FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME	ALS Environmental		
CITY/STATE	Salt Lake City, UT 84123		
CASE NO.	45299	SDG NO.:	MF9K02
SDG NOs. TO FOLLOW	N/A		
MOD. REF. No.	N/A		
CONTRACT NO.	EPW09036		
SOW NO.	ISM01.3		

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

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK REGION
1. Inventory Sheet (DC-2)	1	2	✓	
2. SDG Narrative	3	5	✓	
3. Sample Log-In Sheet (DC-1)	6	6	✓	
4. Traffic Report/Chain of Custody Record(s)	7	8	✓	
5. Cover Page	9	9	✓	
Inorganic Analysis				
6. Data Sheet (Form I-IN)	10	35	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	36	38	✓	
8. Blanks (Form III-IN)	39	40	✓	
9. ICP-AES Interference Check Sample(Form IVA-IN)	41	41	✓	
10. ICP-MS Interference Check Sample(Form IVB-IN)	42	42	✓	
11. Matrix Spike Sample Recovery(Form VA-IN)	43	44	✓	
12. Post-Digestion Spike Sample Recovery(Form VB-IN)	45	45	✓	
13. Duplicates (Form VI-IN)	46	47	✓	
14. Laboratory Control Sample (Form VII-IN)	48	49	✓	
15. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	50	51	✓	
16. Method Detection Limit (Annually) (Form IX-IN)	52	54	✓	
17. ICP-AES Interelement Correction Factors (Quarterly) Form XA-IN)	55	55	✓	
18. ICP-AES Interelement Correction Factors (Annually) Form XB-IN)	56	57	✓	
19. Internal Standard Association (Form X1-IN)	58	58	✓	
20. Preparation Log (Form XII-IN)	59	61	✓	
21. Analysis Run Log (Form XIII-IN)	62	66	✓	

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FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

	PAGE NOs FROM	PAGE NOs TO	CHECK LAB	CHECK REGION
22. ICP-MS Tune (Form XIV-IN)	67	67	✓	
23. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)	68	71	✓	
24. Initial Calibration (Form XVI - IN)	72	79	✓	
25. ICP AES Raw Data	80	149	✓	
26. ICP-MS Raw Data	150	242	✓	
27. Mercury Raw Dta	243	247	✓	
28. Cyanide Raw Data	n/a		✓	
29. Preparation Logs Raw Data	248	250	✓	
30. Percent Solids Determination Log	251	251	✓	
31. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)	252	252	✓	
Sample Tags	253	253	✓	
Sample Log-In Sheet (Lab)	NA		✓	
32. Misc. Shipping/Receiving Records (list all individual records)				
Communication Logs	NA		✓	
ALS SDG TR Cover Sheet	254	255	✓	
			✓	
33. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
ALS CoC	256	261	✓	
34. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records	262	283	✓	
Analysis Records	284	359	✓	
PE Instructions	n/a			
Description	NA		✓	
35. Other Records (describe or list)				
Communication Logs	NA		✓	
E-mail Communications	n/a		✓	
			✓	

36. Comments: n/a

Completed by:
(CLP Lab) Desiree Hill (Signature) | Desiree Hill / Doc. Ctrl. (Print Name & Title) | 7/2/15 (Date)

Audited 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: EPW09030

Case: 45299

SDG: MF9K02

WO No(s): 1516424

Cooler # and Temperatures of each (upon receipt)

Cooler Number C15-	n/a	Arrival temperature was	4	°C
Cooler Number C15-		Arrival temperature was		°C
Cooler Number C15-		Arrival temperature was		°C
Cooler Number C15-		Arrival temperature was		°C
Cooler Number C15-		Arrival temperature was		°C
Cooler Number C15-		Arrival temperature was		°C
Cooler Number C15-		Arrival temperature was		°C
Cooler Number C15-		Arrival temperature was		°C

07/02/2015
DH

Communications:

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

Comments:

None

Signature: Desiree Hill
Document Control Officer

Date: 07/02/2015

SDG Narrative

Case:	45299	Contract #:	EPW-09-036
SDG:	MF9K02	ALS Set ID #:	1516424

General Information: The thirteen samples in this SDG were analyzed by methodologies contained in ISM01.3. 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, 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 acceptance criteria.

Matrix Spike Analysis: All matrix spike recoveries met method acceptance criteria with the exception of antimony.

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

Serial Dilution: All serial dilution results met method acceptance criteria.

Miscellaneous Comments: All calibration data is linear, please see raw data.

Example Equations:

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

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

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

SAMPLE LOG-IN SHEET
FORM DC-1

Lab Name: ALS Environmental	Page 1 of 1
Received By (Print Name): Meredith Edwards	Log-In Date: 6/13/2015
Received By (Signature): Meredith Edwards	
Case Number: 45297	Sample Delivery Group No.: MF9K02
	Mod. Ref. 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.: 7738198410927 / N/A
6. Sample Tags: Present/Absent* — Sample Tag Numbers: Listed/Not Listed on Chain-of-Custody
7. Sample Condition: Intact/Broken*/Leaking*
8. Cooler Temperature Indicator Bottle: Present/Absent*
9. Cooler Temperature: 4
10. Does information on TR/COCs and sample tags agree? Yes/No*
11. Date Received at Laboratory: 6/13/2015
12. Time Received: 9:45

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MF9K02	N/A	N/A	15L0424 001	PES/MS/Hg Soil
2	03			002	
3	04			003	
4	05			004	
5	06			005	
6	07			006,007,008	MS/MSD
7	08			009	
8	09			010	
9	10			011	
10	11			012	
11	12			013	
12	13			014	
13	14			015	
14					
15			MR 6/13/2015		
16					
17					
18					
19					
20					
21					
22					

Sample Transfer

Fraction: PES/MS/Hg	Fraction: MR 6/13/2015
Area #: R003.1	Area #:
By: MR	By:
On: 6/13/2015	On:

* Contact SMO and attach record of resolution

Reviewed By: Joanne Olson	Logbook No.: Not Applicable
Date: 6/15/15	Logbook Page No.: Not Applicable

W 1516424

MF9K02

USEPA CLP COC (LAB COPY)

DateShipped: 6/12/2015
CarrierName: FedEx
AirbillNo: 773819840927

CHAIN OF CUSTODY RECORD

Case #: 45299
Cooler #:

No: 6-061215-103311-0113

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

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
WO-017-001-00-51S	MF9K02	Soil/ START	Composite/ Sieved	TM + Hg(21)	1815 (None) (1)	017	06/08/2015 11:00	
WO-017-002-06-51S	MF9K03	Soil/ START	Composite/ Sieved	TM + Hg(21)	1816 (None) (1)	017	06/08/2015 13:51	
WO-020-002-06-51S	MF9K04	Soil/ START	Composite/ Sieved	TM + Hg(21)	1817 (None) (1)	020	06/08/2015 15:00	
WO-020-002-06-52S	MF9K05	Soil/ START	Composite/ Sieved	TM + Hg(21)	1818 (None) (1)	020	06/08/2015 15:05	
WO-020-005-00-51S	MF9K06	Soil/ START	Composite/ Sieved	TM + Hg(21)	1819 (None) (1)	020	06/08/2015 15:42	
WO-020-005-06-51S	MF9K07	Soil/ START	Composite/ Sieved	TM + Hg(21)	1820 (None) (1)	020	06/08/2015 16:25	
WO-017-004-00-51S	MF9K08	Soil/ START	Composite/ Sieved	TM + Hg(21)	1821 (None) (1)	017	06/09/2015 11:26	
WO-017-001-06-51S	MF9K09	Soil/ START	Composite/ Sieved	TM + Hg(21)	1822 (None) (1)	017	06/09/2015 16:00	
WO-017-001-06-52S	MF9K10	Soil/ START	Composite/ Sieved	TM + Hg(21)	1823 (None) (1)	017	06/09/2015 16:05	
WO-017-002-00-51S	MF9K11	Soil/ START	Composite/ Sieved	TM + Hg(21)	1824 (None) (1)	017	06/10/2015 09:43	

Sample(s) to be used for Lab QC: WO-020-005-06-51S Tag 1820

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: TM + Hg=CLP TM + Hg

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	[signature] Weston	6/12/15 @ 1600	FedEx	6/12/15 @ 1600	
	FedEx	6/13/2015 9:45	Meredith Edwards DATPL	6/13/2015 9:45	good

MF9K02

USEPA CLP COC (LAB COPY)

DateShipped: 6/12/2015
CarrierName: FedEx
AirbillNo: 773819840927

CHAIN OF CUSTODY RECORD

Case #: 45299
Cooler #:

No: 6-061215-103311-0113

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

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
WO-017-003-00-51S	MF9K12	Soil/ START	Composite/ Sieved	TM + Hg(21)	1825 (None) (1)	017	06/10/2015 11:00	
WO-017-006-06-51S	MF9K13	Soil/ START	Composite/ Sieved	TM + Hg(21)	1826 (None) (1)	017	06/10/2015 11:50	
WO-017-005-06-51S	MF9K14	Soil/ START	Composite/ Sieved	TM + Hg(21)	1827 (None) (1)	017	06/10/2015 14:33	SDG Final Sample

Special Instructions:	**Shipment for Case Complete? Y**
	Samples Transferred From Chain of Custody #
Analysis Key: TM + Hg=CLP TM + Hg	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples/Analysis	Weston	6/12/15 @ 1600	FedEx	6/12/15 @ 1600	
	FedEx	6/13/2015/945	[illegible]	6/13/2015/9:45	good

USEPA - CLP
COVER PAGE

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

SOW No.: ISM01.3

EPA Sample No.	Lab Sample ID
MF9K02	1516424001
MF9K03	1516424002
MF9K04	1516424003
MF9K05	1516424004
MF9K06	1516424005
MF9K07	1516424006
MF9K07D	1516424008
MF9K07S	1516424007
MF9K08	1516424009
MF9K09	1516424010
MF9K10	1516424011
MF9K11	1516424012
MF9K12	1516424013
MF9K13	1516424014
MF9K14	1516424015

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

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

Comments:

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

Signature: Name: Neil Edwards

Date: 07/01/2015 Title: Chemist

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K02

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424001

% Solids: 94.1 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.13	J	DN	MS
7440-38-2	Arsenic	2.4		D	MS
7440-39-3	Barium	61.9		D	MS
7440-41-7	Beryllium	0.37	J	D	MS
7440-43-9	Cadmium	0.22	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	11.3		D	MS
7440-48-4	Cobalt	3.3		D	MS
7440-50-8	Copper	96.8		D	MS
7439-89-6	Iron				
7439-92-1	Lead	43.6		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.018	J		CV
7440-02-0	Nickel	6.7		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	2.3	U	D	MS
7440-22-4	Silver	0.044	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.076	J	D	MS
7440-62-2	Vanadium	14.7		D	MS
7440-66-6	Zinc	83.1		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K02

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424001

% Solids: 94.1 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3580			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1960			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	7640			P
7439-92-1	Lead				
7439-95-4	Magnesium	632			P
7439-96-5	Manganese	194			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	825			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	23.1	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K03

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424002

% Solids: 95.7 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.095	J	DN	MS
7440-38-2	Arsenic	2.0		D	MS
7440-39-3	Barium	43.8		D	MS
7440-41-7	Beryllium	0.31	J	D	MS
7440-43-9	Cadmium	0.19	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	9.1		D	MS
7440-48-4	Cobalt	2.3		D	MS
7440-50-8	Copper	104		D	MS
7439-89-6	Iron				
7439-92-1	Lead	19.7		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.053	J		CV
7440-02-0	Nickel	5.3		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	2.2	U	D	MS
7440-22-4	Silver	0.048	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.072	J	D	MS
7440-62-2	Vanadium	13.7		D	MS
7440-66-6	Zinc	76.2		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K03

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424002

% Solids: 95.7 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3010			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1090			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	6460			P
7439-92-1	Lead				
7439-95-4	Magnesium	417			P
7439-96-5	Manganese	119			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	549			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	15.1	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K04

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424003

% Solids: 97.3 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.089	J	DN	MS
7440-38-2	Arsenic	1.5		D	MS
7440-39-3	Barium	35.9		D	MS
7440-41-7	Beryllium	0.19	J	D	MS
7440-43-9	Cadmium	0.14	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	6.2		D	MS
7440-48-4	Cobalt	2.9		D	MS
7440-50-8	Copper	24.6		D	MS
7439-89-6	Iron				
7439-92-1	Lead	13.2		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.023	J		CV
7440-02-0	Nickel	3.3		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	2.2	U	D	MS
7440-22-4	Silver	0.026	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.050	J	D	MS
7440-62-2	Vanadium	8.8		D	MS
7440-66-6	Zinc	54.2		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9K04

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424003

% Solids: 97.3 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2520			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	595			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	7770			P
7439-92-1	Lead				
7439-95-4	Magnesium	280	J		P
7439-96-5	Manganese	225			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	510			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	10	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9K05

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424004

% Solids: 96.6 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.058	J	DN	MS
7440-38-2	Arsenic	1.5		D	MS
7440-39-3	Barium	36.0		D	MS
7440-41-7	Beryllium	0.18	J	D	MS
7440-43-9	Cadmium	0.15	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	6.3		D	MS
7440-48-4	Cobalt	3.2		D	MS
7440-50-8	Copper	48.5		D	MS
7439-89-6	Iron				
7439-92-1	Lead	13.2		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.026	J		CV
7440-02-0	Nickel	3.2		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	1.9	U	D	MS
7440-22-4	Silver	0.027	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.050	J	D	MS
7440-62-2	Vanadium	8.7		D	MS
7440-66-6	Zinc	65.3		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K05

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424004

% Solids: 96.6 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2450			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	640			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	6240			P
7439-92-1	Lead				
7439-95-4	Magnesium	288	J		P
7439-96-5	Manganese	242			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	525			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	9.7	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K06

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424005

% Solids: 98.9 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.079	J	DN	MS
7440-38-2	Arsenic	1.5		D	MS
7440-39-3	Barium	38.2		D	MS
7440-41-7	Beryllium	0.17	J	D	MS
7440-43-9	Cadmium	0.42	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	5.3		D	MS
7440-48-4	Cobalt	1.5		D	MS
7440-50-8	Copper	9.2		D	MS
7439-89-6	Iron				
7439-92-1	Lead	34.5		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.10			CV
7440-02-0	Nickel	3.1		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	2.3	U	D	MS
7440-22-4	Silver	0.070	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.045	J	D	MS
7440-62-2	Vanadium	7.0		D	MS
7440-66-6	Zinc	66.3		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9K06

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424005

% Solids: 98.9 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1910			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	3340			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	3690			P
7439-92-1	Lead				
7439-95-4	Magnesium	1500			P
7439-96-5	Manganese	193			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	416	J		P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	12.4	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K07

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424006

% Solids: 98.3 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.070	J	DN	MS
7440-38-2	Arsenic	1.5		D	MS
7440-39-3	Barium	40.0		D	MS
7440-41-7	Beryllium	0.16	J	D	MS
7440-43-9	Cadmium	0.31	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	5.5		D	MS
7440-48-4	Cobalt	1.6		D	MS
7440-50-8	Copper	8.8		D	MS
7439-89-6	Iron				
7439-92-1	Lead	31.6		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.060	J		CV
7440-02-0	Nickel	3.4		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	2.1	U	D	MS
7440-22-4	Silver	0.060	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.045	J	D	MS
7440-62-2	Vanadium	7.4		D	MS
7440-66-6	Zinc	65.4		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K07

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424006

% Solids: 98.3 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2200			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	4210			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	4170			P
7439-92-1	Lead				
7439-95-4	Magnesium	1960			P
7439-96-5	Manganese	208			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	431			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	14.3	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9K08

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424009

% Solids: 93.9 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.11	J	DN	MS
7440-38-2	Arsenic	1.4		D	MS
7440-39-3	Barium	60.4		D	MS
7440-41-7	Beryllium	0.21	J	D	MS
7440-43-9	Cadmium	0.47	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	7.5		D	MS
7440-48-4	Cobalt	2.2		D	MS
7440-50-8	Copper	108		D	MS
7439-89-6	Iron				
7439-92-1	Lead	46.9		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.093	J		CV
7440-02-0	Nickel	5.3		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	2.4	U	D	MS
7440-22-4	Silver	0.095	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.062	J	D	MS
7440-62-2	Vanadium	10.3		D	MS
7440-66-6	Zinc	153		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K08

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424009

% Solids: 93.9 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2930			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1980			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	5340			P
7439-92-1	Lead				
7439-95-4	Magnesium	601			P
7439-96-5	Manganese	176			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	553			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	15.9	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K09

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424010

% Solids: 97.1 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.075	J	DN	MS
7440-38-2	Arsenic	2.0		D	MS
7440-39-3	Barium	51.3		D	MS
7440-41-7	Beryllium	0.31	J	D	MS
7440-43-9	Cadmium	0.25	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	9.2		D	MS
7440-48-4	Cobalt	3.3		D	MS
7440-50-8	Copper	26.2		D	MS
7439-89-6	Iron				
7439-92-1	Lead	36.2		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.033	J		CV
7440-02-0	Nickel	5.7		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	2.1	U	D	MS
7440-22-4	Silver	0.034	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.059	J	D	MS
7440-62-2	Vanadium	12.4		D	MS
7440-66-6	Zinc	64.9		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9K09

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424010

% Solids: 97.1 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3100			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1160			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	6640			P
7439-92-1	Lead				
7439-95-4	Magnesium	470			P
7439-96-5	Manganese	202			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	619			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	19.0	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K10

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424011

% Solids: 96.7 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.067	J	DN	MS
7440-38-2	Arsenic	2.0		D	MS
7440-39-3	Barium	49.3		D	MS
7440-41-7	Beryllium	0.28	J	D	MS
7440-43-9	Cadmium	0.24	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	8.3		D	MS
7440-48-4	Cobalt	3.4		D	MS
7440-50-8	Copper	93.7		D	MS
7439-89-6	Iron				
7439-92-1	Lead	33.5		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.031	J		CV
7440-02-0	Nickel	5.2		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	1.8	U	D	MS
7440-22-4	Silver	0.041	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.054	J	D	MS
7440-62-2	Vanadium	11.5		D	MS
7440-66-6	Zinc	81.0		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF9K10

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424011

% Solids: 96.7 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3350			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1240			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	7100			P
7439-92-1	Lead				
7439-95-4	Magnesium	495			P
7439-96-5	Manganese	238			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	658			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	20.6	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K11

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424012

% Solids: 95.8 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.050	J	DN	MS
7440-38-2	Arsenic	2.1		D	MS
7440-39-3	Barium	45.8		D	MS
7440-41-7	Beryllium	0.33	J	D	MS
7440-43-9	Cadmium	0.22	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	9.7		D	MS
7440-48-4	Cobalt	2.6		D	MS
7440-50-8	Copper	19.7		D	MS
7439-89-6	Iron				
7439-92-1	Lead	22.8		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.033	J		CV
7440-02-0	Nickel	6.6		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	2.2	U	D	MS
7440-22-4	Silver	0.033	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.063	J	D	MS
7440-62-2	Vanadium	13.7		D	MS
7440-66-6	Zinc	63.7		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K11

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424012

% Solids: 95.8 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3400			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1620			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	7630			P
7439-92-1	Lead				
7439-95-4	Magnesium	594			P
7439-96-5	Manganese	134			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	761			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	17.7	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K12

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424013

% Solids: 93.7 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.11	J	DN	MS
7440-38-2	Arsenic	1.8		D	MS
7440-39-3	Barium	62.8		D	MS
7440-41-7	Beryllium	0.28	J	D	MS
7440-43-9	Cadmium	0.37	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	8.5		D	MS
7440-48-4	Cobalt	3.6		D	MS
7440-50-8	Copper	77.4		D	MS
7439-89-6	Iron				
7439-92-1	Lead	38.9		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.047	J		CV
7440-02-0	Nickel	5.3		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	0.24	J	D	MS
7440-22-4	Silver	0.068	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.068	J	D	MS
7440-62-2	Vanadium	12.4		D	MS
7440-66-6	Zinc	127		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K12

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424013

% Solids: 93.7 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2910			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	1990			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	6070			P
7439-92-1	Lead				
7439-95-4	Magnesium	538			P
7439-96-5	Manganese	235			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	642			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	23.3	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K13

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424014

% Solids: 98.4 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.053	J	DN	MS
7440-38-2	Arsenic	1.3		D	MS
7440-39-3	Barium	31.7		D	MS
7440-41-7	Beryllium	0.19	J	D	MS
7440-43-9	Cadmium	0.17	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	6.0		D	MS
7440-48-4	Cobalt	2.2		D	MS
7440-50-8	Copper	27.6		D	MS
7439-89-6	Iron				
7439-92-1	Lead	19.2		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.057	J		CV
7440-02-0	Nickel	3.6		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	2.2	U	D	MS
7440-22-4	Silver	0.054	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.056	J	D	MS
7440-62-2	Vanadium	9.8		D	MS
7440-66-6	Zinc	49.5		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K13

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424014

% Solids: 98.4 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2830			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	768			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	4480			P
7439-92-1	Lead				
7439-95-4	Magnesium	382			P
7439-96-5	Manganese	151			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	403			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	12.1	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K14

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424015

% Solids: 96.2 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony	0.071	J	DN	MS
7440-38-2	Arsenic	3.4		D	MS
7440-39-3	Barium	45.6		D	MS
7440-41-7	Beryllium	0.25	J	D	MS
7440-43-9	Cadmium	0.29	J	D	MS
7440-70-2	Calcium				
7440-47-3	Chromium	8.4		D	MS
7440-48-4	Cobalt	3.2		D	MS
7440-50-8	Copper	24.9		D	MS
7439-89-6	Iron				
7439-92-1	Lead	27.0		D	MS
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.039	J		CV
7440-02-0	Nickel	5.1		D	MS
7440-09-7	Potassium				
7782-49-2	Selenium	2.3	U	D	MS
7440-22-4	Silver	0.054	J	D	MS
7440-23-5	Sodium				
7440-28-0	Thallium	0.072	J	D	MS
7440-62-2	Vanadium	13.2		D	MS
7440-66-6	Zinc	68.3		D	MS
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP
1B-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF9K14

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil Lab Sample ID: 1516424015

% Solids: 96.2 Date Received: 06/13/2015

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3460			P
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium	6610			P
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron	7310			P
7439-92-1	Lead				
7439-95-4	Magnesium	3260			P
7439-96-5	Manganese	309			P
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium	572			P
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium	19.8	J		P
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
57-12-5	Cyanide				

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: CLEAR Artifacts: No

Comments:

USEPA - CLP
2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Initial Calibration Verification Source: EPA ICV1 (0307)

Continuing Calibration Verification Source: 28405

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									
Antimony	199	188	95	2500	2520	101	2550	102	MS
Arsenic	200	200	100	2500	2480	99	2510	100	MS
Barium	99	99.5	101	2500	2640	106	2580	103	MS
Beryllium	99	104	105	2500	2540	102	2610	105	MS
Cadmium	99	99.2	100	2500	2580	103	2520	101	MS
Calcium									
Chromium	98	95.5	97	2500	2540	102	2500	100	MS
Cobalt	100	98.5	99	2500	2530	101	2490	100	MS
Copper	98	101	103	2500	2410	96	2420	97	MS
Iron									
Lead	200	195	98	2500	2610	105	2630	105	MS
Magnesium									
Manganese									
Mercury									
Nickel	101	100	99	2500	2510	100	2470	99	MS
Potassium									
Selenium	206	205	100	250	253	101	252	101	MS
Silver	100	99.6	100	250	259	104	258	103	MS
Sodium									
Thallium	206	201	98	2500	2650	106	2660	107	MS
Vanadium	100	97.4	97	2500	2650	106	2650	106	MS
Zinc	205	209	102	2500	2390	96	2320	93	MS
Cyanide									

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

USEPA - CLP
2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

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

Continuing Calibration Verification Source: 28501

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	2521	2470	98	250000	254000	102	254000	102	P
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	10026	10500	104	250000	254000	102	256000	103	P
Chromium									
Cobalt									
Copper									
Iron	5082	5230	103	250000	256000	102	258000	103	P
Lead									
Magnesium	6074	6050	100	250000	251000	100	253000	101	P
Manganese	499	503	101	25000	24500	98	24500	98	P
Mercury									
Nickel									
Potassium	10021	9730	97	250000	253000	101	255000	102	P
Selenium									
Silver									
Sodium	10097	10200	101	250000	253000	101	255000	102	P
Thallium									
Vanadium									
Zinc									
Cyanide									

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

USEPA - CLP
2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Initial Calibration Verification Source: EPA ICV5-0508

Continuing Calibration Verification Source: ALS 28538

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	4.0	3.9	98	5	5.1	102	5.1	102	CV
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

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

USEPA - CLP
3-IN
BLANKS

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

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

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

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	M
Aluminum											
Antimony	0.59	J	1.0	J	0.69	J			0.17	J	MS
Arsenic	5.0	U	5.0	U	5.0	U			0.50	U	MS
Barium	50.0	U	0.32	J	0.16	J			0.037	J	MS
Beryllium	5.0	U	0.42	J	0.25	J			0.055	J	MS
Cadmium	5.0	U	0.30	J	0.14	J			0.037	J	MS
Calcium											
Chromium	10.0	U	0.29	J	0.13	J			1.0	U	MS
Cobalt	5.0	U	0.31	J	0.15	J			0.034	J	MS
Copper	10.0	U	0.51	J	10.0	U			0.073	J	MS
Iron											
Lead	5.0	U	0.34	J	0.19	J			0.041	J	MS
Magnesium											
Manganese											
Mercury	-0.015	J	-0.014	J	-0.014	J			-0.0018	J	CV
Nickel	5.0	U	0.38	J	0.22	J			0.080	J	MS
Potassium											
Selenium	25.0	U	25.0	U	25.0	U			2.5	U	MS
Silver	0.17	J	0.10	J	0.066	J			0.022	J	MS
Sodium											
Thallium	0.076	J	0.43	J	0.25	J			0.043	J	MS
Vanadium	25.0	U	0.29	J	25.0	U			0.025	J	MS
Zinc	10.0	U	10.0	U	10.0	U			0.31	J	MS
Cyanide											

USEPA - CLP
3-IN
BLANKS

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

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

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

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	M
Aluminum	200	U	200	U	200	U			20.0	U	P
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium	5000	U	5000	U	5000	U			5.0	J	P
Chromium											
Cobalt											
Copper											
Iron	100	U	100	U	100	U			10.0	U	P
Lead											
Magnesium	5000	U	5000	U	39.5	J			500	U	P
Manganese	15.0	U	15.0	U	15.0	U			1.5	U	P
Mercury											
Nickel											
Potassium	5000	U	5000	U	5000	U			4.9	J	P
Selenium											
Silver											
Sodium	5000	U	22.8	J	5000	U			3.2	J	P
Thallium											
Vanadium											
Zinc											
Cyanide											

USEPA - CLP
4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

ICP-AES Instrument ID: ICP08 ICSA Source: EPA ICSA (1211)

ICSB Source: EPA ICSB (1211/0710)

Concentration Units: ug/L

Analyte	True		Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R
Aluminum	254900	246800	259000	101	254000	103
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium	244500	234900	260000	106	257000	110
Chromium						
Cobalt						
Copper						
Iron	100700	99320	104000	103	103000	104
Lead						
Magnesium	255400	248000	264000	103	263000	106
Manganese	7	507	16.7	239	522	103
Nickel						
Potassium	0	0	-0.084		26.0	
Selenium						
Silver						
Sodium	0	0	43.6		69.1	
Thallium						
Vanadium						
Zinc						

USEPA - CLP
4B-IN
ICP-MS INTERFERENCE CHECK SAMPLE

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

ICP-MS Instrument ID: ICPM02 ICSA Source: EPA ICSA (0803)

ICSB Source: EPA ICSB (0803)

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Found Sol. A	%R	Found Sol. AB	%R
Aluminum						
Antimony	1.5	22	1.3	85	19.6	89
Arsenic	0.1	19	0.31	0	18.5	97
Barium	1.2	22	1.5	126	22.7	103
Beryllium	0	19	0.33		19.3	102
Cadmium	0.7	20	0.23	33	20.0	100
Calcium						
Chromium	21	40	19.1	91	38.9	97
Cobalt	1	20	1.3	130	20.6	103
Copper	8	25	7.4	92	25.3	101
Iron						
Lead	4	25	4.4	110	25.1	100
Magnesium						
Manganese						
Molybdenum						
Nickel	6	24	6.4	106	25.4	106
Potassium						
Selenium	0.3	19	-0.098	0	17.4	91
Silver	0	18	0.044		18.8	104
Sodium						
Thallium	0	21	0.042		21.1	100
Titanium						
Vanadium	0.5	19	-3.0	602	17.4	91
Zinc	11	29	11.4	104	28.1	97

USEPA - CLP
5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MF9K07S

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil

% Solids for Sample: 98.3

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	2.4		0.070	J	8.4	27	N	MS
Arsenic	75-125	4.4		1.5		3.4	88		MS
Barium	75-125	202		40.0		168	97		MS
Beryllium	75-125	4.4		0.16	J	4.2	100		MS
Cadmium	75-125	4.3		0.31	J	4.2	94		MS
Calcium									NR
Chromium	75-125	21.3		5.5		16.8	94		MS
Cobalt	75-125	41.1		1.6		42.0	94		MS
Copper	75-125	29.0		8.8		21.0	96		MS
Iron									NR
Lead		33.5		31.6		1.7	109		MS
Magnesium									NR
Manganese									NR
Mercury	75-125	0.56		0.060	J	0.50	100		CV
Nickel	75-125	43.6		3.4		42.0	96		MS
Potassium									NR
Selenium	75-125	7.3		2.1	U	8.4	87		MS
Silver	75-125	4.1		0.060	J	4.2	96		MS
Sodium									NR
Thallium	75-125	4.0		0.045	J	4.2	95		MS
Vanadium	75-125	50.0		7.4		42.0	101		MS
Zinc	75-125	104		65.4		42.0	91		MS
Cyanide									

Comments:

USEPA - CLP
5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MF9K07S

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil

% Solids for Sample: 98.3

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese	75-125	292		208		82.0	103		P
Mercury									
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									

Comments:

USEPA - CLP
5B-IN
POST-DIGESTION SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MF9K07A

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony		7.7		0.070	J	8.4	91		MS
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

USEPA - CLP
6-IN
DUPLICATES

EPA SAMPLE NO.

MF9K07D

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil

% Solids for Sample: 98.3

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony		0.070	J	0.080	J	13		MS
Arsenic		1.5		1.5		1		MS
Barium		40.0		40.5		1		MS
Beryllium	0.084	0.16	J	0.18	J	8		MS
Cadmium	0.084	0.31	J	0.28	J	12		MS
Calcium								
Chromium		5.5		5.7		4		MS
Cobalt		1.6		1.6		2		MS
Copper		8.8		9.0		2		MS
Iron								
Lead		31.6		31.3		1		MS
Magnesium								
Manganese								
Mercury		0.060	J	0.061	J	1		CV
Nickel		3.4		3.6		3		MS
Potassium								
Selenium		2.1	U	2.1	U			MS
Silver		0.060	J	0.059	J	2		MS
Sodium								
Thallium		0.045	J	0.049	J	8		MS
Vanadium		7.4		7.7		4		MS
Zinc		65.4		66.3		1		MS
Cyanide								

USEPA - CLP
6-IN
DUPLICATES

EPA SAMPLE NO.

MF9K07D

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil

% Solids for Sample: 98.3

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		2200		2190		0		P
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium		4210		4310		3		P
Chromium								
Cobalt								
Copper								
Iron		4170		4160		0		P
Lead								
Magnesium	407	1960		2010		2		P
Manganese		208		214		3		P
Mercury								
Nickel								
Potassium	407	431		428		1		P
Selenium								
Silver								
Sodium		14.3	J	14.9	J	4		P
Thallium								
Vanadium								
Zinc								
Cyanide								

USEPA - CLP
7-IN
LABORATORY CONTROL SAMPLE

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Analyte	Aqueous/Water (ug/L), Soil/Sediment (mg/kg), Wipe/Filter (ug) True	Found	%R
Aluminum			
Antimony	2.0	1.9	94
Arsenic	1.0	0.93	93
Barium	10.0	9.6	96
Beryllium	1.0	0.99	99
Cadmium	1.0	0.92	92
Calcium			
Chromium	2.0	1.9	93
Cobalt	1.0	0.96	96
Copper	2.0	2.0	99
Iron			
Lead	1.0	0.94	94
Magnesium			
Manganese			
Mercury			
Nickel	1.0	1.0	103
Potassium			
Selenium	5.0	4.4	88
Silver	1.0	1.0	100
Sodium			
Thallium	1.0	0.95	95
Vanadium	5.0	5.1	102
Zinc	2.0	2.3	114
Cyanide			

USEPA - CLP
7-IN
LABORATORY CONTROL SAMPLE

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Analyte	Aqueous/Water (ug/L), Soil/Sediment (mg/kg), Wipe/Filter (ug)		
	True	Found	%R
Aluminum	40.0	37.0	93
Antimony			
Arsenic			
Barium			
Beryllium			
Cadmium			
Calcium	1000	1090	109
Chromium			
Cobalt			
Copper			
Iron	20.0	21.9	110
Lead			
Magnesium	1000	1040	104
Manganese	3.0	3.2	107
Mercury			
Nickel			
Potassium	1000	1010	101
Selenium			
Silver			
Sodium	1000	1060	106
Thallium			
Vanadium			
Zinc			
Cyanide			

USEPA - CLP
8-IN
ICP-AES and ICP-MS SERIAL DILUTIONS

EPA SAMPLE NO.

MF9K07L

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil

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

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum							
Antimony	0.070	J	0.097	J	39		MS
Arsenic	1.5		1.6	J	11		MS
Barium	40.0		39.3		2		MS
Beryllium	0.16	J	0.20	J	23		MS
Cadmium	0.31	J	0.33	J	5		MS
Calcium							
Chromium	5.5		5.6		1		MS
Cobalt	1.6		1.6	J	1		MS
Copper	8.8		9.2		4		MS
Iron							
Lead	31.6		31.0		2		MS
Magnesium							
Manganese							
Nickel	3.4		3.7		8		MS
Potassium							
Selenium	2.1	U	10.5	U			MS
Silver	0.060	J	0.068	J	13		MS
Sodium							
Thallium	0.045	J	0.046	J	2		MS
Vanadium	7.4		7.4	J	0		MS
Zinc	65.4		69.5		6		MS

USEPA - CLP
8-IN
ICP-AES and ICP-MS SERIAL DILUTIONS

EPA SAMPLE NO.

MF9K07L

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Matrix: Soil

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

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	2200		2220		1		P
Antimony							
Arsenic							
Barium							
Beryllium							
Cadmium							
Calcium	4210		4310		2		P
Chromium							
Cobalt							
Copper							
Iron	4170		4270		2		P
Lead							
Magnesium	1960		2010	J	2		P
Manganese	208		213		3		P
Nickel							
Potassium	431		423	J	2		P
Selenium							
Silver							
Sodium	14.3	J	15.7	J	10		P
Thallium							
Vanadium							
Zinc							

USEPA - CLP
9-IN
METHOD DETECTION LIMIT (MDL) (ANNUALLY)

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument Type: CV Instrument ID: AACV02 Date: 01/15/2015

Preparation Method: 7471B

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

Analyte	Wavelength/Mass	MDL
Aluminum		
Antimony		
Arsenic		
Barium		
Beryllium		
Cadmium		
Calcium		
Chromium		
Cobalt		
Copper		
Iron		
Lead		
Magnesium		
Manganese		
Mercury	253.65	0.0015
Nickel		
Potassium		
Selenium		
Silver		
Sodium		
Thallium		
Vanadium		
Zinc		
Cyanide		

Comments:

USEPA - CLP
9-IN
METHOD DETECTION LIMIT (MDL) (ANNUALLY)

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument Type: P Instrument ID: ICP08 Date: 03/29/2015

Preparation Method: 3050B

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

Analyte	Wavelength/Mass	MDL
Aluminum	308.22	6.8
Antimony		
Arsenic		
Barium		
Beryllium		
Cadmium		
Calcium	317.93	2.1
Chromium		
Cobalt		
Copper		
Iron	259.84	3.9
Lead		
Magnesium	279.08	3.9
Manganese	257.61	0.093
Mercury		
Nickel		
Potassium	766.49	4.6
Selenium		
Silver		
Sodium	589.59	1.9
Thallium		
Vanadium		
Zinc		
Cyanide		

Comments:

USEPA - CLP
9-IN
METHOD DETECTION LIMIT (MDL) (ANNUALLY)

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument Type: MS Instrument ID: ICPM02 Date: 05/22/2015

Preparation Method: 3050B

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

Analyte	Wavelength/Mass	MDL
Aluminum		
Antimony	121.00	0.015
Arsenic	75.00	0.073
Barium	137.00	0.013
Beryllium	9.00	0.0079
Cadmium	111.00	0.0053
Calcium		
Chromium	52.00	0.011
Cobalt	59.00	0.0030
Copper	63.00	0.029
Iron		
Lead	206,207,208	0.0049
Magnesium		
Manganese		
Mercury		
Nickel	60.00	0.016
Potassium		
Selenium	82.00	0.30
Silver	107.00	0.0025
Sodium		
Thallium	205.00	0.0059
Vanadium	51.00	0.017
Zinc	66.00	0.16
Cyanide		

Comments:

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

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

ICP-AES Instrument ID: ICP08 Date: 03/22/2015

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	0.000034	0	0
Arsenic	189.04	0.000002	0	-0.000009	0	0
Barium	455.40	0	0	0	0	0
Beryllium	313.11	0	0	0	0	0
Cadmium	214.44	-0.000003	0	0.000029	0	0
Calcium	317.93	0	0	0	0	0
Chromium	205.55	0	0	0	0	0
Cobalt	228.62	0	0	0.000016	0	0.000208
Copper	327.40	0	0	0	0	0
Iron	259.84	0	0	0	0	0
Lead	220.35	0.000209	0	0.000053	0	0
Magnesium	279.08	0	0	0	0	0
Manganese	257.61	0	0	0	0	0
Nickel	231.60	0	0	0.000064	0	0
Potassium	766.49	0	0	0	0	0
Selenium	196.09	0.000048	0	0.000016	0	0
Silver	328.07	0	0	0	0	0
Sodium	589.59	0	0	0	0	0
Thallium	190.86	0	0	-0.000015	0	0
Vanadium	292.40	0	0	0.000042	0	0
Zinc	206.20	0	0	0.000012	0	0

Comments:

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

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

ICP-AES Instrument ID: ICP08 Date: 03/22/2015

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	0.004584	0	0
Arsenic	189.04	0	0	0.000182	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	0.000349	0	0	0	0
Cobalt	228.62	0	0	0	0	0
Copper	327.40	0	0	0	0	0
Iron	259.84	0	0	0	0	0.002834
Lead	220.35	0	0.000210	0	0.000609	0
Magnesium	279.08	0	0	0	0	0
Manganese	257.61	0	0	0	0	0
Nickel	231.60	0	0.000299	0	0	0
Potassium	766.49	0	0	0	0	0
Selenium	196.09	0	0	0	0	0.000491
Silver	328.07	0	0	0	0	0.000122
Sodium	589.59	0	0	0	0	0
Thallium	190.86	0	0.003624	0.000231	0	0.000867
Vanadium	292.40	0	0	0	0	0
Zinc	206.20	0	0	-0.000216	0	0

Comments:

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

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

ICP-AES Instrument ID: ICP08 Date: 03/22/2015

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Mo	Ni	Ti	Tl	V
Aluminum	308.22	0.007083	0	0	0	0.142985
Antimony	206.83	-0.002050	0	0	0	0
Arsenic	189.04	0.001151	0	0	0	0
Barium	455.40	0	0	0	0	0
Beryllium	313.11	0	0	0	0	0.000244
Cadmium	214.44	0	0	0	0	0
Calcium	317.93	0	0	0	0	0
Chromium	205.55	0.000511	0	0	0	0.000049
Cobalt	228.62	-0.000958	0.000179	0.002132	0	0
Copper	327.40	-0.000486	0	0	0	0
Iron	259.84	0	0	0	0	0
Lead	220.35	-0.000259	0.000210	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	0.000479	0
Potassium	766.49	0	0	0	0	0
Selenium	196.09	0	0	0	0	0
Silver	328.07	0.000189	0	0	0	0.000084
Sodium	589.59	0	0	0	0	0
Thallium	190.86	0	0	0	0	0.002259
Vanadium	292.40	-0.001033	0	0.000987	0	0
Zinc	206.20	0.000258	0	0	0	0

Comments:

USEPA - CLP
11-IN
INTERNAL STANDARD ASSOCIATION

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

ICP-MS Instrument ID: ICPM02 Date: 06/29/2015 14:25:00

Analyte	Assoc. Internal Standard 1	Assoc. Internal Standard 2
Aluminum		
Antimony	Rh	Tb
Arsenic	Sc	Y
Barium	Rh	Tb
Beryllium	Li	Sc
Cadmium	Rh	Tb
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	Tb
Sodium		
Thallium	Tb	Bi
Vanadium	Sc	Y
Zinc	Sc	Y

