR	Fractions
1914095	05/15/19 9:51 AM	No	ICP-AES, ICP-MS, Mercury, Cyanide
1914424	05/18/19 8:51 AM	No	ICP-AES, ICP-MS, Mercury, Cyanide

Sample Information

Lab ID	Client ID	Type	Matrix	ICPAES	ICPMS	Hg	Cn
1914095001	MF9L61	SAM	Soil[S]	X	X	X	X
1914095002	MF9L69	SAM	Soil[S]	X	X	X	X
1914095003	MF9L70	SAM	Soil[S]	X	X	X	X
1914095004	MF9L74	SAM	Soil[S]	X	X	X	X
1914095005	MF9L75	SAM	Soil[S]	X	X	X	X
1914095006	MF9L76	SAM	Soil[S]	X	X	X	X
1914095007	MF9L77	SAM	Soil[S]	X	X	X	X
1914095008	MF9L78	SAM	Soil[S]	X	X	X	X
1914095009	MF9L79	SAM	Soil[S]	X	X	X	X
1914095010	MF9L79S	MS	Soil[S]	X	X	X	X
1914095011	MF9L79D	MD	Soil[S]	X	X	X	X
1914095012	MF9M24	SAM	Soil[S]	X	X	X	X
1914424001	MF9L62	SAM	Soil[S]	X	X	X	X
1914424002	MF9L63	SAM	Soil[S]	X	X	X	X
1914424003	MF9L64	SAM	Soil[S]	X	X	X	X
1914424004	MF9L65	SAM	Soil[S]	X	X	X	X
1914424005	MF9L66	SAM	Soil[S]	X	X	X	X
1914424006	MF9L67	SAM	Soil[S]	X	X	X	X
1914424007	MF9L71	SAM	Soil[S]	X	X	X	X
1914424008	MF9L72	SAM	Soil[S]	X	X	X	X
1914424009	MF9L73	SAM	Soil[S]	X	X	X	X
1914424010	MF9M33	SAM	Soil[S]	X	X	X	X

Field Samples: **20** MS: **1** MSD: 0 MD: **1** PE: 0

Report Parameters = SDG:MF9L61 Case:<NULL> Region:<NULL>
Mod:<NULL> Workorder:<NULL> BeginDate:<NULL> EndDate:<NULL>
OpenSummary:No SortBy:Case

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914095	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives: COOL

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
1	05/14/2019 16:10	MF9L61	1914095001		Soil/Solid/Sediment	A	1	A	A	A	A
2	05/14/2019 15:15	MF9L69	1914095002		Soil/Solid/Sediment	A	1	A	A	A	A
3	05/14/2019 14:35	MF9L70	1914095003		Soil/Solid/Sediment	A	1	A	A	A	A
4	05/14/2019 13:40	MF9L74	1914095004		Soil/Solid/Sediment	A	1	A	A	A	A
5	05/14/2019 12:20	MF9L75	1914095005		Soil/Solid/Sediment	A	1	A	A	A	A
6	05/13/2019 16:45	MF9L76	1914095006		Soil/Solid/Sediment	A	1	A	A	A	A
7	05/13/2019 16:05	MF9L77	1914095007		Soil/Solid/Sediment	A	1	A	A	A	A
8	05/13/2019 14:40	MF9L78	1914095008		Soil/Solid/Sediment	A	1	A	A	A	A
9	05/13/2019 13:00	MF9L79	1914095009		Soil/Solid/Sediment	A	1	A	A	A	A
10	05/13/2019 13:00	MF9L79S	1914095010	MS	Soil/Solid/Sediment	A	1	A	A	A	A

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/15/2019 09:51	ALS Sample Receiving	Sample Login
[signature]	5/15/2019 1432	LeB	Storage
R-33-1 GB JML	05/23/2019 1505	Metals Prep JML	prep
metals prep CH	05/24/2019 19:19	wet chem lab CH	cyanide
Wet chem lab IJO	05/28/19 10:00	Alice J Ovalle	% solid
Alice J Ovalle	05/28/19 13:30	Wet chem lab IJO	storage/wet lab

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: _____ Lab Notebook No.: _____

Prepared / Analyzed by: _____ Date / Time: _____

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914095	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives: COOL