USEPA - CLP
12-IN
PREPARATION LOG

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Preparation Method: 3050B

EPA Sample No.	Preparation Date	Initial Weight/Volume (g) or (ml)	Final Volume (mL)
PBS1	06/18/2015	1.00	100
LCS1	06/18/2015	1.00	100
MF9K02	06/18/2015	1.37	100
MF9K03	06/18/2015	1.34	100
MF9K04	06/18/2015	1.28	100
MF9K05	06/18/2015	1.17	100
MF9K06	06/18/2015	1.08	100
MF9K07	06/18/2015	1.24	100
MF9K07D	06/18/2015	1.25	100
MF9K07S	06/18/2015	1.24	100
MF9K08	06/18/2015	1.30	100
MF9K09	06/18/2015	1.37	100
MF9K10	06/18/2015	1.25	100
MF9K11	06/18/2015	1.25	100
MF9K12	06/18/2015	1.37	100
MF9K13	06/18/2015	1.48	100
MF9K14	06/18/2015	1.39	100

USEPA - CLP
12-IN
PREPARATION LOG

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Preparation Method: 3050B

EPA Sample No.	Preparation Date	Initial Weight/Volume (g) or (ml)	Final Volume (mL)
PBS1	06/26/2015	1.00	100
LCS1	06/26/2015	1.00	100
MF9K02	06/26/2015	1.15	100
MF9K03	06/26/2015	1.17	100
MF9K04	06/26/2015	1.15	100
MF9K05	06/26/2015	1.38	100
MF9K06	06/26/2015	1.09	100
MF9K07	06/26/2015	1.21	100
MF9K07D	06/26/2015	1.21	100
MF9K07S	06/26/2015	1.21	100
MF9K08	06/26/2015	1.13	100
MF9K09	06/26/2015	1.20	100
MF9K10	06/26/2015	1.44	100
MF9K11	06/26/2015	1.21	100
MF9K12	06/26/2015	1.32	100
MF9K13	06/26/2015	1.14	100
MF9K14	06/26/2015	1.11	100

USEPA - CLP
12-IN
PREPARATION LOG

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Preparation Method: 7471B

EPA Sample No.	Preparation Date	Initial Weight/Volume (g) or (ml)	Final Volume (mL)
S0	07/01/2015	0.50	100
S0.2	07/01/2015	0.50	100
S0.5	07/01/2015	0.50	100
S1.0	07/01/2015	0.50	100
S5.0	07/01/2015	0.50	100
S10	07/01/2015	0.50	100
ICB	07/01/2015	0.50	100
ICV	07/01/2015	0.50	100
CCB	07/01/2015	0.50	100
CCV	07/01/2015	0.50	100
PBS1	07/01/2015	0.50	100
MF9K02	07/01/2015	0.56	100
MF9K03	07/01/2015	0.57	100
MF9K04	07/01/2015	0.57	100
MF9K05	07/01/2015	0.56	100
MF9K06	07/01/2015	0.57	100
MF9K07	07/01/2015	0.51	100
MF9K07D	07/01/2015	0.51	100
MF9K07S	07/01/2015	0.51	100
MF9K08	07/01/2015	0.52	100
MF9K09	07/01/2015	0.54	100
MF9K10	07/01/2015	0.58	100
MF9K11	07/01/2015	0.52	100
MF9K12	07/01/2015	0.57	100
MF9K13	07/01/2015	0.51	100
MF9K14	07/01/2015	0.58	100

USEPA - CLP
13-IN
ANALYSIS RUN LOG

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: AACV02 Analysis Method: CV

Start Date: 07/01/2015 End Date: 07/01/2015

EPA Sample No.	D/F	Time	Analytes																									
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn		
S0	1.0	1213															X											
S0.2	1.0	1214															X											
S0.5	1.0	1215															X											
S1.0	1.0	1216															X											
S5.0	1.0	1217															X											
S10	1.0	1219															X											
ICV1	1.0	1220															X											
ICB1	1.0	1221															X											
CCV1	1.0	1222															X											
CCB1	1.0	1223															X											
PBS1	1.0	1224															X											
MF9K02	1.0	1225															X											
MF9K03	1.0	1227															X											
MF9K04	1.0	1228															X											
MF9K05	1.0	1229															X											
MF9K06	1.0	1230															X											
MF9K07	1.0	1231															X											
MF9K07D	1.0	1232															X											
MF9K07S	1.0	1233															X											
MF9K08	1.0	1234															X											
MF9K09	1.0	1236															X											
MF9K10	1.0	1237															X											
MF9K11	1.0	1238															X											
MF9K12	1.0	1239															X											
MF9K13	1.0	1240															X											
MF9K14	1.0	1241															X											
CCV2	1.0	1242															X											
CCB2	1.0	1243															X											

USEPA - CLP
13-IN
ANALYSIS RUN LOG

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: ICPM02 Analysis Method: MS

Start Date: 06/29/2015 End Date: 06/29/2015

EPA Sample No.	D/F	Time	Analytes																									
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn		
TUNE	1.0	1425																										
S0	1.0	1450		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
S	1.0	1454		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
S10	1.0	1458		X	X		X	X		X	X	X		X				X		X	X		X	X	X			
S50	1.0	1503		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
S200	1.0	1507		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
S500	1.0	1511		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
S2500	1.0	1516		X	X	X	X	X		X	X	X		X				X					X	X	X			
S5000	1.0	1520		X	X	X	X	X		X	X	X		X				X					X	X	X			
S50000	1.0	1524																										
S100000	1.0	1529																										
ICV1	1.0	1533		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
ICB1	1.0	1538		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
ICSA1	1.0	1542		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
ICSAB1	1.0	1546		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
CCV1	1.0	1551		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
CCB1	1.0	1555		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
PBS1	5.0	1559		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
LCS1	5.0	1604		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K02	5.0	1608		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K03	5.0	1612		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K04	5.0	1617		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K05	5.0	1621		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K06	5.0	1625		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K07	5.0	1630		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K07S	5.0	1634		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K07D	5.0	1638		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K07L	25	1643		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K07A	5.0	1647		X																								
MF9K08	5.0	1651		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K09	5.0	1656		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K10	5.0	1700		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			

USEPA - CLP
13-IN
ANALYSIS RUN LOG

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: ICPM02 Analysis Method: MS

Start Date: 06/29/2015 End Date: 06/29/2015

EPA Sample No.	D/F	Time	Analytes																									
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn		
MF9K11	5.0	1704		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K12	5.0	1709		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K13	5.0	1713		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
MF9K14	5.0	1718		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
ZZZZZZ	1.0	1722																										
CCV2	1.0	1726		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			
CCB2	1.0	1731		X	X	X	X	X		X	X	X		X				X		X	X		X	X	X			

USEPA - CLP
13-IN
ANALYSIS RUN LOG

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: ICP08 Analysis Method: P

Start Date: 06/30/2015 End Date: 06/30/2015

EPA Sample No.	D/F	Time	Analytes																									
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn		
S0	1.0	1243	X						X				X		X	X			X			X						
SA	1.0	1246	X						X				X		X	X			X			X						
SB	1.0	1249	X						X				X		X	X			X			X						
SC	1.0	1252	X										X			X												
SD	1.0	1254	X						X				X		X	X			X			X						
SE	1.0	1257	X						X				X		X	X			X			X						
SF	1.0	1300														X												
S500000	1.0	1303	X						X				X		X				X			X						
ICV1	1.0	1306	X						X				X		X	X			X			X						
ICB1	1.0	1309	X						X				X		X	X			X			X						
ICSA1	1.0	1312	X						X				X		X	X			X			X						
ICSAB1	1.0	1315	X						X				X		X	X			X			X						
CCV1	1.0	1317	X						X				X		X	X			X			X						
CCB1	1.0	1320	X						X				X		X	X			X			X						
PBS1	1.0	1323	X						X				X		X	X			X			X						
LCS1	1.0	1326	X						X				X		X	X			X			X						
MF9K02	1.0	1329	X						X				X		X	X			X			X						
MF9K03	1.0	1332	X						X				X		X	X			X			X						
MF9K04	1.0	1335	X						X				X		X	X			X			X						
MF9K05	1.0	1338	X						X				X		X	X			X			X						
MF9K06	1.0	1340	X						X				X		X	X			X			X						
MF9K07	1.0	1343	X						X				X		X	X			X			X						
MF9K07S	1.0	1346														X												
MF9K07D	1.0	1349	X						X				X		X	X			X			X						
MF9K07L	5.0	1352	X						X				X		X	X			X			X						
MF9K08	1.0	1354	X						X				X		X	X			X			X						
MF9K09	1.0	1357	X						X				X		X	X			X			X						
MF9K10	1.0	1400	X						X				X		X	X			X			X						
MF9K11	1.0	1403	X						X				X		X	X			X			X						
MF9K12	1.0	1406	X						X				X		X	X			X			X						
MF9K13	1.0	1409	X						X				X		X	X			X			X						
MF9K14	1.0	1411	X						X				X		X	X			X			X						

USEPA - CLP
13-IN
ANALYSIS RUN LOG

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: ICP08 Analysis Method: P

Start Date: 06/30/2015 End Date: 06/30/2015

EPA Sample No.	D/F	Time	Analytes																									
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	Cn		
CCV2	1.0	1414	X						X				X		X	X			X			X						
CCB2	1.0	1417	X						X				X		X	X			X			X						

USEPA - CLP
14-IN
ICP-MS Tune

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

ICP-MS Instrument ID: ICPM02 Date: 06/29/2015

Element - Mass	Avg. Measured Mass (amu)	Average Peak Width (amu)	%Height	%RSD
Be - 9	9.01	0.82	5	1.5
Mg - 24	23.99	0.77	5	1.1
Mg - 25	24.99	0.77	5	0.5
Mg - 26	25.98	0.77	5	0.6
Co - 59	58.93	0.77	5	0.8
In - 113	112.90	0.77	5	0.7
In - 115	114.90	0.77	5	0.4
Pb - 206	205.97	0.76	5	0.4
Pb - 207	206.98	0.76	5	0.3
Pb - 208	207.98	0.76	5	0.4

Comments:
Instrument manufacturer's specification for peak height is 0.65 to 0.85 amu with the peak width measured at 5% of the peak maximum.

USEPA - CLP
15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

ICP-MS Instrument ID: ICPM02 Start Date: 06/29/2015 End Date: 06/29/2015

EPA Sample No.	Time	Internal Standards %RI For:									
		Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q
S0	1450										
S	1454										
S10	1458										
S50	1503										
S200	1507										
S500	1511										
S2500	1516										
S5000	1520										
S50000	1524										
S100000	1529										
ICV1	1533	101		99		94		96		93	
ICB1	1538	102		99		96		98		94	
ICSA1	1542	81		86		82		80		87	
ICSAB1	1546	80		86		82		80		89	
CCV1	1551	88		91		85		84		88	
CCB1	1555	99		97		94		97		96	
PBS1	1559	103		100		97		100		99	
LCS1	1604	104		102		97		100		99	
MF9K02	1608	96		100		100		96		96	
MF9K03	1612	97		101		100		96		95	
MF9K04	1617	98		100		98		97		95	
MF9K05	1621	98		100		98		96		95	
MF9K06	1625	98		99		96		96		95	
MF9K07	1630	100		101		97		95		93	
MF9K07S	1634	99		100		96		94		91	
MF9K07D	1638	101		101		96		95		92	
MF9K07L	1643	102		100		94		96		92	
MF9K07A	1647	101		101		97		93		90	
MF9K08	1651	101		101		95		94		90	
MF9K09	1656	101		101		96		93		89	
MF9K10	1700	101		100		95		92		89	
MF9K11	1704	102		101		94		92		88	

USEPA - CLP
15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

ICP-MS Instrument ID: ICPM02 Start Date: 06/29/2015 End Date: 06/29/2015

EPA Sample No.	Time	Internal Standards %RI For:									
		Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
S0	1450										
S	1454										
S10	1458										
S50	1503										
S200	1507										
S500	1511										
S2500	1516										
S5000	1520										
S50000	1524										
S100000	1529										
ICV1	1533	93									
ICB1	1538	96									
ICSA1	1542	80									
ICSAB1	1546	81									
CCV1	1551	83									
CCB1	1555	98									
PBS1	1559	99									
LCS1	1604	99									
MF9K02	1608	95									
MF9K03	1612	95									
MF9K04	1617	95									
MF9K05	1621	95									
MF9K06	1625	94									
MF9K07	1630	93									
MF9K07S	1634	91									
MF9K07D	1638	91									
MF9K07L	1643	93									
MF9K07A	1647	88									
MF9K08	1651	90									
MF9K09	1656	89									
MF9K10	1700	89									
MF9K11	1704	88									

USEPA - CLP
15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

ICP-MS Instrument ID: ICPM02 Start Date: 06/29/2015 End Date: 06/29/2015

EPA Sample No.	Time	Internal Standards %RI For:									
		Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q
MF9K12	1709	101		100		93		91		87	
MF9K13	1713	102		101		93		92		89	
MF9K14	1718	102		101		94		92		87	
ZZZZZZ	1722										
CCV2	1726	95		93		82		81		80	
CCB2	1731	106		101		91		94		88	

USEPA - CLP
15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

ICP-MS Instrument ID: ICPM02 Start Date: 06/29/2015 End Date: 06/29/2015

EPA Sample No.	Time	Internal Standards %RI For:									
		Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
MF9K12	1709	87									
MF9K13	1713	88									
MF9K14	1718	87									
ZZZZZZ	1722										
CCV2	1726	75									
CCB2	1731	89									

USEPA - CLP
16-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: ICPM02 Start Date: 06/29/2015

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum									
Antimony	0.0	0.0		2.0	1.9	3	10.0	9.4	6
Arsenic	0.0	0.0		1.0	0.91	9	10.0	9.7	3
Barium	0.0	0.0		10.0	9.8	2			
Beryllium	0.0	0.0		1.0	1.0	0	10.0	10.3	-3
Cadmium	0.0	0.0		1.0	0.96	4	10.0	10.0	0
Calcium									
Chromium	0.0	0.0		2.0	1.9	6	10.0	9.6	4
Cobalt	0.0	0.0		1.0	0.95	5	10.0	9.7	3
Copper	0.0	0.0		2.0	1.9	3	10.0	9.8	2
Iron									
Lead	0.0	0.0		1.0	0.93	7	10.0	9.5	5
Magnesium									
Manganese									
Mercury									
Nickel	0.0	0.0		1.0	1.0	-2	10.0	10.1	-1
Potassium									
Selenium	0.0	0.0		5.0	5.0	0	10.0	10.1	-1
Silver	0.0	0.0		1.0	1.0	0	10.0	9.8	2
Sodium									
Thallium	0.0	0.0		1.0	0.94	6	10.0	9.5	5
Vanadium	0.0	0.0		5.0	5.1	-3	10.0	9.6	4
Zinc	0.0	0.0		2.0	2.1	-5	10.0	12.3	-23
Cyanide									

Control Limits ±30

USEPA - CLP
16-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: ICPM02 Start Date: 06/29/2015

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum									
Antimony	50.0	47.3	5	200	193	4	500	483	3
Arsenic	50.0	48.6	3	200	195	2	500	484	3
Barium	50.0	49.6	1	200	200	0	500	491	2
Beryllium	50.0	50.9	-2	200	207	-3	500	509	-2
Cadmium	50.0	49.3	1	200	201	0	500	497	1
Calcium									
Chromium	50.0	48.3	3	200	198	1	500	502	0
Cobalt	50.0	48.4	3	200	200	0	500	498	0
Copper	50.0	49.2	2	200	202	-1	500	501	0
Iron									
Lead	50.0	47.2	6	200	193	3	500	489	2
Magnesium									
Manganese									
Mercury									
Nickel	50.0	49.8	0	200	202	-1	500	501	0
Potassium									
Selenium	50.0	50.5	-1	200	202	-1	500	499	0
Silver	50.0	49.2	2	200	201	0	500	500	0
Sodium									
Thallium	50.0	47.3	5	200	196	2	500	499	0
Vanadium	50.0	48.1	4	200	198	1	500	502	0
Zinc	50.0	50.7	-1	200	207	-4	500	513	-3
Cyanide									

Control Limits ±30

USEPA - CLP
16-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: ICPM02 Start Date: 06/29/2015

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum									
Antimony	2500	2510	-1	5000	5000	0			
Arsenic	2500	2490	0	5000	5010	0			
Barium	2500	2530	-1	5000	4980	0			
Beryllium	2500	2530	-1	5000	4980	0			
Cadmium	2500	2560	-3	5000	4970	1			
Calcium									
Chromium	2500	2500	0	5000	5000	0			
Cobalt	2500	2520	-1	5000	4990	0			
Copper	2500	2520	-1	5000	4990	0			
Iron									
Lead	2500	2480	1	5000	5010	0			
Magnesium									
Manganese									
Mercury									
Nickel	2500	2510	-1	5000	4990	0			
Potassium									
Selenium									
Silver									
Sodium									
Thallium	2500	2490	1	5000	5010	0			
Vanadium	2500	2530	-1	5000	4990	0			
Zinc	2500	2590	-3	5000	4960	1			
Cyanide									

Control Limits ±30

USEPA - CLP
16-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: ICP08 Start Date: 06/30/2015

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	0.0	0.011		200	186	7	1000	983	2
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium	0.0	-0.66		5000	5290	-6	25000	26400	-6
Chromium									
Cobalt									
Copper									
Iron	0.0	-0.035		100	116	-16	1000	1070	-7
Lead									
Magnesium	0.0	-0.25		5000	5150	-3	25000	25700	-3
Manganese	0.0	-0.00087		15.0	15.3	-2	200	203	-2
Mercury									
Nickel									
Potassium	0.0	0.020		5000	4960	1	25000	25100	0
Selenium									
Silver									
Sodium	0.0	-0.60		5000	5250	-5	25000	26200	-5
Thallium									
Vanadium									
Zinc									
Cyanide									

Control Limits ±30

USEPA - CLP
16-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: ICP08 Start Date: 06/30/2015

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	5000	5140	-3	50000	49300	1	250000	257000	-3
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium				125000	127000	-1	250000	256000	-2
Chromium									
Cobalt									
Copper									
Iron	5000	5420	-8	50000	51300	-3	250000	258000	-3
Lead									
Magnesium				125000	123000	1	250000	252000	-1
Manganese	2000	2110	-6	5000	4880	2	25000	24700	1
Mercury									
Nickel									
Potassium				125000	123000	1	250000	256000	-2
Selenium									
Silver									
Sodium				125000	127000	-1	250000	257000	-3
Thallium									
Vanadium									
Zinc									
Cyanide									

Control Limits ±30

USEPA - CLP
16-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: ICP08 Start Date: 06/30/2015

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum				500000	494000	1			
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium				500000	491000	2			
Chromium									
Cobalt									
Copper									
Iron				500000	490000	2			
Lead									
Magnesium				500000	498000	0			
Manganese	50000	50300	-1						
Mercury									
Nickel									
Potassium				500000	496000	1			
Selenium									
Silver									
Sodium				500000	490000	2			
Thallium									
Vanadium									
Zinc									
Cyanide									

Control Limits ±30

USEPA - CLP
16-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: AACV02 Start Date: 07/01/2015

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	0.0	-0.0094		0.20	0.19	4	0.50	0.49	3
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Control Limits ±30

USEPA - CLP
16-IN
INITIAL CALIBRATION

Lab Name: ALS Environmental Contract: EPW09036

Lab Code: DATAC Case No.: 45299 Mod. Ref. No.: SDG No.: MF9K02

Instrument ID: AACV02 Start Date: 07/01/2015

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	1.0	1.0	-2	5.0	5.0	-1	10.0	10	0
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Control Limits ±30

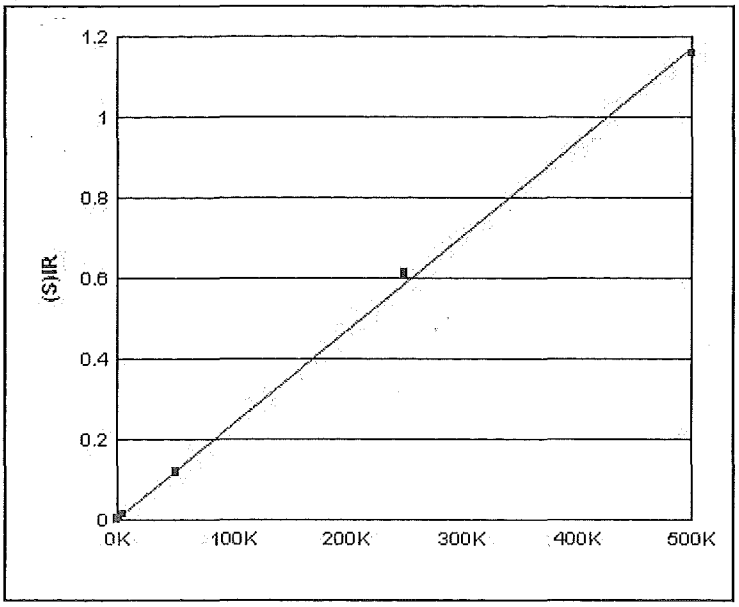
Run#	k15126	Al3082	Ca3179	Fe2598	Mg2790	Mn2576	K_7664	Na5895
		Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
S0	06/30/2015 12:43:25	0.00055	0.00319	0.00009	-0.00013	0.00006	0.00148	-0.00141
SA	06/30/2015 12:46:22	0.001	0.26876	0.00172	0.01191	0.00178	0.10068	0.25824
SB	06/30/2015 12:49:17	0.00292	1.329	0.01509	0.05999	0.02296	0.50213	1.2962
SC	06/30/2015 12:52:04	0.01328		0.07608		0.23811		
SD	06/30/2015 12:54:44	0.11772	6.3569	0.71814	0.28849	0.5505	2.464	6.2603
SE	06/30/2015 12:57:18	0.61078	12.854	3.6076	0.59049	2.7863	5.113	12.728
SF	06/30/2015 13:00:13					5.6761		
S500000	06/30/2015 13:03:23	1.157	24.653	6.8641	1.1658		9.9124	24.23
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
ICV1	06/30/2015 13:06:26	2466.4	10467	5231.2	6049	502.95	9732.8	10248
ICB1	06/30/2015 13:09:07	-22.787	-13.397	12.075	4.3686	-0.03043	-0.88371	5.3965
ICSA1	06/30/2015 13:12:15	258710	259860	104040	264170	16.731	-0.08433	43.602
ICSAB1	06/30/2015 13:15:10	253910	257310	103310	262800	522.19	25.976	69.07
CCV1	06/30/2015 13:17:52	253860	254180	256060	251170	24462	253100	253110
CCB1	06/30/2015 13:20:46	-6.4406	-1.7978	12.723	22.869	0.69324	15.408	22.798
PBS1	06/30/2015 13:23:44	-8.1231	49.555	15.296	37.425	-0.2595	49.054	31.968
LCS1	06/30/2015 13:26:43	370.33	10863	219.33	10384	32.098	10108	10637
MF9K02	06/30/2015 13:29:37	46143	25261	98502	8141.5	2498.2	10638	297.27
MF9K03	06/30/2015 13:32:26	38555	13917	82835	5350.3	1527	7034.5	193.93
MF9K04	06/30/2015 13:35:16	31337	7405.3	96728	3489.2	2805.6	6356.4	124.3
MF9K05	06/30/2015 13:38:06	27712	7232.4	70544	3256.6	2740.9	5935.3	110.13
MF9K06	06/30/2015 13:40:56	20452	35654	39467	16024	2062.4	4440.7	132.93
MF9K07	06/30/2015 13:43:45	26778	51267	50832	23941	2529.8	5253.7	174.19
MF9K07S	06/30/2015 13:46:33	34427	50732	53131	23871	3561.9	5659.2	185.84
MF9K07D	06/30/2015 13:49:13	26872	52992	51151	24656	2626.9	5258	183.51
MF9K07L	06/30/2015 13:52:02	5418.9	10503	10406	4907.6	520.16	1031	38.214
MF9K08	06/30/2015 13:54:56	35775	24222	65203	7330.9	2146.9	6752.9	194.11
MF9K09	06/30/2015 13:57:45	41225	15390	88292	6256.5	2691.5	8231.2	252.58
MF9K10	06/30/2015 14:00:34	40440	14994	85821	5985.9	2874.7	7949.9	248.6
MF9K11	06/30/2015 14:03:24	40721	19370	91427	7110.3	1609	9114.2	211.75
MF9K12	06/30/2015 14:06:13	37286	25585	77882	6906.3	3011.8	8240.8	299.46
MF9K13	06/30/2015 14:09:02	41271	11180	65186	5557.3	2197.8	5867.7	176.35
MF9K14	06/30/2015 14:11:51	46300	88446	97769	43549	4125.3	7645.8	264.17
CCV2	06/30/2015 14:14:39	253810	256420	257760	253250	24507	255260	254680
CCB2	06/30/2015 14:17:37	-14.478	-7.5865	19.889	39.514	0.64046	-18.552	12.417

Results are not used/required.

Calibration Data for Run# k15126

Author: Neil Edwards

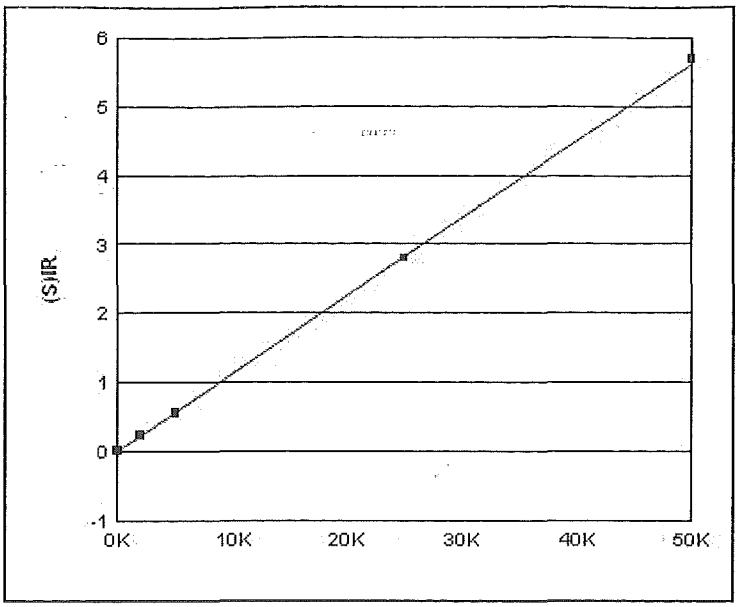
Method Name: ICP08 ISM01.3 2015 (11)



Element Name:	Al
Element Wavelength:	Al 308.215 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:06:11
Date of Fit:	06/30/2015 13:06:11
Type of Fit:	Linear
Correlation:	0.99983
A0 (Offset):	0.00055055
A1 (Gain):	0.0000023426
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	0.011151	0.011151	0.00000	0.00055057	0.000067263	1
SA	200.00	186.38	-13.615	-6.8077	0.0010041	0.000049816	1
SB	1,000.00	983.19	-16.813	-1.6813	0.0029221	0.000044013	1
SC	5,000.0	5,143.2	143.20	2.8640	0.013282	0.00011052	1
SD	50,000	49,290	-710.19	-1.4204	0.11772	0.00018310	1
SE	250,000	256,850	6,848.6	2.7395	0.61078	0.0011991	1
S500000	500,000	493,650	-6,348.1	-1.2696	1.1570	0.0027545	1

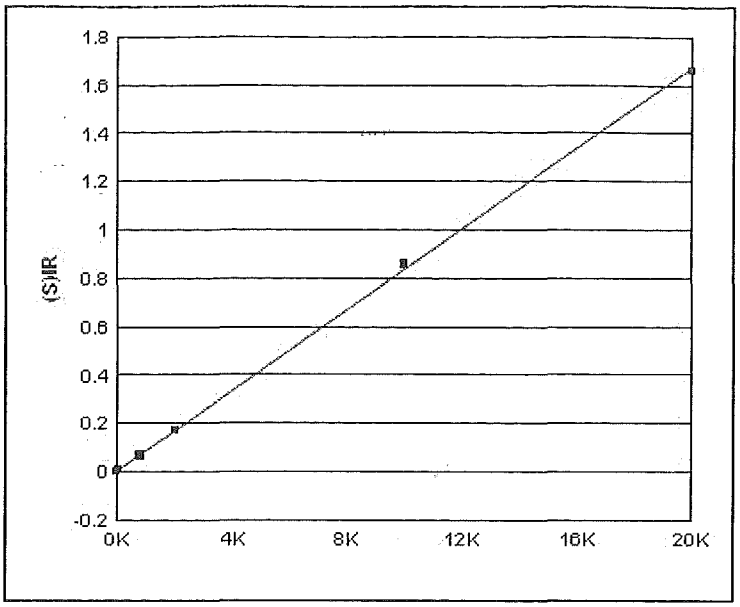


Element Name:	Sb
Element Wavelength:	Sb 206.833 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	-0.000036836
A1 (Gain):	0.00011250
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	0.0014201	0.0014201	0.00000	-0.000036676	0.00031572	1
SA	60.000	60.160	0.15966	0.26610	0.0067341	0.00022457	1
SB	200.00	198.60	-1.3966	-0.69828	0.022394	0.00020627	1
SC	2,000.0	1,996.8	-3.2156	-0.16078	0.22546	0.00045886	1
SD	5,000.0	4,932.6	-67.381	-1.3476	0.55717	0.0018609	1
SE	25,000	24,715	-285.11	-1.1404	2.7918	0.0050407	1
SF	50,000	50,357	357.06	0.71412	5.6861	0.085679	1

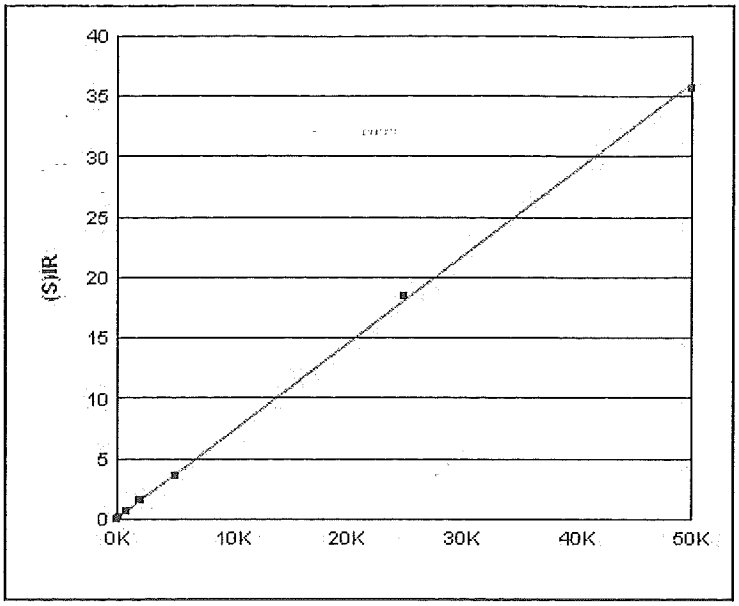


Element Name:	As
Element Wavelength:	As 189.042 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99986
A0 (Offset):	-0.000044428
A1 (Gain):	0.000083710
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	0.00027778	0.00027778	0.00000	-0.000044405	0.00010918	1
SA	10.000	10.097	0.096675	0.96675	0.00080183	0.000029036	1
SB	80.000	78.095	-1.9046	-2.3808	0.0065031	0.000033578	1
SC	800.00	770.55	-29.451	-3.6814	0.064562	0.00025139	1
SD	2,000.0	2,022.3	22.269	1.1135	0.16948	0.00043814	1
SE	10,000	10,232	231.78	2.3178	0.85765	0.0016254	1
SF	20,000	19,777	-222.75	-1.1137	1.6582	0.026148	1

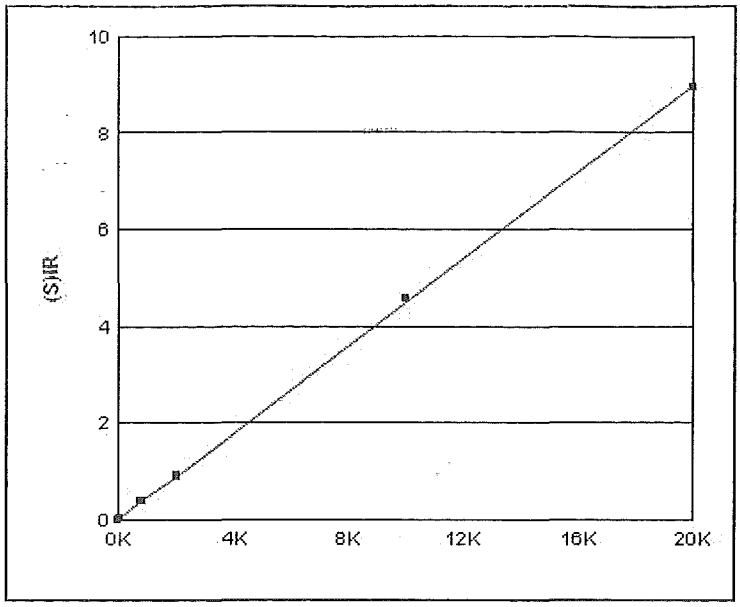


Element Name:	Ba
Element Wavelength:	Ba 455.403 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99987
A0 (Offset):	0.0024767
A1 (Gain):	0.00072127
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	-0.026678	-0.026678	0.00000	0.0024575	0.00012583	1
SA	200.00	209.55	9.5484	4.7742	0.15362	0.00056602	1
SB	750.00	779.24	29.241	3.8988	0.56452	0.00047689	1
SC	2,000.0	2,104.2	104.17	5.2085	1.5202	0.0031137	1
SD	5,000.0	4,934.1	-65.883	-1.3177	3.5613	0.0037924	1
SE	25,000	25,465	464.57	1.8583	18.369	0.051294	1
SF	50,000	49,458	-541.65	-1.0833	35.675	0.30201	1

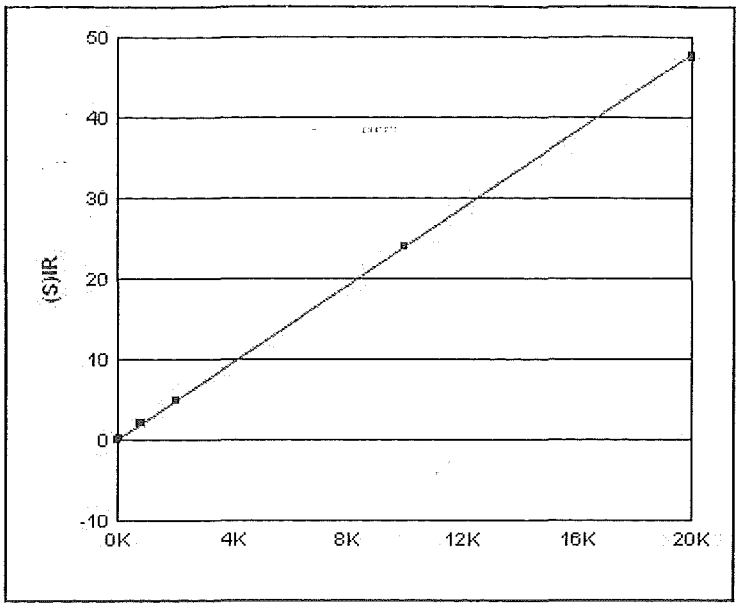


Element Name:	Be
Element Wavelength:	Be 313.107 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	0.00011149
A1 (Gain):	0.00045009
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	0.00012962	0.00012962	0.00000	0.00011155	0.00010643	1
SA	5.0000	4.7166	-0.28340	-5.6679	0.0022399	0.000065368	1
SB	80.000	80.550	0.54994	0.68743	0.036388	0.00012197	1
SC	800.00	818.98	18.978	2.3723	0.36894	0.00062315	1
SD	2,000.0	1,989.9	-10.146	-0.50731	0.89627	0.0021097	1
SE	10,000	10,114	113.71	1.1371	4.5549	0.012893	1
SF	20,000	19,877	-122.81	-0.61404	8.9521	0.13976	1

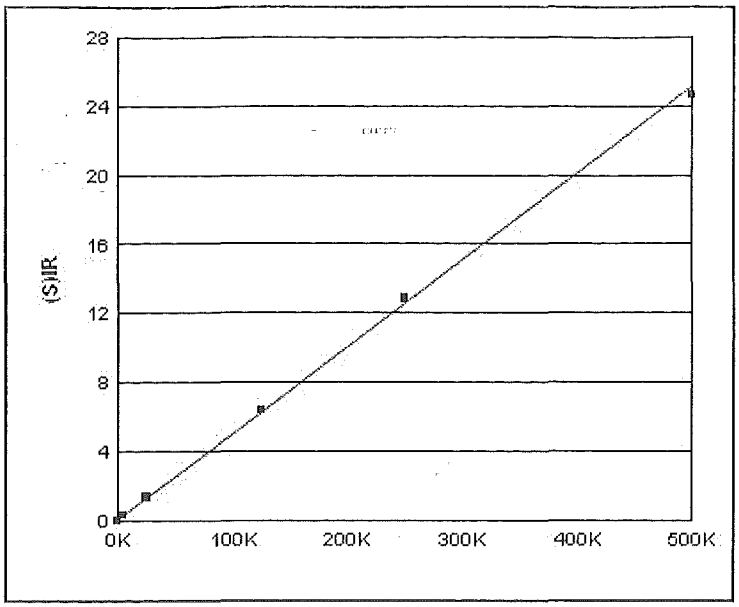


Element Name:	Cd
Element Wavelength:	Cd 214.438 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99993
A0 (Offset):	-0.00038287
A1 (Gain):	0.0023897
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	-0.00086197	-0.00086197	0.00000	-0.00038493	0.00020460	1
SA	5.0000	5.2178	0.21776	4.3553	0.012091	0.00015980	1
SB	80.000	83.872	3.8724	4.8406	0.20011	0.00064333	1
SC	800.00	847.49	47.491	5.9363	2.0251	0.0023013	1
SD	2,000.0	2,053.3	53.257	2.6628	4.9093	0.023052	1
SE	10,000	9,993.8	-6.2390	-0.062390	23.897	0.027559	1
SF	20,000	19,901	-98.638	-0.49319	47.557	0.75369	1

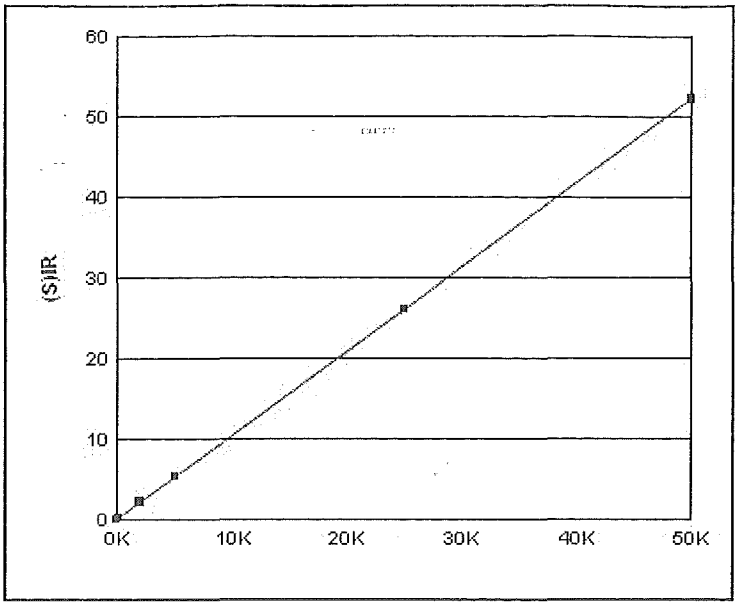


Element Name:	Ca
Element Wavelength:	Ca 317.933 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:06:11
Date of Fit:	06/30/2015 13:06:11
Type of Fit:	Linear
Correlation:	0.99977
A0 (Offset):	0.0032234
A1 (Gain):	0.000050216
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	-0.65613	-0.65613	0.00000	0.0031904	0.000042760	1
SA	5,000.0	5,287.9	287.87	5.7573	0.26876	0.0016575	1
SB	25,000	26,401	1,401.5	5.6059	1.3290	0.0026354	1
SD	125,000	126,530	1,527.1	1.2217	6.3569	0.010072	1
SE	250,000	255,900	5,904.8	2.3619	12.854	0.062406	1
S500000	500,000	490,880	-9,121.3	-1.8243	24.653	0.20721	1

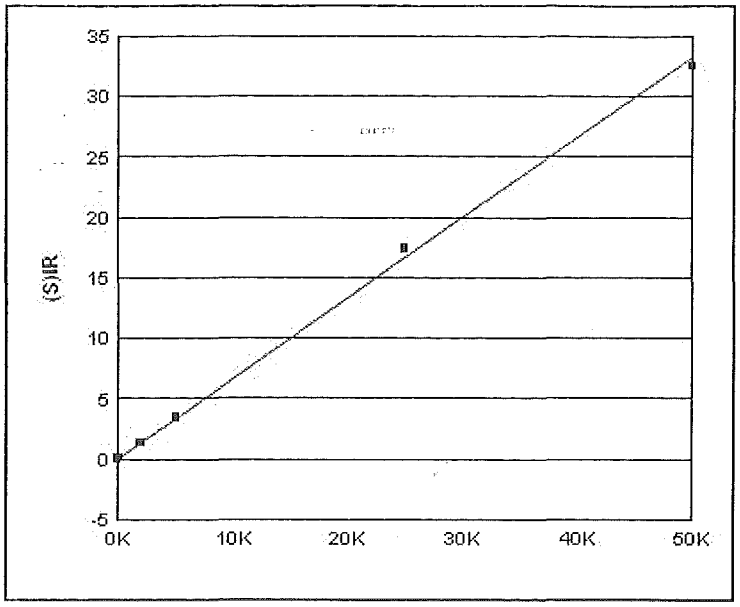


Element Name:	Cr
Element Wavelength:	Cr 205.552 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	0.00022130
A1 (Gain):	0.0010436
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	-0.0011725	-0.0011725	0.00000	0.00022008	0.000049315	1
SA	10.000	10.392	0.39199	3.9199	0.011076	0.000048180	1
SB	200.00	205.34	5.3382	2.6691	0.21460	0.00037607	1
SC	2,000.0	2,092.4	92.408	4.6204	2.1847	0.0022678	1
SD	5,000.0	5,055.4	55.389	1.1078	5.2782	0.023367	1
SE	25,000	24,857	-142.61	-0.57043	25.952	0.037955	1
SF	50,000	49,989	-10.919	-0.021837	52.190	0.96038	1

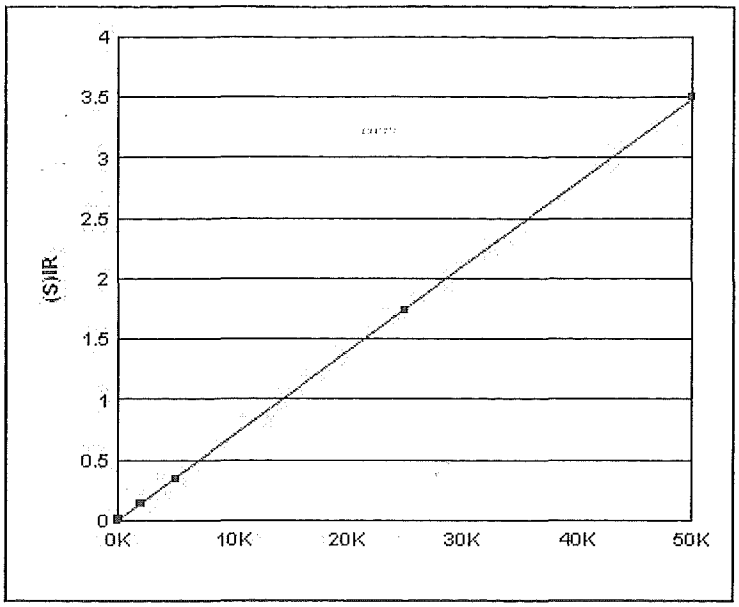


Element Name:	Co
Element Wavelength:	Co 228.616 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99951
A0 (Offset):	-0.000090726
A1 (Gain):	0.00066489
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	-0.00076397	-0.00076397	0.00000	-0.000091234	0.00013909	1
SA	50.000	49.418	-0.58242	-1.1648	0.032829	0.00049778	1
SB	200.00	197.86	-2.1441	-1.0721	0.13166	0.00016707	1
SC	2,000.0	1,973.2	-26.845	-1.3423	1.3130	0.0021950	1
SD	5,000.0	5,160.5	160.52	3.2105	3.4345	0.014219	1
SE	25,000	26,079	1,079.5	4.3178	17.357	0.023762	1
SF	50,000	48,789	-1,210.6	-2.4212	32.468	0.54841	1

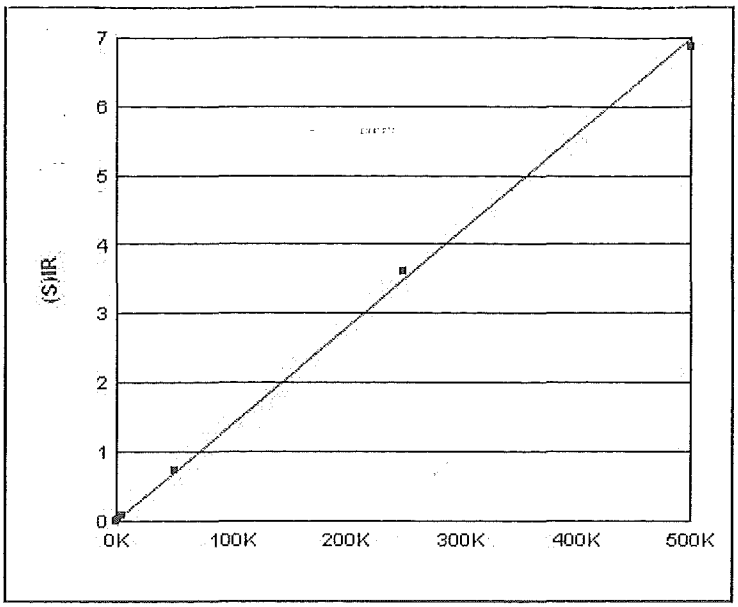


Element Name:	Cu
Element Wavelength:	Cu 327.396 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99994
A0 (Offset):	0.00041086
A1 (Gain):	0.000069644
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	0.0017697	0.0017697	0.00000	0.00041099	0.000025069	1
SA	25.000	24.662	-0.33831	-1.3532	0.0021281	0.000023198	1
SB	200.00	195.26	-4.7427	-2.3713	0.014007	0.00010199	1
SC	2,000.0	2,003.9	3.9023	0.19512	0.13994	0.00037883	1
SD	5,000.0	4,813.9	-186.11	-3.7221	0.33560	0.0061368	1
SE	25,000	24,899	-100.95	-0.40380	1.7342	0.010123	1
SF	50,000	50,288	288.24	0.57647	3.5020	0.014902	1

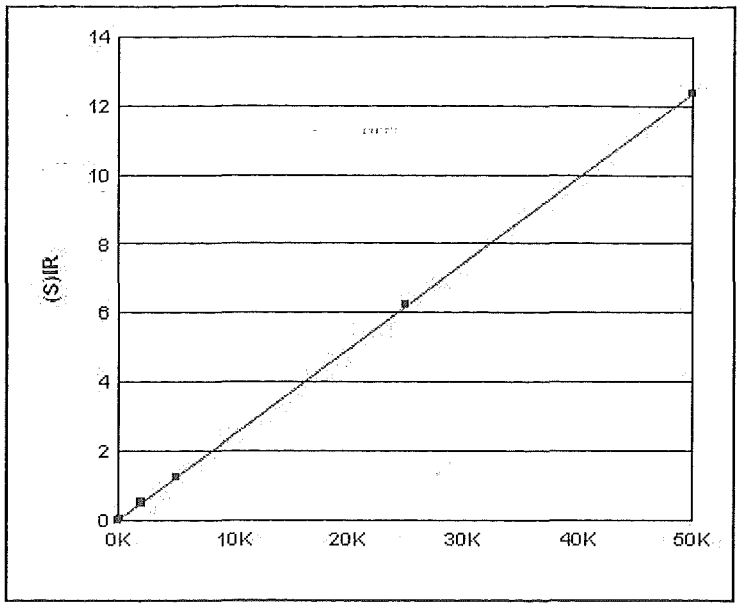


Element Name:	Fe
Element Wavelength:	Fe 259.837 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:06:11
Date of Fit:	06/30/2015 13:06:11
Type of Fit:	Linear
Correlation:	0.99969
A0 (Offset):	0.000094351
A1 (Gain):	0.000013995
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	-0.035320	-0.035320	0.00000	0.000093857	0.000052119	1
SA	100.00	115.97	15.966	15.966	0.0017178	0.000043771	1
SB	1,000.00	1,071.0	70.996	7.0996	0.015090	0.000031688	1
SC	5,000.0	5,424.2	424.22	8.4843	0.076083	0.00040458	1
SD	50,000	51,294	1,294.4	2.5889	0.71814	0.0015156	1
SE	250,000	257,710	7,711.3	3.0845	3.6076	0.013756	1
S500000	500,000	490,480	-9,520.0	-1.9040	6.8641	0.016313	1

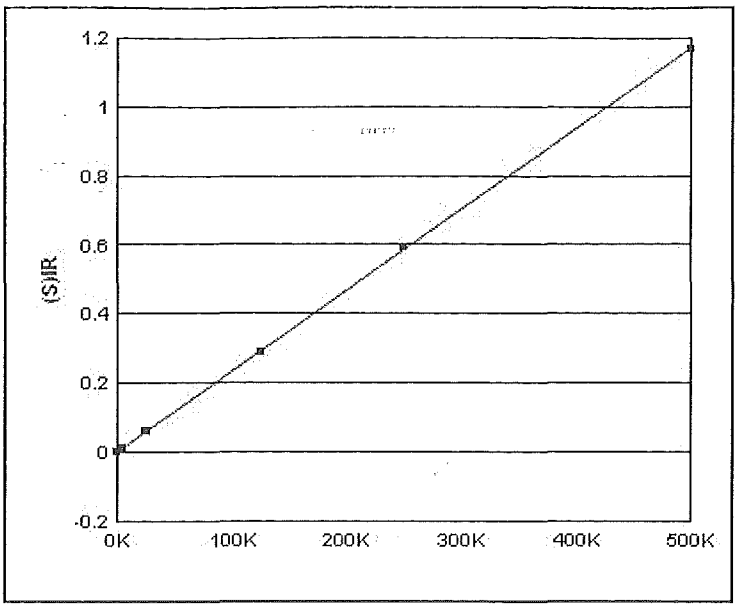


Element Name:	Pb
Element Wavelength:	Pb 220.353 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	0.0013641
A1 (Gain):	0.00024740
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	0.00052082	0.00052082	0.00000	0.0013642	0.00036562	1
SA	10.000	9.6252	-0.37482	-3.7482	0.0037649	0.00018276	1
SB	200.00	195.61	-4.3890	-2.1945	0.049870	0.00071006	1
SC	2,000.0	1,999.4	-0.56546	-0.028273	0.49681	0.00046176	1
SD	5,000.0	5,032.2	32.241	0.64481	1.2507	0.0045759	1
SE	25,000	25,086	86.178	0.34471	6.2297	0.0091897	1
SF	50,000	49,887	-113.39	-0.22678	12.355	0.18026	1

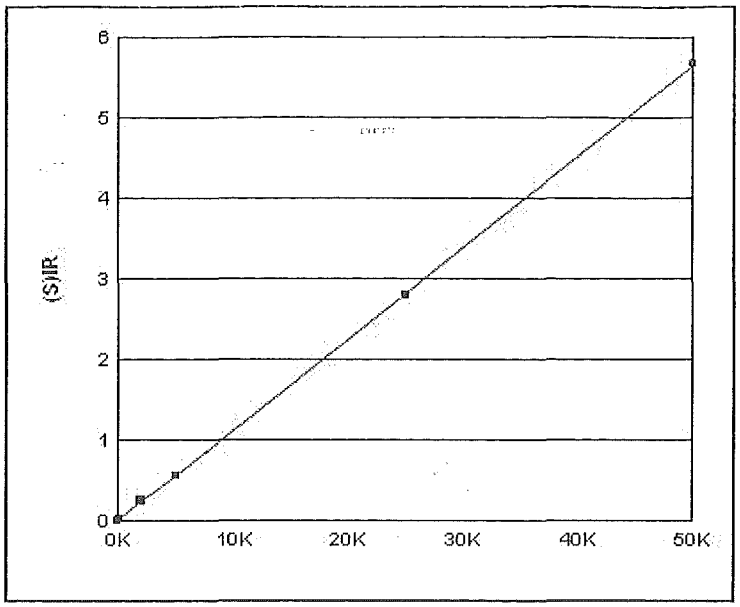


Element Name:	Mg
Element Wavelength:	Mg 279.079 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:06:11
Date of Fit:	06/30/2015 13:06:11
Type of Fit:	Linear
Correlation:	0.99996
A0 (Offset):	-0.00012728
A1 (Gain):	0.0000023396
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	-0.25227	-0.25227	0.00000	-0.00012787	0.000045412	1
SA	5,000.0	5,146.1	146.08	2.9215	0.011913	0.000051263	1
SB	25,000	25,697	696.86	2.7874	0.059993	0.00024735	1
SD	125,000	123,360	-1,638.5	-1.3108	0.28849	0.00038121	1
SE	250,000	252,440	2,441.3	0.97651	0.59049	0.0033053	1
S500000	500,000	498,350	-1,645.7	-0.32914	1.1658	0.0054740	1

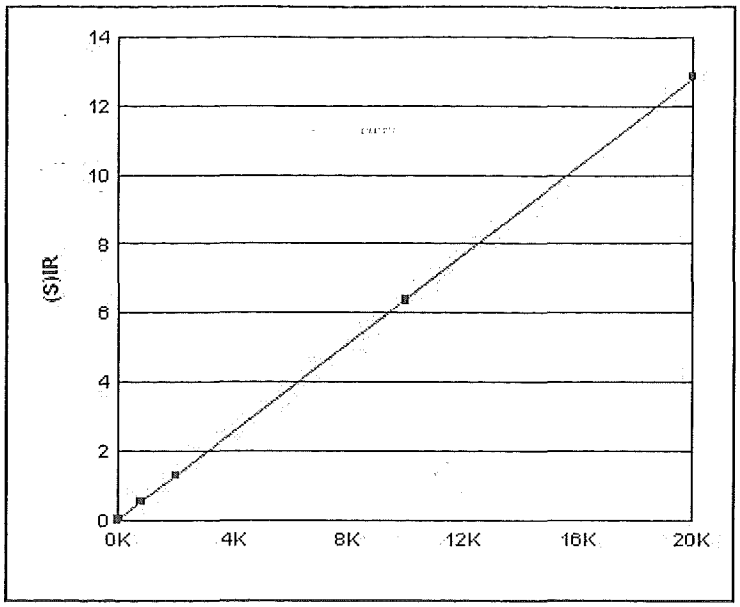


Element Name:	Mn
Element Wavelength:	Mn 257.610 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99991
A0 (Offset):	0.000059449
A1 (Gain):	0.00011282
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	-0.00086852	-0.00086852	0.00000	0.000059351	0.000080532	1
SA	15.000	15.271	0.27051	1.8034	0.0017822	0.000090994	1
SB	200.00	203.00	2.9973	1.4987	0.022961	0.000031060	1
SC	2,000.0	2,110.0	110.01	5.5003	0.23811	0.00050585	1
SD	5,000.0	4,879.0	-121.04	-2.4209	0.55050	0.0014236	1
SE	25,000	24,697	-303.46	-1.2138	2.7863	0.0064498	1
SF	50,000	50,311	311.23	0.62246	5.6761	0.019890	1

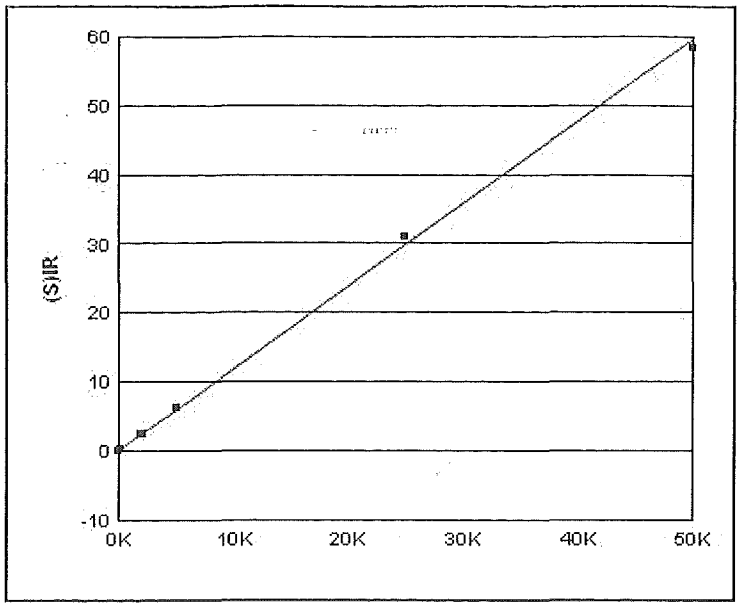


Element Name:	Mo
Element Wavelength:	Mo 202.030 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	0.00010037
A1 (Gain):	0.00064121
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	0.00012621	0.00012621	0.00000	0.00010045	0.00026357	1
SA	10.000	9.6790	-0.32103	-3.2103	0.0063062	0.000046614	1
SB	80.000	81.323	1.3227	1.6534	0.052241	0.00013992	1
SC	800.00	804.24	4.2424	0.53030	0.51577	0.00089013	1
SD	2,000.0	2,002.9	2.8956	0.14478	1.2841	0.0049322	1
SE	10,000	9,932.1	-67.915	-0.67915	6.3674	0.0054547	1
SF	20,000	20,060	59.762	0.29881	12.863	0.22700	1

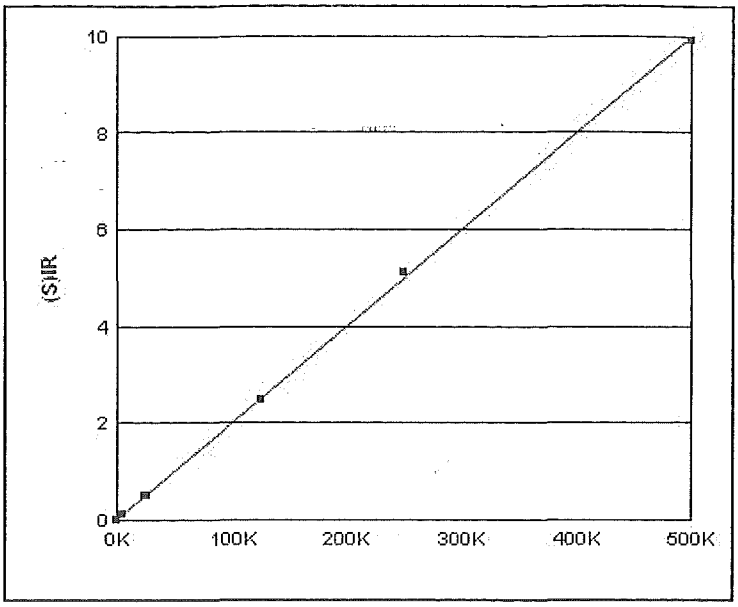


Element Name:	Ni
Element Wavelength:	Ni 231.604 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99961
A0 (Offset):	-0.00024541
A1 (Gain):	0.0011934
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	0.00043747	0.00043747	0.00000	-0.00024489	0.00046240	1
SA	40.000	38.574	-1.4258	-3.5645	0.045827	0.00032225	1
SB	200.00	197.49	-2.5069	-1.2534	0.23563	0.0011085	1
SC	2,000.0	1,975.2	-24.838	-1.2419	2.3584	0.0053197	1
SD	5,000.0	5,168.2	168.23	3.3647	6.1740	0.023136	1
SE	25,000	25,941	940.95	3.7638	30.990	0.059489	1
SF	50,000	48,919	-1,081.1	-2.1622	58.407	0.96419	1

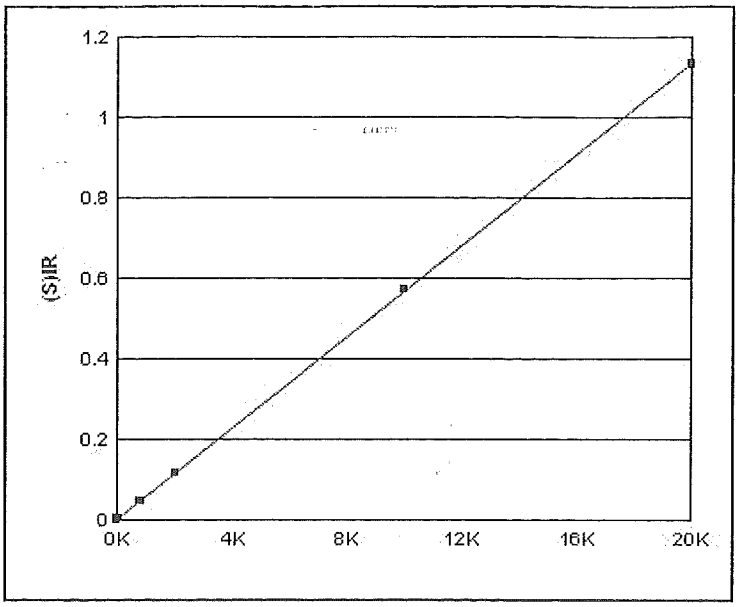


Element Name:	K
Element Wavelength:	K 766.490 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:06:11
Date of Fit:	06/30/2015 13:06:11
Type of Fit:	Linear
Correlation:	0.99989
A0 (Offset):	0.0014768
A1 (Gain):	0.000019983
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	0.020288	0.020288	0.00000	0.0014772	0.00069823	1
SA	5,000.0	4,964.4	-35.621	-0.71241	0.10068	0.00098978	1
SB	25,000	25,054	53.590	0.21436	0.50213	0.0013667	1
SD	125,000	123,230	-1,770.6	-1.4164	2.4640	0.0073567	1
SE	250,000	255,790	5,791.1	2.3164	5.1130	0.023371	1
S500000	500,000	495,960	-4,038.5	-0.80770	9.9124	0.035963	1

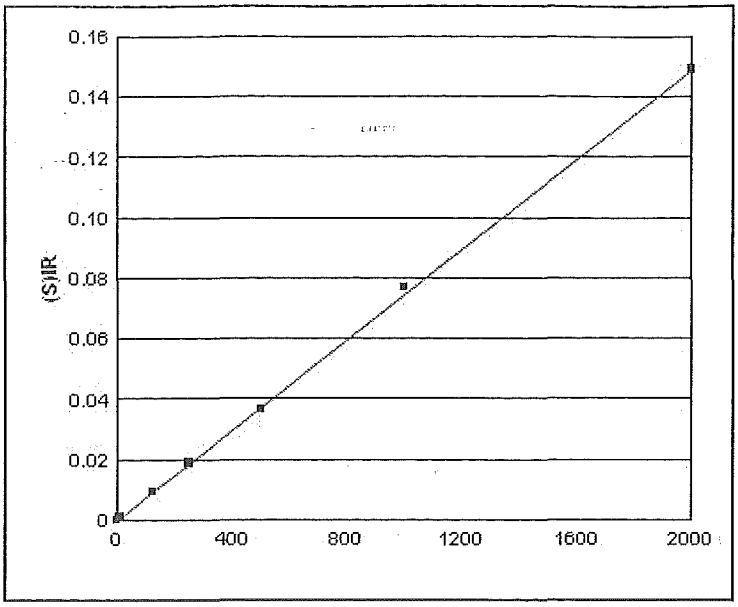


Element Name:	Se
Element Wavelength:	Se 196.090 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	0.00039903
A1 (Gain):	0.000056660
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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

Concentration

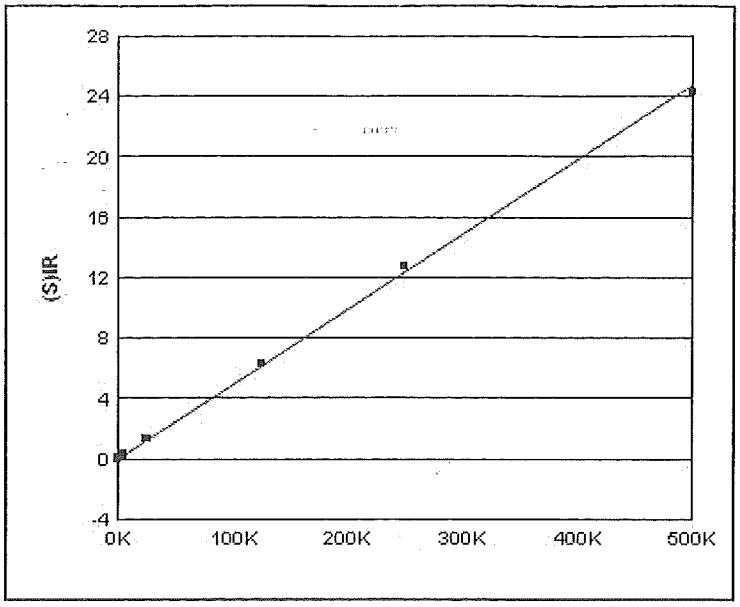
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
S0	0.00000	0.0020887	0.0020887	0.00000	0.00039914	0.00017737	1
SA	35.000	33.241	-1.7589	-5.0253	0.0022835	0.000026501	1
SB	80.000	80.605	0.60491	0.75613	0.0049753	0.00018516	1
SC	800.00	781.41	-18.589	-2.3236	0.044748	0.00034118	1
SD	2,000.0	2,005.2	5.2209	0.26105	0.11434	0.00030921	1
SE	10,000	10,058	58.391	0.58391	0.57191	0.00047053	1
SF	20,000	19,956	-43.964	-0.21982	1.1325	0.014266	1



Element Name:	Ag
Element Wavelength:	Ag 328.068 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99988
A0 (Offset):	0.0000012349
A1 (Gain):	0.000074458
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	0.00010799	0.00010799	0.00000	0.0000012430	0.000027256	1
SA	10.000	10.007	0.0070748	0.070748	0.00074694	0.000026892	1
SB	125.00	123.81	-1.1913	-0.95306	0.0092240	0.000083266	1
SC	250.00	250.77	0.77346	0.30938	0.018715	0.000047319	1
SD	500.00	488.33	-11.671	-2.3342	0.036466	0.00071688	1
SE	1,000.00	1,024.5	24.517	2.4517	0.076809	0.00060516	1
SF	2,000.0	1,987.5	-12.488	-0.62441	0.14904	0.0016690	1

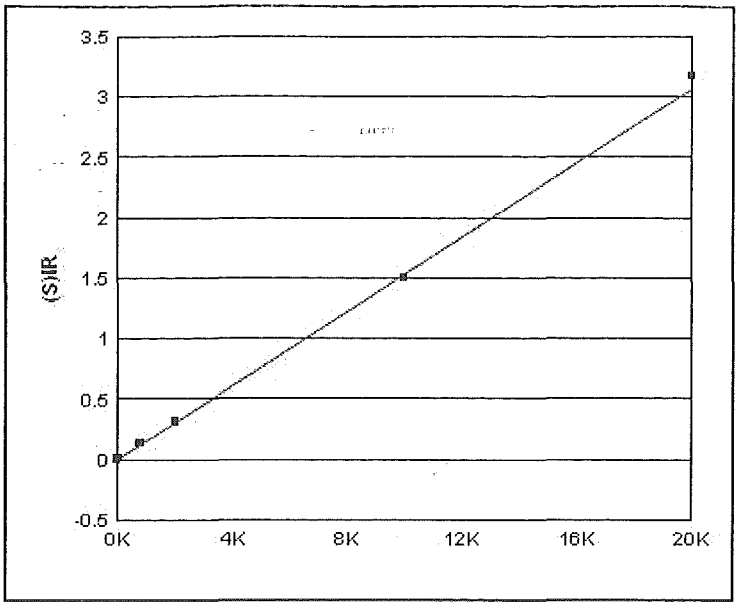


Element Name:	Na
Element Wavelength:	Na 589.592 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:06:11
Date of Fit:	06/30/2015 13:06:11
Type of Fit:	Linear
Correlation:	0.99972
A0 (Offset):	-0.0013828
A1 (Gain):	0.000049479
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	-0.59633	-0.59633	0.00000	-0.0014123	0.00027178	1
SA	5,000.0	5,247.1	247.10	4.9420	0.25824	0.00025124	1
SB	25,000	26,224	1,224.1	4.8965	1.2962	0.0014000	1
SD	125,000	126,550	1,551.6	1.2413	6.2603	0.012384	1
SE	250,000	257,260	7,257.2	2.9029	12.728	0.11880	1
S500000	500,000	489,720	-10,280	-2.0560	24.230	0.18414	1

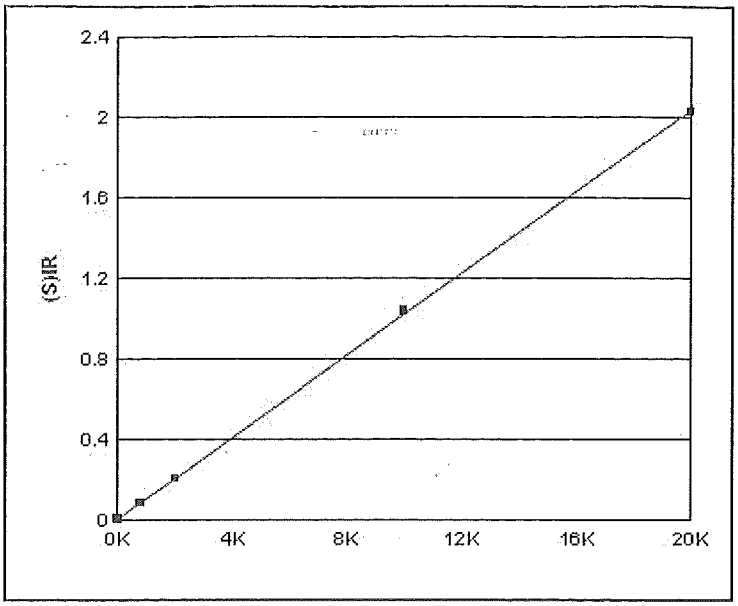


Element Name:	Tl
Element Wavelength:	Tl 190.856 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99957
A0 (Offset):	-0.00094966
A1 (Gain):	0.00015326
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	-0.0050922	-0.0050922	0.00000	-0.00095044	0.00013996	1
SA	25.000	28.459	3.4594	13.838	0.0034593	0.000096975	1
SB	80.000	82.699	2.6986	3.3733	0.011937	0.00024688	1
SC	800.00	850.16	50.162	6.2703	0.13148	0.00027076	1
SD	2,000.0	1,984.5	-15.483	-0.77414	0.30844	0.0016175	1
SE	10,000	9,573.3	-426.70	-4.2670	1.4924	0.0033355	1
SF	20,000	20,386	385.72	1.9286	3.1769	0.042241	1

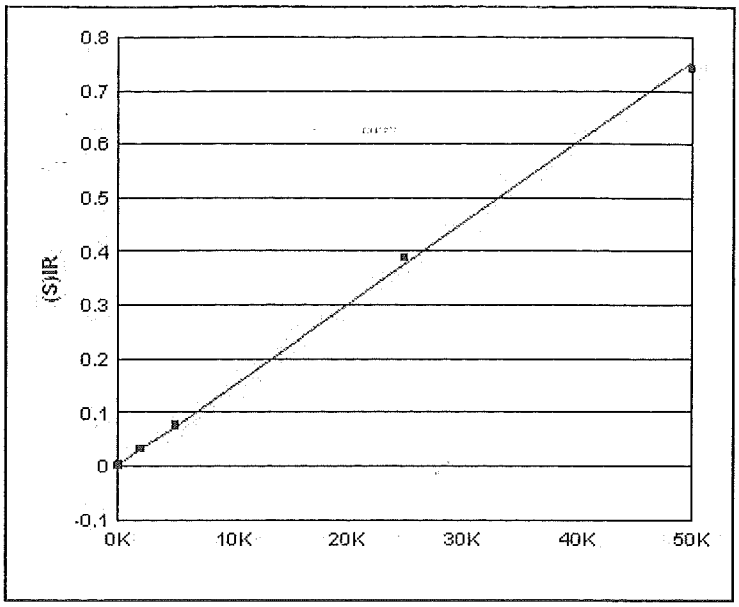


Element Name:	Ti
Element Wavelength:	Ti 334.941 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99994
A0 (Offset):	0.00011674
A1 (Gain):	0.00010189
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	-0.00071334	-0.00071334	0.00000	0.00011667	0.000086402	1
SA	25.000	24.979	-0.020662	-0.082647	0.0026703	0.000087755	1
SB	80.000	81.715	1.7147	2.1434	0.0084898	0.000054176	1
SC	800.00	811.26	11.262	1.4078	0.082848	0.00016851	1
SD	2,000.0	1,971.0	-28.995	-1.4498	0.20132	0.00064509	1
SE	10,000	10,151	150.92	1.5092	1.0357	0.00041221	1
SF	20,000	19,865	-134.92	-0.67458	2.0260	0.010171	1

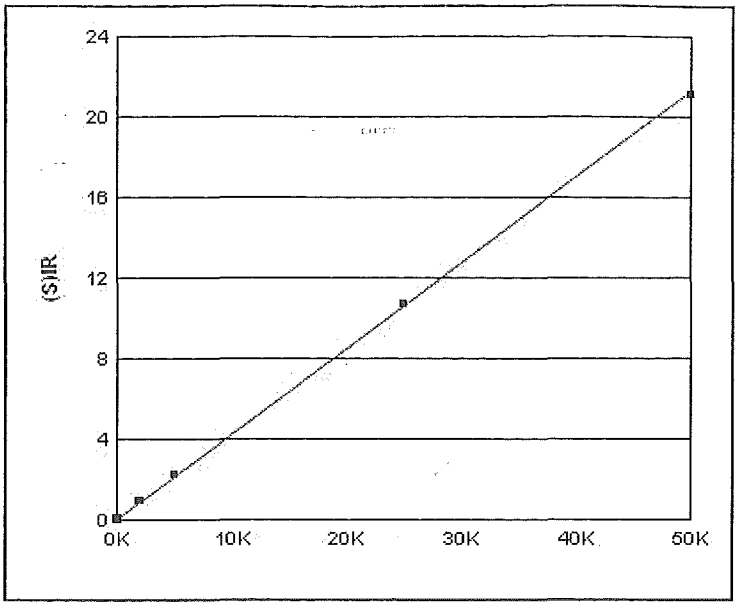


Element Name:	V
Element Wavelength:	V 292.402 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99979
A0 (Offset):	-0.000011537
A1 (Gain):	0.000015055
A2 (Curvature):	0.00000
n (Exponent):	1.0000

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	-0.0052002	-0.0052002	0.00000	-0.000011615	0.0000094088	1
SA	50.000	51.763	1.7634	3.5269	0.00076803	0.000013848	1
SB	200.00	205.17	5.1663	2.5831	0.0030778	0.000038848	1
SC	2,000.0	2,043.3	43.294	2.1647	0.030752	0.00010460	1
SD	5,000.0	5,044.4	44.431	0.88861	0.075961	0.00063322	1
SE	25,000	25,714	713.51	2.8541	0.38725	0.0031301	1
SF	50,000	49,192	-808.49	-1.6170	0.74054	0.0081416	1



Element Name:	Zn
Element Wavelength:	Zn 206.200 nm
Concentration Units:	ug/L
Date of Calibration:	06/30/2015 13:03:09
Date of Fit:	06/30/2015 13:03:09
Type of Fit:	Linear
Correlation:	0.99991
A0 (Offset):	0.00088743
A1 (Gain):	0.00042489
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	-0.010715	-0.010715	0.00000	0.00088287	0.00012108	1
SA	60.000	62.906	2.9060	4.8434	0.027616	0.00019884	1
SB	200.00	210.01	10.005	5.0026	0.090112	0.00016379	1
SC	2,000.0	2,100.7	100.71	5.0354	0.89338	0.0031082	1
SD	5,000.0	5,165.0	164.95	3.2990	2.1954	0.011718	1
SE	25,000	25,117	117.17	0.46866	10.673	0.019228	1
SF	50,000	49,604	-395.78	-0.79155	21.075	0.35298	1

RUN# IC15126
06/30/2015

Sample Name: S0 Acquired: 06/30/2015 12:43:25 Type: Cal
Method: ICP08 ISM01.3 2015(v11) Mode: IR Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00055**	**-.00004**	**-.00004**	**.00246**	**.00011**	**-.00038**	**.00319**
Stddev	.00007	.00032	.00011	.00013	.00011	.00020	.00004
%RSD	12.217	860.84	245.88	5.1201	95.405	53.151	1.3403
#1	.00063	-.00001	-.00016	.00258	.00023	-.00022	.00317
#2	.00050	-.00036	.00006	.00233	.00006	-.00032	.00316
#3	.00053	.00027	-.00003	.00246	.00004	-.00061	.00324

Elem	Cr2055	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00022**	**-.00009**	**.00041**	**.00009**	**.00136**	**-.00013**	**.00006**
Stddev	.00005	.00014	.00003	.00005	.00037	.00005	.00008
%RSD	22.407	152.45	6.0996	55.530	26.801	35.513	135.69
#1	.00027	-.00019	.00043	.00006	.00129	-.00018	.00006
#2	.00018	-.00015	.00038	.00007	.00104	-.00010	-.00002
#3	.00021	.00007	.00043	.00015	.00176	-.00011	.00014

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	**.00010**	**-.00024**	**.00148**	**.00040**	**.00000**	**-.00141**	**-.00095**
Stddev	.00026	.00046	.00070	.00018	.00003	.00027	.00014
%RSD	262.38	188.82	47.266	44.437	2192.8	19.243	14.726
#1	-.00004	.00028	.00138	.00037	-.00002	-.00111	-.00102
#2	.00040	-.00059	.00222	.00024	.00003	-.00164	-.00104
#3	-.00006	-.00042	.00084	.00059	-.00001	-.00148	-.00079

Elem	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S
Avg	**.00012**	**-.00001**	**.00088**
Stddev	.00009	.00001	.00012
%RSD	74.058	81.003	13.714
#1	.00005	-.00001	.00092
#2	.00008	-.00001	.00075
#3	.00022	-.00002	.00098

Sample Name: S0 Acquired: 06/30/2015 12:43:25 Type: Cal
Method: ICP08 ISM01.3 2015(v11) Mode: IR Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 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	**3678.6**	**33411.**	**483330.**	**4739.2**	**15117.**	**229400.**
Stddev	13.1	230.	1067.	10.5	112.	1710.
%RSD	.35745	.68704	.22072	.22077	.74116	.74529
#1	3663.7	33543.	484070.	4729.2	15216.	228910.
#2	3683.7	33146.	483820.	4738.3	14995.	227990.
#3	3688.5	33544.	482110.	4750.1	15138.	231300.

Sample Name: SA Acquired: 06/30/2015 12:46:22 Type: Cal
Method: ICP08 ISM01.3 2015(v11) Mode: IR Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 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	**.00100**	**.00673**	**.00080**	**.15362**	**.00224**	**.01209**	**.26876**	**.01108**
Stddev	.00005	.00022	.00003	.00057	.00007	.00016	.00166	.00005
%RSD	4.9613	3.3348	3.6212	.36846	2.9184	1.3216	.61672	.43498
#1	.00096	.00648	.00077	.15390	.00216	.01219	.27048	.01102
#2	.00106	.00685	.00082	.15399	.00227	.01191	.26863	.01111
#3	.00099	.00688	.00081	.15297	.00228	.01218	.26717	.01110

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.03283**	**.00213**	**.00172**	**.00376**	**.01191**	**.00178**	**.00631**	**.04583**
Stddev	.00050	.00002	.00004	.00018	.00005	.00009	.00005	.00032
%RSD	1.5163	1.0901	2.5480	4.8544	.43033	5.1056	.73918	.70319
#1	.03338	.00213	.00168	.00396	.01195	.00187	.00627	.04616
#2	.03270	.00210	.00176	.00360	.01194	.00169	.00629	.04579
#3	.03241	.00215	.00171	.00373	.01185	.00179	.00636	.04552

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	**.10068**	**.00228**	**.00075**	**.25824**	**.00346**	**.00267**	**.00077**	**.02762**
Stddev	.00099	.00003	.00003	.00025	.00010	.00009	.00001	.00020
%RSD	.98308	1.1605	3.6004	.09729	2.8033	3.2863	1.8031	.72001
#1	.10182	.00225	.00072	.25842	.00347	.00269	.00078	.02764
#2	.10010	.00230	.00077	.25795	.00355	.00275	.00077	.02780
#3	.10012	.00230	.00075	.25835	.00336	.00257	.00075	.02741

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	**3593.7**	**33616.**	**482440.**	**4725.2**	**15144.**	**228300.**
Stddev	3.7	249.	3523.	2.2	123.	1614.
%RSD	.10424	.74191	.73019	.04692	.81231	.70686
#1	3590.6	33336.	478760.	4722.6	15005.	230130.
#2	3597.9	33813.	482780.	4726.4	15237.	227650.
#3	3592.7	33699.	485780.	4726.5	15191.	227110.

Sample Name: SB Acquired: 06/30/2015 12:49:17 Type: Cal
Method: ICP08 ISM01.3 2015(v11) Mode: IR Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 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	**.00292**	**.02239**	**.00650**	**.56452**	**.03639**	**.20011**	**1.3290**	**.21460**
Stddev	.00004	.00021	.00003	.00048	.00012	.00064	.0026	.00038
%RSD	1.5062	.92112	.51634	.08448	.33520	.32150	.19830	.17524
#1	.00288	.02263	.00647	.56506	.03652	.19966	1.3286	.21483
#2	.00293	.02232	.00650	.56415	.03636	.19981	1.3266	.21480
#3	.00296	.02223	.00654	.56435	.03628	.20084	1.3318	.21417

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.13166**	**.01401**	**.01509**	**.04987**	**.05999**	**.02296**	**.05224**	**.23563**
Stddev	.00017	.00010	.00003	.00071	.00025	.00003	.00014	.00111
%RSD	.12690	.72818	.20999	1.4238	.41230	.13527	.26783	.47043
#1	.13165	.01403	.01510	.04954	.05974	.02293	.05237	.23686
#2	.13150	.01410	.01512	.05068	.06001	.02295	.05209	.23529
#3	.13183	.01390	.01505	.04939	.06023	.02300	.05226	.23473

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	**.50213**	**.00498**	**.00922**	**1.2962**	**.01194**	**.00849**	**.00308**	**.09011**
Stddev	.00137	.00019	.00008	.0014	.00025	.00005	.00004	.00016
%RSD	.27218	3.7216	.90271	.10801	2.0683	.63813	1.2622	.18176
#1	.50281	.00500	.00927	1.2972	.01206	.00844	.00304	.09030
#2	.50056	.00514	.00927	1.2946	.01165	.00855	.00308	.09003
#3	.50302	.00478	.00913	1.2968	.01210	.00848	.00312	.09000

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	**3400.7**	**33510.**	**469930.**	**4595.2**	**14960.**	**221220.**
Stddev	9.3	302.	4536.	16.6	127.	2003.
%RSD	.27429	.90260	.96519	.36096	.84624	.90546
#1	3390.4	33806.	474450.	4578.0	15079.	220860.
#2	3408.7	33523.	469960.	4611.0	14975.	219430.
#3	3402.9	33201.	465380.	4596.7	14827.	223380.