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
11	05/13/2019 13:00	MF9L79D	1914095011	MD	Soil/Solid/Sediment	A	1	A	A	A	A
12	05/14/2019 12:20	MF9M24	1914095012		Soil/Solid/Sediment	A	1	A	A	A	A
13											
14											
15											
16											
17											
18											
19											
20											

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/15/2019 09:51	ALS Sample Receiving	Sample Login
[signature]	5/15/2019 1022	GB	Storage
R-33-1 GB [initials]	05/23/2019 1505	metals prep [initials]	prep
metals prep CH	05/24/2019 13:19	wet chem lab CH	cyanide
Metals prep IJO	05/28/19 10:00	Use of Ovalle	% Solid
Use of Ovalle	05/28/19 13:30	Metals prep IJO	storage/cart

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: _____ Lab Notebook No.: _____

Prepared / Analyzed by: _____ Date / Time: _____

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914424	Level: EPACLP_PDF	Requested Analysis
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM	
Comments:			Preservatives: COOL	

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
1	05/16/2019 10:30	MF9L62	1914424001		Soil/Solid/Sediment	A	1	A	A	A	A
2	05/16/2019 16:50	MF9L63	1914424002		Soil/Solid/Sediment	A	1	A	A	A	A
3	05/16/2019 15:50	MF9L64	1914424003		Soil/Solid/Sediment	A	1	A	A	A	A
4	05/16/2019 14:25	MF9L65	1914424004		Soil/Solid/Sediment	A	1	A	A	A	A
5	05/16/2019 15:05	MF9L66	1914424005		Soil/Solid/Sediment	A	1	A	A	A	A
6	05/16/2019 13:35	MF9L67	1914424006		Soil/Solid/Sediment	A	1	A	A	A	A
7	05/17/2019 10:35	MF9L71	1914424007		Soil/Solid/Sediment	A	1	A	A	A	A
8	05/17/2019 11:55	MF9L72	1914424008		Soil/Solid/Sediment	A	1	A	A	A	A
9	05/17/2019 12:35	MF9L73	1914424009		Soil/Solid/Sediment	A	1	A	A	A	A
10	05/16/2019 10:30	MF9M33	1914424010		Soil/Solid/Sediment	A	1	A	A	A	A

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/18/2019 08:51	ALS Sample Receiving	Sample Login
Meredith Edwards	5/23/2019 1115	13D	Storage
R-33-1 13D MK	05/23/2019 1505	Metals Prep MK	prep
metals prep CH	05/24/2019 12:15	wet chem lab CH	cyanide
Wet chem lab	05/28/19 10:00	Flue & Oxalle	% solid
Flue & Oxalle	05/28/19 13:30	Wet chem lab IDS	storage/cart

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: _____ Lab Notebook No.: _____

Prepared / Analyzed by: _____ Date / Time: _____

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location

61506

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914424	Level: EPACLP_PDF	Requested Analysis
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM	
Comments:			Preservatives	

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
1	05/16/2019 10:30	MF9L62	1914424001		Soil/Solid/Sediment	A	1	A	A	A	A
2	05/16/2019 16:50	MF9L63	1914424002		Soil/Solid/Sediment	A	1	A	A	A	A
3	05/16/2019 15:50	MF9L64	1914424003		Soil/Solid/Sediment	A	1	A	A	A	A
4	05/16/2019 14:25	MF9L65	1914424004		Soil/Solid/Sediment	A	1	A	A	A	A
5	05/16/2019 15:05	MF9L66	1914424005		Soil/Solid/Sediment	A	1	A	A	A	A
6	05/16/2019 13:35	MF9L67	1914424006		Soil/Solid/Sediment	A	1	A	A	A	A
7	05/17/2019 10:35	MF9L71	1914424007		Soil/Solid/Sediment	A	1	A	A	A	A
8	05/17/2019 11:55	MF9L72	1914424008		Soil/Solid/Sediment	A	1	A	A	A	A
9	05/17/2019 12:35	MF9L73	1914424009		Soil/Solid/Sediment	A	1	A	A	A	A
10	05/16/2019 10:30	MF9M33	1914424010		Soil/Solid/Sediment	A	1	A	A	A	A

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/18/2019 08:51	ALS Sample Receiving	Sample Login
Meredith Edwards R-33-1 13D MC	5/18/2019 1115 05/23/2019 1505	13D Metals Prep MC	Storage prep

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP — Lab Notebook No.: Network

Prepared / Analyzed by: Jesse Cummings - Rex Bagley — Date / Time: 05/23/2019 14:51

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Metals Prep MC	05/23/2019 10:03	ICP Lab MC	Analysis

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914095	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives: COOL

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
1	05/14/2019 16:10	MF9L61	1914095001		Soil/Solid/Sediment	A	1	A	A	A	A
2	05/14/2019 15:15	MF9L69	1914095002		Soil/Solid/Sediment	A	1	A	A	A	A
3	05/14/2019 14:35	MF9L70	1914095003		Soil/Solid/Sediment	A	1	A	A	A	A
4	05/14/2019 13:40	MF9L74	1914095004		Soil/Solid/Sediment	A	1	A	A	A	A
5	05/14/2019 12:20	MF9L75	1914095005		Soil/Solid/Sediment	A	1	A	A	A	A
6	05/13/2019 16:45	MF9L76	1914095006		Soil/Solid/Sediment	A	1	A	A	A	A
7	05/13/2019 16:05	MF9L77	1914095007		Soil/Solid/Sediment	A	1	A	A	A	A
8	05/13/2019 14:40	MF9L78	1914095008		Soil/Solid/Sediment	A	1	A	A	A	A
9	05/13/2019 13:00	MF9L79	1914095009		Soil/Solid/Sediment	A	1	A	A	A	A
10	05/13/2019 13:00	MF9L79S	1914095010	MS	Soil/Solid/Sediment	A	1	A	A	A	A

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/15/2019 09:51	ALS Sample Receiving	Sample Login
[signature]	5/15/2019 1432	LB	Storage
R-33-1 GB [initials]	05/23/2019 1505	Metals Prep [initials]	prep

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP

Lab Notebook No.: Network

Prepared / Analyzed by: Jesse Cummings - Rex Bagley

Date / Time: 05/23/2019 14:56

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Metals Prep [initials]	05/28/2019 10:03	ICP Lab [initials]	Analysis

Wed, 05/15/19 4:30 PM

ALSCOCV3.1

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914095	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives: COOL

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	Requested Analysis: EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
11	05/13/2019 13:00	MF9L79D	1914095011	MD	Soil/Solid/Sediment	A	1	A	A	A	A
12	05/14/2019 12:20	MF9M24	1914095012		Soil/Solid/Sediment	A	1	A	A	A	A
13											
14											
15											
16											
17											
18											
19											
20											

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/15/2019 09:51	ALS Sample Receiving	Sample Login
[signature] R-33-1 GB JRC	5/15/2019 1022 05/23/2019 1505	GB metals prep JRC	Storage prep

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP

Lab Notebook No.: Network

Prepared / Analyzed by: Jesse Cummings-Rex Bagley

Date / Time: 05/23/2019 14:51

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Metals Prep JC	05/23/2019 1007 JC	ICP Lab JC	Analysis

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914424	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives: COOL

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
1	05/16/2019 10:30	MF9L62	1914424001		Soil/Solid/Sediment	A	1	A	A	A	A
2	05/16/2019 16:50	MF9L63	1914424002		Soil/Solid/Sediment	A	1	A	A	A	A
3	05/16/2019 15:50	MF9L64	1914424003		Soil/Solid/Sediment	A	1	A	A	A	A
4	05/16/2019 14:25	MF9L65	1914424004		Soil/Solid/Sediment	A	1	A	A	A	A
5	05/16/2019 15:05	MF9L66	1914424005		Soil/Solid/Sediment	A	1	A	A	A	A
6	05/16/2019 13:35	MF9L67	1914424006		Soil/Solid/Sediment	A	1	A	A	A	A
7	05/17/2019 10:35	MF9L71	1914424007		Soil/Solid/Sediment	A	1	A	A	A	A
8	05/17/2019 11:55	MF9L72	1914424008		Soil/Solid/Sediment	A	1	A	A	A	A
9	05/17/2019 12:35	MF9L73	1914424009		Soil/Solid/Sediment	A	1	A	A	A	A
10	05/16/2019 10:30	MF9M33	1914424010		Soil/Solid/Sediment	A	1	A	A	A	A