Sample Name: SC Acquired: 06/30/2015 12:52:04 Type: Cal
Method: ICP08 ISM01.3 2015(v11) Mode: IR Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Cr2055	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01328**	**.22546**	**.06456**	**1.5202**	**.36894**	**2.0251**	**2.1847**	**1.3130**
Stddev	.00011	.00046	.00025	.0031	.00062	.0023	.0023	.0022
%RSD	.83210	.20352	.38937	.20483	.16890	.11364	.10380	.16717
#1	.01329	.22570	.06443	1.5193	.36965	2.0269	2.1829	1.3105
#2	.01339	.22493	.06441	1.5236	.36872	2.0260	2.1872	1.3145
#3	.01317	.22575	.06485	1.5176	.36847	2.0225	2.1841	1.3141

Elem	Cu3273	Fe2598	Pb2203	Mn2576	Mo2020	Ni2316	Se1960	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.13994**	**.07608**	**.49681**	**.23811**	**.51577**	**2.3584**	**.04475**	**.01872**
Stddev	.00038	.00040	.00046	.00051	.00089	.0053	.00034	.00005
%RSD	.27070	.53176	.09294	.21244	.17258	.22557	.76244	.25283
#1	.14038	.07583	.49642	.23859	.51601	2.3522	.04506	.01867
#2	.13972	.07655	.49670	.23815	.51478	2.3617	.04480	.01877
#3	.13973	.07587	.49732	.23758	.51651	2.3612	.04438	.01871

Elem	Tl1908	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.13148**	**.08285**	**.03075**	**.89338**
Stddev	.00027	.00017	.00010	.00311
%RSD	.20594	.20340	.34014	.34791
#1	.13128	.08281	.03068	.89429
#2	.13136	.08303	.03071	.89594
#3	.13179	.08270	.03087	.88992

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	**3674.0**	**34200.**	**490230.**	**4784.0**	**15337.**	**231180.**
Stddev	8.3	202.	1560.	11.5	114.	1540.
%RSD	.22659	.59085	.31826	.24063	.74108	.66592
#1	3675.3	34155.	491960.	4778.7	15308.	231480.
#2	3665.2	34024.	489810.	4776.1	15240.	229520.
#3	3681.7	34421.	488930.	4797.3	15462.	232550.

Sample Name: SD Acquired: 06/30/2015 12:54:44 Type: Cal
Method: ICP08 ISM01.3 2015(v11) Mode: IR Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 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	**.11772**	**.55717**	**.16948**	**3.5613**	**.89627**	**4.9093**	**6.3569**	**5.2782**
Stddev	.00018	.00186	.00044	.0038	.00211	.0231	.0101	.0234
%RSD	.15553	.33398	.25852	.10649	.23539	.46956	.15844	.44271
#1	.11767	.55593	.16914	3.5588	.89486	4.8858	6.3537	5.2588
#2	.11758	.55628	.16997	3.5657	.89870	4.9100	6.3682	5.2716
#3	.11793	.55931	.16932	3.5595	.89526	4.9319	6.3488	5.3041

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.4345**	**.33560**	**.71814**	**1.2507**	**.28849**	**.55050**	**1.2841**	**6.1740**
Stddev	.0142	.00614	.00152	.0046	.00038	.00142	.0049	.0231
%RSD	.41402	1.8286	.21105	.36585	.13214	.25860	.38409	.37473
#1	3.4290	.32852	.71742	1.2481	.28864	.54929	1.2817	6.1632
#2	3.4238	.33915	.71988	1.2481	.28877	.55207	1.2808	6.1583
#3	3.4506	.33914	.71711	1.2560	.28806	.55013	1.2898	6.2006

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	**2.4640**	**.11434**	**.03647**	**6.2603**	**.30844**	**.20132**	**.07596**	**2.1954**
Stddev	.0074	.00031	.00072	.0124	.00162	.00065	.00063	.0117
%RSD	.29856	.27044	1.9659	.19782	.52441	.32043	.83361	.53373
#1	2.4557	.11438	.03564	6.2489	.30823	.20063	.07533	2.1832
#2	2.4698	.11401	.03682	6.2735	.30693	.20191	.07595	2.1965
#3	2.4665	.11462	.03693	6.2585	.31014	.20141	.07660	2.2066

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	**2967.7**	**33371.**	**448150.**	**4355.9**	**14687.**	**207640.**
Stddev	8.9	148.	2625.	4.8	64.	2755.
%RSD	.29895	.44420	.58582	.11057	.43528	1.3267
#1	2960.1	33202.	449910.	4351.5	14615.	210820.
#2	2977.4	33433.	449420.	4361.1	14710.	206030.
#3	2965.5	33478.	445140.	4355.2	14736.	206070.

Sample Name: SE Acquired: 06/30/2015 12:57:18 Type: Cal
Method: ICP08 ISM01.3 2015(v11) Mode: IR Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 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	**.61078**	**2.7918**	**.85765**	**18.369**	**4.5549**	**23.897**	**12.854**	**25.952**
Stddev	.00120	.0050	.00163	.051	.0129	.028	.062	.038
%RSD	.19632	.18055	.18952	.27923	.28305	.11533	.48551	.14625
#1	.61126	2.7976	.85897	18.343	4.5663	23.926	12.906	25.988
#2	.61166	2.7893	.85583	18.336	4.5575	23.892	12.870	25.956
#3	.60941	2.7886	.85813	18.428	4.5409	23.872	12.785	25.913

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**17.357**	**1.7342**	**3.6076**	**6.2297**	**.59049**	**2.7863**	**6.3674**	**30.990**
Stddev	.024	.0101	.0138	.0092	.00331	.0065	.0055	.059
%RSD	.13690	.58377	.38131	.14751	.55975	.23148	.08567	.19196
#1	17.383	1.7323	3.6189	6.2396	.59349	2.7898	6.3727	31.056
#2	17.350	1.7451	3.6117	6.2215	.59102	2.7902	6.3677	30.976
#3	17.337	1.7251	3.5923	6.2279	.58695	2.7788	6.3618	30.939

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	**5.1130**	**.57191**	**.07681**	**12.728**	**1.4924**	**1.0357**	**.38725**	**10.673**
Stddev	.0234	.00047	.00061	.119	.0033	.0004	.00313	.019
%RSD	.45708	.08227	.78787	.93339	.22349	.03980	.80828	.18016
#1	5.1311	.57209	.07627	12.609	1.4960	1.0360	.38946	10.693
#2	5.1214	.57138	.07746	12.847	1.4893	1.0358	.38367	10.672
#3	5.0866	.57227	.07669	12.726	1.4921	1.0352	.38862	10.654

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	**2708.0**	**32424.**	**417890.**	**4103.8**	**14381.**	**195270.**
Stddev	1.6	295.	3392.	.8	163.	1053.
%RSD	.05924	.90891	.81174	.01941	1.1360	.53911
#1	2706.1	32304.	415100.	4103.9	14282.	195600.
#2	2708.6	32209.	421670.	4102.9	14291.	194090.
#3	2709.2	32760.	416910.	4104.4	14569.	196110.

Sample Name: SF Acquired: 06/30/2015 13:00:13 Type: Cal
Method: ICP08 ISM01.3 2015(v11) Mode: IR Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment:

Elem	Sb2068	As1890	Ba4554	Be3131	Cd2144	Cr2055	Co2286	Cu3273
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.6861**	**1.6582**	**35.675**	**8.9521**	**47.557**	**52.190**	**32.468**	**3.5020**
Stddev	.0857	.0262	.302	.1398	.754	.960	.548	.0149
%RSD	1.5068	1.5769	.84654	1.5612	1.5848	1.8402	1.6891	.42553
#1	5.7699	1.6850	35.459	9.0415	48.337	53.225	33.069	3.5139
#2	5.6899	1.6567	35.546	9.0238	47.503	52.018	32.341	3.4853
#3	5.5986	1.6328	36.021	8.7911	46.832	51.328	31.995	3.5069

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	**12.355**	**5.6761**	**12.863**	**58.407**	**1.1325**	**.14904**	**3.1769**	**2.0260**
Stddev	.180	.0199	.227	.964	.0143	.00167	.0422	.0102
%RSD	1.4590	.35041	1.7648	1.6508	1.2597	1.1198	1.3296	.50205
#1	12.551	5.6990	13.101	59.471	1.1462	.14718	3.2225	2.0375
#2	12.318	5.6627	12.839	58.157	1.1335	.14952	3.1691	2.0182
#3	12.196	5.6666	12.648	57.591	1.1177	.15041	3.1391	2.0222

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.74054**	**21.075**
Stddev	.00814	.353
%RSD	1.0994	1.6749
#1	.74985	21.441
#2	.73700	21.046
#3	.73477	20.737

Int. Std.	Sc2273	Sc3613	Sc3613-2	Y_2243	Y_3710-2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3406.2**	**34353.**	**482860.**	**4504.7**	**222850.**
Stddev	22.6	93.	5250.	26.1	1348.
%RSD	.66290	.27192	1.0873	.57855	.60484
#1	3380.8	34256.	476910.	4474.9	223760.
#2	3424.0	34361.	484830.	4516.5	223500.
#3	3413.7	34442.	486840.	4522.9	221310.

Sample Name: S500000 Acquired: 06/30/2015 13:03:23 Type: Cal
Method: ICP08 ISM01.3 2015(v11) Mode: IR Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment:

Elem	Al3082	Ca3179	Fe2598	Mg2790	K_7664	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.1570**	**24.653**	**6.8641**	**1.1658**	**9.9124**	**24.230**
Stddev	.0027	.207	.0163	.0055	.0360	.184
%RSD	.23808	.84049	.23765	.46954	.36280	.75998
#1	1.1597	24.828	6.8827	1.1721	9.9449	24.322
#2	1.1542	24.424	6.8519	1.1631	9.8738	24.018
#3	1.1570	24.708	6.8579	1.1623	9.9186	24.349

Int. Std.	Sc3613	Y_3710
Units	Cts/S	Cts/S
Avg	**32968.**	**14348.**
Stddev	72.	42.
%RSD	.21961	.28953
#1	32935.	14338.
#2	33051.	14393.
#3	32918.	14312.

Sample Name: ICV1 Acquired: 06/30/2015 13:06:26 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**2466.4**	**965.65**	**971.69**	**505.39**	**489.73**	**507.26**	**10467.**	**509.17**	**496.02**
Stddev	27.4	6.42	3.49	1.56	.30	1.09	21.	1.25	1.38
%RSD	1.1117	.66447	.35867	.30919	.06144	.21475	.20337	.24619	.27835
#1	2437.1	958.24	968.03	506.58	490.06	506.56	10472.	507.72	495.25
#2	2491.4	969.34	972.07	505.96	489.66	508.52	10485.	509.95	495.20
#3	2470.7	969.36	974.96	503.62	489.48	506.71	10443.	509.83	497.62
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3273	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	**495.79**	**5231.2**	**989.87**	**6049.0**	**502.95**	**.74304**	**498.22**	**9732.8**	**952.82**
Stddev	2.60	15.5	.59	21.1	1.35	.44699	.59	31.4	4.00
%RSD	.52376	.29610	.05931	.34939	.26772	60.157	.11821	.32223	.42030
#1	492.84	5238.0	989.95	6061.1	504.49	1.1202	497.98	9768.1	948.34
#2	497.74	5242.1	990.42	6024.6	502.34	.85956	497.79	9708.2	956.05
#3	496.80	5213.4	989.25	6061.3	502.01	.24934	498.89	9722.3	954.08
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**479.53**	**10248.**	**1065.4**	**4.7515**	**501.13**	**1018.5**
Stddev	2.89	3.	2.1	1.4161	3.95	2.7
%RSD	.60186	.03232	.19877	29.804	.78740	.26695
#1	476.23	10244.	1064.3	3.7527	498.92	1017.4
#2	480.78	10250.	1064.0	6.3722	505.69	1021.6
#3	481.57	10249.	1067.8	4.1297	498.79	1016.6
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value						
Range						

Sample Name: ICV1 Acquired: 06/30/2015 13:06:26 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**3500.3**	**35002.**	**496040.**	**4746.3**	**15439.**	**229430.**
Stddev	5.6	114.	4061.	4.9	26.	1026.
%RSD	.15921	.32574	.81868	.10423	.16724	.44717
#1	3494.6	35043.	497030.	4741.0	15442.	228260.
#2	3505.8	34873.	491580.	4747.1	15412.	229900.
#3	3500.4	35089.	499520.	4750.8	15464.	230140.

Sample Name: ICB1 Acquired: 06/30/2015 13:09:07 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**-22.787**	**-.62592**	**-1.2175**	**.15687**	**-.27177**	**-.06370**	**-13.397**	**.13142**
Stddev	19.481	2.3127	1.9391	.26762	.30968	.03767	3.197	.13864
%RSD	85.490	369.49	159.27	170.60	113.95	59.134	23.865	105.50
#1	-33.114	-3.2742	.88117	.40746	.06538	-.09735	-11.364	.02887
#2	-.3171	.99590	-1.5910	-.12502	-.54354	-.07075	-11.745	.07623
#3	-34.931	.40050	-2.9426	.18816	-.33714	-.02301	-17.083	.28915
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.27041**	**.33242**	**12.075**	**-2.2558**	**4.3686**	**-.03043**	**.41558**	**-.92893**
Stddev	.19639	.53135	11.011	.9285	14.979	.23330	.44558	.10059
%RSD	72.627	159.84	91.189	41.161	342.89	766.72	107.22	10.829
#1	.18095	.02988	21.596	-1.1867	12.528	-.14162	.88831	-.88410
#2	.13468	.94595	14.612	-2.7211	13.497	-.18733	.35513	-.85854
#3	.49561	.02143	.01685	-2.8598	-12.919	.23767	.00331	-1.0441
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	**-.88371**	**-.22180**	**.00669**	**5.3965**	**2.8851**	**-.20636**	**.34743**	**-.69754**
Stddev	29.951	2.1675	.10785	17.631	1.6246	1.3480	.65247	.06281
%RSD	3389.3	977.26	1613.1	326.70	56.310	653.25	187.80	9.0038
#1	21.808	-2.7050	-.00323	-12.434	4.7481	-.32071	1.0992	-.62621
#2	-34.832	1.2908	.11915	5.8029	2.1433	1.1952	.01471	-.72188
#3	10.373	.74880	-.09586	22.820	1.7638	-1.4936	-.07160	-.74454
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICB1 Acquired: 06/30/2015 13:09:07 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**3740.3**	**34593.**	**493060.**	**4773.5**	**15419.**	**232040.**
Stddev	9.3	162.	2622.	10.7	70.	1870.
%RSD	.24868	.46900	.53182	.22321	.45197	.80579
#1	3730.7	34409.	492740.	4761.3	15339.	230430.
#2	3740.9	34716.	495830.	4780.2	15468.	234090.
#3	3749.2	34653.	490610.	4779.2	15449.	231600.

Sample Name: ICSA1 Acquired: 06/30/2015 13:12:15 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**258710.**	**9.5528**	**6.2092**	**6.0666**	**-.34531**	**.17606**	**259860.**
Stddev	741.	2.8009	.9149	.2703	.24732	.08458	255.
%RSD	.28640	29.320	14.734	4.4552	71.624	48.041	.09804
#1	259410.	6.4096	5.6362	5.7672	-.20149	.23899	259890.
#2	258790.	11.784	7.2643	6.2927	-.63089	.07991	260100.
#3	257930.	10.465	5.7272	6.1399	-.20355	.20928	259590.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cr2055	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**58.990**	**-2.2320**	**2.4699**	**104040.**	**9.4441**	**264170.**	**16.731**
Stddev	.434	1.0834	.6084	165.	1.9716	731.	.256
%RSD	.73557	48.539	24.633	.15832	20.877	.27677	1.5276
#1	59.477	-2.4251	2.5393	104210.	10.850	263540.	16.436
#2	58.646	-3.2059	3.0407	104020.	7.1904	264980.	16.857
#3	58.845	-1.0651	1.8298	103890.	10.292	264000.	16.898
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	**.28203**	**-5.3500**	**-.08433**	**-4.5545**	**.25206**	**43.602**	**-6.9430**
Stddev	.56895	.4107	57.475	4.6459	.46176	14.092	1.4804
%RSD	201.73	7.6759	68157.	102.01	183.19	32.318	21.322
#1	.15075	-5.5874	-50.929	.42641	.65781	56.988	-5.9471
#2	.90514	-5.5867	62.277	-8.7704	.34875	44.922	-6.2378
#3	-.20981	-4.8758	-11.601	-5.3196	-.25039	28.898	-8.6441
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA1 Acquired: 06/30/2015 13:12:15 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**3.1190**	**-.89641**	**2.3618**
Stddev	.1854	.66374	.4647
%RSD	5.9435	74.044	19.677
#1	3.3205	-.43965	2.8858
#2	3.0809	-.59180	2.2002
#3	2.9557	-1.6578	1.9995
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	**2830.0**	**33680.**	**445780.**	**4277.5**	**14839.**	**203780.**
Stddev	7.5	115.	2294.	10.2	33.	1362.
%RSD	.26333	.34017	.51454	.23822	.21990	.66822
#1	2821.9	33660.	444110.	4266.0	14828.	204510.
#2	2831.6	33577.	444840.	4281.4	14813.	202210.
#3	2836.5	33804.	448400.	4285.2	14875.	204610.

Sample Name: ICSAB1 Acquired: 06/30/2015 13:15:10 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**253910.**	**612.60**	**108.26**	**523.79**	**520.56**	**1032.3**	**257310.**
Stddev	194.	3.05	1.29	1.07	.34	3.3	621.
%RSD	.07630	.49866	1.1949	.20453	.06580	.31518	.24130
#1	253700.	616.12	109.56	522.72	520.30	1035.0	257770.
#2	253970.	610.70	108.26	523.77	520.95	1033.3	257550.
#3	254070.	610.97	106.97	524.87	520.43	1028.7	256600.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cr2055	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**582.15**	**535.40**	**537.82**	**103310.**	**58.173**	**262800.**	**522.19**
Stddev	1.94	2.45	9.54	140.	4.396	436.	1.37
%RSD	.33340	.45806	1.7733	.13538	7.5575	.16587	.26324
#1	583.88	537.95	529.54	103360.	62.161	263300.	522.64
#2	582.51	535.20	548.25	103410.	58.899	262600.	523.29
#3	580.05	533.05	535.68	103150.	53.459	262500.	520.65
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	**.40112**	**1073.2**	**25.976**	**41.441**	**211.95**	**69.070**	**100.76**
Stddev	.23417	3.1	4.446	2.700	2.94	1.442	4.37
%RSD	58.379	.28643	17.115	6.5155	1.3885	2.0880	4.3412
#1	.54660	1076.0	30.141	40.045	209.32	67.586	105.34
#2	.52578	1073.8	26.491	39.725	215.13	70.467	96.624
#3	.13099	1069.9	21.295	44.554	211.41	69.156	100.31
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAB1 Acquired: 06/30/2015 13:15:10 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**5.4108**	**519.08**	**1031.4**
Stddev	.3861	6.58	3.5
%RSD	7.1353	1.2677	.33490
#1	5.6812	512.99	1032.3
#2	4.9686	526.06	1034.2
#3	5.5826	518.20	1027.5
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	**2835.2**	**34177.**	**443090.**	**4289.5**	**14854.**	**202830.**
Stddev	6.2	141.	4526.	10.5	94.	1668.
%RSD	.21752	.41219	1.0213	.24494	.62986	.82246
#1	2829.7	34152.	446740.	4277.8	14808.	204130.
#2	2841.9	34050.	438030.	4298.1	14793.	200950.
#3	2834.0	34328.	444510.	4292.5	14962.	203420.

Sample Name: CCV1 Acquired: 06/30/2015 13:17:52 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**253860.**	**25296.**	**10356.**	**25230.**	**10075.**	**9898.3**	**254180.**
Stddev	1363.	41.	4.	152.	36.	18.1	644.
%RSD	.53680	.16366	.03705	.60391	.35837	.18322	.25320
#1	254610.	25333.	10352.	25267.	10113.	9890.3	254920.
#2	254680.	25304.	10357.	25360.	10072.	9919.0	253890.
#3	252290.	25252.	10359.	25063.	10041.	9885.5	253740.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cr2055	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**24787.**	**26101.**	**24978.**	**256060.**	**25237.**	**251170.**	**24462.**
Stddev	52.	19.	216.	953.	49.	1073.	89.
%RSD	.20940	.07409	.86485	.37202	.19241	.42706	.36553
#1	24796.	26082.	25209.	257010.	25187.	252210.	24536.
#2	24833.	26099.	24943.	256070.	25241.	251230.	24487.
#3	24731.	26121.	24781.	255110.	25284.	250060.	24362.
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	**9908.8**	**26029.**	**253100.**	**10176.**	**1036.0**	**253110.**	**9659.6**
Stddev	21.3	20.	385.	15.	3.5	1476.	27.4
%RSD	.21450	.07798	.15194	.14805	.33923	.58308	.28330
#1	9922.3	26006.	253450.	10194.	1038.2	252890.	9640.4
#2	9919.9	26035.	253160.	10167.	1032.0	251760.	9647.5
#3	9884.3	26045.	252680.	10169.	1037.9	254690.	9691.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV1 Acquired: 06/30/2015 13:17:52 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**10027.**	**25195.**	**24697.**
Stddev	45.	39.	51.
%RSD	.44402	.15385	.20699
#1	10045.	25151.	24666.
#2	10059.	25225.	24756.
#3	9976.2	25208.	24670.
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	**2696.1**	**33052.**	**424810.**	**4102.0**	**14576.**	**197110.**
Stddev	1.8	18.	634.	6.5	31.	468.
%RSD	.06795	.05518	.14918	.15889	.20972	.23764
#1	2695.8	33067.	424350.	4098.1	14579.	196620.
#2	2698.1	33058.	425530.	4098.4	14605.	197550.
#3	2694.5	33032.	424540.	4109.5	14544.	197150.

Sample Name: CCB1 Acquired: 06/30/2015 13:20:46 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**-6.4406**	**-.58844**	**-2.0796**	**.93580**	**.23729**	**.11279**	**-1.7978**	**.54011**
Stddev	31.574	1.5329	1.2988	.19770	.04807	.03284	2.0059	.15898
%RSD	490.23	260.50	62.453	21.126	20.258	29.119	111.57	29.435
#1	18.961	-.10497	-.58009	.97708	.22441	.14648	-.11626	.72327
#2	3.5079	-2.3048	-2.8084	.72072	.29049	.11104	-4.0181	.45930
#3	-41.790	.64443	-2.8503	1.1096	.19697	.08086	-1.2592	.43778
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.29652**	**1.0277**	**12.723**	**-1.1730**	**22.869**	**.69324**	**1.3999**	**-.27130**
Stddev	.19540	.3469	5.947	.8733	16.257	.72078	.1231	.26851
%RSD	65.898	33.752	46.746	74.455	71.087	103.97	8.7958	98.971
#1	.51417	1.2034	19.280	-1.7709	38.849	1.3743	1.4562	-.07432
#2	.13621	1.2516	11.211	-1.5773	6.3480	.76705	1.4848	-.16245
#3	.23917	.62815	7.6770	-.17075	23.411	-.06160	1.2587	-.57715
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	**15.408**	**2.9011**	**-.10626**	**22.798**	**2.9363**	**.58285**	**.90283**	**-.54938**
Stddev	22.748	.4075	.06421	3.929	1.9111	.69618	.31905	.34304
%RSD	147.64	14.048	60.428	17.234	65.087	119.44	35.339	62.441
#1	39.172	3.2719	-.07718	27.217	5.1031	-.12187	.53835	-.78289
#2	-6.1666	2.9665	-.06173	19.700	2.2153	1.2702	1.0386	-.70971
#3	13.218	2.4648	-.17986	21.476	1.4905	.60024	1.1315	-.15553
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: 06/30/2015 13:20:46 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**3728.1**	**34472.**	**494020.**	**4754.8**	**15319.**	**231610.**
Stddev	13.5	301.	5575.	14.0	146.	1668.
%RSD	.36279	.87249	1.1286	.29523	.95121	.72018
#1	3714.5	34376.	496750.	4738.9	15320.	230880.
#2	3728.4	34810.	487600.	4759.7	15465.	230430.
#3	3741.5	34231.	497700.	4765.7	15173.	233520.

Sample Name: PBS1 Acquired: 06/30/2015 13:23:44 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**-8.1231**	**-.41029**	**-.26618**	**.71141**	**-.17586**	**-.02309**	**49.555**	**.99121**
Stddev	42.387	1.0865	1.2467	.06984	.13846	.01791	5.695	.31414
%RSD	521.81	264.82	468.35	9.8171	78.733	77.566	11.492	31.692
#1	35.356	.84214	-.36464	.78953	-.01917	-.02072	47.128	.70494
#2	-10.398	-.97221	-1.4607	.65501	-.22669	-.00648	56.062	.94142
#3	-49.327	-1.1008	1.0268	.68969	-.28173	-.04206	45.476	1.3273

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.29497**	**.31583**	**15.296**	**-1.6220**	**37.425**	**-.25950**	**.46560**	**-.01994**
Stddev	.46257	.33036	10.981	1.8395	4.057	.25750	.04248	.33857
%RSD	156.82	104.60	71.794	113.41	10.839	99.231	9.1248	1697.7
#1	.02948	.61957	27.476	-.29825	33.065	-.00353	.45380	.36518
#2	-.82464	-.03590	6.1526	-3.7224	41.088	-.25645	.51273	-.15432
#3	-.08975	.36381	12.258	-.84530	38.122	-.51850	.43026	-.27069

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	**49.054**	**2.3826**	**-.02221**	**31.968**	**.28894**	**.66663**	**.41932**	**.71417**
Stddev	31.273	1.5592	.24610	4.326	1.8070	1.3491	.39249	.20638
%RSD	63.752	65.440	1108.0	13.531	625.38	202.38	93.601	28.899
#1	82.283	1.9534	.05675	27.772	.13791	.77886	-.03388	.47743
#2	44.680	1.0830	.17472	36.413	-1.4378	-.73510	.64382	.80884
#3	20.198	4.1114	-.29809	31.719	2.1667	1.9561	.64803	.85623

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	**3774.9**	**34894.**	**499830.**	**4801.3**	**15339.**	**232610.**
Stddev	11.0	78.	4251.	3.2	67.	1122.
%RSD	.29075	.22455	.85055	.06761	.43962	.48249
#1	3786.3	34873.	502650.	4799.8	15328.	231720.
#2	3764.4	34828.	501900.	4799.2	15278.	233870.
#3	3774.0	34981.	494940.	4805.1	15411.	232240.

Sample Name: LCS1 Acquired: 06/30/2015 13:26:43 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**370.33**	**121.06**	**18.994**	**421.12**	**9.9446**	**10.477**	**10863.**	**22.026**	**100.79**
Stddev	34.33	2.73	2.124	.71	.1842	.054	20.	.371	.23
%RSD	9.2686	2.2560	11.185	.16842	1.8520	.51790	.18467	1.6853	.23061
#1	363.10	124.21	19.853	420.44	10.035	10.532	10884.	21.652	100.71
#2	340.20	119.53	16.574	421.05	10.066	10.424	10860.	22.030	101.05
#3	407.70	119.43	20.554	421.85	9.7328	10.474	10844.	22.395	100.61

Elem	Cu3273	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	**52.542**	**219.33**	**19.683**	**10384.**	**32.098**	**.10278**	**80.142**	**10108.**	**70.935**
Stddev	.557	2.55	.733	65.	.287	.11251	.338	48.	1.575
%RSD	1.0608	1.1613	3.7255	.63007	.89296	109.48	.42231	.47163	2.2203
#1	51.957	217.28	19.647	10458.	32.422	.23180	79.829	10088.	69.183
#2	53.067	222.19	20.434	10362.	31.994	.02509	80.501	10074.	71.392
#3	52.602	218.53	18.968	10333.	31.877	.05144	80.096	10162.	72.232

Elem	Ag3280	Na5895	Tl1908	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**20.273**	**10637.**	**56.112**	**.50665**	**102.98**	**127.53**
Stddev	.286	16.	1.112	.50581	.73	.35
%RSD	1.4130	.14964	1.9824	99.835	.70432	.27110
#1	19.985	10654.	57.202	-.03492	103.79	127.34
#2	20.558	10622.	56.154	.58802	102.39	127.31
#3	20.277	10634.	54.979	.96684	102.77	127.93

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	**3532.2**	**34377.**	**488250.**	**4682.3**	**15301.**	**227240.**
Stddev	7.0	190.	2082.	4.4	102.	2080.
%RSD	.19701	.55274	.42639	.09453	.66470	.91533
#1	3538.3	34162.	489450.	4678.5	15184.	228980.
#2	3524.6	34520.	489460.	4681.3	15371.	224940.
#3	3533.7	34449.	485850.	4687.2	15347.	227810.

Sample Name: MF9K02 Acquired: 06/30/2015 13:29:37 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**46143.**	**4.4389**	**41.496**	**681.81**	**3.4743**	**2.5765**	**25261.**	**109.42**
Stddev	61.	2.3058	.522	2.83	.2407	.1155	63.	.67
%RSD	.13320	51.945	1.2573	.41573	6.9274	4.4845	.24775	.60985
#1	46206.	4.2078	41.941	684.03	3.2209	2.5260	25205.	109.04
#2	46083.	6.8515	40.922	682.77	3.6999	2.7087	25250.	110.19
#3	46141.	2.2573	41.627	678.62	3.5020	2.4948	25329.	109.03

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**40.217**	**1264.7**	**98502.**	**543.23**	**8141.5**	**2498.2**	**4.3376**	**65.171**
Stddev	.599	7.2	85.	1.55	37.6	2.5	.6676	.759
%RSD	1.4903	.56805	.08620	.28542	.46157	.09837	15.390	1.1641
#1	40.738	1260.7	98408.	541.82	8118.2	2497.0	5.0228	64.956
#2	40.351	1260.5	98573.	542.99	8121.5	2496.5	4.3009	66.014
#3	39.562	1273.0	98525.	544.89	8184.9	2501.0	3.6891	64.543

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	**10638.**	**-3.1643**	**-.96974**	**297.27**	**-3.9513**	**550.33**	**133.60**	**1136.0**
Stddev	3.	1.9349	.36688	1.53	.9336	2.27	1.61	7.7
%RSD	.03225	61.147	37.833	.51322	23.627	.41288	1.2061	.67692
#1	10634.	-4.3827	-.62475	297.99	-4.1126	550.98	132.38	1132.8
#2	10640.	-4.1771	-1.3552	295.52	-4.7937	552.21	135.43	1144.8
#3	10639.	-.93325	-.92931	298.31	-2.9476	547.81	133.00	1130.5

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	**3415.4**	**35526.**	**495210.**	**4760.8**	**15760.**	**228010.**
Stddev	12.2	411.	3955.	21.2	196.	1360.
%RSD	.35817	1.1557	.79870	.44525	1.2466	.59662
#1	3407.9	35672.	497350.	4749.1	15846.	226730.
#2	3408.9	35844.	490650.	4748.1	15898.	229440.
#3	3429.6	35063.	497640.	4785.3	15535.	227850.

Sample Name: MF9K03 Acquired: 06/30/2015 13:32:26 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**38555.**	**3.3768**	**34.648**	**449.53**	**2.5154**	**2.5079**	**13917.**	**79.734**
Stddev	116.	2.1379	3.001	1.89	.0735	.1227	41.	.613
%RSD	.30085	63.312	8.6605	.41950	2.9200	4.8937	.29469	.76896
#1	38631.	5.7938	34.678	451.09	2.5940	2.6470	13902.	80.373
#2	38613.	2.6035	31.632	450.08	2.4485	2.4149	13963.	79.678
#3	38422.	1.7331	37.633	447.43	2.5037	2.4617	13885.	79.151

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**24.452**	**1308.5**	**82835.**	**256.18**	**5350.3**	**1527.0**	**2.4508**	**43.148**
Stddev	.779	10.3	371.	1.13	24.8	3.8	.1921	.372
%RSD	3.1859	.78340	.44764	.44041	.46294	.24869	7.8381	.86302
#1	24.983	1314.9	82997.	255.24	5375.0	1529.6	2.5965	43.381
#2	24.817	1296.7	83097.	255.86	5325.5	1528.8	2.2331	43.343
#3	23.558	1313.9	82410.	257.43	5350.3	1522.7	2.5229	42.718

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	**7034.5**	**4.5472**	**-.89790**	**193.93**	**-3.1223**	**533.23**	**115.90**	**979.23**
Stddev	31.0	1.7538	.45304	14.96	.8136	3.22	.77	5.48
%RSD	.44089	38.570	50.455	7.7155	26.059	.60471	.66730	.55932
#1	7039.0	4.3172	-.93528	210.97	-3.9301	534.59	116.15	985.38
#2	7063.0	2.9197	-.42733	187.88	-3.1338	535.55	115.03	977.41
#3	7001.5	6.4047	-1.3311	182.94	-2.3029	529.55	116.52	974.89

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	**3513.9**	**35832.**	**496700.**	**4790.8**	**15686.**	**228620.**
Stddev	9.6	145.	1303.	13.9	62.	653.
%RSD	.27435	.40586	.26237	.29108	.39763	.28559
#1	3505.8	35921.	496580.	4775.5	15737.	228100.
#2	3511.3	35664.	495460.	4794.3	15617.	229350.
#3	3524.6	35911.	498060.	4802.7	15705.	228410.

Sample Name: MF9K04 Acquired: 06/30/2015 13:35:16 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**31337.**	**.85584**	**27.290**	**396.55**	**1.5640**	**1.5485**	**7405.3**	**62.591**
Stddev	122.	4.4612	4.032	1.37	.3226	.0436	15.7	.138
%RSD	.38861	521.26	14.774	.34539	20.626	2.8138	.21223	.22070
#1	31239.	3.2487	31.384	395.81	1.5817	1.5948	7423.5	62.433
#2	31298.	3.6100	23.324	395.72	1.8773	1.5425	7396.9	62.692
#3	31473.	-4.2913	27.161	398.13	1.2329	1.5083	7395.7	62.647

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**36.032**	**299.43**	**96728.**	**164.03**	**3489.2**	**2805.6**	**2.7809**	**27.317**
Stddev	.367	2.90	189.	2.82	42.0	10.7	.2653	.483
%RSD	1.0181	.96893	.19559	1.7210	1.2038	.38131	9.5398	1.7679
#1	36.446	298.26	96790.	164.26	3528.8	2793.5	2.5131	27.666
#2	35.906	302.73	96515.	166.73	3493.7	2809.6	3.0437	27.520
#3	35.745	297.30	96878.	161.10	3445.2	2813.7	2.7858	26.766

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	**6356.4**	**-1.4515**	**-.60380**	**124.30**	**-3.5614**	**567.56**	**91.651**	**728.27**
Stddev	15.1	2.8594	.38169	9.22	1.7419	1.96	.595	1.67
%RSD	.23680	196.99	63.214	7.4200	48.910	.34498	.64942	.22905
#1	6372.7	-1.2746	-.78021	124.13	-1.6870	566.40	92.109	729.46
#2	6353.7	-4.3953	-.86537	133.60	-3.8668	566.46	90.978	728.98
#3	6342.9	1.3152	-.16582	115.16	-5.1305	569.82	91.865	726.36

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	**3534.8**	**35574.**	**492180.**	**4763.1**	**15559.**	**229170.**
Stddev	4.7	227.	3723.	5.2	36.	899.
%RSD	.13420	.63880	.75652	.10975	.22920	.39238
#1	3533.8	35822.	493980.	4761.7	15593.	228910.
#2	3540.0	35522.	494660.	4758.7	15563.	228430.
#3	3530.6	35377.	487900.	4768.9	15522.	230170.

Sample Name: MF9K05 Acquired: 06/30/2015 13:38:06 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**27712.**	**-.05532**	**28.805**	**382.39**	**1.4939**	**1.7807**	**7232.4**	**61.882**
Stddev	21.	.98465	5.342	.49	.2862	.0393	28.3	.116
%RSD	.07743	1779.9	18.547	.12839	19.157	2.2077	.39098	.18752
#1	27707.	-.79306	34.473	381.90	1.6577	1.7410	7263.5	61.950
#2	27735.	1.0628	28.078	382.88	1.6605	1.8196	7225.2	61.948
#3	27693.	-.43568	23.863	382.37	1.1634	1.7816	7208.3	61.748

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**35.159**	**596.24**	**70544.**	**153.77**	**3256.6**	**2740.9**	**2.3433**	**24.725**
Stddev	.296	3.08	179.	2.07	27.9	7.2	.1716	.101
%RSD	.84069	.51733	.25426	1.3457	.85703	.26429	7.3231	.40926
#1	34.825	598.10	70726.	154.18	3281.0	2745.4	2.4400	24.767
#2	35.265	597.95	70538.	151.53	3262.5	2744.8	2.4447	24.610
#3	35.388	592.68	70368.	155.60	3226.2	2732.6	2.1451	24.799

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	**5935.3**	**-.81502**	**-.73797**	**110.13**	**-1.6356**	**530.00**	**78.633**	**813.14**
Stddev	16.4	2.2519	.34716	7.68	1.2241	2.26	.670	1.85
%RSD	.27575	276.30	47.042	6.9749	74.843	.42558	.85248	.22761
#1	5919.7	-3.0191	-.71448	108.05	-2.0739	531.35	77.859	815.27
#2	5952.4	-.90775	-.40315	103.70	-2.5802	531.25	79.040	812.09
#3	5933.8	1.4818	-1.0963	118.64	-.25264	527.40	78.999	812.05

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	**3588.3**	**35317.**	**495570.**	**4787.4**	**15536.**	**230830.**
Stddev	6.2	143.	3332.	11.6	71.	960.
%RSD	.17163	.40571	.67244	.24155	.45682	.41573
#1	3585.2	35229.	499380.	4774.4	15469.	230150.
#2	3584.3	35482.	493200.	4791.0	15610.	230420.
#3	3595.4	35239.	494140.	4796.7	15529.	231930.

Sample Name: MF9K06 Acquired: 06/30/2015 13:40:56 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**20452.**	**1.3035**	**19.698**	**353.15**	**1.3020**	**4.4136**	**35654.**	**43.021**
Stddev	37.	3.4568	1.955	.53	.0631	.0046	77.	.297
%RSD	.17850	265.19	9.9225	.14900	4.8443	.10372	.21673	.69018
#1	20492.	4.8398	21.594	353.38	1.2693	4.4117	35740.	43.360
#2	20442.	1.1387	17.690	353.52	1.3748	4.4189	35629.	42.898
#3	20422.	-2.0679	19.810	352.55	1.2621	4.4104	35591.	42.805

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**13.461**	**91.059**	**39467.**	**344.31**	**16024.**	**2062.4**	**1.3265**	**21.101**
Stddev	.452	1.268	78.	1.44	44.	4.2	.3473	.170
%RSD	3.3543	1.3926	.19724	.41952	.27196	.20216	26.185	.80768
#1	13.900	91.282	39557.	345.73	16063.	2066.9	1.7051	20.912
#2	13.484	89.695	39425.	342.84	15977.	2058.7	1.2519	21.150
#3	12.998	92.202	39419.	344.34	16031.	2061.6	1.0225	21.242

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	**4440.7**	**.26772**	**-.40717**	**132.93**	**-2.8873**	**400.02**	**52.107**	**658.00**
Stddev	24.7	1.3706	.31901	11.83	1.0953	1.86	.931	1.89
%RSD	.55653	511.94	78.347	8.9010	37.937	.46536	1.7874	.28756
#1	4440.3	-.44704	-.68360	125.33	-4.1475	402.17	52.856	659.23
#2	4416.2	1.8479	-.05811	146.56	-2.3499	398.87	51.064	658.95
#3	4465.6	-.59773	-.47982	126.90	-2.1644	399.02	52.400	655.82

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	**3520.0**	**35308.**	**489340.**	**4738.0**	**15515.**	**226210.**
Stddev	5.2	265.	1705.	6.8	107.	1545.
%RSD	.14707	.75031	.34835	.14304	.69185	.68303
#1	3525.8	35232.	489720.	4741.4	15487.	225970.
#2	3516.0	35602.	487470.	4730.2	15633.	227850.
#3	3518.1	35088.	490820.	4742.4	15424.	224790.

Sample Name: MF9K07 Acquired: 06/30/2015 13:43:45 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**26778.**	**.03760**	**25.149**	**452.03**	**1.5025**	**3.8987**	**51267.**	**53.890**
Stddev	66.	1.4537	1.846	2.20	.2220	.0748	104.	.113
%RSD	.24828	3866.4	7.3413	.48604	14.775	1.9186	.20276	.20916
#1	26809.	.07217	25.166	452.56	1.6511	3.8713	51211.	53.760
#2	26824.	1.4737	26.986	453.91	1.6091	3.8414	51387.	53.947
#3	26702.	-1.4331	23.294	449.62	1.2473	3.9833	51203.	53.962

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**17.392**	**115.23**	**50832.**	**406.89**	**23941.**	**2529.8**	**2.0370**	**33.540**
Stddev	.823	1.83	146.	3.80	114.	8.9	.2825	.324
%RSD	4.7317	1.5919	.28744	.93489	.47420	.35090	13.869	.96522
#1	18.331	114.45	50756.	411.03	23911.	2533.2	2.3620	33.437
#2	16.797	117.33	51001.	403.56	24067.	2536.4	1.8989	33.903
#3	17.048	113.92	50741.	406.07	23846.	2519.7	1.8502	33.280

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	**5253.7**	**1.8655**	**-.16320**	**174.19**	**-1.5693**	**469.13**	**64.565**	**902.44**
Stddev	28.7	6.2979	.44877	5.71	1.9082	4.36	.433	.89
%RSD	.54687	337.59	274.98	3.2809	121.60	.92846	.66989	.09807
#1	5223.7	-5.2487	-.13704	168.81	-.13765	470.55	64.091	901.51
#2	5256.6	4.1173	.27191	173.57	-.83457	472.60	64.938	903.27
#3	5280.9	6.7281	-.62448	180.19	-3.7356	464.24	64.666	902.55

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	**3402.0**	**35069.**	**492080.**	**4687.0**	**15317.**	**222300.**
Stddev	13.8	249.	1875.	12.2	111.	3170.
%RSD	.40593	.70890	.38095	.25991	.72446	1.4262
#1	3387.3	35307.	492500.	4673.1	15436.	223350.
#2	3414.7	34811.	490030.	4695.5	15217.	218740.
#3	3404.2	35090.	493710.	4692.5	15299.	224810.