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/18/2019 08:51	ALS Sample Receiving	Sample Login
Meredith Edwards	5/18/2019 1115	13D	Storage
R-33-1 13D JC	05/23/2019 1505	Metals Prep JC	prep
metals prep CH	05/24/2019 12:19	wet chem lab CH	cyanide
Wet chem lab	05/28/19 10:00	Flue & Oxalle	% solid
Flue & Oxalle	05/28/19 15:30	Wet chem lab IJO	storage/cart
Wet Chem Lab KB	05/30/2019 15:38	Metals Prep KB	Prep
Prep lab IJO	05/31/19 10:30	Flue & Oxalle	% solids)
Flue & Oxalle	05/31/19 12:00	prep lab IJO	storage/cart

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP

Prepared / Analyzed by: Jesse Cummings

Lab Notebook No.: Network

Date / Time: ~~06/04/2019 08:15~~ 06/03/2019 10:50 06/04/2019 JC

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Metals Prep JC	05:25 JC 06/04/2019	ICP lab JC	Analysis

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914424	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives: COOL

Requested Analysis

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
1	05/16/2019 10:30	MF9L62	1914424001		Soil/Solid/Sediment	A	1	A	A	A	A
2	05/16/2019 16:50	MF9L63	1914424002		Soil/Solid/Sediment	A	1	A	A	A	A
3	05/16/2019 15:50	MF9L64	1914424003		Soil/Solid/Sediment	A	1	A	A	A	A
4	05/16/2019 14:25	MF9L65	1914424004		Soil/Solid/Sediment	A	1	A	A	A	A
5	05/16/2019 15:05	MF9L66	1914424005		Soil/Solid/Sediment	A	1	A	A	A	A
6	05/16/2019 13:35	MF9L67	1914424006		Soil/Solid/Sediment	A	1	A	A	A	A
7	05/17/2019 10:35	MF9L71	1914424007		Soil/Solid/Sediment	A	1	A	A	A	A
8	05/17/2019 11:55	MF9L72	1914424008		Soil/Solid/Sediment	A	1	A	A	A	A
9	05/17/2019 12:35	MF9L73	1914424009		Soil/Solid/Sediment	A	1	A	A	A	A
10	05/16/2019 10:30	MF9M33	1914424010		Soil/Solid/Sediment	A	1	A	A	A	A

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/18/2019 08:51	ALS Sample Receiving	Sample Login
Meredith Edwards	5/18/2019 1115	13D	Storage
R-33-1 13D JM	05/23/2019 1505	Metals Prep JM	prep
metals prep CH	05/24/2019 12:19	wet chem lab CH	cyanide
Wet chem lab	05/28/19 10:00	Elsie J Ovalle	% solid
Elsie J Ovalle	05/28/19 13:30	Wet chem lab ITO	storage/cart
Wet Chem Lab KB	05/30/2019 15:38	Metals Prep KB	Prep

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP-MS

Lab Notebook No.: HBN 239773

Prepared / Analyzed by: Kristie Bitner

Date / Time: 05/30/2019 15:36

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Kristie Bitner	05/31/2019 10:30	ICP-MS Lab KB	Analysis

Sat, 05/18/19 11:13 AM

ALSCOCV3.1

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914095	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives: COOL

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
1	05/14/2019 16:10	MF9L61	1914095001		Soil/Solid/Sediment	A	1	A	A	A	A
2	05/14/2019 15:15	MF9L69	1914095002		Soil/Solid/Sediment	A	1	A	A	A	A
3	05/14/2019 14:35	MF9L70	1914095003		Soil/Solid/Sediment	A	1	A	A	A	A
4	05/14/2019 13:40	MF9L74	1914095004		Soil/Solid/Sediment	A	1	A	A	A	A
5	05/14/2019 12:20	MF9L75	1914095005		Soil/Solid/Sediment	A	1	A	A	A	A
6	05/13/2019 16:45	MF9L76	1914095006		Soil/Solid/Sediment	A	1	A	A	A	A
7	05/13/2019 16:05	MF9L77	1914095007		Soil/Solid/Sediment	A	1	A	A	A	A
8	05/13/2019 14:40	MF9L78	1914095008		Soil/Solid/Sediment	A	1	A	A	A	A
9	05/13/2019 13:00	MF9L79	1914095009		Soil/Solid/Sediment	A	1	A	A	A	A
10	05/13/2019 13:00	MF9L79S	1914095010	MS	Soil/Solid/Sediment	A	1	A	A	A	A

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/15/2019 09:51	ALS Sample Receiving	Sample Login
[signature]	5/15/2019 1432	LB	Storage
R-33-1 GB JML	05/23/2019 1505	Metals Prep JML	prep
metals prep CH	05/24/2019 19:19	wet chem lab. CH	cyanide
Wet chem lab IJO	05/28/19 10:00	Elise J Ovalle	To solid
Elise J Ovalle	05/28/19 13:30	Wet chem lab IJO	storage/wet lab
Wet Chem Lab KB	05/30/2019 15:38	metals Prep KB	Prep

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP-ms

Lab Notebook No.: HBN 239773

Prepared / Analyzed by: Kristie Bitner

Date / Time: 05/30/2019 15:36

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Kristie Bitner	05/31/2019 10:30	ICP-ms Lab KB	Analysis

Wed, 05/15/19 4:30 PM

ALSCOCV3.1

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914095	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives: COOL

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
11	05/13/2019 13:00	MF9L79D	1914095011	MD	Soil/Solid/Sediment	A	1	A	A	A	A
12	05/14/2019 12:20	MF9M24	1914095012		Soil/Solid/Sediment	A	1	A	A	A	A
13											
14											
15											
16											
17											
18											
19											
20											

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/15/2019 09:51	ALS Sample Receiving	Sample Login
[signature]	5/15/2019 1022	LB	Storage
R-33-1 GB [initials]	05/23/2019 1505	metals prep [initials]	prep
metals prep CH	05/24/2019 19:19	wet chem lab CH	cyanide
Metals prep ITO	05/28/19 10:00	Elsa J Ovalle	% Solid
Elsa J Ovalle	05/28/19 13:30	Metals prep ITO	storage/cart

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP-ms

Lab Notebook No.: HBN 239773

Prepared / Analyzed by: Kristie Bitner

Date / Time: 05/30/2019 15:36

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Kristie Bitner	05/31/2019 10:30	ICP-MS Lab KB	Analysis

Wed, 05/15/19 4:30 PM

ALSCOCV3.1

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914095	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives: COOL

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
1	05/14/2019 16:10	MF9L61	1914095001		Soil/Solid/Sediment	A	1	A	A	A	A
2	05/14/2019 15:15	MF9L69	1914095002		Soil/Solid/Sediment	A	1	A	A	A	A
3	05/14/2019 14:35	MF9L70	1914095003		Soil/Solid/Sediment	A	1	A	A	A	A
4	05/14/2019 13:40	MF9L74	1914095004		Soil/Solid/Sediment	A	1	A	A	A	A
5	05/14/2019 12:20	MF9L75	1914095005		Soil/Solid/Sediment	A	1	A	A	A	A
6	05/13/2019 16:45	MF9L76	1914095006		Soil/Solid/Sediment	A	1	A	A	A	A
7	05/13/2019 16:05	MF9L77	1914095007		Soil/Solid/Sediment	A	1	A	A	A	A
8	05/13/2019 14:40	MF9L78	1914095008		Soil/Solid/Sediment	A	1	A	A	A	A
9	05/13/2019 13:00	MF9L79	1914095009		Soil/Solid/Sediment	A	1	A	A	A	A
10	05/13/2019 13:00	MF9L79S	1914095010	MS	Soil/Solid/Sediment	A	1	A	A	A	A

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/15/2019 09:51	ALS Sample Receiving	Sample Login
[illegible]	5/15/2019 1432	LB	Storage
R-33-1 GB JML	05/23/2019 1505	Metals Prep JML	prep
metals prep CH	05/24/2019 19:19	wet chem lab CH	cyanide
Wet chem lab IJO	05/28/19 10:00	Jlse J Ovalle	% solid
Jlse J Ovalle	05/28/19 13:30	Wet chem lab IJO	storage/wet lab
Wet Chem Lab KB	05/30/2019 15:38	metals Prep KB	Prep
Prep lab IJO	05/31/19 10:30	Jlse J Ovalle	% solid
Jlse J Ovalle	05/31/19 12:00	prep lab IJO	storage/cart

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: Hg / Hg Lab Notebook No.: 240883

Prepared / Analyzed by: SW/SW Date / Time: 06/06/19 0800

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Metals prep SW	06/06/19 1245	Hg lab SW	Analysis
Hg lab	06/06/19 1500	non hazardous waste SW	disposal

06/06/19 SW

Wed, 05/15/19 4:30 PM

ALSCOCV3.1

00587

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914095	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives: COOL