Sample Name: MF9K07S Acquired: 06/30/2015 13:46:33 Type: RQC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Mn only

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**34427.**	F **93.854**	**102.30**	**4483.2**	**103.78**	**105.00**	**50732.**
Stddev	170.	.774	2.23	6.2	.02	.32	107.
%RSD	.49255	.82489	2.1752	.13748	.01563	.30504	.21063
#1	34448.	93.903	101.06	4479.8	103.77	105.37	50835.
#2	34585.	94.603	104.87	4490.4	103.80	104.82	50741.
#3	34248.	93.057	100.97	4479.6	103.78	104.81	50621.
Check ?	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value		200.00					
Range		-25.000%					
	None		77.152	4031.2	102.28	101.10	None
Recovery		93.816	96.440%	100.78%	102.28%	101.10%	
% Recovery		46.908%					

Elem	Cr2055	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**463.94**	**1015.4**	**616.99**	**53131.**	**451.53**	**23871.**	**3561.9**
Stddev	2.34	4.3	4.54	115.	4.37	129.	11.6
%RSD	.50445	.41949	.73528	.21660	.96680	.54157	.32543
#1	466.63	1020.3	612.53	53184.	456.19	24020.	3568.7
#2	462.75	1013.3	621.60	53210.	447.54	23803.	3568.6
#3	462.43	1012.5	616.84	52999.	450.88	23790.	3548.6
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass
Value							
Range							
	410.05	997.96	501.76	None	44.650	None	1032.2
Recovery	102.51%	99.796%	100.35%		111.62%		103.22%
% Recovery							

Sample Name: MF9K07S Acquired: 06/30/2015 13:46:33 Type: RQC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Mn only

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	**1.6821**	**1029.9**	**5659.2**	**91.252**	**96.623**	**185.84**	**104.38**
Stddev	.2398	4.6	51.8	3.279	.955	6.33	1.72
%RSD	14.259	.45068	.91503	3.5931	.98793	3.4042	1.6446
#1	1.9365	1035.3	5610.6	88.719	96.173	185.83	102.40
#2	1.6496	1027.5	5713.6	94.955	97.719	179.52	105.51
#3	1.4601	1027.0	5653.3	90.082	95.976	192.17	105.22
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass
Value Range	None	996.39	None	89.387	96.786	None	105.95
Recovery % Recovery		99.639%		89.387%	96.786%		105.95%

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**511.78**	**1053.5**	**1870.9**
Stddev	2.28	8.8	5.8
%RSD	.44569	.83435	.30937
#1	509.85	1062.1	1876.8
#2	514.30	1053.9	1870.6
#3	511.19	1044.5	1865.2
Check ?	None	Chk Pass	Chk Pass
Value Range	None	988.91	968.45
Recovery % Recovery		98.891%	96.845%

Sample Name: MF9K07S Acquired: 06/30/2015 13:46:33 Type: RQC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Mn only

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	**3377.7**	**34763.**	**479770.**	**4681.6**	**15431.**	**224900.**
Stddev	12.3	144.	3032.	11.2	53.	1643.
%RSD	.36279	.41315	.63196	.23957	.34188	.73038
#1	3365.0	34604.	476630.	4673.4	15382.	226780.
#2	3378.7	34884.	480010.	4677.1	15487.	223700.
#3	3389.4	34801.	482680.	4694.4	15425.	224240.

Sample Name: MF9K07D Acquired: 06/30/2015 13:49:13 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**26872.**	**3.8176**	**25.540**	**445.48**	**1.6113**	**3.8864**	**52992.**	**53.190**
Stddev	250.	2.4793	1.568	3.65	.2079	.0250	21.	.132
%RSD	.93035	64.944	6.1382	.81947	12.904	.64205	.03885	.24746
#1	27094.	1.0430	27.199	449.02	1.7174	3.9040	52968.	53.323
#2	26921.	5.8159	24.084	445.70	1.3717	3.8974	53002.	53.187
#3	26601.	4.5940	25.337	441.73	1.7447	3.8578	53004.	53.060

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**17.600**	**114.98**	**51151.**	**418.38**	**24656.**	**2626.9**	**2.0925**	**29.273**
Stddev	.483	.72	95.	2.68	153.	13.9	.2393	.421
%RSD	2.7418	.62898	.18539	.64139	.61896	.52775	11.435	1.4374
#1	17.715	115.81	51205.	420.22	24804.	2641.9	1.9891	29.475
#2	17.070	114.71	51206.	419.61	24499.	2624.2	2.3661	29.554
#3	18.014	114.44	51041.	415.30	24666.	2614.5	1.9224	28.789

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	**5258.0**	**-.32729**	**-.18593**	**183.51**	**-1.2930**	**503.93**	**66.577**	**849.24**
Stddev	24.0	3.6132	.32324	1.25	.9147	4.83	.809	4.92
%RSD	.45707	1104.0	173.85	.68273	70.742	.95797	1.2153	.57937
#1	5285.6	-3.2571	-.47378	184.96	-1.7843	507.87	65.750	854.91
#2	5241.6	3.7101	-.24778	182.86	-1.8570	505.38	67.366	846.76
#3	5246.8	-1.4348	.16377	182.72	-.23763	498.54	66.616	846.06

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	**3428.4**	**34723.**	**485050.**	**4697.2**	**15398.**	**225560.**
Stddev	11.2	104.	2738.	17.0	46.	495.
%RSD	.32659	.29895	.56444	.36108	.30021	.21963
#1	3427.1	34625.	487960.	4680.4	15428.	225610.
#2	3417.9	34832.	484670.	4696.7	15420.	226030.
#3	3440.2	34712.	482530.	4714.3	15345.	225040.

Sample Name: MF9K07L Acquired: 06/30/2015 13:52:02 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**5418.9**	**1.6241**	**5.9110**	**92.757**	**.10224**	**.66255**	**10503.**	**10.897**
Stddev	25.9	2.7122	3.5074	.235	.18950	.06396	37.	.339
%RSD	.47819	167.00	59.337	.25317	185.35	9.6539	.34868	3.1135
#1	5399.5	-.52552	9.8833	92.846	-.10634	.70817	10532.	11.176
#2	5448.4	4.6713	3.2412	92.934	.26380	.58944	10515.	10.994
#3	5408.9	.72643	4.6085	92.490	.14926	.69004	10462.	10.519

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**3.4489**	**23.206**	**10406.**	**79.593**	**4907.6**	**520.16**	**.34608**	**5.9261**
Stddev	.4298	.488	42.	.953	62.7	1.90	.10585	.3090
%RSD	12.463	2.1023	.39916	1.1970	1.2769	.36507	30.586	5.2149
#1	3.8934	23.768	10399.	79.813	4899.4	520.63	.23822	5.9399
#2	3.4180	22.954	10451.	80.416	4973.9	521.78	.44981	6.2281
#3	3.0354	22.895	10369.	78.549	4849.4	518.07	.35022	5.6104

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	**1031.0**	**-1.6639**	**.14607**	**38.214**	**-.63257**	**95.219**	**13.092**	**182.33**
Stddev	17.6	4.6673	.29916	7.901	.74361	1.693	.804	1.30
%RSD	1.7043	280.50	204.80	20.677	117.55	1.7775	6.1408	.71129
#1	1011.7	-3.7152	-.07535	47.106	.12630	95.037	12.318	183.02
#2	1035.3	-4.9544	.02716	31.996	-.66408	96.996	13.036	183.14
#3	1046.1	3.6777	.48640	35.540	-1.3599	93.626	13.923	180.84

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	**3653.4**	**34853.**	**497550.**	**4769.6**	**15269.**	**229680.**
Stddev	15.5	316.	3712.	14.2	131.	1490.
%RSD	.42304	.90781	.74604	.29802	.85493	.64881
#1	3635.6	34768.	501050.	4754.3	15236.	230140.
#2	3661.5	34587.	493660.	4772.0	15158.	230880.
#3	3663.2	35203.	497940.	4782.4	15413.	228010.

Sample Name: MF9K08 Acquired: 06/30/2015 13:54:56 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**35775.**	**2.1069**	**27.704**	**718.63**	**2.1002**	**6.5460**	**24222.**	**75.514**
Stddev	140.	1.2285	.618	2.86	.2307	.1573	22.	.676
%RSD	.39227	58.307	2.2290	.39823	10.983	2.4025	.09108	.89495
#1	35805.	2.4606	27.307	719.51	2.3313	6.4526	24245.	76.008
#2	35898.	3.1197	28.416	720.95	1.8699	6.7276	24219.	75.790
#3	35622.	.74040	27.390	715.43	2.0993	6.4579	24201.	74.744

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**25.706**	**1434.2**	**65203.**	**616.91**	**7330.9**	**2146.9**	**2.9813**	**48.972**
Stddev	.389	8.6	139.	5.31	15.2	3.3	.1638	.621
%RSD	1.5151	.60203	.21293	.86081	.20695	.15266	5.4957	1.2682
#1	25.778	1435.9	65258.	622.64	7319.3	2147.3	2.9544	49.683
#2	26.055	1441.9	65305.	615.93	7325.3	2150.0	2.8326	48.535
#3	25.286	1424.9	65045.	612.15	7348.1	2143.5	3.1569	48.698

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	**6752.9**	**-.31791**	**-.15989**	**194.11**	**-1.9966**	**562.41**	**94.644**	**2113.7**
Stddev	31.4	2.8767	.72603	2.66	1.5125	1.58	1.090	8.5
%RSD	.46551	904.89	454.07	1.3700	75.754	.28035	1.1520	.40401
#1	6754.3	1.4685	-.45313	191.68	-1.4379	564.19	93.546	2117.9
#2	6783.6	1.2142	.66689	196.95	-3.7089	561.21	94.659	2119.2
#3	6720.8	-3.6364	-.69344	193.68	-.84289	561.83	95.726	2103.8

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	**3507.5**	**35465.**	**489140.**	**4755.5**	**15679.**	**227050.**
Stddev	12.0	21.	2484.	16.0	27.	1247.
%RSD	.34259	.05826	.50778	.33601	.17092	.54934
#1	3501.0	35474.	491100.	4747.3	15681.	228090.
#2	3500.2	35480.	489970.	4745.4	15705.	225670.
#3	3521.4	35441.	486340.	4774.0	15651.	227400.

Sample Name: MF9K09 Acquired: 06/30/2015 13:57:45 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**41225.**	**1.4941**	**35.290**	**585.11**	**2.8529**	**2.8976**	**15390.**	**89.402**
Stddev	133.	2.3611	2.696	1.22	.1141	.1106	70.	.211
%RSD	.32251	158.03	7.6402	.20769	4.0005	3.8183	.45604	.23624
#1	41244.	3.5949	37.334	585.76	2.7216	2.9641	15372.	89.394
#2	41347.	-1.0613	32.234	585.87	2.9286	2.7699	15467.	89.618
#3	41083.	1.9488	36.302	583.71	2.9083	2.9589	15331.	89.195

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**40.679**	**346.37**	**88292.**	**454.59**	**6256.5**	**2691.5**	**2.8421**	**52.042**
Stddev	.554	2.68	407.	.84	31.7	12.0	.5180	.985
%RSD	1.3626	.77236	.46061	.18428	.50621	.44503	18.227	1.8934
#1	40.572	348.33	88426.	455.44	6247.3	2701.5	3.2896	53.173
#2	41.280	347.47	88615.	454.56	6230.5	2694.8	2.2746	51.372
#3	40.187	343.32	87835.	453.77	6291.8	2678.2	2.9619	51.580

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	**8231.2**	**2.2522**	**-.57414**	**252.58**	**-2.1213**	**529.26**	**119.70**	**862.30**
Stddev	68.4	5.2705	.14962	10.94	1.5894	3.23	.70	4.80
%RSD	.83046	234.02	26.060	4.3304	74.925	.61104	.58598	.55698
#1	8207.9	7.6403	-.74006	242.79	-3.5993	531.02	118.98	866.74
#2	8308.2	-2.8922	-.53286	250.56	-2.3247	531.23	120.38	862.94
#3	8177.5	2.0085	-.44949	264.39	-.44003	525.53	119.74	857.20

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	**3472.5**	**35339.**	**491680.**	**4769.3**	**15668.**	**228350.**
Stddev	5.9	173.	2407.	12.6	73.	1086.
%RSD	.16969	.49043	.48960	.26400	.46506	.47542
#1	3467.5	35461.	494360.	4759.0	15730.	227760.
#2	3471.1	35141.	489690.	4765.6	15588.	227680.
#3	3479.0	35416.	490990.	4783.4	15687.	229600.

Sample Name: MF9K10 Acquired: 06/30/2015 14:00:34 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**40440.**	**4.2369**	**36.622**	**560.10**	**2.8228**	**2.9983**	**14994.**	**92.202**
Stddev	337.	.6102	3.677	2.29	.1874	.0754	76.	.375
%RSD	.83221	14.402	10.040	.40956	6.6373	2.5155	.50923	.40672
#1	40568.	4.4161	33.101	562.08	3.0234	2.9164	15070.	91.839
#2	40695.	3.5572	40.437	560.63	2.6524	3.0649	14997.	92.588
#3	40059.	4.7375	36.329	557.58	2.7925	3.0138	14917.	92.178

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**41.238**	**1315.2**	**85821.**	**411.53**	**5985.9**	**2874.7**	**3.4061**	**49.778**
Stddev	.213	7.6	527.	1.64	27.0	13.7	.2858	.241
%RSD	.51675	.57705	.61395	.39733	.45029	.47780	8.3904	.48406
#1	41.481	1311.0	86368.	410.27	6009.2	2889.3	3.7329	50.018
#2	41.081	1324.0	85776.	410.94	5992.2	2872.8	3.2026	49.536
#3	41.154	1310.6	85317.	413.38	5956.4	2862.0	3.2830	49.782

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	**7949.9**	**-.32158**	**-.84255**	**248.60**	**-4.3456**	**536.66**	**116.17**	**1119.2**
Stddev	16.4	1.7488	.00773	3.28	.4824	2.04	1.60	4.0
%RSD	.20628	543.81	.91768	1.3175	11.101	.38052	1.3781	.35756
#1	7957.0	-2.1552	-.83789	246.03	-4.1734	538.68	114.53	1122.2
#2	7961.5	1.3278	-.85148	247.49	-4.8905	534.59	117.73	1114.6
#3	7931.1	-.13729	-.83829	252.29	-3.9730	536.71	116.26	1120.7

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	**3456.6**	**35385.**	**494900.**	**4752.2**	**15551.**	**227960.**
Stddev	12.9	275.	4001.	14.8	107.	892.
%RSD	.37265	.77783	.80841	.31169	.68534	.39145
#1	3442.0	35074.	497580.	4735.3	15432.	227370.
#2	3461.5	35485.	490300.	4758.4	15585.	227520.
#3	3466.3	35596.	496830.	4762.9	15637.	228980.

Sample Name: MF9K11 Acquired: 06/30/2015 14:03:24 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**40721.**	**1.5943**	**34.889**	**484.35**	**2.6998**	**2.6606**	**19370.**	**88.658**
Stddev	184.	1.0219	2.142	.94	.3228	.0545	24.	.189
%RSD	.45150	64.096	6.1398	.19482	11.956	2.0498	.12258	.21286
#1	40514.	1.2945	33.079	483.77	2.5302	2.6208	19362.	88.840
#2	40787.	2.7325	34.335	483.85	3.0720	2.6382	19397.	88.671
#3	40864.	.75582	37.254	485.44	2.4972	2.7228	19352.	88.463

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**28.661**	**248.40**	**91427.**	**273.82**	**7110.3**	**1609.0**	**2.6818**	**57.676**
Stddev	.228	1.67	110.	3.53	71.0	2.0	.3508	.407
%RSD	.79711	.67308	.12054	1.2875	.99817	.12137	13.079	.70540
#1	28.453	250.09	91373.	277.87	7058.4	1606.9	2.2891	58.087
#2	28.623	246.74	91554.	271.45	7191.2	1610.7	2.7926	57.273
#3	28.906	248.37	91355.	272.14	7081.3	1609.5	2.9638	57.669

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	**9114.2**	**2.5179**	**-1.0047**	**211.75**	**-3.6115**	**597.33**	**120.22**	**805.48**
Stddev	46.9	4.2520	.1664	3.18	.3469	1.78	.84	2.50
%RSD	.51461	168.87	16.563	1.4996	9.6059	.29827	.69548	.31046
#1	9154.3	4.1298	-.93963	208.58	-3.9918	595.69	120.79	808.15
#2	9062.6	-2.3044	-.88073	211.75	-3.3124	597.07	119.26	803.20
#3	9125.6	5.7283	-1.1939	214.93	-3.5303	599.23	120.61	805.07

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	**3479.0**	**35042.**	**487180.**	**4778.9**	**15642.**	**228160.**
Stddev	14.0	218.	1632.	17.3	80.	723.
%RSD	.40359	.62186	.33490	.36200	.51063	.31708
#1	3463.7	35277.	487100.	4758.9	15720.	228080.
#2	3481.9	34847.	488850.	4789.2	15560.	228920.
#3	3491.3	35001.	485590.	4788.6	15646.	227480.

Sample Name: MF9K12 Acquired: 06/30/2015 14:06:13 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**37286.**	**.86787**	**28.007**	**663.06**	**2.4218**	**4.3640**	**25585.**	**70.964**
Stddev	162.	.54927	1.115	1.13	.1360	.2006	84.	.266
%RSD	.43352	63.289	3.9795	.16978	5.6140	4.5965	.32816	.37478
#1	37438.	.36449	28.918	664.20	2.4878	4.2620	25668.	71.261
#2	37304.	1.4537	26.764	663.03	2.2655	4.5951	25585.	70.883
#3	37116.	.78541	28.338	661.95	2.5123	4.2349	25500.	70.747

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**39.890**	**888.67**	**77882.**	**438.40**	**6906.3**	**3011.8**	**2.5890**	**44.621**
Stddev	.288	7.32	191.	1.75	73.5	7.3	.3755	.342
%RSD	.72236	.82404	.24485	.39964	1.0642	.24167	14.502	.76609
#1	40.072	884.16	78035.	439.04	6987.5	3019.4	2.2009	44.275
#2	39.557	897.11	77941.	439.75	6887.0	3011.2	2.9504	44.632
#3	40.040	884.72	77668.	436.42	6844.4	3004.8	2.6155	44.958

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	**8240.8**	**-.90236**	**-.26876**	**299.46**	**-2.8684**	**526.41**	**103.59**	**1536.0**
Stddev	25.5	1.4953	.30564	3.16	.1582	.74	1.20	8.6
%RSD	.30989	165.71	113.72	1.0559	5.5138	.14150	1.1628	.56237
#1	8221.6	-1.0575	-.00392	300.19	-2.9437	526.02	103.80	1543.8
#2	8269.8	-2.3141	-.19917	302.19	-2.6866	527.27	102.29	1537.3
#3	8231.0	.66448	-.60320	295.99	-2.9748	525.94	104.67	1526.7

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	**3485.8**	**35161.**	**487940.**	**4758.3**	**15657.**	**228470.**
Stddev	16.3	114.	1915.	19.7	47.	2095.
%RSD	.46747	.32521	.39248	.41307	.30088	.91700
#1	3469.5	35276.	488720.	4741.9	15672.	230030.
#2	3485.7	35047.	489340.	4752.8	15604.	226090.
#3	3502.1	35159.	485750.	4780.1	15694.	229290.

Sample Name: MF9K13 Acquired: 06/30/2015 14:09:02 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**41271.**	**2.8237**	**26.972**	**415.02**	**2.0808**	**2.8431**	**11180.**	**77.465**
Stddev	186.	3.2380	1.202	1.39	.1685	.1091	25.	.416
%RSD	.45137	114.67	4.4584	.33461	8.0983	3.8385	.22200	.53710
#1	41373.	2.9802	27.382	415.60	1.9464	2.9165	11179.	77.914
#2	41384.	-.48980	27.916	416.03	2.0261	2.7177	11206.	77.389
#3	41056.	5.9806	25.618	413.44	2.2698	2.8951	11156.	77.092

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**29.594**	**442.63**	**65186.**	**286.80**	**5557.3**	**2197.8**	**2.2782**	**41.275**
Stddev	.527	1.69	78.	4.42	32.0	1.7	.1480	.071
%RSD	1.7796	.38196	.11912	1.5399	.57520	.07595	6.4947	.17309
#1	29.872	440.95	65152.	290.08	5564.1	2198.2	2.3966	41.243
#2	29.924	442.61	65275.	288.54	5522.5	2199.2	2.1123	41.357
#3	28.987	444.33	65132.	281.78	5585.4	2196.0	2.3257	41.226

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	**5867.7**	**.12143**	**-.71181**	**176.35**	**-2.0040**	**610.42**	**102.16**	**770.99**
Stddev	17.3	3.4939	.24404	2.78	.0830	3.48	1.00	1.64
%RSD	.29484	2877.4	34.284	1.5790	4.1442	.56976	.97661	.21259
#1	5886.4	3.0406	-.83579	175.26	-1.9083	614.13	101.42	769.11
#2	5852.4	-3.7498	-.43067	179.51	-2.0470	609.91	103.29	771.74
#3	5864.2	1.0735	-.86898	174.27	-2.0567	607.23	101.76	772.12

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	**3488.0**	**35144.**	**496560.**	**4759.6**	**15529.**	**226210.**
Stddev	13.3	140.	2678.	13.6	32.	218.
%RSD	.38253	.39721	.53934	.28603	.20831	.09635
#1	3477.4	34984.	498990.	4743.9	15507.	226300.
#2	3483.6	35242.	493690.	4767.9	15566.	225960.
#3	3502.9	35205.	497000.	4766.9	15514.	226370.

Sample Name: MF9K14 Acquired: 06/30/2015 14:11:51 Type: Unk
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep: 3050B
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**46300.**	**4.3974**	**57.833**	**535.66**	**2.2041**	**3.6962**	**88446.**	**80.044**
Stddev	335.	.7834	3.445	1.81	.2221	.1183	280.	.453
%RSD	.72410	17.814	5.9564	.33721	10.077	3.1998	.31610	.56654
#1	46579.	3.5186	57.733	537.54	2.4577	3.6757	88646.	80.452
#2	46393.	5.0226	61.327	535.52	2.1107	3.5895	88566.	79.556
#3	45929.	4.6508	54.439	533.94	2.0440	3.8234	88127.	80.124

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**40.947**	**344.50**	**97769.**	**371.76**	**43549.**	**4125.3**	**3.0548**	**51.935**
Stddev	.508	6.61	308.	1.98	300.	9.3	.2586	.699
%RSD	1.2404	1.9194	.31480	.53166	.68958	.22458	8.4661	1.3466
#1	41.246	352.11	98057.	372.12	43760.	4130.0	3.3516	52.467
#2	41.235	341.21	97806.	369.63	43683.	4131.2	2.8780	52.195
#3	40.361	340.19	97445.	373.54	43205.	4114.6	2.9347	51.143

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	**7645.8**	**1.0338**	**-.22016**	**264.17**	**-5.8552**	**601.24**	**122.30**	**936.77**
Stddev	21.7	1.6291	.10063	9.64	3.3108	1.24	.73	2.52
%RSD	.28392	157.59	45.708	3.6490	56.545	.20651	.59801	.26873
#1	7668.2	1.7538	-.12452	275.25	-8.9720	601.84	122.31	938.41
#2	7644.5	2.1788	-.32513	257.76	-6.2140	602.07	123.02	933.87
#3	7624.8	-.83132	-.21083	259.48	-2.3796	599.81	121.56	938.02

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	**3257.9**	**34824.**	**472610.**	**4628.9**	**15562.**	**221140.**
Stddev	17.2	326.	3223.	13.5	129.	2911.
%RSD	.52880	.93751	.68189	.29254	.83077	1.3163
#1	3244.0	34864.	473300.	4613.8	15558.	217880.
#2	3277.2	34479.	469100.	4640.0	15434.	223470.
#3	3252.5	35128.	475430.	4632.9	15693.	222080.

Sample Name: CCV2 Acquired: 06/30/2015 14:14:39 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**253810.**	**25614.**	**10500.**	**25277.**	**10136.**	**9965.7**	**256420.**
Stddev	931.	86.	23.	210.	30.	34.6	1405.
%RSD	.36677	.33400	.21755	.83118	.29661	.34684	.54804
#1	254740.	25685.	10525.	25385.	10161.	10006.	257550.
#2	253820.	25639.	10481.	25411.	10144.	9943.6	256860.
#3	252880.	25519.	10493.	25035.	10103.	9948.0	254840.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cr2055	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**25004.**	**26291.**	**25660.**	**257760.**	**25445.**	**253250.**	**24507.**
Stddev	89.	102.	243.	1401.	73.	1113.	70.
%RSD	.35743	.38635	.94661	.54359	.28571	.43936	.28664
#1	25084.	26405.	25915.	258750.	25528.	253930.	24567.
#2	25020.	26259.	25431.	258380.	25416.	253860.	24524.
#3	24907.	26210.	25634.	256150.	25391.	251970.	24429.
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	**9968.3**	**26313.**	**255260.**	**10240.**	**1055.4**	**254680.**	**9731.9**
Stddev	34.6	84.	1433.	43.	11.1	1608.	50.4
%RSD	.34680	.31770	.56134	.42272	1.0518	.63122	.51818
#1	10001.	26406.	256140.	10284.	1067.3	255580.	9789.8
#2	9972.3	26289.	256030.	10240.	1053.8	255640.	9697.4
#3	9931.9	26244.	253610.	10198.	1045.2	252830.	9708.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV2 Acquired: 06/30/2015 14:14:39 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

Elem	Ti3349	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**10002.**	**25238.**	**24845.**
Stddev	34.	127.	100.
%RSD	.33556	.50258	.40137
#1	10036.	25384.	24959.
#2	9999.3	25160.	24798.
#3	9969.4	25170.	24777.
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	**2675.9**	**33126.**	**425300.**	**4076.8**	**14492.**	**194340.**
Stddev	3.4	136.	1414.	1.3	93.	1788.
%RSD	.12859	.41107	.33243	.03076	.64239	.91991
#1	2672.4	32998.	423700.	4075.7	14406.	192610.
#2	2679.3	33112.	425850.	4078.2	14480.	194250.
#3	2676.1	33269.	426370.	4076.7	14591.	196180.

Sample Name: CCB2 Acquired: 06/30/2015 14:17:37 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**-14.478**	**1.3891**	**.30054**	**.68312**	**.25804**	**.14241**	**-7.5865**	**.39663**
Stddev	13.457	2.0596	1.9462	.57442	.19793	.06156	4.4107	.06609
%RSD	92.948	148.27	647.57	84.087	76.704	43.227	58.138	16.663
#1	-7.1622	1.5827	2.0128	1.3420	.47660	.10922	-3.5559	.47272
#2	-30.008	-.76047	-1.8161	.28780	.20661	.21344	-12.298	.35352
#3	-6.2634	3.3451	.70489	.41954	.09090	.10457	-6.9057	.36366
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu3273	Fe2598	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.10190**	**.11707**	**19.889**	**-.68366**	**39.514**	**.64046**	**1.4675**	**-.66059**
Stddev	.34209	.30255	6.452	2.0453	18.730	.41037	.5166	.36669
%RSD	335.72	258.44	32.440	299.16	47.402	64.074	35.201	55.510
#1	.04131	.19482	26.232	.08299	39.305	.23653	2.0243	-.66772
#2	-.20586	.37315	20.102	-3.0015	20.888	.62788	1.3746	-.29038
#3	.47023	-.21677	13.333	.86750	58.347	1.0570	1.0037	-1.0237
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	**-18.552**	**4.8295**	**-.13669**	**12.417**	**1.5149**	**.97956**	**.95033**	**-.41590**
Stddev	28.815	1.9172	.46276	3.976	1.0051	.82008	.33847	.23832
%RSD	155.32	39.698	338.54	32.017	66.348	83.719	35.616	57.303
#1	13.950	7.0430	.31137	7.9327	2.4708	1.8841	1.2560	-.46870
#2	-28.642	3.6890	-.61287	13.807	1.6071	.28456	1.0084	-.62339
#3	-40.965	3.7566	-.10859	15.510	.46689	.77006	.58659	-.15560
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: 06/30/2015 14:17:37 Type: QC
Method: ICP08 ISM01.3 2015(v11) Mode: CONC Corr. Factor: 1.000000
User: Neil.Edwards SDG#: MF9K02 CASE#: 45299 Prep:
Comment: Al,Ca,Fe,Mg,Mn,K,Na

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	**3723.2**	**34357.**	**495890.**	**4748.1**	**15170.**	**232740.**
Stddev	9.1	122.	4170.	17.6	58.	1944.
%RSD	.24338	.35547	.84095	.36966	.38318	.83545
#1	3715.1	34346.	493480.	4747.9	15127.	233050.
#2	3721.7	34484.	500710.	4730.7	15236.	230650.
#3	3733.0	34241.	493490.	4765.8	15148.	234500.

Run MS215065 Summary		9Be	51V	52Cr	59Co	60Ni	63Cu	66Zn	75As	82Se	107Ag	111Cd	121Sb	137Ba	205Tl	208Pb	6Li	45Sc	89Y	103Rh	159Tb	209Bi
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
S0	06/29/2015 14:50:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
S	06/29/2015 14:54:35	1.0021	5.1307	1.8895	0.9468	1.0198	1.9438	2.1066	0.9145	4.9777	1.0043	0.9605	1.9488	9.8274	0.9354	0.9286	102.52%	101.76%	100.53%	101.22%	100.02%	99.94%
S10	06/29/2015 14:58:54	10.259	9.6195	9.6357	9.6539	10.125	9.7797	12.278	9.7025	10.134	9.8468	10.01	9.3892	9.8849	9.4612	9.4774	102.45%	101.51%	100.71%	101.34%	100.09%	100.28%
S50	06/29/2015 15:03:14	50.933	48.118	48.318	48.38	49.839	49.195	50.695	48.621	50.536	49.171	49.305	47.311	49.622	47.341	47.242	102.68%	100.46%	98.67%	99.80%	98.52%	98.83%
S200	06/29/2015 15:07:33	206.73	197.73	197.85	199.57	202	201.6	207.41	195.01	202.1	200.93	200.64	192.59	199.68	195.98	193.44	100.82%	97.68%	96.61%	97.53%	96.42%	97.38%
S500	06/29/2015 15:11:53	508.56	501.77	501.92	498.18	501.32	501.18	512.88	483.77	499.1	499.72	496.98	483.02	491.26	499.46	489.04	98.97%	96.07%	94.62%	96.31%	96.08%	97.56%
S2500	06/29/2015 15:16:14	2528.1	2525.5	2504.9	2523.6	2513.6	2524.7	2585.8	2488.9	0.3649	0.8218	2564.8	2513.2	2534.3	2487.4	2483.6	95.13%	90.44%	88.31%	89.56%	90.69%	91.43%
S5000	06/29/2015 15:20:34	4984.8	4987.2	4997.5	4988.4	4993	4987.5	4955.5	5007.4	0.4578	0.6326	4967.9	4995.4	4983.7	5006.5	5009.6	95.75%	91.28%	86.81%	87.67%	88.49%	87.81%
S50000	06/29/2015 15:24:57	0.8897	0.5137	0.8066	0.9496	1.6295	1.4345	2.635	0.9621	0.0107	0.2945	0.6491	1.6461	0.7145	0.9159	0.8077	90.82%	90.76%	85.13%	83.57%	85.39%	80.84%
S100000	06/29/2015 15:29:25	0.1699	-0.2417	0.1849	0.7068	1.8952	1.2841	1.9448	0.2005	-0.3264	0.2388	0.0789	0.5213	0.1661	0.1489	0.2478	86.65%	90.03%	82.03%	80.10%	80.38%	74.37%
ICV1	06/29/2015 15:33:46	104.39	97.435	95.465	98.524	100.39	101.31	208.58	199.9	205.13	99.572	99.193	188.1	99.502	200.9	195.17	101.04%	98.59%	94.19%	95.72%	92.74%	93.43%
ICB1	06/29/2015 15:38:09	0.0746	0.0027	-0.0347	0.0231	0.1278	0.0769	0.5578	0.0974	0.077	0.1718	0.0151	0.5941	0.0287	0.0758	0.0429	102.40%	99.41%	95.77%	97.61%	94.22%	95.85%
ICSA1	06/29/2015 15:42:30	0.3314	-3.0113	19.057	1.2989	6.3712	7.3846	11.386	0.3114	-0.0978	0.0439	0.2318	1.2824	1.5103	0.0415	4.3975	80.70%	85.97%	81.83%	79.89%	87.14%	80.13%
ICSAB1	06/29/2015 15:46:50	19.297	17.366	38.881	20.585	25.394	25.263	28.122	18.451	17.359	18.752	20.025	19.613	22.658	21.103	25.108	80.07%	86.03%	82.27%	80.13%	88.71%	80.86%
CCV1	06/29/2015 15:51:11	2540.2	2647.8	2538.2	2531.6	2506.1	2409.4	2394.2	2479.6	252.51	258.94	2580.3	2517.1	2640.9	2645.9	2614.7	88.30%	90.92%	85.32%	84.32%	88.15%	83.14%
CCB1	06/29/2015 15:55:31	0.415	0.2897	0.2863	0.3078	0.381	0.5062	0.6368	0.5022	0.1248	0.1044	0.3003	1.0105	0.3181	0.4335	0.3418	98.50%	96.81%	94.49%	96.65%	96.44%	97.64%
PBS1-5x	06/29/2015 15:59:52	0.1094	0.05	0.0007	0.0681	0.1601	0.1453	0.6106	0.109	-0.0439	0.0431	0.0736	0.3346	0.0749	0.0859	0.0821	103.35%	100.49%	97.10%	99.66%	98.53%	99.30%
LCS1-5x	06/29/2015 16:04:13	1.9854	10.194	3.733	1.9116	2.0698	3.9713	4.5665	1.8594	8.81	2.0036	1.8488	3.7788	19.234	1.8924	1.8825	104.27%	101.83%	97.35%	99.51%	98.50%	99.27%
MF9K02-5x	06/29/2015 16:08:34	0.8021	31.722	24.528	7.1913	14.557	209.51	179.81	5.1382	0.3082	0.0958	0.4869	0.2738	133.98	0.1653	94.257	96.32%	100.44%	99.69%	95.69%	95.99%	95.36%
MF9K03-5x	06/29/2015 16:12:54	0.7013	30.652	20.41	5.093	11.952	232.15	170.56	4.4727	0.4628	0.1072	0.4291	0.2137	97.979	0.1607	44.155	96.91%	100.59%	99.58%	96.18%	95.29%	94.87%
MF9K04-5x	06/29/2015 16:17:14	0.4255	19.627	13.854	6.5269	7.2777	55.15	121.23	3.3779	0.4039	0.0571	0.3089	0.1997	80.287	0.1123	29.631	97.56%	100.44%	98.09%	96.61%	95.38%	94.93%
MF9K05-5x	06/29/2015 16:21:35	0.4896	23.212	16.833	8.4842	8.6447	129.22	174.23	4.073	0.2106	0.0728	0.3958	0.1536	96.097	0.1335	35.123	97.53%	100.13%	98.13%	95.90%	95.25%	95.13%
MF9K06-5x	06/29/2015 16:25:55	0.3641	15.134	11.511	3.3009	6.7246	19.905	143.01	3.1646	0.3735	0.1507	0.9124	0.1712	82.355	0.0971	74.284	98.17%	99.46%	96.43%	95.67%	94.74%	94.28%
MF9K07-5X	06/29/2015 16:30:16	0.3918	17.61	13.147	3.7591	8.1592	21.033	155.5	3.5327	0.5024	0.1432	0.7414	0.1661	95.074	0.1076	75.233	99.85%	100.63%	96.89%	95.21%	93.43%	93.26%
MF9K07S-5x	06/29/2015 16:34:35	10.353	118.98	50.608	97.712	103.79	68.973	246.58	10.544	17.341	9.7703	10.117	5.6497	481.26	9.5751	79.607	99.27%	100.09%	95.91%	94.26%	91.38%	91.23%
MF9K07D-5x	06/29/2015 16:38:57	0.4252	18.32	13.652	3.8346	8.4445	21.41	157.6	3.5616	0.4094	0.1403	0.6597	0.19	96.375	0.1164	74.536	100.99%	101.35%	96.00%	94.55%	91.53%	91.16%
MF9K07L-5x	06/29/2015 16:43:16	0.0966	3.5111	2.6484	0.7612	1.7603	4.3726	33.075	0.7814	0.1256	0.0323	0.1554	0.0462	18.688	0.022	14.762	101.73%	100.34%	93.53%	95.72%	91.53%	92.55%
MF9K07A-5x	06/29/2015 16:47:36	10.179	67.088	31.041	12.586	17.237	38.867	168.27	11.599	42.325	9.8673	9.6909	18.388	187.78	9.4431	84.388	101.34%	100.99%	96.77%	92.87%	90.00%	88.33%
MF9K08-5x	06/29/2015 16:51:56	0.4501	21.933	15.878	4.7521	11.161	229.02	324.72	2.9837	0.3703	0.2014	0.9961	0.244	128.25	0.1325	99.539	100.73%	101.10%	95.32%	93.89%	90.49%	90.12%
MF9K09-5x	06/29/2015 16:56:16	0.7259	28.963	21.547	7.7287	13.267	60.977	151.25	4.7615	0.4159	0.0801	0.5903	0.1746	119.66	0.1364	84.454	100.59%	100.82%	95.86%	92.95%	89.44%	89.17%
MF9K10-5x	06/29/2015 17:00:36	0.7714	32.107	23.194	9.5056	14.479	260.8	225.56	5.4872	0.3449	0.1155	0.664	0.1858	137.11	0.1506	93.24	101.37%	100.48%	95.15%	92.06%	89.15%	89.01%
MF9K11-5x	06/29/2015 17:04:56	0.7637	31.784	22.586	5.954	15.247	45.656	147.75	4.825	0.4855	0.0764	0.5047	0.1163	106.18	0.1452	52.878	101.53%	100.67%	94.39%	91.69%	87.64%	87.53%
MF9K12-5x	06/29/2015 17:09:23	0.6866	30.761	20.991	8.9621	13.131	191.27	315.2	4.5455	0.6029	0.1691	0.905	0.2804	155.16	0.1687	96.206	101.22%	100.01%	93.48%	90.98%	87.04%	87.20%
MF9K13-5x	06/29/2015 17:13:43	0.415	21.952	13.529	4.8947	8.1329	61.807	110.93	2.8636	0.321	0.1202	0.3759	0.12	71.191	0.126	43.005	102.32%	100.87%	93.44%	92.45%	88.55%	88.43%
MF9K14-5x	06/29/2015 17:18:04	0.5438	28.227	17.91	6.9132	10.983	53.244	145.88	7.2837	0.2807	0.1161	0.6212	0.1513	97.402	0.1543	57.655	102.46%	101.22%	93.76%	91.68%	87.34%	86.68%
ZZZZZZ	06/29/2015 17:22:25	-0.0109	-0.0098	-0.0453	0.0025	0.2341	-0.0089	2.172	-0.0212	-0.0826	0.0032	-0.0049	0.0056	0.0408	-0.005	0.0143	104.13%	100.89%	92.39%	95.45%	89.99%	91.13%
CCV2	06/29/2015 17:26:46	2614.5	2646.1	2496.9	2492.5	2473.3	2423	2319.1	2505.6	252.17	258.41	2517.2	2552.7	2583.4	2663.1	2634.4	94.83%	93.18%	81.66%	81.04%	79.53%	74.73%
CCB2	06/29/2015 17:31:39	0.2534	0.1441	0.1283	0.1516	0.2184	0.2672	0.2573	0.3449	0.0955	0.0664	0.1373	0.6861	0.1561	0.2537	0.1869	106.22%	100.80%	91.03%	93.78%	87.91%	89.33%
PBS1-5x	06/29/2015 17:36:00	0.0588	0.0264	-0.0353	0.0364	0.0701	0.0611	1.6746	0.119	0.0125	0.0178	0.0403	0.2419	0.0448	0.0551	0.0433	112.30%	104.98%	93.97%	96.67%	90.05%	91.01%
LCS1-5x	06/29/2015 17:40:20	2.0358	10.062	3.6739	1.8825	2.0991	4.0126	4.4959	1.8489	9.1664	1.9969	1.8714	3.8129	19.19	1.8837	1.899	112.68%	106.29%	94.49%	97.44%	90.75%	91.01%
MF9K26-5x	06/29/2015 17:44:42	0.4878	21.43	13.665	6.1835	7.3897	30.684	86.656	3.5293	0.3506	0.0532	0.4082	0.2271	86.426	0.1403	32.852	104.33%	102.67%	94.29%	92.59%	87.37%	87.47%
MF9K26S-5x	06/29/2015 17:49:11	10.35	118.01	49.272	97.3	100.7	77.352	174.34	10.054	16.209	9.7206	9.5646	3.6349	460.71	9.3325	35.903	102.52%	100.85%	93.28%	91.90%	86.84%	86.63%
MF9K26D-5x	06/29/2015 17:53:33	0.4637	21.19	13.492	6.1731	7.3866	30.584	87.179	3.4368	0.2585	0.0481	0.4037	0.1396	86.087	0.1314	32.545	104.09%	102.42%	94.76%	93.41%	87.34%	87.26%
MF9K26L-5x	06/29/2015 17:57:53	0.113	4.4058	2.8126	1.2975	1.5498	6.3803	19.904	0.7231	-0.0458	0.0103	0.0961	0.048	17.432	0.0217	6.4771	103.01%	99.69%	91.88%	93.73%	88.31%	89.72%
MF9K26A-5x	06/29/2015 18:02:13	10.374	71.441	31.593	15.157	16.807	49.139	102.72	12.01	43.113	9.7948	9.5576	18.225	179.68	9.5253	42.263	102.09%	99.83%	92.72%	90.34%	85.89%	84.81%
MF9K15-5x	06/29/2015 18:06:35	0.6829	30.365	21.154	8.868	13.274	86.359	283.26	4.6494	0.7045	0.1602	0.9639	0.2469	152.75	0.1671	98.803	103.36%	101.01%	93.04%	90.35%	86.16%	85.72%
MF9K16-5x	06/29/2015 18:10:56	0.4256	20.501	13.996	4.233	9.1345	38.494	211.82	2.9004	0.3654	0.1606	0.7695	0.1455	105.1	0.128	82.448	103.21%	100.72%	93.01%	91.61%	87.24%	87.11%
MF9K17-5x	06/29/2015 18:15:16	0.4923	24.768	16.042	5.7674	9.9709	90.471	143.1	6.6176	0.4885	0.1038	0.5264	0.1111	95.417	0.1361	53.232	103.17%	100.46%	93.82%	92.14%	88.31%	87.71%
MF9K19-5x	06/29/2015 18:19:36	0.6709	28.704	19.687	5.6426	11.168	57.754	113.81	3.348	0.5019	0.0442	0.2915	0.0931	118.46	0.1348	30.056	101.66%	99.64%	93.63%	91.43%	88.42%	88.63%
MF9K20-5x	06/29/2015 18:23:55	0.4163	21.909	15.383	4.9823	8.4266	36.292	133	3.0315	0.3423	0.1261	0.4484	0.1404	75.154	0.1321	52.809	102.22%	99.42%	92.98%	92.08%	88.89%	89.30%
MF9K21-5x	06/29/2015 18:28:15	0.4107	18.787	12.101	5.3733	6.4675	54.33	78.785	3.0496	0.2716	0.0424	0.4013	0.121	71.652	0.1102	28.324	104.15%	100.12%	93.14%	91.73%	87.44%	87.91%
MF9K22-5x	06/29/2015 18:32:34	0.5554	22.406	17.649	6.4963	9.9471	30.652	257.26	3.6441	0.5527	0.0739	0.6648	0.1789	113.89	0.137	83.919	102.98%	99.61%	92.17%	90.55%	86.02%	86.55%
MF9K23-5x	06/29/2015 18:36:54	0.7714	33.033	22.047	6.6456	13.065	27.37	110.03	3.4375	0.4609	0.0501	0.3248	0.1216	124.84	0.1559	33.706	103.41%	100.10%	95.22%	90.27%	85.94%	85.74%
MF9K25-5x	06/29/2015 18:41:14	0.621	29.121	19.706	6.7527	12.244	30.548	145.25	6.1481	0.5364	0.1196	0.4721	0.158	100.67	0.1723	52.863	102.93%	98.49%	91.66%	89.34%	85.76%	85.44%
MF9K27-5x	06/29/2015 18:45:39	0.509	25.13	16.131	6.4749	9.3423	26.63	98.387	3.4821	0.2194	0.0668	0.322	0.1197	82.714	0.1429	38.587	102.69%	98.05%	91.61%	90.44%	86.77%	87.30%
MF9K28-5x	06/29/2015 18:50:00	0.4604	19.416	15.367	5.7801	8.7462	27.888	201.67	3.2713	0.3975	0.0683	0.5557	0.1269	92.872	0.1153	71.296	103.09%	98.69%	91.70%	90.78%	86.78%	87.20%
MF9K29-5x	06/29/2015 18:54:21	0.4594	22.167	14.896	7.6796	8.2565	23.47	176.02	3.5196	0.2483	0.0476	0.3451	0.1189	88.696	0.1255	33.024	103.25%	99.33%	91.77%	90.67%	86.88%	87.14%
ZZZZZZ	06/29/2015 18:58:45	-0.0052	-0.0012	-0.0519	-0.0003	0.0256	-0.1053	0.2233	0.0049	-0.0869	0.0002	-0.0157	0.004	0.0207	0.0046	-0.0047	103.57%	98.28%	89.49%	92.63%	87.20%	89.36%
CCV3	06/29/2015 19:03:06	2580.5	2612.3	2457.6	2468.8	2450.9	2400.8	2278.6	2468.4	248.52	254.44	2476.3	2537.6	2531.8	2642.1	2608.1	97.41%	93.41%	80.42%	80.04%	77.79%	73.68%
CCB3	06/29/2015 19:07:29	0.3098	0.1974	0.1538	0.1997	0.2202	0.3211	0.2598	0.4032	0.0801	0.0849	0.1925	0.9629	0.2018	0.3507	0.2425	109.12%	100.62%	89.57%	92.57%	85.78%	87.42%