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
11	05/13/2019 13:00	MF9L79D	1914095011	MD	Soil/Solid/Sediment	A	1	A	A	A	A
12	05/14/2019 12:20	MF9M24	1914095012		Soil/Solid/Sediment	A	1	A	A	A	A
13											
14											
15											
16											
17											
18											
19											
20											

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/15/2019 09:51	ALS Sample Receiving	Sample Login
[illegible]	5/15/2019 1622	LB	Storage
R-33-1 GB [illegible]	05/23/2019 1505	metals prep [illegible]	prep
metals prep CH	05/24/2019 19:19	wet chem lab CH	cyanide
Metals prep IJO	05/28/19 10:00	Ilse of Ovalle	% Solid
Ilse of Ovalle	05/28/19 13:30	Metals prep IJO	storage/cart
Met prep lab IJO	05/31/19 10:30	Ilse of Ovalle	% solid
Ilse of Ovalle	05/31/19 12:00	Met prep lab IJO	storage/cart

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: Hg / Hg

Prepared / Analyzed by: SW/SW

Lab Notebook No.: 240883

Date / Time: 06/06/19 0800

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
metals prep SW	06/06/19 1245	Hg lab SW	Analysis
Hg lab	06/06/19 1500	non hazardous waste SW	disposal

06/06/19 SW

Wed, 05/15/19 4:30 PM

ALSCOCV3.1

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914424	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	COOL	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
1	05/16/2019 10:30	MF9L62	1914424001		Soil/Solid/Sediment	A	1		A	A	A	A
2	05/16/2019 16:50	MF9L63	1914424002		Soil/Solid/Sediment	A	1		A	A	A	A
3	05/16/2019 15:50	MF9L64	1914424003		Soil/Solid/Sediment	A	1		A	A	A	A
4	05/16/2019 14:25	MF9L65	1914424004		Soil/Solid/Sediment	A	1		A	A	A	A
5	05/16/2019 15:05	MF9L66	1914424005		Soil/Solid/Sediment	A	1		A	A	A	A
6	05/16/2019 13:35	MF9L67	1914424006		Soil/Solid/Sediment	A	1		A	A	A	A
7	05/17/2019 10:35	MF9L71	1914424007		Soil/Solid/Sediment	A	1		A	A	A	A
8	05/17/2019 11:55	MF9L72	1914424008		Soil/Solid/Sediment	A	1		A	A	A	A
9	05/17/2019 12:35	MF9L73	1914424009		Soil/Solid/Sediment	A	1		A	A	A	A
10	05/16/2019 10:30	MF9M33	1914424010		Soil/Solid/Sediment	A	1		A	A	A	A

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/18/2019 08:51	ALS Sample Receiving	Sample Login
Meredith Edwards	5/18/2019 1115	13D	Storage
R-33-1 130 JRC	05/23/2019 1505	Metals Prep JRC	prep
metals prep CH	05/24/2019 13:19	wet chem lab CH	cyanide
Wet chem lab	05/28/19 10:00	Blue & Ovalle	% solid
Blue & Ovalle	05/28/19 13:30	Wet chem lab 130	storage/cart
Wet Chem Lab GB	05/30/2019 15:38	Metals Prep GB	Prep
Prep lab 130	05/31/19 16:30	Blue & Ovalle	% solids
Blue & Ovalle	05/31/19 12:00	prep lab 130	storage/cart

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: Hg / Hg

Prepared / Analyzed by: SW / SW

Lab Notebook No.: 240883

Date / Time: 06/06/19 0800

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Metals prep SW	06/06/19 0745	Hg lab SW	Analysis
Hg lab SW	06/06/19 1500	non hazardous waste SW	disposal
	06/06/19 SW		

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914095	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives: COOL