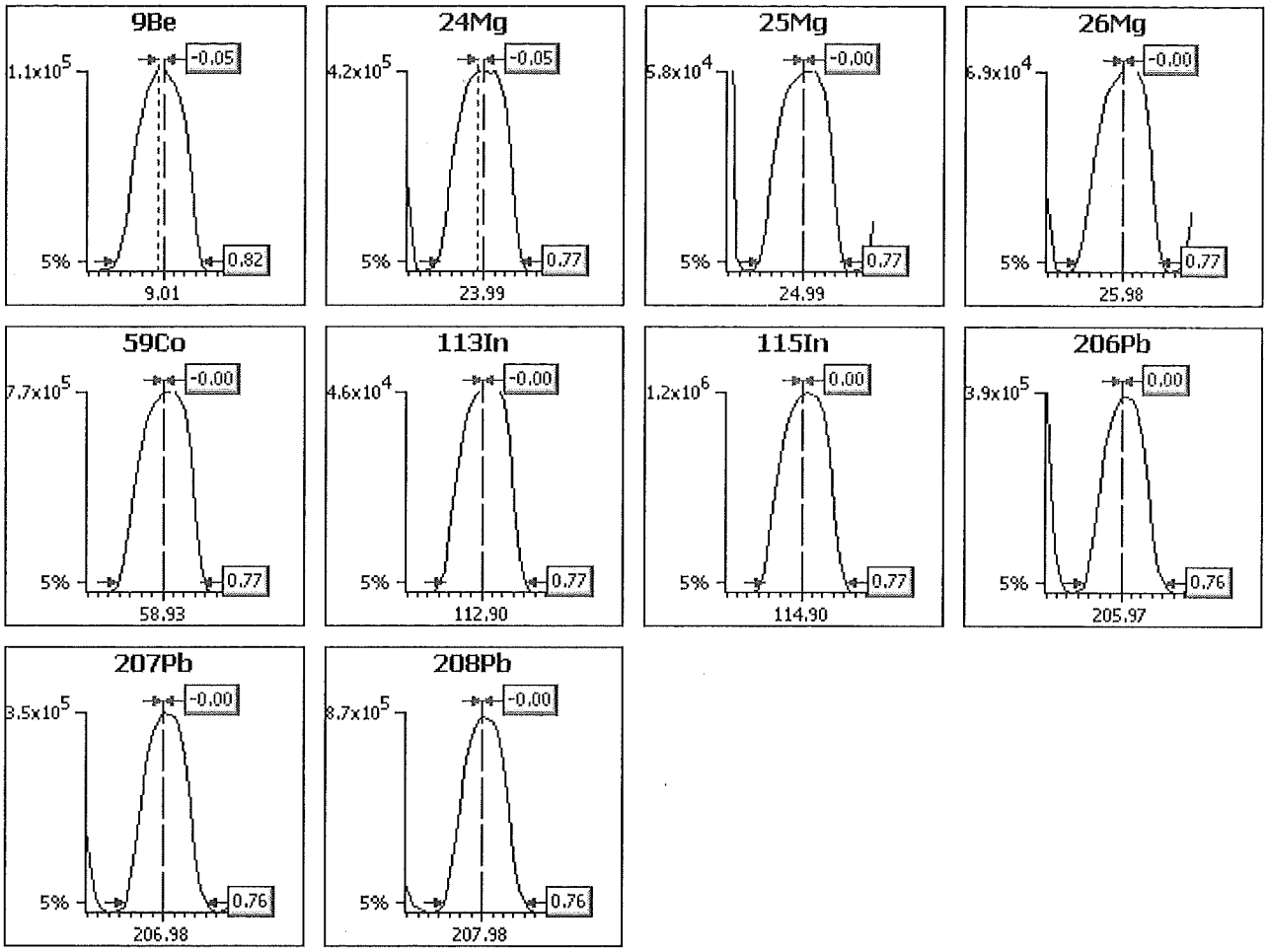
Performance Report

Tune - Run # m5215065

Sample details
Acquired at : 06/29/2015 14:25:07
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	0.82	-0.05
24Mg	0.85	0.65	0.11	0.77	-0.05
25Mg	0.85	0.65	0.11	0.77	-0.00
26Mg	0.85	0.65	0.11	0.77	-0.00
59Co	0.85	0.65	0.11	0.77	-0.00
113In	0.85	0.65	0.11	0.77	-0.00
115In	0.85	0.65	0.11	0.77	0.00
206Pb	0.85	0.65	0.11	0.76	0.00
207Pb	0.85	0.65	0.11	0.76	-0.00
208Pb	0.85	0.65	0.11	0.76	-0.00

Tune - Run# MS215065

Sample details
Acquired at : 06/29/2015 14:25:07
Report name : CLP [10/19/2012 10:16:28]

Tune conditions

Major	
Extraction	-149
Lens 1	4.7
Focus	26.9
D1	-32.9
Pole Bias	-0.0
Hexapole Bias	-5.0
Nebuliser	0.80
Sampling Depth	130

Minor	
Lens 2	-27.5
Lens 3	-115.3
Forward power	1404
Horizontal	79
Vertical	467
D2	-160
DA	-80.0
Cool	13.0
Auxiliary	0.90

Global	
Standard resolution	125
High resolution	125
Analogue Detector	1951
PC Detector	3225

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	14:25:28	1.077	104355.49	450181.53	57531.757	68916.876	351457.52	766023.52	20826.762	1.385
2	14:26:40	2.462	105074.44	455090.78	57565.063	68801.311	346697.28	769439.26	20531.929	2.231
3	14:27:53	2.000	106927.01	459871.26	58180.081	69268.232	348650.93	782277.51	20588.479	1.615
4	14:29:05	1.692	107464.63	458000.81	57943.054	68985.129	344881.13	775364.01	20558.148	2.154
5	14:30:18	1.846	108038.13	463523.98	58146.773	69908.934	343651.08	777171.29	20276.690	1.692
x		1.815	106371.94	457333.67	57873.346	69176.096	347067.59	774055.12	20556.401	1.815
σ		0.50	1583.34	5034.58	310.41	444.32	3097.12	6419.58	195.55	0.36
%RSD		27.721	1.488	1.101	0.536	0.642	0.892	0.829	0.951	20.010

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	14:25:28	49248.945	1155054.0	836305.47	1178723.1	18433.699	398005.12	356486.03	867970.19	1.769
2	14:26:40	49020.682	1157347.2	838228.93	1179972.9	18299.301	398334.14	358368.08	869577.00	2.308
3	14:27:53	49471.798	1157149.3	840767.31	1181591.5	18640.312	398554.30	358109.62	868482.77	1.462
4	14:29:05	49127.462	1148332.4	835162.80	1172446.3	18795.531	395578.17	356172.26	861168.99	1.769
5	14:30:18	48543.284	1147997.5	834469.80	1171357.2	18568.356	395899.84	356482.82	863274.92	2.000
x		49082.434	1153176.1	836986.86	1176818.2	18547.440	397274.31	357123.76	866094.77	1.862
σ		344.91	4663.43	2547.63	4617.93	190.47	1419.66	1029.94	3659.25	0.31
%RSD		0.703	0.404	0.304	0.392	1.027	0.357	0.288	0.423	16.887

Ratio results

Run	Time	56Ar O/59Co	138Ba++/138Ba	115In/101Bkg	156Ce O/140Ce
Ratio limits		-	-	>10000.0000	<0.0300
1	14:25:28	0.459	0.025	834205.56	0.016
2	14:26:40	0.451	0.024	518810.76	0.016
3	14:27:53	0.446	0.024	716330.44	0.016
4	14:29:05	0.445	0.025	533154.24	0.016
5	14:30:18	0.442	0.024	678362.10	0.016
x		0.4484	0.0246	656172.62	0.0158
σ		0.01	0.00	132106.84	0.00
%RSD		1.4627	0.9074	20.1329	1.2700

Result : The performance report passed.

Experiment Details

Description	PlasmaLab Template BlankExperiment
Template Filename	C:\Program Files\Thermo Fisher\PlasmaLab\data\MS215062.tee
Created By User	Edwards
Analyte Database	ILM5.3.tea
Creation Timestamp	02/02/2005 10:10:19
Last Edited By	john.kershisnik
Last Edit Timestamp	06/30/2015 14:17:07
Instrument Detector	Simultaneous
Database Version	3.51
Acquisition Mode	Unknown

John Kershisnik
Run # MS215065
MF9K02
Case: 45299
W.O. 1516424
ISM01.3 SOIL

Numerical Results report key (text indicates meaning)

Blue text indicates that cell is a statistic.
Underlining indicates that a data warning flag is set.

Column headings	Result cells	Data warning flags
No flag	Internal Standard	I - Invalid calibration
Semi Quant	Excluded	T - Tripped
Standard Addition	QC Warning	F - Interference correction failed
Multi Element	QC Failure	M - Result over max
	Transient TRA only:	V - Valley integration failed
	Peak Not Found	D - Different method used
	Manually Edited	
	Merged Peak	

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	36287
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
115In	1	10000	Standard
118Sn	1	10000	Standard
121Sb	1	10000	Standard
135Ba	1	10000	Standard
137Ba	1	10000	Standard
159Tb	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	None	Through Blank	Yes		0.995000

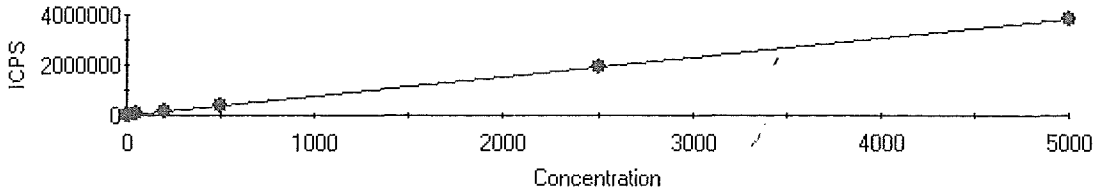
66Zn	Yes	0.38	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
75As	Yes	0.07	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
78Se	Yes	0.10	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
82Se	Yes	0.10	Fully-Quantified	Linear	None	Through Blank	Yes	0.995000
83Kr	Yes	0.01	Semi-Quantified				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
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
159Tb	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	S	Fully Quant Standard	1.000	1	1	2	144
3	S10	Fully Quant Standard	1.000	1	1	3	144
4	S50	Fully Quant Standard	1.000	1	1	4	144
5	S200	Fully Quant Standard	1.000	1	1	5	144
6	S500	Fully Quant Standard	1.000	1	1	6	144
7	S2500	Fully Quant Standard	1.000	1	1	7	144
8	S5000	Fully Quant Standard	1.000	1	1	8	144
9	S50000	Fully Quant Standard	1.000	1	1	9	144
10	S100000	Fully Quant Standard	1.000	1	1	10	144
11	ICV1	Unknown	1.000	1	1	11	144
12	ICB1	Unknown	1.000	1	1	12	144
13	ICSA1	Unknown	1.000	1	2	1	144
14	ICSAB1	Unknown	1.000	1	2	2	144
15	CCV1	Unknown	1.000	1	2	3	144
16	CCB1	Unknown	1.000	1	2	4	144
17	PBS1-5x	Unknown	1.000	1	2	5	144
18	LCS1-5x	Unknown	1.000	1	2	6	144
19	MF9K02-5x	Unknown	1.000	1	2	7	144
20	MF9K03-5x	Unknown	1.000	1	2	8	144
21	MF9K04-5x	Unknown	1.000	1	2	9	144
22	MF9K05-5x	Unknown	1.000	1	2	10	144
23	MF9K06-5x	Unknown	1.000	1	2	11	144
24	MF9K07-5X	Unknown	1.000	1	2	12	144
25	MF9K07S-5x	Unknown	1.000	1	3	1	144
26	MF9K07D-5x	Unknown	1.000	1	3	2	144
27	MF9K07L-5x	Unknown	1.000	1	3	3	144
28	MF9K07A-5x	Unknown	1.000	1	3	4	144
29	MF9K08-5x	Unknown	1.000	1	3	5	144
30	MF9K09-5x	Unknown	1.000	1	3	6	144
31	MF9K10-5x	Unknown	1.000	1	3	7	144
32	MF9K11-5x	Unknown	1.000	1	3	8	144
33	MF9K12-5x	Unknown	1.000	1	3	9	144
34	MF9K13-5x	Unknown	1.000	1	3	10	144
35	MF9K14-5x	Unknown	1.000	1	3	11	144
36	ZZZZZZ	Unknown	1.000	1	3	12	144
37	CCV2	Unknown	1.000	1	4	1	144
38	CCB2	Unknown	1.000	1	4	2	144

Fully Quant Calibration

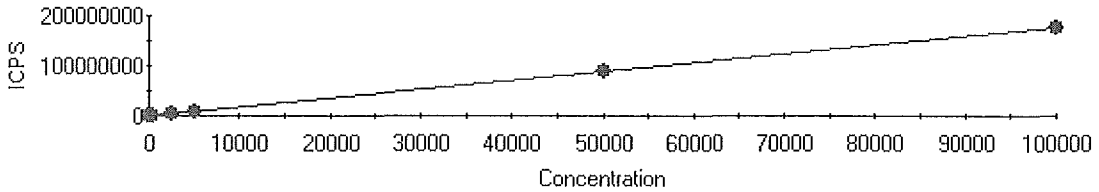
9Be FQ Block 1



Intercept CPS=30.822085 Intercept Conc=0.040143
Sensitivity=767.799832 Correlation Coeff=0.999978

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	30.82	0.00
S	1.000	1.002	0.002	800.22	0.21
S10	10.000	10.259	0.259	7907.61	2.59
S50	50.000	50.933	0.933	39137.01	1.87
S200	200.000	206.732	6.732	158759.78	3.37
S500	500.000	508.556	8.556	390499.91	1.71
S2500	2500.000	2528.078	28.078	1941088.91	1.12
S5000	5000.000	4984.826	15.174	3827379.49	0.30

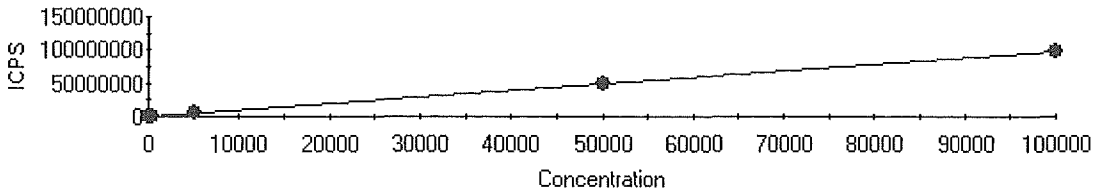
23Na FQ Block 1



Intercept CPS=23866.930056 Intercept Conc=13.476444
Sensitivity=1771.010999 Correlation Coeff=0.999941

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	23866.93	0.00
S50	50.000	46.135	3.865	105572.88	7.73
S200	200.000	187.289	12.711	355557.30	6.36
S500	500.000	461.438	38.562	841078.04	7.71
S2500	2500.000	2374.598	125.402	4229305.31	5.02
S5000	5000.000	4770.632	229.368	8472708.58	4.59
S50000	50000.000	49039.850	960.150	86873981.21	1.92
S100000	100000.000	100494.898	494.898	178001437.48	0.49

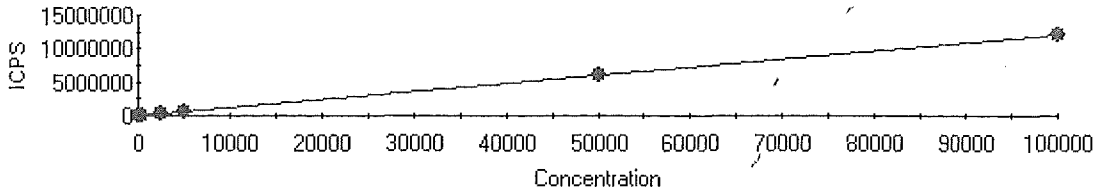
24Mg FQ Block 1



Intercept CPS=153.087492 Intercept Conc=0.155209
Sensitivity=986.333482 Correlation Coeff=0.999990

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	153.09	0.00
S50	50.000	48.885	1.115	48370.36	2.23
S200	200.000	193.260	6.740	190771.91	3.37
S500	500.000	479.858	20.142	473452.93	4.03
S5000	5000.000	4848.051	151.949	4781948.04	3.04
S50000	50000.000	49620.280	379.720	48942296.50	0.76
S100000	100000.000	100197.572	197.572	98828373.43	0.20

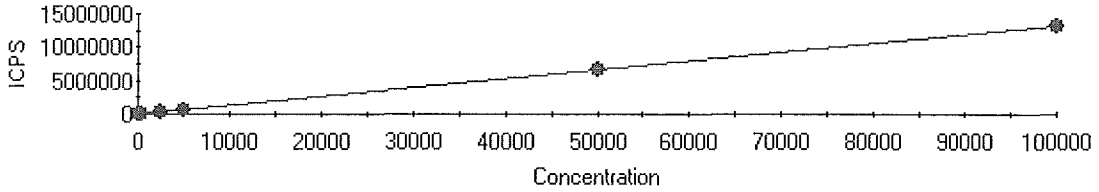
25Mg FQ Block 1



Intercept CPS=33.998589 Intercept Conc=0.278907
Sensitivity=121.899203 Correlation Coeff=0.999998

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	34.00	0.00
S50	50.000	48.912	1.088	5996.34	2.18
S200	200.000	197.811	2.189	24146.98	1.09
S500	500.000	489.535	10.465	59707.86	2.09
S2500	2500.000	2414.039	85.961	294303.40	3.44
S5000	5000.000	4806.003	193.997	585881.96	3.88
S50000	50000.000	50029.620	29.620	6098604.76	0.06
S100000	100000.000	99997.096	2.904	12189600.30	0.00

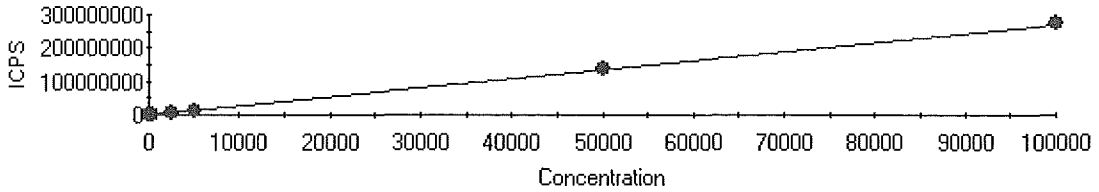
26Mg FQ Block 1



Intercept CPS=38.015799 Intercept Conc=0.284800
Sensitivity=133.482572 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	38.02	0.00
S50	50.000	51.751	1.751	6945.81	3.50
S200	200.000	203.959	3.959	27263.02	1.98
S500	500.000	499.630	0.370	66729.92	0.07
S2500	2500.000	2478.682	21.318	330898.93	0.85
S5000	5000.000	4903.180	96.820	654527.06	1.94
S50000	50000.000	50197.511	197.511	6700530.86	0.40
S100000	100000.000	99906.612	93.388	13335829.52	0.09

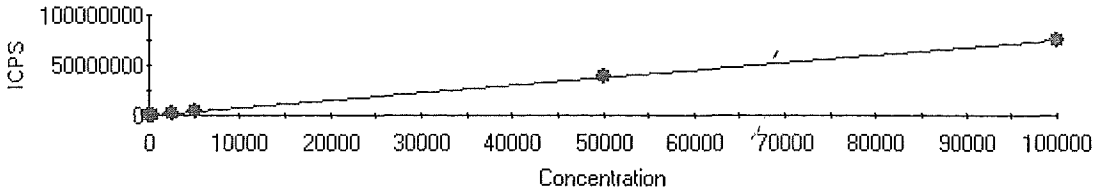
27Al FQ Block 1



Intercept CPS=1661.209203 Intercept Conc=0.606206
Sensitivity=2740.336334 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	1661.21	0.00
S	20.000	19.760	0.240	55810.15	1.20
S50	50.000	52.590	2.590	145775.15	5.18
S200	200.000	204.636	4.636	562432.65	2.32
S500	500.000	507.890	7.890	1393451.14	1.58
S2500	2500.000	2516.279	16.279	6897110.96	0.65
S5000	5000.000	4951.134	48.866	13569432.52	0.98
S50000	50000.000	49910.989	89.011	136774556.83	0.18
S100000	100000.000	100046.492	46.492	274162698.53	0.05

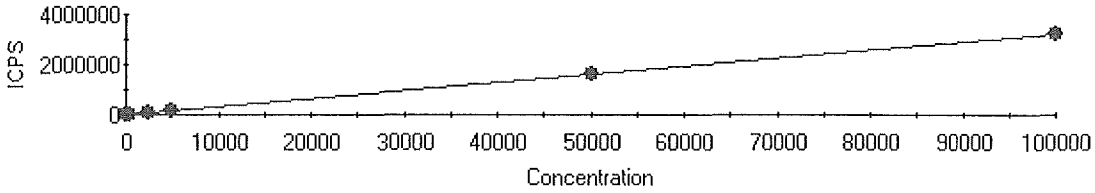
39K FQ Block 1



Intercept CPS=41522.860917 Intercept Conc=55.265621
Sensitivity=751.332566 Correlation Coeff=0.999936

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	41522.86	0.00
S50	50.000	50.477	0.477	79447.77	0.95
S200	200.000	213.167	13.167	201682.00	6.58
S500	500.000	522.645	22.645	434202.83	4.53
S2500	2500.000	2551.610	51.610	1958630.76	2.06
S5000	5000.000	4967.023	32.977	3773408.76	0.66
S50000	50000.000	51000.552	1000.552	38359898.24	2.00
S100000	100000.000	99499.943	500.057	74799070.32	0.50

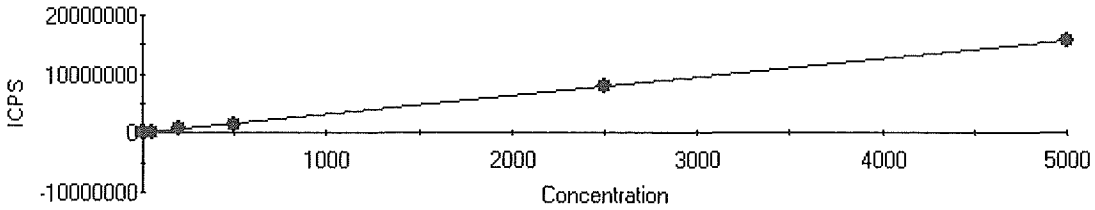
44Ca FQ Block 1



Intercept CPS=400.988736 Intercept Conc=12.323231
Sensitivity=32.539252 Correlation Coeff=0.999994

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	400.99	0.00
S50	50.000	47.174	2.826	1935.99	5.65
S200	200.000	194.404	5.596	6726.76	2.80
S500	500.000	476.818	23.182	15916.29	4.64
S2500	2500.000	2386.211	113.789	78046.51	4.55
S5000	5000.000	4708.332	291.668	153606.59	5.83
S50000	50000.000	49791.444	208.556	1620577.34	0.42
S100000	100000.000	100121.835	121.835	3258290.62	0.12

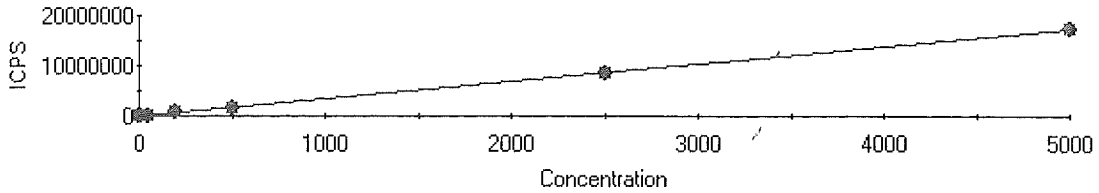
51V FQ Block 1



Intercept CPS=148.396487 Intercept Conc=0.047324
Sensitivity=3135.735501 Correlation Coeff=0.999982

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	148.40	0.00
S	5.000	5.131	0.131	16236.95	2.61
S10	10.000	9.620	0.380	30312.73	3.80
S50	50.000	48.118	1.882	151032.96	3.76
S200	200.000	197.731	2.269	620180.92	1.13
S500	500.000	501.769	1.769	1573562.56	0.35
S2500	2500.000	2525.455	25.455	7919305.84	1.02
S5000	5000.000	4987.206	12.794	15638707.49	0.26

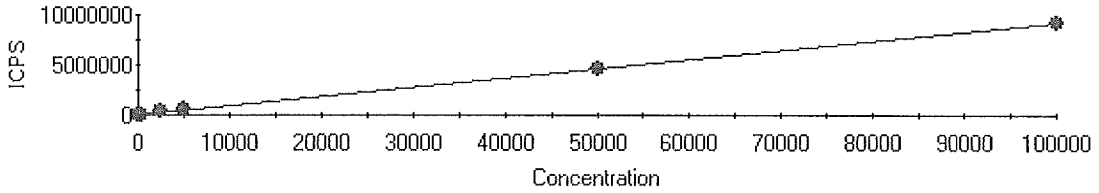
52Cr FQ Block 1



Intercept CPS=855.228067 Intercept Conc=0.248362
Sensitivity=3443.474543 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	855.23	0.00
S	2.000	1.890	0.110	7361.76	5.52
S10	10.000	9.636	0.364	34035.46	3.64
S50	50.000	48.318	1.682	167235.93	3.36
S200	200.000	197.853	2.147	682156.98	1.07
S500	500.000	501.920	1.920	1729203.91	0.38
S2500	2500.000	2504.894	4.894	8626393.79	0.20
S5000	5000.000	4997.465	2.535	17209497.02	0.05

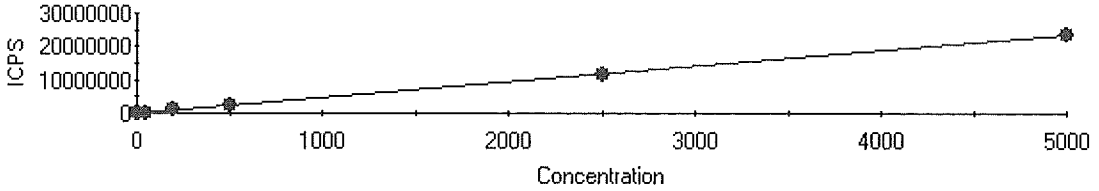
54Fe FQ Block 1



Intercept CPS=2314.579887 Intercept Conc=25.132533
Sensitivity=92.094971 Correlation Coeff=0.999805

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	2314.58	0.00
S50	50.000	67.784	17.784	8557.16	35.57
S200	200.000	279.774	79.774	28080.32	39.89
S500	500.000	701.674	201.674	66935.26	40.33
S2500	2500.000	3533.611	1033.611	327742.42	41.34
S5000	5000.000	7041.855	2041.855	650834.00	40.84
S50000	50000.000	50472.575	472.575	4650584.92	0.95
S100000	100000.000	99634.603	365.397	9178160.40	0.37

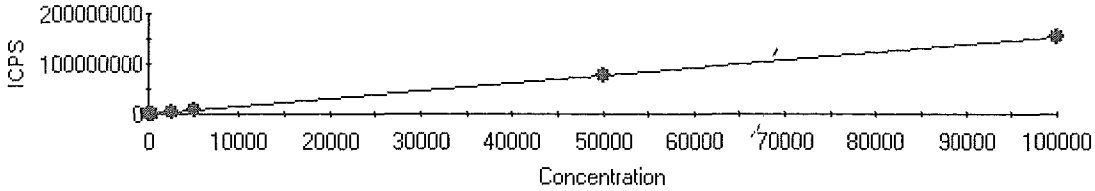
55Mn FQ Block 1



Intercept CPS=152.451296 Intercept Conc=0.032515
Sensitivity=4688.693050 Correlation Coeff=0.999991

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	152.45	0.00
S	1.000	0.978	0.022	4740.02	2.16
S10	10.000	10.005	0.005	47061.22	0.05
S50	50.000	49.592	0.408	232674.59	0.82
S200	200.000	203.659	3.659	955046.60	1.83
S500	500.000	500.778	0.778	2348144.44	0.16
S2500	2500.000	2518.568	18.568	11808946.34	0.74
S5000	5000.000	4990.496	9.504	23399055.40	0.19

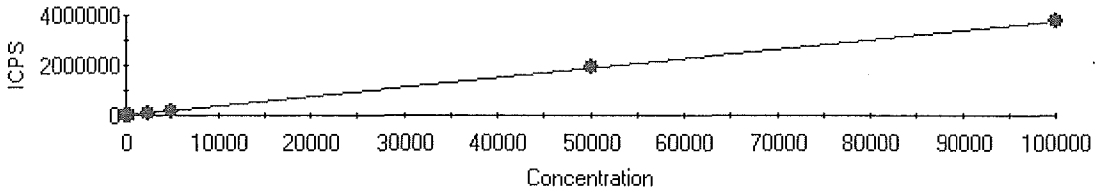
56Fe FQ Block 1



Intercept CPS=108785.173684 Intercept Conc=70.425081
Sensitivity=1544.693624 Correlation Coeff=0.999976

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	108785.17	0.00
S50	50.000	47.810	2.190	182637.23	4.38
S200	200.000	202.293	2.293	421266.22	1.15
S500	500.000	513.142	13.142	901431.94	2.63
S2500	2500.000	2586.922	86.922	4104786.60	3.48
S5000	5000.000	5128.519	128.519	8030775.97	2.57
S50000	50000.000	50607.868	607.868	78282435.97	1.22
S100000	100000.000	99687.398	312.602	154095273.05	0.31

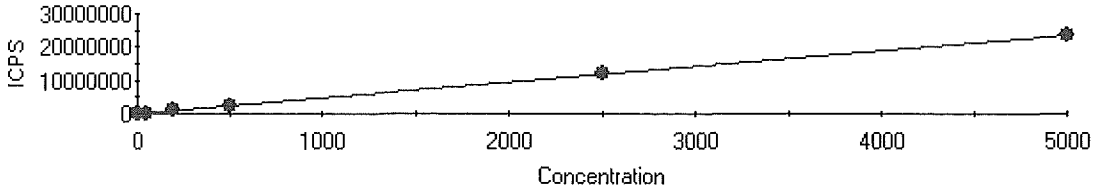
57Fe FQ Block 1



Intercept CPS=701.139862 Intercept Conc=18.455648
Sensitivity=37.990531 Correlation Coeff=0.999955

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	701.14	0.00
S50	50.000	48.678	1.322	2550.45	2.64
S200	200.000	202.328	2.328	8387.69	1.16
S500	500.000	504.411	4.411	19863.98	0.88
S2500	2500.000	2507.608	7.608	95966.50	0.30
S5000	5000.000	4931.832	68.168	188064.04	1.36
S50000	50000.000	50831.645	831.645	1931822.31	1.66
S100000	100000.000	99587.370	412.630	3784078.16	0.41

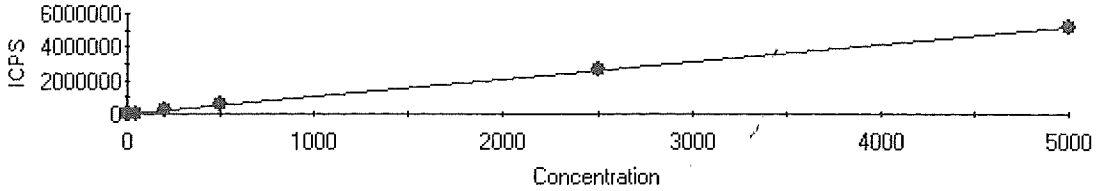
59Co FQ Block 1



Intercept CPS=21.987534 Intercept Conc=0.004624
Sensitivity=4754.646090 Correlation Coeff=0.999985

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	21.99	0.00
S	1.000	0.947	0.053	4523.54	5.32
S10	10.000	9.654	0.346	45923.08	3.46
S50	50.000	48.380	1.620	230053.96	3.24
S200	200.000	199.568	0.432	948897.91	0.22
S500	500.000	498.182	1.818	2368702.35	0.36
S2500	2500.000	2523.618	23.618	11998932.51	0.94
S5000	5000.000	4988.407	11.593	23718131.54	0.23

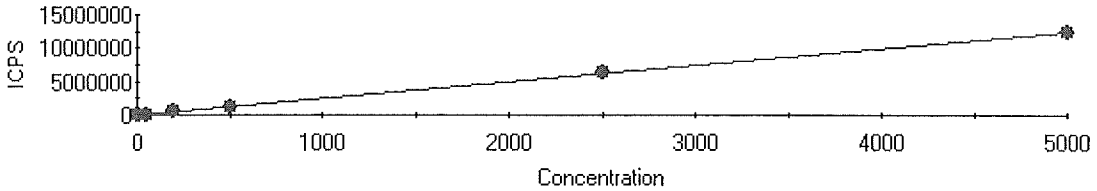
60Ni FQ Block 1



Intercept CPS=33.542498 Intercept Conc=0.031968
Sensitivity=1049.264420 Correlation Coeff=0.999995

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	33.54	0.00
S	1.000	1.020	0.020	1103.61	1.98
S10	10.000	10.125	0.125	10657.29	1.25
S50	50.000	49.839	0.161	52328.13	0.32
S200	200.000	202.003	2.003	211988.06	1.00
S500	500.000	501.319	1.319	526049.56	0.26
S2500	2500.000	2513.632	13.632	2637498.06	0.55
S5000	5000.000	4992.973	7.027	5238982.88	0.14

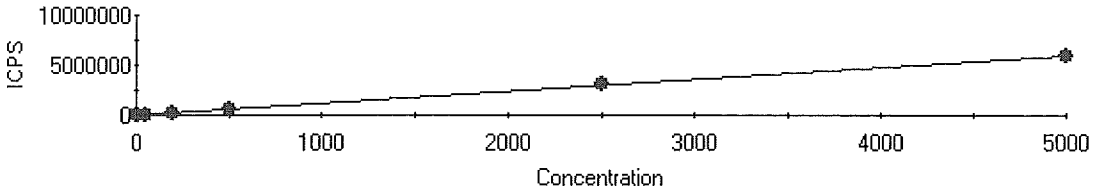
63Cu FQ Block 1



Intercept CPS=611.527901 Intercept Conc=0.246027
Sensitivity=2485.615396 Correlation Coeff=0.999984

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	611.53	0.00
S	2.000	1.944	0.056	5443.00	2.81
S10	10.000	9.780	0.220	24920.11	2.20
S50	50.000	49.195	0.805	122891.10	1.61
S200	200.000	201.601	1.601	501714.52	0.80
S500	500.000	501.181	1.181	1246355.90	0.24
S2500	2500.000	2524.731	24.731	6276120.98	0.99
S5000	5000.000	4987.461	12.539	12397521.33	0.25

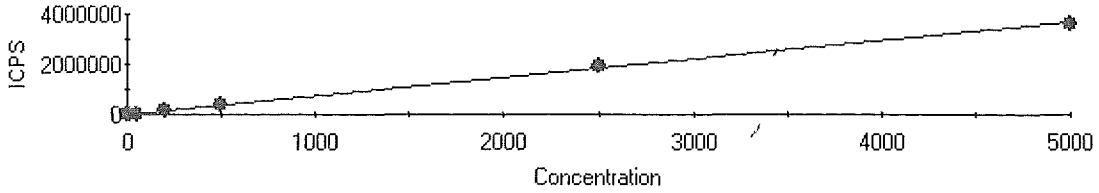
65Cu FQ Block 1



Intercept CPS=190.407816 Intercept Conc=0.158086
Sensitivity=1204.455362 Correlation Coeff=0.999994

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	190.41	0.00
S	2.000	1.999	0.001	2598.02	0.05
S10	10.000	9.984	0.016	12215.52	0.16
S50	50.000	49.465	0.535	59768.84	1.07
S200	200.000	200.025	0.025	241111.42	0.01
S500	500.000	497.961	2.039	599961.95	0.41
S2500	2500.000	2515.220	15.220	3029661.17	0.61
S5000	5000.000	4992.598	7.402	6013551.94	0.15