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	Requested Analysis: EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
1	05/14/2019 16:10	MF9L61	1914095001		Soil/Solid/Sediment	A	1	A	A	A	A
2	05/14/2019 15:15	MF9L69	1914095002		Soil/Solid/Sediment	A	1	A	A	A	A
3	05/14/2019 14:35	MF9L70	1914095003		Soil/Solid/Sediment	A	1	A	A	A	A
4	05/14/2019 13:40	MF9L74	1914095004		Soil/Solid/Sediment	A	1	A	A	A	A
5	05/14/2019 12:20	MF9L75	1914095005		Soil/Solid/Sediment	A	1	A	A	A	A
6	05/13/2019 16:45	MF9L76	1914095006		Soil/Solid/Sediment	A	1	A	A	A	A
7	05/13/2019 16:05	MF9L77	1914095007		Soil/Solid/Sediment	A	1	A	A	A	A
8	05/13/2019 14:40	MF9L78	1914095008		Soil/Solid/Sediment	A	1	A	A	A	A
9	05/13/2019 13:00	MF9L79	1914095009		Soil/Solid/Sediment	A	1	A	A	A	A
10	05/13/2019 13:00	MF9L79S	1914095010	MS	Soil/Solid/Sediment	A	1	A	A	A	A

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/15/2019 09:51	ALS Sample Receiving	Sample Login
[illegible]	5/13/2019 [illegible]	LAB	Storage
R-33-168 MK	05/23/2019 1505	Metals Prep MK	prep
metals prep CH	05/24/2019 13:19	wet chem lab CH	cyanide
Wet chem lab IJO	05/28/19 10:00	Flue & Ovalle	to solid
Flue & Ovalle	05/28/19 13:30	Wet chem lab IJO	storage/wet lab
wet Chem Lab KB	05/30/2019 15:38	metals Prep KB	Prep
Prep lab IJO	05/31/19 10:30	Flue & Ovalle	to solid
Flue & Ovalle	05/31/19 12:00	prep lab IJO	storage/cart

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: EPA-CLP CN — Lab Notebook No.: 240697

Prepared / Analyzed by: CH/CH — Date / Time: 05/27/2019 10:09

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
wet chem lab CH	05/27/2019 13:50	wet chem lab CH	Analysis
wet chem lab CH	05/27/2019 16:20	cyanide waste CH	Disposal
		CH 05/05/2019	

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914095	Level: EPACLP_PDF	Requested Analysis
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM	
Comments:			Preservatives	

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	COOL	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
11	05/13/2019 13:00	MF9L79D	1914095011	MD	Soil/Solid/Sediment	A	1		A	A	A	A
12	05/14/2019 12:20	MF9M24	1914095012		Soil/Solid/Sediment	A	1		A	A	A	A
13												
14												
15												
16												
17												
18												
19												
20												

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/15/2019 09:51	ALS Sample Receiving	Sample Login
[illegible]	5/15/2019 1022	WB	Storage
R-33-1 GB JPL	05/23/2019 1505	metals prep JPL	prep
metals prep CH	05/24/2019 13:19	wet chem lab CH	cyanide
Metals prep ITO	05/28/19 10:00	Ilse of Ovalle	To Solid
Ilse of Ovalle	05/28/19 13:30	Metals prep ITO	Storage/cart
Met prep lab ITO	05/31/19 10:30	Ilse of Ovalle	To Solid
Ilse of Ovalle	05/31/19 12:00	Met prep lab ITO	storage/cart

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: EPA-CLP CN Lab Notebook No.: 240697

Prepared / Analyzed by: CH / CH Date / Time: 05/27/2019 10:09

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
wet chem lab CH	05/27/2019 13:50	wet chem lab CH	Analysis
wet chem lab CH	05/27/2019 16:20	cyanide water CH	Disposal
		CH 06/05/2019	

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914424	Level: EPACLP_PDF
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM
Comments:			Preservatives: COOL

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	Requested Analysis: EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
1	05/16/2019 10:30	MF9L62	1914424001		Soil/Solid/Sediment	A	1	A	A	A	A
2	05/16/2019 16:50	MF9L63	1914424002		Soil/Solid/Sediment	A	1	A	A	A	A
3	05/16/2019 15:50	MF9L64	1914424003		Soil/Solid/Sediment	A	1	A	A	A	A
4	05/16/2019 14:25	MF9L65	1914424004		Soil/Solid/Sediment	A	1	A	A	A	A
~~5~~	~~05/16/2019 15:05~~	~~MF9L66~~	~~1914424005~~		~~Soil/Solid/Sediment~~	~~A~~	~~1~~	~~A~~	~~A~~	~~A~~	~~A~~
6	05/16/2019 13:35	MF9L67	1914424006		Soil/Solid/Sediment	A	1	A	A	A	A
7	05/17/2019 10:35	MF9L71	1914424007		Soil/Solid/Sediment	A	1	A	A	A	A
8	05/17/2019 11:55	MF9L72	1914424008		Soil/Solid/Sediment	A	1	A	A	A	A
9	05/17/2019 12:35	MF9L73	1914424009		Soil/Solid/Sediment	A	1	A	A	A	A
10	05/16/2019 10:30	MF9M33	1914424010		Soil/Solid/Sediment	A	1	A	A	A	A