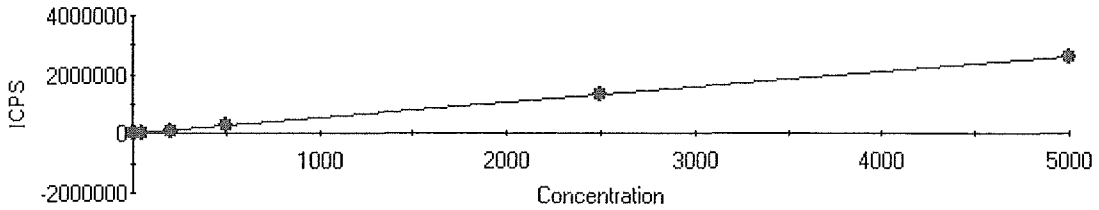
66Zn FQ Block 1



Intercept CPS=159.634801 Intercept Conc=0.216793
Sensitivity=736.346044 Correlation Coeff=0.999807

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	159.63	0.00
S	2.000	2.107	0.107	1710.84	5.33
S10	10.000	12.278	2.278	9200.66	22.78
S50	50.000	50.695	0.695	37488.90	1.39
S200	200.000	207.410	7.410	152884.85	3.70
S500	500.000	512.884	12.884	377819.38	2.58
S2500	2500.000	2585.766	85.766	1904178.48	3.43
S5000	5000.000	4955.521	44.479	3649137.57	0.89

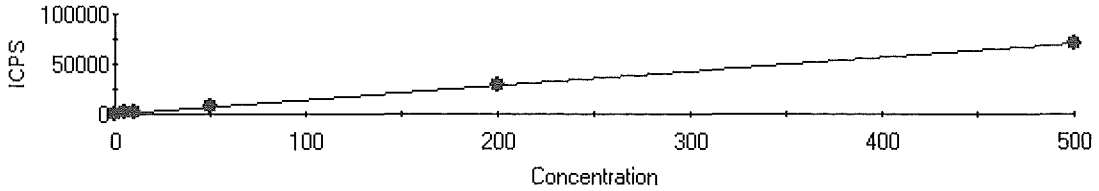
75As FQ Block 1



Intercept CPS=-10.407288 Intercept Conc=-0.019658
Sensitivity=529.423428 Correlation Coeff=0.999992

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	-10.41	0.00
S	1.000	0.915	0.085	473.75	8.55
S10	10.000	9.702	0.298	5126.32	2.98
S50	50.000	48.621	1.379	25730.69	2.76
S200	200.000	195.012	4.988	103233.44	2.49
S500	500.000	483.768	16.232	256107.61	3.25
S2500	2500.000	2488.857	11.143	1317648.76	0.45
S5000	5000.000	5007.409	7.409	2651029.06	0.15

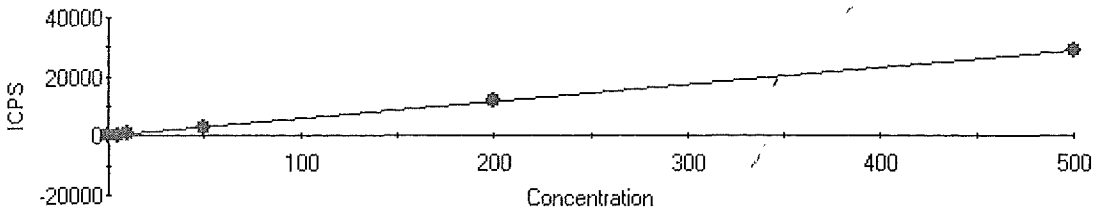
78Se FQ Block 1



Intercept CPS=859.625376 Intercept Conc=6.136381
Sensitivity=140.086695 Correlation Coeff=0.999972

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	859.63	0.00
S	5.000	4.821	0.179	1534.97	3.58
S10	10.000	9.943	0.057	2252.56	0.57
S50	50.000	50.583	0.583	7945.59	1.17
S200	200.000	203.186	3.186	29323.25	1.59
S500	500.000	498.670	1.330	70716.71	0.27

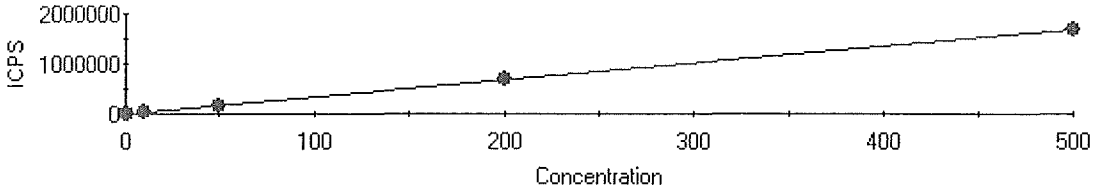
82Se FQ Block 1



Intercept CPS=4.408117 Intercept Conc=0.075401
Sensitivity=58.462371 Correlation Coeff=0.999988

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	4.41	0.00
S	5.000	4.978	0.022	295.42	0.45
S10	10.000	10.134	0.134	596.88	1.34
S50	50.000	50.536	0.536	2958.85	1.07
S200	200.000	202.101	2.101	11819.73	1.05
S500	500.000	499.103	0.897	29183.18	0.18

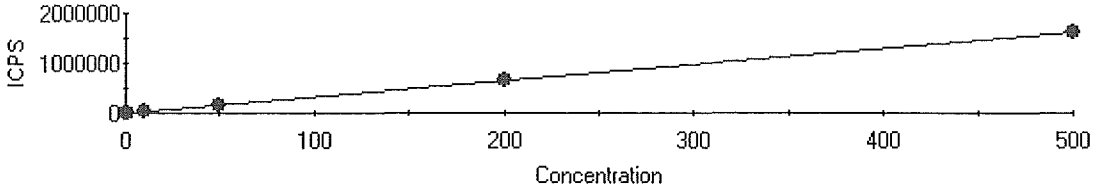
107Ag FQ Block 1



Intercept CPS=30.953178 Intercept Conc=0.009203
Sensitivity=3363.257045 Correlation Coeff=0.999996

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	30.95	0.00
S	1.000	1.004	0.004	3408.70	0.43
S10	10.000	9.847	0.153	33148.27	1.53
S50	50.000	49.171	0.829	165405.32	1.66
S200	200.000	200.926	0.926	675796.17	0.46
S500	500.000	499.716	0.284	1680703.08	0.06

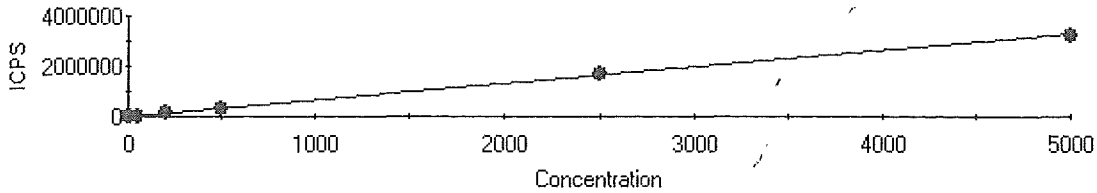
109Ag FQ Block 1



Intercept CPS=22.730860 Intercept Conc=0.007063
Sensitivity=3218.294084 Correlation Coeff=0.999994

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	22.73	0.00
S	1.000	0.986	0.014	3197.41	1.36
S10	10.000	9.850	0.150	31722.26	1.50
S50	50.000	49.324	0.676	158760.84	1.35
S200	200.000	201.316	1.316	647916.63	0.66
S500	500.000	499.544	0.456	1607703.16	0.09

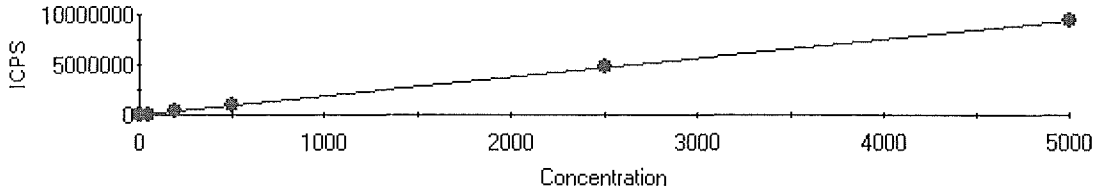
111Cd FQ Block 1



Intercept CPS=85.596218 Intercept Conc=0.130835
Sensitivity=654.230178 Correlation Coeff=0.999889

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	85.60	0.00
S	1.000	0.960	0.040	713.98	3.95
S10	10.000	10.010	0.010	6634.75	0.10
S50	50.000	49.305	0.695	32342.71	1.39
S200	200.000	200.642	0.642	131351.66	0.32
S500	500.000	496.978	3.022	325223.69	0.60
S2500	2500.000	2564.835	64.835	1678078.28	2.59
S5000	5000.000	4967.866	32.134	3250213.30	0.64

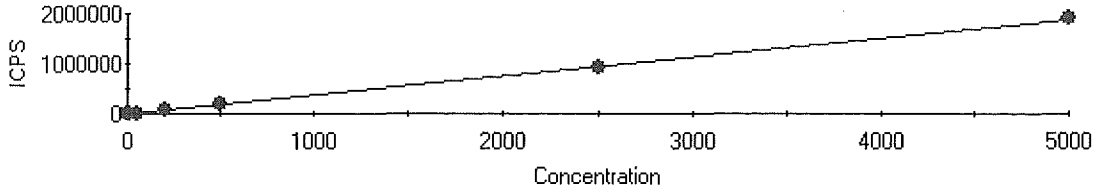
121Sb FQ Block 1



Intercept CPS=20.993606 Intercept Conc=0.011049
Sensitivity=1899.960778 Correlation Coeff=0.999990

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	20.99	0.00
S	2.000	1.949	0.051	3723.64	2.56
S10	10.000	9.389	0.611	17860.10	6.11
S50	50.000	47.311	2.689	89910.32	5.38
S200	200.000	192.594	7.406	365941.47	3.70
S500	500.000	483.021	16.979	917742.54	3.40
S2500	2500.000	2513.214	13.214	4775029.94	0.53
S5000	5000.000	4995.415	4.585	9491113.58	0.09

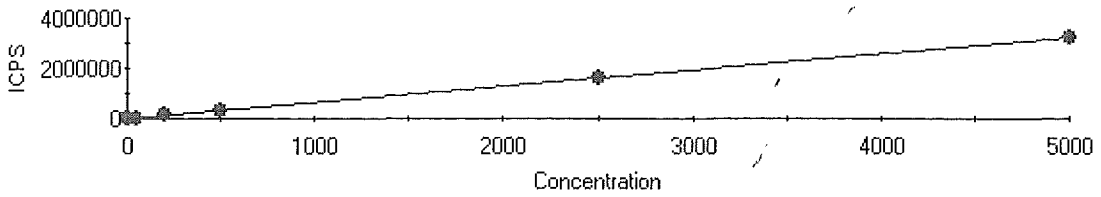
135Ba FQ Block 1



Intercept CPS=3.986709 Intercept Conc=0.010487
Sensitivity=380.162103 Correlation Coeff=0.999832

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	3.99	0.00
S	10.000	9.471	0.529	3604.36	5.29
S50	50.000	47.991	2.009	18248.22	4.02
S200	200.000	192.688	7.312	73256.51	3.66
S500	500.000	477.660	22.340	181592.07	4.47
S2500	2500.000	2422.041	77.959	920772.31	3.12
S5000	5000.000	5041.527	41.527	1916601.50	0.83

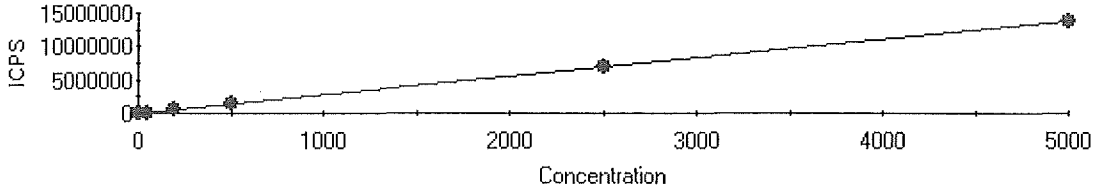
137Ba FQ Block 1



Intercept CPS=4.518684 Intercept Conc=0.006974
Sensitivity=647.936568 Correlation Coeff=0.999965

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	4.52	0.00
S	10.000	9.827	0.173	6372.05	1.73
S50	50.000	49.622	0.378	32156.32	0.76
S200	200.000	199.676	0.324	129382.03	0.16
S500	500.000	491.259	8.741	318309.32	1.75
S2500	2500.000	2534.298	34.298	1642069.04	1.37
S5000	5000.000	4983.742	16.258	3229153.23	0.33

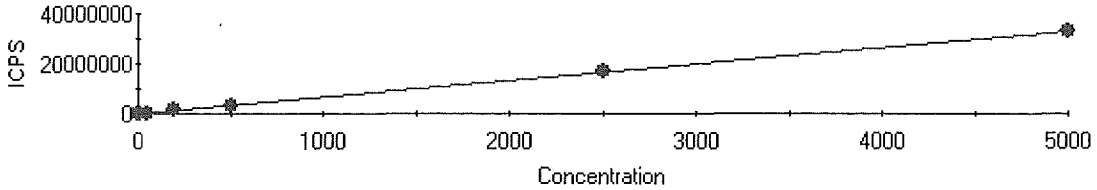
203Tl FQ Block 1



Intercept CPS=77.267782 Intercept Conc=0.028106
Sensitivity=2749.157778 Correlation Coeff=0.999983

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	77.27	0.00
S	1.000	0.944	0.056	2672.13	5.61
S10	10.000	9.520	0.480	26248.09	4.80
S50	50.000	47.827	2.173	131559.98	4.35
S200	200.000	194.938	5.062	535993.88	2.53
S500	500.000	490.945	9.055	1349763.83	1.81
S2500	2500.000	2475.363	24.637	6805239.79	0.99
S5000	5000.000	5013.449	13.449	13782840.38	0.27

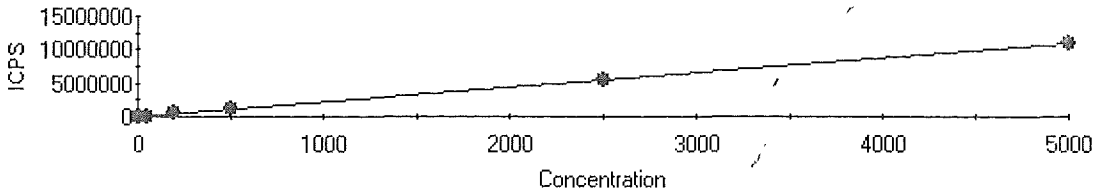
205Tl FQ Block 1



Intercept CPS=190.439056 Intercept Conc=0.028514
Sensitivity=6678.864525 Correlation Coeff=0.999996

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	190.44	0.00
S	1.000	0.935	0.065	6437.98	6.46
S10	10.000	9.461	0.539	63380.78	5.39
S50	50.000	47.341	2.659	316376.33	5.32
S200	200.000	195.982	4.018	1309127.09	2.01
S500	500.000	499.456	0.544	3335990.53	0.11
S2500	2500.000	2487.426	12.574	16613374.25	0.50
S5000	5000.000	5006.530	6.530	33438123.34	0.13

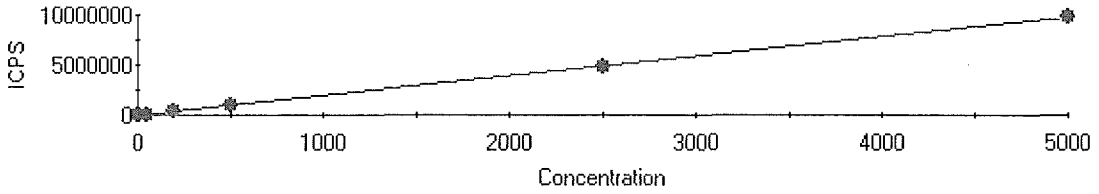
206Pb FQ Block 1



Intercept CPS=67.411071 Intercept Conc=0.030909
Sensitivity=2180.956317 Correlation Coeff=0.999994

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	0.000	0.000	67.41	0.00
S	1.000	0.933	0.067	2101.68	6.73
S10	10.000	9.919	0.081	21699.32	0.81
S50	50.000	49.254	0.746	107488.83	1.49
S200	200.000	200.881	0.881	438180.87	0.44
S500	500.000	504.642	4.642	1100670.54	0.93
S2500	2500.000	2485.501	14.499	5420837.57	0.58
S5000	5000.000	5006.757	6.757	10919586.58	0.14

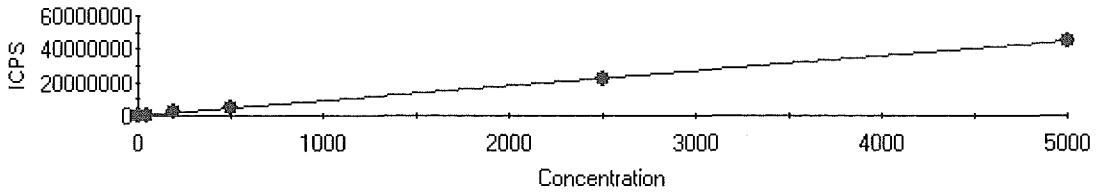
207Pb FQ Block 1



Intercept CPS=66.936690 Intercept Conc=0.034040
Sensitivity=1966.424472 Correlation Coeff=0.999979

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	66.94	0.00
S	1.000	0.956	0.044	1946.96	4.39
S10	10.000	9.209	0.791	18176.39	7.91
S50	50.000	46.158	3.842	90833.66	7.68
S200	200.000	187.694	12.306	369152.85	6.15
S500	500.000	468.908	31.092	922138.73	6.22
S2500	2500.000	2486.396	13.604	4889377.74	0.54
S5000	5000.000	5010.443	10.443	9852725.16	0.21

208Pb FQ Block 1



Intercept CPS=291.740411 Intercept Conc=0.032452
Sensitivity=8990.019910 Correlation Coeff=0.999991

Label	Defined	Measured	Error	Mean CPS	% Error
S0	0.000	-0.000	0.000	291.74	0.00
S	1.000	0.929	0.071	8639.51	7.14
S10	10.000	9.477	0.523	85494.15	5.23
S50	50.000	47.242	2.758	425001.13	5.52
S200	200.000	193.444	6.556	1739360.17	3.28
S500	500.000	489.044	10.956	4396807.36	2.19
S2500	2500.000	2483.590	16.410	22327811.26	0.66
S5000	5000.000	5009.592	9.592	45036620.71	0.19

Dilution Corrected Concentrations

S0 06/29/2015 14:50:15

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:50:55	99.12%	0.0015	0.2223	-0.0015	-0.0717	-0.0198	0.0633	-0.6154
2	14:51:35	98.54%	-0.0005	0.1037	0.0238	0.0935	-0.0204	0.0239	-0.0366
3	14:52:14	99.53%	-0.0052	-0.0901	-0.0025	-0.0318	0.0914	0.0012	0.9050
4	14:52:54	101.15%	0.0028	-0.1203	-0.0048	0.1267	-0.0625	-0.0585	-0.3230
5	14:53:34	101.68%	0.0015	-0.1155	-0.0150	-0.1168	0.0114	-0.0299	0.0699
X		100.00%	-0.0000	-0.0000	-0.0000	0.0000	-0.0000	-0.0000	0.0000
%RSD		1.35	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:50:55	-0.8191	98.80%	-0.0021	-0.0256	0.0192	0.6775	-0.0013	0.9432
2	14:51:35	1.3048	99.77%	0.0034	-0.0689	0.0367	1.6542	-0.0026	0.2810
3	14:52:14	1.7843	99.63%	0.0020	0.0469	-0.0296	-1.4696	-0.0015	-0.5347
4	14:52:54	-1.3068	101.09%	-0.0024	0.0664	-0.0211	-0.1588	-0.0034	-0.1731
5	14:53:34	-0.9632	100.71%	-0.0009	-0.0188	-0.0051	-0.7032	0.0088	-0.5164
X		0.0000	100.00%	-0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		0.0000	0.91	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:50:55	-0.7012	0.0007	0.0113	-0.0046	-0.0137	0.0501	0.0104	-0.0853
2	14:51:35	2.4066	-0.0009	0.0087	0.0183	-0.0207	0.0591	-0.0010	-0.1660
3	14:52:14	0.6285	-0.0015	-0.0081	-0.0122	-0.0000	-0.0433	-0.0209	-0.1871
4	14:52:54	-1.3429	0.0016	-0.0201	0.0027	-0.0055	-0.0413	-0.0067	0.2371
5	14:53:34	-0.9911	0.0001	0.0083	-0.0042	0.0399	-0.0245	0.0182	0.2013
X		-0.0000	0.0000	0.0000	0.0000	0.0000	-0.0000	-0.0000	0.0000
%RSD		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:50:55	0.0236	-0.3688	99.73%	0.0000	0.0000	0.0000	0.0000	0.0000
2	14:51:35	-0.2055	0.0451	99.60%	0.0000	0.0000	0.0000	0.0000	0.0000
3	14:52:14	0.0517	-0.1497	99.98%	0.0000	0.0000	0.0000	0.0000	0.0000
4	14:52:54	0.0653	0.5419	100.09%	0.0000	0.0000	0.0000	0.0000	0.0000
5	14:53:34	0.0650	-0.0685	100.60%	0.0000	0.0000	0.0000	0.0000	0.0000
X		0.0000	0.0000	100.00%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		0.0000	0.0000	0.39	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:50:55	99.90%	-0.0029	0.4019	0.0019	-0.0093	0.0000	0.0000	-0.0005
2	14:51:35	99.00%	-0.0032	-0.3666	-0.0027	0.0154	0.0000	0.0000	-0.0018
3	14:52:14	100.28%	-0.0014	0.1102	0.0007	-0.0075	0.0000	0.0000	0.0022
4	14:52:54	100.58%	0.0056	-0.1242	0.0010	0.0037	0.0000	0.0000	-0.0019
5	14:53:34	100.24%	0.0019	-0.0213	-0.0009	-0.0024	0.0000	0.0000	0.0020
X		100.00%	-0.0000	-0.0000	0.0000	-0.0000	0.0000	0.0000	0.0000
%RSD		0.61	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:50:55	-0.0039	-0.0031	99.78%	-0.0062	-0.0075	-0.0125	-0.0008	-0.0076
2	14:51:35	-0.0038	0.0125	99.09%	-0.0007	-0.0022	0.0013	-0.0098	-0.0034
3	14:52:14	-0.0105	-0.0031	99.58%	0.0075	0.0033	-0.0056	0.0005	0.0005
4	14:52:54	0.0026	-0.0070	100.57%	0.0031	0.0073	0.0056	-0.0024	0.0005
5	14:53:34	0.0156	0.0007	100.99%	-0.0038	-0.0009	0.0111	0.0125	0.0100
X		0.0000	-0.0000	100.00%	0.0000	-0.0000	0.0000	-0.0000	-0.0000
%RSD		0.0000	0.0000	0.77	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	14:50:55	99.57%	-0.5383
2	14:51:35	99.54%	-0.5383
3	14:52:14	99.51%	0.0057
4	14:52:54	100.40%	0.0009
5	14:53:34	100.98%	1.0700
X		100.00%	0.0000
%RSD		0.66	0.0000

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:55:14	101.14%	0.9687	450.9800	475.1300	478.4600	495.9600	19.8990	538.6400
2	14:55:54	101.91%	1.0050	461.7100	482.3900	486.9200	517.4100	20.0520	550.7000
3	14:56:34	102.92%	1.0327	T476.9500	485.8200	501.7900	513.4500	20.0630	555.0900
4	14:57:13	103.27%	1.0055	T474.7800	477.5800	480.2900	507.1700	19.6750	549.8900
5	14:57:53	103.38%	0.9985	442.3900	464.5800	471.9000	488.4300	19.1110	512.6100
X		102.52%	1.0021	T461.3600	477.1000	483.8700	504.4800	19.7600	541.3800
%RSD		0.94	2.2793	T3.2342	1.7055	2.3464	2.3974	2.0007	3.1752

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:55:14	454.7800	99.64%	-0.0022	5.1752	1.9183	193.9200	1.0044	201.4100
2	14:55:54	462.7600	101.48%	0.0059	5.2372	1.9632	192.6100	0.9642	204.5400
3	14:56:34	477.9000	102.47%	0.0016	5.2565	1.8371	197.8600	1.0197	205.3200
4	14:57:13	475.1000	102.19%	0.0030	5.0822	1.8605	192.9300	0.9504	201.9800
5	14:57:53	447.1800	103.00%	0.0029	4.9023	1.8686	192.4200	0.9534	196.2700
X		463.5400	101.76%	0.0022	5.1307	1.8895	193.9500	0.9784	201.9000
%RSD		2.8227	1.28	131.4400	2.8188	2.6828	1.1666	3.2286	1.7607

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:55:14	204.9400	0.9314	0.9678	1.8778	1.9195	2.0157	0.9918	4.9312
2	14:55:54	203.7100	0.9633	1.0363	2.0303	1.9838	2.0521	0.7879	5.1027
3	14:56:34	196.3300	0.9408	1.1124	1.9683	2.0731	2.1202	0.9865	5.0447
4	14:57:13	205.4500	0.9842	0.9484	1.9675	2.1093	2.2172	0.9594	4.4226
5	14:57:53	202.6400	0.9143	1.0343	1.8749	1.9089	2.1278	0.8469	4.6035
X		202.6100	0.9468	1.0198	1.9438	1.9989	2.1066	0.9145	4.8209
%RSD		1.8164	2.8926	6.3667	3.4253	4.4973	3.6845	10.0470	6.1140

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:55:14	4.9608	0.4615	99.60%	0.0000	0.0000	0.0000	0.0000	0.0000
2	14:55:54	4.5657	-0.2323	100.21%	0.0000	0.0000	0.0000	0.0000	0.0000
3	14:56:34	5.3072	0.4471	100.57%	0.0000	0.0000	0.0000	0.0000	0.0000
4	14:57:13	5.0018	0.7109	101.16%	0.0000	0.0000	0.0000	0.0000	0.0000
5	14:57:53	5.0531	0.0648	101.13%	0.0000	0.0000	0.0000	0.0000	0.0000
X		4.9777	0.2904	100.53%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		5.3616	128.2300	0.66	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:55:14	100.23%	0.9809	0.3967	0.9479	0.8751	0.0000	0.0000	1.9226
2	14:55:54	100.68%	1.0257	-0.4388	1.0103	0.9753	0.0000	0.0000	1.9752
3	14:56:34	101.44%	1.0484	0.0130	1.0068	1.0242	0.0000	0.0000	1.9921
4	14:57:13	102.25%	1.0166	0.5360	1.0283	1.0296	0.0000	0.0000	1.9073
5	14:57:53	101.50%	0.9499	-0.0474	0.9389	0.8983	0.0000	0.0000	1.9468
X		101.22%	1.0043	0.0919	0.9865	0.9605	0.0000	0.0000	1.9488
%RSD		0.77	3.8734	420.6500	4.0814	7.4022	0.0000	0.0000	1.8130

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:55:14	9.1078	9.4611	99.92%	0.9382	0.8948	0.9679	0.9768	0.9368
2	14:55:54	9.2058	10.2000	99.72%	0.9423	0.9557	0.9396	0.9557	0.9375
3	14:56:34	9.9989	9.6736	99.54%	0.9618	0.9625	0.9525	0.9545	0.9390
4	14:57:13	9.8030	10.0070	100.44%	0.9665	0.9806	0.9207	0.9808	0.9515
5	14:57:53	9.2376	9.7950	100.50%	0.9106	0.8835	0.8829	0.9126	0.8781
X		9.4706	9.8274	100.02%	0.9439	0.9354	0.9327	0.9561	0.9286
%RSD		4.2421	2.9237	0.43	2.3558	4.6357	3.5161	2.8342	3.1087

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	14:55:14	99.48%	0.0059
2	14:55:54	99.83%	-0.5383
3	14:56:34	99.55%	0.0055
4	14:57:13	100.09%	-0.5383
5	14:57:53	100.75%	-0.5383
X		99.94%	-0.3207
%RSD		0.51	92.9020

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:59:34	101.36%	10.0680	18.3760	10.5730	10.4870	12.1840	11.2130	14.4890
2	15:00:13	101.57%	10.3220	19.1930	10.9800	11.4240	11.7730	11.1960	14.2690
3	15:00:53	103.33%	10.2670	19.1770	10.5080	12.2630	10.2960	10.9820	13.2170
4	15:01:32	102.31%	10.4990	19.1170	10.5280	9.8687	11.0700	11.1900	14.2770
5	15:02:12	103.68%	10.1380	18.9100	9.9873	9.7135	10.4440	10.7980	12.1510
x		102.45%	10.2590	18.9550	10.5150	10.7510	11.1530	11.0760	13.6810
%RSD		1.01	1.6360	1.8083	3.3570	10.0440	7.3544	1.6435	7.2283

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:59:34	13.3260	100.56%	0.0060	9.3702	9.5309	12.0430	10.0110	9.9180
2	15:00:13	14.1980	101.01%	-0.0010	9.6870	9.5949	12.2550	9.9713	9.4756
3	15:00:53	11.5900	101.38%	-0.0010	9.6833	9.7502	14.4090	10.0750	9.9668
4	15:01:32	14.9430	102.23%	-0.0025	9.6558	9.5471	12.7360	10.0210	8.5039
5	15:02:12	10.9920	102.37%	0.0043	9.7015	9.7553	12.0620	9.9447	7.9104
x		13.0100	101.51%	0.0012	9.6195	9.6357	12.7010	10.0050	9.1550
%RSD		12.9390	0.77	317.0500	1.4593	1.1358	7.8309	0.4987	9.9465

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:59:34	11.5680	9.6941	10.0740	9.7638	9.7606	12.4230	9.4709	9.7283
2	15:00:13	9.9333	9.6841	10.0200	9.7934	9.6898	12.3130	9.3291	10.2660
3	15:00:53	11.1010	9.6268	10.1790	9.9220	10.1570	12.3230	10.0430	9.6975
4	15:01:32	10.4640	9.7203	10.3510	9.7785	10.2550	12.1990	9.8017	10.1800
5	15:02:12	11.1630	9.5445	10.0020	9.6409	10.0580	12.1330	9.8676	9.8458
x		10.8460	9.6539	10.1250	9.7797	9.9839	12.2780	9.7025	9.9434
%RSD		5.9486	0.7261	1.4205	1.0217	2.4783	0.9240	3.0323	2.6418

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:59:34	9.3188	-0.3449	100.23%	0.0000	0.0000	0.0000	0.0000	0.0000
2	15:00:13	9.8143	1.1568	100.68%	0.0000	0.0000	0.0000	0.0000	0.0000
3	15:00:53	10.6670	-0.4831	100.57%	0.0000	0.0000	0.0000	0.0000	0.0000
4	15:01:32	10.8640	-0.7948	100.89%	0.0000	0.0000	0.0000	0.0000	0.0000
5	15:02:12	10.0060	-0.1662	101.18%	0.0000	0.0000	0.0000	0.0000	0.0000
x		10.1340	-0.1264	100.71%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		6.2433	595.9200	0.35	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:59:34	101.09%	9.5912	-0.3588	9.5530	9.7792	0.0000	0.0000	9.2114
2	15:00:13	101.01%	9.7664	0.4031	9.9827	10.0800	0.0000	0.0000	9.3276
3	15:00:53	101.43%	10.0500	0.7899	10.0400	10.0750	0.0000	0.0000	9.5351
4	15:01:32	101.76%	10.0680	0.0962	10.0060	10.0660	0.0000	0.0000	9.4343
5	15:02:12	101.40%	9.7579	-0.4639	9.6669	10.0530	0.0000	0.0000	9.4375
x		101.34%	9.8468	0.0933	9.8498	10.0100	0.0000	0.0000	9.3892
%RSD		0.30	2.0947	561.0000	2.2697	1.2958	0.0000	0.0000	1.3158

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	14:59:34	9.5008	9.7728	100.03%	9.4175	9.3273	9.7959	9.0599	9.3655
2	15:00:13	9.0440	9.8474	100.32%	9.5555	9.4493	10.0290	9.2404	9.5470
3	15:00:53	9.6059	10.1700	100.84%	9.6453	9.7147	10.0600	9.3579	9.6439
4	15:01:32	9.5529	9.9290	99.20%	9.6171	9.5120	9.9208	9.2873	9.4962
5	15:02:12	9.5843	9.7051	100.07%	9.3625	9.3029	9.7866	9.1011	9.3347
x		9.4576	9.8849	100.09%	9.5196	9.4612	9.9185	9.2093	9.4774
%RSD		2.4800	1.8222	0.59	1.3046	1.7528	1.2828	1.3645	1.3534

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	14:59:34	99.96%	0.0033
2	15:00:13	100.46%	-0.5383
3	15:00:53	100.55%	0.0001
4	15:01:32	100.29%	0.0015
5	15:02:12	100.16%	-0.5383
x		100.28%	-0.2144
%RSD		0.23	137.9500

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:03:53	102.62%	51.9390	46.5680	49.1810	49.5250	52.0010	53.4660	51.9140
2	15:04:33	102.48%	51.6600	47.0460	48.9220	53.3720	52.4410	53.1970	53.1610
3	15:05:12	102.44%	52.2620	47.8360	50.4030	48.2180	53.1480	54.4300	50.8270
4	15:05:52	103.00%	50.6940	45.6570	47.7670	48.8150	51.5010	51.6470	50.3630
5	15:06:32	102.85%	48.1090	43.5690	48.1530	44.6300	49.6610	50.2090	46.1200
X		102.68%	50.9330	46.1350	48.8850	48.9120	51.7510	52.5900	50.4770
%RSD		0.23	3.3058	3.5494	2.0907	6.3921	2.5422	3.1643	5.2777

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:03:53	50.9280	100.02%	0.0062	49.2150	49.0750	66.7960	50.3760	49.1550
2	15:04:33	48.6970	100.16%	0.0033	49.2610	49.0990	65.8990	49.8040	48.4550
3	15:05:12	47.2990	100.59%	0.0005	49.5540	49.7790	70.3970	50.5400	49.2100
4	15:05:52	45.7620	101.40%	-0.0010	47.4640	47.6480	68.9200	49.5990	46.8780
5	15:06:32	43.1840	100.14%	-0.0009	45.0950	45.9870	66.9090	47.6420	45.3520
X		47.1740	100.46%	0.0016	48.1180	48.3180	67.7840	49.5920	47.8100
%RSD		6.2107	0.56	189.3400	3.9068	3.1393	2.7017	2.3346	3.4833

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:03:53	43.1510	48.7870	50.6260	50.1100	50.3170	50.6750	49.2740	51.4560
2	15:04:33	50.8930	49.7010	50.2840	49.6390	49.5700	51.9910	49.9820	51.8050
3	15:05:12	52.4560	49.3110	51.3260	50.2180	51.1690	51.7920	49.2850	50.8050
4	15:05:52	48.2410	48.2690	49.6170	49.2340	48.9490	51.2620	48.2160	50.7160
5	15:06:32	48.6500	45.8340	47.3430	46.7730	47.3200	47.7550	46.3470	48.1310
X		48.6780	48.3800	49.8390	49.1950	49.4650	50.6950	48.6210	50.5830
%RSD		7.2576	3.1471	3.0609	2.8653	2.9484	3.3948	2.9183	2.8535

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:03:53	51.6700	0.7766	98.12%	0.0000	0.0000	0.0000	0.0000	0.0000
2	15:04:33	53.1410	-0.6243	98.55%	0.0000	0.0000	0.0000	0.0000	0.0000
3	15:05:12	50.4460	0.3236	98.66%	0.0000	0.0000	0.0000	0.0000	0.0000
4	15:05:52	49.6720	-0.1090	98.84%	0.0000	0.0000	0.0000	0.0000	0.0000
5	15:06:32	47.7510	-0.8306	99.20%	0.0000	0.0000	0.0000	0.0000	0.0000
X		50.5360	-0.0928	98.68%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		4.0285	714.4100	0.40	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:03:53	99.41%	49.3640	-0.5551	49.5420	49.8140	0.0000	0.0000	47.6570
2	15:04:33	99.67%	49.9240	0.2218	50.1290	50.3140	0.0000	0.0000	48.4600
3	15:05:12	99.72%	50.1260	-0.4748	50.4580	51.1840	0.0000	0.0000	48.0600
4	15:05:52	100.27%	50.3440	-0.3215	50.2070	48.4140	0.0000	0.0000	46.8940
5	15:06:32	99.94%	46.0970	-0.0641	46.2820	46.8010	0.0000	0.0000	45.4850
X		99.80%	49.1710	-0.2388	49.3240	49.3050	0.0000	0.0000	47.3110
%RSD		0.32	3.5720	133.3100	3.5135	3.4942	0.0000	0.0000	2.4807

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:03:53	47.6930	49.8280	98.01%	48.0130	47.4570	49.6490	46.6460	47.8720
2	15:04:33	49.3610	50.3330	98.26%	49.1600	48.3900	49.6240	46.6870	47.9780
3	15:05:12	49.0460	50.3640	98.21%	48.4200	48.2230	50.3230	46.6790	47.9370
4	15:05:52	48.2240	50.5600	98.71%	48.5100	47.8690	49.4820	46.9610	47.4250
5	15:06:32	45.6290	47.0240	99.41%	45.0290	44.7680	47.1930	43.8190	45.0000
X		47.9910	49.6220	98.52%	47.8270	47.3410	49.2540	46.1580	47.2420
%RSD		3.0758	2.9769	0.57	3.3807	3.1310	2.4312	2.8464	2.6948

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:03:53	98.51%	0.0113
2	15:04:33	97.83%	-0.5383
3	15:05:12	98.95%	0.0088
4	15:05:52	99.32%	-0.5383
5	15:06:32	99.52%	0.5496
X		98.83%	-0.1014
%RSD		0.69	449.4100

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:08:13	101.45%	205.7200	185.2900	191.6300	193.3800	203.7400	201.7700	213.1100
2	15:08:52	100.90%	207.2300	188.4700	192.5200	198.1200	209.6100	207.2000	214.4800
3	15:09:32	100.78%	209.9000	191.7900	197.3700	204.2000	207.3900	208.5800	217.2000
4	15:10:12	100.16%	208.1600	188.9100	194.6600	202.1900	200.8000	205.3400	216.1700
5	15:10:52	100.80%	202.6400	181.9800	190.1100	191.1700	198.2500	200.3000	204.8700
x		100.82%	206.7300	187.2900	193.2600	197.8100	203.9600	204.6400	213.1700
%RSD		0.45	1.3271	2.0059	1.4629	2.8120	2.2778	1.7222	2.2968

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:08:13	195.9900	98.31%	0.0079	197.9500	197.6400	287.3900	202.9700	202.8400
2	15:08:52	195.1900	98.37%	-0.0020	200.1300	198.9000	278.1500	205.0400	202.4500
3	15:09:32	195.3400	96.79%	0.0097	199.7700	201.2700	279.9600	206.4300	204.9000
4	15:10:12	191.1900	97.70%	0.0152	196.0500	197.0100	282.3200	203.8900	201.8900
5	15:10:52	194.3100	97.24%	0.0053	194.7500	194.4400	271.0500	199.9700	199.3900
x		194.4000	97.68%	0.0072	197.7300	197.8500	279.7700	203.6600	202.2900
%RSD		0.9747	0.70	87.7790	1.1759	1.2680	2.1391	1.1962	0.9783

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:08:13	202.0500	198.1800	201.7000	198.1300	198.4200	205.4500	192.5400	199.7000
2	15:08:52	199.9800	199.1800	200.7400	201.8600	200.3800	209.6200	194.6500	204.6600
3	15:09:32	210.7300	204.6000	205.8300	204.8600	203.2500	212.1800	198.4100	207.0900
4	15:10:12	201.8000	200.0800	201.9300	203.5100	200.4600	206.5300	196.0700	204.0700
5	15:10:52	197.0700	195.7900	199.8100	199.6300	197.6200	203.2700	193.3900	200.4100
x		202.3300	199.5700	202.0000	201.6000	200.0200	207.4100	195.0100	203.1900
%RSD		2.5219	1.6234	1.1373	1.3642	1.0919	1.6945	1.1890	1.5183

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:08:13	201.0800	-0.1646	97.96%	0.0000	0.0000	0.0000	0.0000	0.0000
2	15:08:52	202.2300	-0.5434	96.97%	0.0000	0.0000	0.0000	0.0000	0.0000
3	15:09:32	203.1800	0.0173	95.72%	0.0000	0.0000	0.0000	0.0000	0.0000
4	15:10:12	205.7800	-0.5740	96.39%	0.0000	0.0000	0.0000	0.0000	0.0000
5	15:10:52	198.2300	0.0610	96.00%	0.0000	0.0000	0.0000	0.0000	0.0000
x		202.1000	-0.2407	96.61%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		1.3714	125.6800	0.92	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:08:13	98.04%	197.9100	-1.8643	197.6400	199.7000	0.0000	0.0000	190.7600
2	15:08:52	97.74%	201.8100	1.8889	202.5600	204.3100	0.0000	0.0000	195.7200
3	15:09:32	97.06%	204.9500	0.6929	205.0500	203.4500	0.0000	0.0000	193.7900
4	15:10:12	96.69%	207.5600	-3.9328	209.4100	202.5200	0.0000	0.0000	193.2100
5	15:10:52	98.13%	192.4000	-0.7542	191.9300	193.2200	0.0000	0.0000	189.4800
x		97.53%	200.9300	-0.7939	201.3200	200.6400	0.0000	0.0000	192.5900
%RSD		0.65	2.9739	284.5200	3.3565	2.2397	0.0000	0.0000	1.2894