CH 05/05/2019

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/18/2019 08:51	ALS Sample Receiving	Sample Login
Meredith Edwards	5/18/2019 1115	13D	Storage
R-33-1 13D MK	05/23/2019 1505	Metals Prep MK	prep
metals prep CH	05/24/2019 12:19	wet chem lab CH	cyanide
Wet chem lab	05/28/19 10:00	Flue & Oxalle	% solid
Flue & Oxalle	05/28/19 15:30	Wet chem lab ITO	storage/cart
Wet Chem Lab BB	05/30/2019 15:38	Metals Prep BB	Prep
Prep Lab ITO	05/31/19 16:30	Flue & Oxalle	% solids
Flue & Oxalle	05/31/19 12:00	Prep lab ITO	storage/cart

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: EPA-CLP CN

Lab Notebook No.: 240637

Prepared / Analyzed by: CH / CH

Date / Time: 05/27/2019 10:09

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
wet chem lab CH	05/27/2019 13:50	wet chem lab CH	Analysis
wet chem lab CH	05/27/2019 14:20	cyanide waste CH	Disposal
		CH 05/05/2019 CH 05/02/2019	

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW14027	Split:	Workorder ID: 1914424	Level: EPACLP_PDF	Requested Analysis
Client: U. S. EPA Region 6 [48266/MF9L61]		Account: 8201	Type: 8ozGWM	
Comments:			Preservatives: COOL	

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	EPA-CLP ICP-MS, Soil Analysis	EPA-CLP ICP-AES, Soil Analysis	EPA-CLP Mercury, Soil Analysis	EPA-CLP Cyanide, Soil Analysis
1	05/16/2019 10:30	MF9L62	1914424001		Soil/Solid/Sediment	A	1	A	A	A	A
2	05/16/2019 16:50	MF9L63 CH 05/05/2019	1914424002		Soil/Solid/Sediment	A	1	A	A	A	A
3	05/16/2019 15:50	MF9L64	1914424003		Soil/Solid/Sediment	A	1	A	A	A	A
4	05/16/2019 14:25	MF9L65	1914424004		Soil/Solid/Sediment	A	1	A	A	A	A
5	05/16/2019 15:05	MF9L66	1914424005		Soil/Solid/Sediment	A	1	A	A	A	A
6	05/16/2019 13:35	MF9L67	1914424006		Soil/Solid/Sediment	A	1	A	A	A	A
7	05/17/2019 10:35	MF9L71	1914424007		Soil/Solid/Sediment	A	1	A	A	A	A
8	05/17/2019 11:55	MF9L72	1914424008		Soil/Solid/Sediment	A	1	A	A	A	A
9	05/17/2019 12:35	MF9L73 CH 05/05/2019	1914424009		Soil/Solid/Sediment	A	1	A	A	A	A
10	05/16/2019 10:30	MF9M33	1914424010		Soil/Solid/Sediment	A	1	A	A	A	A

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	05/18/2019 08:51	ALS Sample Receiving	Sample Login
Meredith Edwards	5/18/2019 1115	13D	Storage
R-33-1 13D MK	05/23/2019 1505	Metals Prep MK	prep
metals prep CH	05/24/2019 12:15	wet chem lab CH	cyanide
Wet chem lab	05/28/19 10:00	Flue & Oralle	% solid
Flue & Oralle	05/28/19 15:30	Wet chem lab IID	storage/cart
Wet Chem Lab BB	05/30/2019 15:38	Metals Prep BB	Prep
Prep, lab IID	05/31/19 10:30	Flue & Oralle	% solids
Flue & Oralle	05/31/19 12:00	prep lab IID	storage/cart

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: EPA-CLP CN

Lab Notebook No.: 240700

Prepared / Analyzed by: CH / CH

Date / Time: 05/30/2019 11:00

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
wet chem lab CH	05/30/2019 15:33	wet chem lab CH	Analysis
wet chem lab CH	05/30/2019 19:00	cyanide waste CH	Disposal
		CH 05/05/2019	