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:08:13	190.6500	199.3800	96.92%	193.4000	193.4800	199.6300	186.0600	192.5500
2	15:08:52	194.7500	200.8600	95.62%	195.8000	197.1400	200.4700	188.1600	193.7700
3	15:09:32	196.8500	204.0900	96.03%	198.6900	200.2300	205.9800	190.6700	197.1000
4	15:10:12	194.4500	200.2000	96.60%	197.4800	199.5800	203.7700	190.1400	195.3500
5	15:10:52	186.7400	193.8500	96.93%	189.3300	189.4800	194.5500	183.4400	188.4500
x		192.6900	199.6800	96.42%	194.9400	195.9800	200.8800	187.6900	193.4400
%RSD		2.0794	1.8599	0.60	1.9036	2.2951	2.1714	1.5944	1.6920

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:08:13	97.81%	-0.5383
2	15:08:52	98.02%	-0.5383
3	15:09:32	96.73%	1.1407
4	15:10:12	97.11%	-0.5383
5	15:10:52	97.23%	0.0185
x		97.38%	-0.0912
%RSD		0.54	800.2600

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:12:33	99.02%	513.3600	460.1400	485.7400	496.5700	514.3600	T 510.1500	532.1900
2	15:13:12	99.75%	511.1400	T 473.2800	484.4700	497.8800	507.9000	516.9400	533.0900
3	15:13:52	99.21%	517.8200	467.3900	484.4200	497.5500	500.7800	T 508.6900	527.9000
4	15:14:32	97.90%	511.5400	468.5600	482.3000	488.9300	490.1800	510.0600	528.2600
5	15:15:12	98.95%	488.9200	437.8300	462.3600	466.7500	484.9200	493.6100	491.7900
X		98.97%	508.5600	T 461.4400	479.8600	489.5300	499.6300	T 507.8900	522.6400
%RSD		0.68	2.2203	T 3.0363	2.0545	2.7077	2.4354	T 1.6945	3.3296

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:12:33	480.2900	96.23%	-0.0033	T 514.0600	511.7400	714.8000	T 509.9900	524.0900
2	15:13:12	485.6900	96.63%	-0.0004	T 508.2000	508.3800	708.1900	T 507.3000	518.6000
3	15:13:52	487.6900	96.17%	-0.0047	T 507.9200	508.8900	717.9300	T 509.7300	523.2300
4	15:14:32	476.7500	95.66%	0.0071	T 496.4100	498.4000	694.1700	T 497.6600	508.5800
5	15:15:12	453.6600	95.69%	0.0041	T 482.2600	482.1900	673.2800	T 479.2000	491.2100
X		476.8200	96.07%	0.0006	T 501.7700	501.9200	701.6700	T 500.7800	513.1400
%RSD		2.8624	0.42	873.3900	T 2.5200	2.4167	2.6098	T 2.6093	2.6740

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:12:33	512.8100	T 501.7300	506.5400	507.5200	509.3700	520.3900	489.9900	M 505.9800
2	15:13:12	522.3600	T 504.9100	509.2300	506.9400	503.0100	522.7300	492.9700	M 503.4300
3	15:13:52	511.6000	T 502.6900	509.3400	507.4100	502.2300	520.2400	488.2900	M 507.9000
4	15:14:32	495.8300	T 500.2600	502.2200	502.4100	499.6800	513.9000	483.8100	M 502.2800
5	15:15:12	479.4600	T 481.3200	479.2600	481.6400	475.5100	487.1500	463.7800	473.7500
X		504.4100	T 498.1800	501.3200	501.1800	497.9600	512.8800	483.7700	M 498.6700
%RSD		3.3483	T 1.9226	2.5260	2.2206	2.6197	2.8765	2.4094	M 2.8280

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:12:33	M 505.1500	-0.4620	95.50%	0.0000	0.0000	0.0000	0.0000	0.0000
2	15:13:12	M 505.6500	0.6087	95.08%	0.0000	0.0000	0.0000	0.0000	0.0000
3	15:13:52	M 508.4200	-0.0716	95.12%	0.0000	0.0000	0.0000	0.0000	0.0000
4	15:14:32	M 502.8900	-0.0465	93.45%	0.0000	0.0000	0.0000	0.0000	0.0000
5	15:15:12	473.4000	0.3044	93.95%	0.0000	0.0000	0.0000	0.0000	0.0000
X		M 499.1000	0.0666	94.62%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		M 2.9054	610.6100	0.92	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:12:33	97.10%	M 502.0500	2.0302	M 501.6600	501.3700	0.0000	0.0000	486.9000
2	15:13:12	96.48%	M 507.6400	1.4515	M 508.5800	506.6000	0.0000	0.0000	487.7000
3	15:13:52	96.46%	M 509.5200	-3.0009	M 510.0300	506.2600	0.0000	0.0000	494.6400
4	15:14:32	95.63%	M 513.5800	-5.3812	M 512.9600	496.9900	0.0000	0.0000	480.2500
5	15:15:12	95.91%	465.7900	2.4475	464.5000	473.6700	0.0000	0.0000	465.6200
X		96.31%	M 499.7200	-0.4906	M 499.5400	496.9800	0.0000	0.0000	483.0200
%RSD		0.59	M 3.8849	713.2500	M 4.0089	2.7392	0.0000	0.0000	2.2737

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:12:33	484.4500	496.6400	96.53%	495.6300	511.1700	511.0200	470.7800	492.8600
2	15:13:12	484.7200	499.6900	96.66%	497.3100	513.8200	511.8200	478.9500	496.7300
3	15:13:52	485.7600	500.5200	96.36%	504.2400	T 503.2100	515.8500	479.4400	500.4700
4	15:14:32	483.3700	490.4200	95.74%	496.0700	T 493.0500	501.0500	465.6300	487.5200
5	15:15:12	450.0100	469.0400	95.10%	461.4800	476.0300	483.4700	449.7400	467.6500
X		477.6600	491.2600	96.08%	490.9500	T 499.4600	504.6400	468.9100	489.0400
%RSD		3.2414	2.6545	0.68	3.4292	T 3.0810	2.5818	2.5970	2.6350

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:12:33	97.73%	0.0157
2	15:13:12	98.12%	2.2203
3	15:13:52	97.48%	0.5724
4	15:14:32	97.72%	1.6776
5	15:15:12	96.76%	0.0212
X		97.56%	0.9014
%RSD		0.52	111.0700

S2500 06/29/2015 15:16:14

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:16:53	95.71%	↹2544.0000	↹2372.0000	↹2432.7000	2424.9000	2497.2000	↹2521.0000	↹2565.3000
2	15:17:33	95.40%	↹2546.5000	↹2377.1000	↹2456.1000	2418.8000	2496.0000	↹2525.5000	↹2558.5000
3	15:18:13	95.75%	↹2560.9000	↹2409.2000	↹2480.1000	2442.2000	2500.0000	↹2574.2000	↹2608.3000
4	15:18:53	94.61%	↹2504.5000	↹2387.5000	↹2430.2000	2386.3000	2467.2000	↹2475.1000	↹2568.7000
5	15:19:32	94.17%	↹2484.6000	↹2327.2000	↹2359.2000	2398.0000	2433.1000	↹2485.5000	↹2457.3000
x		95.13%	↹2528.1000	↹2374.6000	↹2431.7000	2414.0000	2478.7000	↹2516.3000	↹2551.6000
%RSD		0.74	↹1.2691	↹1.2674	↹1.8631	0.9170	1.1589	↹1.5516	↹2.2037

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:16:53	2395.8000	91.16%	0.0173	↹2530.4000	↹2523.0000	3531.8000	↹2524.6000	↹2592.6000
2	15:17:33	2393.7000	90.98%	0.0081	↹2542.4000	↹2526.7000	3568.8000	↹2540.4000	↹2602.8000
3	15:18:13	2466.7000	89.97%	0.0037	↹2601.9000	↹2564.3000	3623.5000	↹2582.7000	↹2646.1000
4	15:18:53	2362.6000	90.43%	0.1057	↹2498.3000	↹2458.9000	3491.7000	↹2487.1000	↹2555.8000
5	15:19:32	2312.3000	89.67%	0.0037	↹2454.3000	↹2451.5000	3452.3000	↹2458.0000	↹2537.3000
x		2386.2000	90.44%	0.0277	↹2525.5000	↹2504.9000	3533.6000	↹2518.6000	↹2586.9000
%RSD		2.3570	0.70	158.6600	↹2.1643	↹1.9250	1.8824	↹1.9131	↹1.6419

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:16:53	2514.7000	↹2527.1000	↹2508.5000	↹2523.5000	↹2526.3000	2588.5000	2507.1000	-0.4605
2	15:17:33	2561.1000	↹2539.6000	↹2535.8000	↹2550.6000	↹2524.4000	2617.4000	2521.0000	-0.3456
3	15:18:13	2547.0000	↹2590.3000	↹2588.3000	↹2580.2000	↹2557.9000	2645.4000	2533.4000	-0.2300
4	15:18:53	2474.8000	↹2512.8000	↹2492.9000	↹2510.1000	↹2516.7000	2553.4000	2460.8000	-0.5331
5	15:19:32	2440.4000	↹2448.3000	↹2442.7000	↹2459.2000	↹2451.0000	2524.0000	2421.9000	-0.6634
x		2507.6000	↹2523.6000	↹2513.6000	↹2524.7000	↹2515.2000	2585.8000	2488.9000	-0.4465
%RSD		1.9998	↹2.0320	↹2.1376	↹1.7999	↹1.5597	1.8776	1.8652	37.4340

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:16:53	0.1457	0.6011	89.39%	0.0000	0.0000	0.0000	0.0000	0.0000
2	15:17:33	0.4554	0.4911	87.91%	0.0000	0.0000	0.0000	0.0000	0.0000
3	15:18:13	0.6674	-0.5664	87.80%	0.0000	0.0000	0.0000	0.0000	0.0000
4	15:18:53	-0.0286	0.5364	88.35%	0.0000	0.0000	0.0000	0.0000	0.0000
5	15:19:32	0.5848	0.3584	88.09%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.3649	0.2841	88.31%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		81.1710	170.2500	0.72	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:16:53	89.30%	0.6504	-1.1611	0.6375	2601.8000	0.0000	0.0000	↹2541.1000
2	15:17:33	89.98%	0.6851	0.9915	0.7227	2593.7000	0.0000	0.0000	↹2550.5000
3	15:18:13	90.14%	1.0564	-0.6158	1.0759	2591.0000	0.0000	0.0000	↹2556.6000
4	15:18:53	89.72%	1.2757	-2.2151	1.2846	2531.2000	0.0000	0.0000	↹2487.3000
5	15:19:32	88.66%	0.4414	0.5823	0.4358	2506.5000	0.0000	0.0000	↹2430.6000
x		89.56%	0.8218	-0.4836	0.8313	2564.8000	0.0000	0.0000	↹2513.2000
%RSD		0.66	40.9880	269.3300	41.2820	1.6790	0.0000	0.0000	↹2.1375

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:16:53	2458.1000	2570.3000	91.21%	↹2479.4000	↹2490.5000	↹2495.7000	↹2493.6000	↹2489.2000
2	15:17:33	2457.1000	2571.9000	90.24%	↹2501.7000	↹2515.3000	↹2516.4000	↹2510.9000	↹2511.9000
3	15:18:13	2444.1000	2554.4000	90.15%	↹2517.0000	↹2537.4000	↹2525.5000	↹2531.5000	↹2529.9000
4	15:18:53	2408.9000	2517.4000	90.59%	↹2498.5000	↹2506.2000	↹2476.0000	↹2474.2000	↹2474.6000
5	15:19:32	2342.1000	2457.5000	91.26%	↹2380.2000	↹2387.6000	↹2413.8000	↹2421.8000	↹2412.3000
x		2422.0000	2534.3000	90.69%	↹2475.4000	↹2487.4000	↹2485.5000	↹2486.4000	↹2483.6000
%RSD		2.0191	1.9037	0.57	↹2.2162	↹2.3439	↹1.7871	↹1.6841	↹1.8162

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:16:53	91.71%	1.8230
2	15:17:33	91.17%	0.0555
3	15:18:13	91.13%	0.0558
4	15:18:53	91.41%	0.0539
5	15:19:32	91.73%	-0.5383
x		91.43%	0.2900
%RSD		0.31	308.5400

S5000 06/29/2015 15:20:34

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:21:14	95.47%	T 4967.1000	T 4744.8000	T 4829.2000	4780.6000	4869.6000	T 4916.3000	T 4926.0000
2	15:21:54	94.95%	TM 5003.8000	T 4808.3000	T 4900.0000	4847.5000	4925.2000	T 4954.1000	T 5003.7000
3	15:22:35	94.31%	TM 5029.0000	T 4789.5000	T 4900.4000	4911.2000	4987.6000	T 5002.3000	T 5031.7000
4	15:23:15	98.08%	T 4937.1000	T 4777.9000	T 4789.3000	4732.5000	4840.2000	T 4911.2000	T 4973.3000
5	15:23:55	95.96%	T 4987.2000	T 4732.7000	T 4821.3000	4758.2000	4893.2000	T 4971.7000	T 4900.4000
X		95.76%	TM 4984.8000	T 4770.6000	T 4848.1000	4806.0000	4903.2000	T 4951.1000	T 4967.0000
%RSD		1.50	TM 0.7028	T 0.6576	T 1.0293	1.5126	1.1539	T 0.7726	T 1.0883

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:21:14	4643.3000	90.70%	0.0128	T 4962.7000	T 4956.8000	7069.2000	T 4979.8000	T 5112.2000
2	15:21:54	4813.2000	90.46%	0.0315	TM 5021.2000	TM 5044.3000	7059.1000	TM 5050.4000	T 5184.9000
3	15:22:35	4749.1000	91.38%	0.0142	TM 5007.2000	TM 5010.9000	7119.0000	TM 5046.9000	T 5155.6000
4	15:23:15	4666.4000	92.39%	0.0215	TM 5012.3000	T 4985.0000	6996.6000	T 4960.6000	T 5099.5000
5	15:23:55	4669.6000	91.46%	0.0050	T 4932.6000	T 4990.3000	6965.3000	T 4914.7000	T 5090.4000
X		4708.3000	91.28%	0.0170	TM 4987.2000	TM 4997.5000	7041.9000	TM 4990.5000	T 5128.5000
%RSD		1.5074	0.83	58.8720	TM 0.7612	TM 0.6514	0.8667	TM 1.1651	T 0.7847

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:21:14	4936.0000	TM 5018.3000	T 4997.9000	T 4966.7000	T 4944.1000	T 4934.7000	T 4989.2000	-0.3995
2	15:21:54	4998.5000	T 4988.9000	T 4986.4000	T 4980.4000	TM 5005.2000	TM 5010.9000	TM 5034.4000	-0.2407
3	15:22:35	4979.4000	TM 5010.1000	TM 5048.3000	TM 5024.6000	TM 5021.5000	T 4994.0000	TM 5062.5000	-0.2483
4	15:23:15	4865.3000	T 4966.7000	T 4961.6000	T 4968.5000	T 4986.8000	T 4904.0000	T 4965.7000	-0.2115
5	15:23:55	4879.9000	T 4958.1000	T 4970.6000	T 4997.1000	TM 5005.4000	T 4934.0000	T 4985.2000	-0.1118
X		4931.8000	TM 4988.4000	TM 4993.0000	TM 4987.5000	TM 4992.6000	TM 4955.5000	TM 5007.4000	-0.2423
%RSD		1.1924	TM 0.5257	TM 0.6806	TM 0.4820	TM 0.5968	TM 0.9079	TM 0.7941	42.6570

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:21:14	0.6103	-0.2361	86.51%	0.0000	0.0000	0.0000	0.0000	0.0000
2	15:21:54	0.4302	0.7825	86.53%	0.0000	0.0000	0.0000	0.0000	0.0000
3	15:22:35	0.5111	0.7740	86.54%	0.0000	0.0000	0.0000	0.0000	0.0000
4	15:23:15	0.4408	0.7810	87.35%	0.0000	0.0000	0.0000	0.0000	0.0000
5	15:23:55	0.2965	0.6680	87.14%	0.0000	0.0000	0.0000	0.0000	0.0000
X		0.4578	0.5539	86.81%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		25.1820	80.2060	0.46	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:21:14	86.76%	0.3752	-1.2351	0.3936	T 4986.7000	0.0000	0.0000	T 4998.2000
2	15:21:54	88.17%	0.4842	-15.9300	0.5004	T 4960.8000	0.0000	0.0000	TM 5016.7000
3	15:22:35	87.58%	0.9810	-21.2140	1.0304	T 5028.6000	0.0000	0.0000	TM 5028.3000
4	15:23:15	87.92%	0.9794	-22.3580	0.9945	T 4938.0000	0.0000	0.0000	T 4971.2000
5	15:23:55	87.93%	0.3431	-16.8230	0.3438	T 4925.1000	0.0000	0.0000	T 4962.7000
X		87.67%	0.6326	-15.5120	0.6526	T 4967.9000	0.0000	0.0000	TM 4995.4000
%RSD		0.63	50.8460	54.4260	51.1320	T 0.8308	0.0000	0.0000	TM 0.5661

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:21:14	TM 5038.0000	T 4981.9000	87.78%	TM 5030.1000	T 5005.3000	T 5019.6000	T 5020.2000	T 5021.3000
2	15:21:54	TM 5031.3000	T 4976.3000	88.91%	TM 5051.3000	T 5038.7000	T 5031.7000	T 5032.0000	T 5030.8000
3	15:22:35	TM 5091.1000	TM 5039.0000	88.61%	TM 5061.2000	T 5068.0000	T 5058.9000	T 5042.8000	T 5051.8000
4	15:23:15	TM 5002.5000	T 4972.5000	88.35%	TM 5019.2000	T 5008.9000	T 4975.4000	T 5000.6000	T 4993.1000
5	15:23:55	TM 5044.7000	T 4949.0000	88.81%	T 4905.4000	T 4911.7000	T 4948.1000	T 4956.6000	T 4950.8000
X		TM 5041.5000	TM 4983.7000	88.49%	TM 5013.4000	T 5006.5000	T 5006.8000	T 5010.4000	T 5009.6000
%RSD		TM 0.6359	TM 0.6688	0.51	TM 1.2500	T 1.1739	T 0.8890	T 0.6771	T 0.7794

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:21:14	86.57%	0.7124
2	15:21:54	87.81%	1.9277
3	15:22:35	87.78%	2.5455
4	15:23:15	88.18%	1.9175
5	15:23:55	88.70%	2.5135
X		87.81%	1.9233
%RSD		0.89	38.5760

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:25:37	89.27%	1.7141	48422.0000	49103.0000	49695.0000	49985.0000	49795.0000	50835.0000
2	15:26:16	90.60%	1.0555	49792.0000	50081.0000	50503.0000	50934.0000	50267.0000	51558.0000
3	15:26:56	90.68%	0.7354	49548.0000	50538.0000	50796.0000	51192.0000	50870.0000	51871.0000
4	15:27:36	91.58%	0.5332	50150.0000	50113.0000	50507.0000	50347.0000	50278.0000	52146.0000
5	15:28:16	91.97%	0.4106	47287.0000	48267.0000	48648.0000	48529.0000	48345.0000	48593.0000
X		90.82%	0.8897	49040.0000	49620.0000	50030.0000	50198.0000	49911.0000	51001.0000
%RSD		1.15	58.6040	2.3932	1.8566	1.7484	2.0847	1.9130	2.8085

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:25:37	49535.0000	88.70%	0.0119	1.2764	1.4713	50566.0000	2.4073	50811.0000
2	15:26:16	50592.0000	89.95%	0.0209	0.7682	0.9845	50998.0000	1.8841	51470.0000
3	15:26:56	50741.0000	90.79%	0.0314	0.2836	0.6231	51451.0000	1.5463	51276.0000
4	15:27:36	49957.0000	92.06%	0.0018	0.1723	0.5459	50571.0000	1.4082	50417.0000
5	15:28:16	48132.0000	92.31%	0.0154	0.0679	0.4084	48777.0000	1.3265	49065.0000
X		49791.0000	90.76%	0.0163	0.5137	0.8066	50473.0000	1.7145	50608.0000
%RSD		2.1041	1.65	67.2050	98.0500	53.0940	2.0126	25.7790	1.8869

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:25:37	50957.0000	1.6133	2.2280	2.0699	2.1733	3.4403	1.8194	-0.4664
2	15:26:16	51540.0000	1.0697	1.7461	1.6208	1.5347	2.7622	1.0580	-0.3238
3	15:26:56	51943.0000	0.8438	1.5385	1.3513	1.2603	2.4928	0.8406	-0.0797
4	15:27:36	50689.0000	0.6522	1.3670	1.1125	1.1095	2.3399	0.6554	-0.1068
5	15:28:16	49030.0000	0.5689	1.2678	1.0181	1.0099	2.1395	0.4373	0.1659
X		50832.0000	0.9496	1.6295	1.4345	1.4175	2.6350	0.9621	-0.1622
%RSD		2.2031	44.0420	23.3660	29.6250	32.9130	19.1410	55.2010	149.8400

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:25:37	0.1953	-0.2377	83.00%	0.0000	0.0000	0.0000	0.0000	0.0000
2	15:26:16	-0.0767	0.0126	84.59%	0.0000	0.0000	0.0000	0.0000	0.0000
3	15:26:56	0.0560	-0.0216	85.07%	0.0000	0.0000	0.0000	0.0000	0.0000
4	15:27:36	-0.0113	0.6597	86.10%	0.0000	0.0000	0.0000	0.0000	0.0000
5	15:28:16	-0.1095	0.8800	86.86%	0.0000	0.0000	0.0000	0.0000	0.0000
X		0.0107	0.2586	85.13%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		1127.4000	186.6900	1.74	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:25:37	82.66%	0.1690	-0.4564	0.1706	1.3576	0.0000	0.0000	2.8187
2	15:26:16	82.42%	0.2217	-0.6386	0.2326	0.8319	0.0000	0.0000	1.9184
3	15:26:56	83.88%	0.3807	0.4501	0.4117	0.4590	0.0000	0.0000	1.4214
4	15:27:36	84.48%	0.4949	-0.1676	0.5228	0.3752	0.0000	0.0000	1.1059
5	15:28:16	84.38%	0.2062	0.3370	0.1830	0.2216	0.0000	0.0000	0.9661
X		83.57%	0.2945	-0.0951	0.3041	0.6491	0.0000	0.0000	1.6461
%RSD		1.16	46.9400	502.9200	51.2020	70.1490	0.0000	0.0000	45.5990

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:25:37	1.3234	1.4879	84.70%	1.7991	1.7145	1.5485	1.5616	1.5086
2	15:26:16	0.8859	0.7996	84.58%	1.1411	1.1419	0.9750	1.0622	0.9619
3	15:26:56	0.6024	0.6254	85.44%	0.7510	0.7347	0.6773	0.6643	0.6714
4	15:27:36	0.3989	0.4233	85.65%	0.5652	0.5750	0.5369	0.5057	0.5122
5	15:28:16	0.2737	0.2361	86.59%	0.3922	0.4134	0.4244	0.3845	0.3842
X		0.6968	0.7145	85.39%	0.9297	0.9159	0.8324	0.8356	0.8077
%RSD		60.2500	67.3810	0.95	60.2290	57.0030	54.0910	57.3960	55.3820

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:25:37	80.40%	0.1350
2	15:26:16	80.33%	0.8095
3	15:26:56	80.84%	-0.5383
4	15:27:36	81.10%	0.1292
5	15:28:16	81.53%	0.1257
X		80.84%	0.1322
%RSD		0.62	360.4300

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:30:05	85.84%	0.2133	TM 101220.0000	TM 100900.0000	T 99192.0000	TM 100900.0000	TM 100940.0000	TM 100500.0000
2	15:30:44	85.95%	0.1978	TM 100740.0000	TM 101630.0000	TM 101750.0000	TM 101880.0000	TM 101770.0000	TM 101420.0000
3	15:31:24	85.62%	0.1784	TM 102120.0000	TM 102620.0000	TM 102700.0000	TM 101940.0000	TM 102100.0000	TM 101810.0000
4	15:32:04	87.25%	0.1483	TM 101590.0000	T 99481.0000	T 99409.0000	T 99230.0000	T 99609.0000	T 99826.0000
5	15:32:44	88.57%	0.1115	T 96807.0000	T 96356.0000	T 96932.0000	T 95583.0000	T 95805.0000	T 93940.0000
X		86.65%	0.1699	TM 100490.0000	TM 100200.0000	TM 99997.0000	TM 99907.0000	TM 100050.0000	TM 99500.0000
%RSD		1.44	23.9320	TM 2.1126	TM 2.4283	TM 2.2789	TM 2.6559	TM 2.5576	TM 3.2203

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:30:05	TM 100460.0000	88.93%	0.0087	-0.2007	0.1541	TM 100540.0000	2.1810	TM 100840.0000
2	15:30:44	TM 102150.0000	89.55%	0.0242	-0.2231	0.1887	TM 101880.0000	2.3138	TM 102090.0000
3	15:31:24	TM 101480.0000	89.66%	0.0242	-0.2288	0.2122	TM 101710.0000	2.2656	TM 101730.0000
4	15:32:04	TM 100470.0000	91.05%	0.0267	-0.2748	0.1725	T 97786.0000	2.2699	T 98210.0000
5	15:32:44	T 96053.0000	90.98%	0.0329	-0.2814	0.1972	T 96258.0000	2.1810	T 95570.0000
X		TM 100120.0000	90.03%	0.0233	-0.2417	0.1849	TM 99635.0000	2.2423	TM 99687.0000
%RSD		TM 2.3814	1.04	38.2770	14.4310	12.1310	TM 2.5082	2.6320	TM 2.7653

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:30:05	TM 100560.0000	0.6747	1.9663	1.2331	1.3766	2.0036	0.2888	0.8233
2	15:30:44	TM 101900.0000	0.7098	2.0218	1.3474	1.3331	2.0767	0.2626	0.7003
3	15:31:24	TM 101630.0000	0.7306	1.9667	1.3077	1.4420	1.8078	0.1784	1.0302
4	15:32:04	T 97608.0000	0.7270	1.8185	1.2668	1.3952	1.9271	0.2242	1.0783
5	15:32:44	T 96251.0000	0.6919	1.7027	1.2654	1.2435	1.9086	0.0483	0.9533
X		TM 99587.0000	0.7068	1.8952	1.2841	1.3581	1.9448	0.2005	0.9171
%RSD		TM 2.5336	3.3431	6.9370	3.4402	5.5255	5.2229	47.2430	16.8840

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:30:05	-0.0596	0.4243	81.41%	0.0000	0.0000	0.0000	0.0000	0.0000
2	15:30:44	-0.1634	2.1956	81.60%	0.0000	0.0000	0.0000	0.0000	0.0000
3	15:31:24	-0.4209	1.4678	81.75%	0.0000	0.0000	0.0000	0.0000	0.0000
4	15:32:04	-0.1279	1.0201	82.86%	0.0000	0.0000	0.0000	0.0000	0.0000
5	15:32:44	-0.8602	3.3045	82.54%	0.0000	0.0000	0.0000	0.0000	0.0000
X		-0.3264	1.6825	82.03%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		100.5800	66.2010	0.77	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:30:05	79.62%	0.1709	-0.4583	0.1421	0.0654	0.0000	0.0000	0.5046
2	15:30:44	79.85%	0.1824	0.0755	0.1878	0.0921	0.0000	0.0000	0.5798
3	15:31:24	80.10%	0.3481	-0.1960	0.3144	0.1222	0.0000	0.0000	0.4714
4	15:32:04	80.31%	0.3731	-0.9904	0.3823	0.0850	0.0000	0.0000	0.5266
5	15:32:44	80.64%	0.1194	-0.0760	0.1124	0.0297	0.0000	0.0000	0.5240
X		80.10%	0.2388	-0.3290	0.2278	0.0789	0.0000	0.0000	0.5213
%RSD		0.50	47.7580	127.0900	50.8290	43.3640	0.0000	0.0000	7.5653

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:30:05	0.1292	0.1279	80.38%	0.1611	0.1631	0.2522	0.2753	0.2617
2	15:30:44	0.1697	0.1900	80.63%	0.1681	0.1657	0.2431	0.2720	0.2598
3	15:31:24	0.1208	0.1519	80.19%	0.1711	0.1610	0.2643	0.2478	0.2504
4	15:32:04	0.1042	0.2093	80.28%	0.1544	0.1396	0.2619	0.2210	0.2436
5	15:32:44	0.1610	0.1512	80.43%	0.1164	0.1149	0.2084	0.2064	0.2234
X		0.1370	0.1661	80.38%	0.1542	0.1489	0.2460	0.2445	0.2478
%RSD		20.1550	19.7790	0.21	14.3300	14.5400	9.1987	12.4790	6.2365

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:30:05	74.58%	-0.5383
2	15:30:44	74.11%	0.1922
3	15:31:24	74.22%	0.1912
4	15:32:04	74.04%	0.1929
5	15:32:44	74.89%	0.1846
X		74.37%	0.0445
%RSD		0.48	732.1400

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:34:26	99.94%	105.3300	T 2006.4000	T 1220.7000	1189.9000	1199.6000	T 531.4000	T 2009.7000
2	15:35:05	100.84%	104.5900	T 1984.0000	1205.6000	1191.3000	1201.4000	T 526.5800	T 2009.1000
3	15:35:45	100.88%	104.9500	T 2023.1000	T 1226.2000	1193.5000	1209.0000	T 532.6300	T 2047.5000
4	15:36:24	101.42%	104.0300	T 2013.3000	1208.6000	1188.1000	1206.4000	T 522.4500	T 2029.4000
5	15:37:04	102.10%	103.0500	T 1978.0000	1191.6000	1159.2000	1180.8000	T 515.7000	T 1979.3000
X		101.04%	104.3900	T 2001.0000	T 1210.5000	1184.4000	1199.5000	T 525.7500	T 2015.0000
%RSD		0.79	0.8507	T 0.9638	T 1.1195	1.1991	0.9229	T 1.3175	T 1.2654

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:34:26	1964.0000	97.48%	0.0110	98.3100	95.4010	1029.0000	97.2020	T 1038.1000
2	15:35:05	1944.4000	99.31%	0.0134	96.4630	94.9530	1026.1000	96.8060	1045.6000
3	15:35:45	1992.7000	98.10%	0.0066	98.4050	96.7590	1040.5000	98.9100	1056.1000
4	15:36:24	1970.8000	98.68%	0.0079	97.5800	95.1860	1031.3000	96.9790	1034.1000
5	15:37:04	1924.3000	99.41%	0.0105	96.4190	95.0260	1008.7000	96.1540	1020.6000
X		1959.3000	98.59%	0.0099	97.4350	95.4650	1027.1000	97.2100	T 1038.9000
%RSD		1.3293	0.83	27.3150	0.9877	0.7788	1.1287	1.0567	T 1.2740

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:34:26	1006.8000	98.5760	99.4880	100.4600	102.8600	206.0200	201.3200	205.5700
2	15:35:05	1001.3000	98.7180	100.6700	101.7400	103.0000	208.9800	201.0400	207.0100
3	15:35:45	1014.2000	99.5570	102.8700	102.4100	103.0700	212.3400	200.5000	207.5600
4	15:36:24	999.7300	98.4140	100.8500	102.2600	102.2500	209.2600	198.7600	207.5500
5	15:37:04	966.5600	97.3550	98.0650	99.6720	100.1900	206.2900	197.8800	200.0000
X		997.7100	98.5240	100.3900	101.3100	102.2700	208.5800	199.9000	205.5400
%RSD		1.8358	0.8002	1.7715	1.1792	1.1821	1.2360	0.7532	1.5567

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:34:26	206.4900	-0.6923	93.53%	0.0000	0.0000	0.0000	0.0000	0.0000
2	15:35:05	205.8200	-0.0880	93.74%	0.0000	0.0000	0.0000	0.0000	0.0000
3	15:35:45	207.1700	-0.3661	94.50%	0.0000	0.0000	0.0000	0.0000	0.0000
4	15:36:24	202.9200	0.5162	94.20%	0.0000	0.0000	0.0000	0.0000	0.0000
5	15:37:04	203.2700	-0.0264	94.97%	0.0000	0.0000	0.0000	0.0000	0.0000
X		205.1300	-0.1313	94.19%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		0.9387	341.0400	0.61	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:34:26	94.42%	98.7150	0.4251	99.0510	99.3660	0.0000	0.0000	186.4000
2	15:35:05	95.90%	99.2690	-0.1935	99.8640	99.3640	0.0000	0.0000	187.9600
3	15:35:45	95.75%	101.6300	2.7394	101.6300	100.3200	0.0000	0.0000	190.0800
4	15:36:24	95.88%	101.1600	1.0044	102.0700	98.7460	0.0000	0.0000	188.1400
5	15:37:04	96.65%	97.0920	0.9837	97.2490	98.1730	0.0000	0.0000	187.9100
X		95.72%	99.5720	0.9918	99.9730	99.1930	0.0000	0.0000	188.1000
%RSD		0.84	1.8600	110.2200	1.9654	0.8070	0.0000	0.0000	0.6968

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:34:26	96.4560	99.0430	92.19%	199.5500	200.2500	201.4100	194.1200	195.6200
2	15:35:05	96.5490	99.5680	92.59%	200.4200	201.9600	200.9900	193.7300	195.8900
3	15:35:45	98.2070	101.2400	92.65%	202.8800	203.4100	201.3400	193.6700	195.9700
4	15:36:24	96.7660	99.9220	93.20%	201.1600	202.0100	199.6100	194.7400	196.2600
5	15:37:04	95.1290	97.7380	93.08%	194.9400	196.8800	195.4800	190.8800	192.0900
X		96.6210	99.5020	92.74%	199.7900	200.9000	199.7600	193.4300	195.1700
%RSD		1.1333	1.2824	0.44	1.4891	1.2501	1.2536	0.7686	0.8891

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:34:26	92.25%	-0.5383
2	15:35:05	93.36%	-0.5383
3	15:35:45	93.46%	0.0410
4	15:36:24	93.40%	-0.5383
5	15:37:04	94.67%	0.0335
X		93.43%	-0.3081
%RSD		0.92	102.3300

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:38:49	101.02%	0.0719	4.6635	3.1983	2.7698	2.7274	2.4972	-0.6382
2	15:39:29	101.42%	0.0800	4.3967	3.6382	3.6162	3.9868	3.0707	-1.4380
3	15:40:09	102.27%	0.0886	4.5468	3.8396	3.9982	3.4754	3.5581	-0.9531
4	15:40:48	103.97%	0.0666	3.6086	3.8175	3.4061	3.9983	3.5993	-3.3316
5	15:41:28	103.33%	0.0662	3.1024	3.4797	2.8610	2.8791	3.2428	-2.9235
x		102.40%	0.0746	4.0636	3.5946	3.3303	3.4134	3.1937	-1.8569
%RSD		1.22	12.8320	16.6690	7.3853	15.5150	17.5220	14.0030	64.7940

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:38:49	-1.2949	98.07%	0.0066	-0.0657	-0.0322	2.9630	0.0317	-3.0287
2	15:39:29	-3.1468	98.63%	-0.0021	0.0437	-0.0576	0.8094	0.0176	-1.7806
3	15:40:09	-1.4835	99.09%	0.0049	-0.0064	-0.0226	1.6975	0.0266	-2.0508
4	15:40:48	-1.5206	100.81%	-0.0079	0.0494	-0.0153	2.0793	0.0209	-2.0180
5	15:41:28	-3.2378	100.43%	-0.0037	-0.0074	-0.0460	1.5812	0.0087	-1.9283
x		-2.1367	99.41%	-0.0004	0.0027	-0.0347	1.8261	0.0211	-2.1613
%RSD		45.3000	1.18	1448.9000	1717.5000	49.5000	43.0060	41.5570	22.9520

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:38:49	2.0481	0.0177	0.1381	0.1234	0.0814	0.6312	0.1011	0.3384
2	15:39:29	4.7169	0.0250	0.1611	0.0972	0.0641	0.6052	0.1366	0.1833
3	15:40:09	4.1177	0.0329	0.0847	0.0675	0.1181	0.5379	0.0228	0.0334
4	15:40:48	6.0457	0.0213	0.1430	0.0512	0.1125	0.5421	0.0795	-0.2056
5	15:41:28	5.2007	0.0187	0.1124	0.0452	0.1219	0.4725	0.1468	-0.1965
x		4.4258	0.0231	0.1278	0.0769	0.0996	0.5578	0.0974	0.0306
%RSD		34.0010	26.6550	23.2730	42.7780	25.5650	11.1760	51.0050	775.6700

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:38:49	0.0139	-0.9682	94.02%	0.0000	0.0000	0.0000	0.0000	0.0000
2	15:39:29	0.1910	-0.9065	95.42%	0.0000	0.0000	0.0000	0.0000	0.0000
3	15:40:09	-0.1655	0.5947	96.07%	0.0000	0.0000	0.0000	0.0000	0.0000
4	15:40:48	0.0549	0.2354	96.84%	0.0000	0.0000	0.0000	0.0000	0.0000
5	15:41:28	0.2905	-1.0837	96.49%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.0770	-0.4257	95.77%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		226.8100	183.3600	1.16	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:38:49	96.43%	0.1461	0.5277	0.1571	0.0038	0.0000	0.0000	0.9178
2	15:39:29	96.82%	0.1671	-0.3262	0.1444	0.0294	0.0000	0.0000	0.6372
3	15:40:09	97.69%	0.2166	0.1748	0.2168	0.0048	0.0000	0.0000	0.5453
4	15:40:48	98.37%	0.2424	0.5306	0.2634	0.0150	0.0000	0.0000	0.4539
5	15:41:28	98.76%	0.0870	-0.0940	0.0802	0.0225	0.0000	0.0000	0.4165
x		97.61%	0.1718	0.1626	0.1724	0.0151	0.0000	0.0000	0.5941
%RSD		1.01	35.4730	232.9200	40.7920	73.5390	0.0000	0.0000	33.6880

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:38:49	0.0034	0.0420	93.37%	0.0724	0.0855	0.0430	0.0654	0.0539
2	15:39:29	0.0242	0.0501	93.17%	0.0782	0.0792	0.0474	0.0421	0.0505
3	15:40:09	0.0032	0.0333	94.61%	0.0770	0.0716	0.0529	0.0616	0.0471
4	15:40:48	0.0306	0.0011	94.53%	0.0783	0.0817	0.0248	0.0119	0.0290
5	15:41:28	0.0371	0.0170	95.42%	0.0558	0.0609	0.0296	0.0331	0.0337
x		0.0197	0.0287	94.22%	0.0723	0.0758	0.0396	0.0428	0.0429
%RSD		79.3250	68.8080	1.00	13.2130	12.8570	30.1490	51.0150	25.3750

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:38:49	94.70%	-0.5383
2	15:39:29	95.25%	-0.5383
3	15:40:09	95.79%	-0.5383
4	15:40:48	96.86%	0.5795
5	15:41:28	96.64%	-0.5383
x		95.85%	-0.3148
%RSD		0.95	158.8300

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:43:09	80.80%	0.3312	T 95599.0000	T 97280.0000	T 98485.0000	TM 100500.0000	TM 100100.0000	TM 101350.0000
2	15:43:49	80.95%	0.3324	T 96108.0000	T 99568.0000	T 99981.0000	TM 102240.0000	TM 101600.0000	TM 104910.0000
3	15:44:29	80.47%	0.3197	T 98734.0000	T 99715.0000	TM 101590.0000	TM 103780.0000	TM 101600.0000	TM 106920.0000
4	15:45:09	80.84%	0.3528	T 96363.0000	T 98362.0000	TM 101770.0000	TM 103770.0000	TM 101840.0000	TM 107750.0000
5	15:45:48	80.45%	0.3210	T 96303.0000	T 97625.0000	TM 100120.0000	TM 102740.0000	TM 102760.0000	TM 105140.0000
X		80.70%	0.3314	T 96621.0000	T 98510.0000	TM 100390.0000	TM 102610.0000	TM 101580.0000	TM 105210.0000
%RSD		0.28	4.0065	T 1.2613	T 1.1226	TM 1.3379	TM 1.3173	TM 0.9410	TM 2.3470

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:43:09	TM 100340.0000	87.06%	282.1200	-2.3226	18.6410	TM 101790.0000	8.3066	TM 102120.0000
2	15:43:49	TM 103790.0000	85.66%	290.7600	-3.1793	19.2310	TM 104220.0000	8.6431	TM 105360.0000
3	15:44:29	TM 106130.0000	85.47%	290.2400	-2.9299	19.3640	TM 105830.0000	8.6639	TM 106640.0000
4	15:45:09	TM 106790.0000	85.80%	287.2200	-3.2755	19.1440	TM 105290.0000	8.6154	TM 106720.0000
5	15:45:48	TM 104630.0000	85.83%	291.7700	-3.3491	18.9060	TM 105390.0000	8.5922	TM 106170.0000
X		TM 104340.0000	85.97%	288.4200	-3.0113	19.0570	TM 104500.0000	8.5642	TM 105400.0000
%RSD		TM 2.4263	0.73	1.3559	13.8220	1.5037	TM 1.5594	1.7114	TM 1.8131

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:43:09	TM 102440.0000	1.2699	6.2272	7.3122	7.8345	11.3510	0.2187	0.2986
2	15:43:49	TM 106030.0000	1.3473	6.4016	7.3444	8.2992	11.4050	0.3269	-0.0462
3	15:44:29	TM 107430.0000	1.3141	6.4346	7.5143	8.2640	11.3790	0.4829	0.5252
4	15:45:09	TM 107530.0000	1.2625	6.5374	7.4755	7.8417	11.4980	0.2649	-0.0093
5	15:45:48	TM 106700.0000	1.3006	6.2553	7.2768	8.2757	11.2950	0.2638	0.5911
X		TM 106020.0000	1.2989	6.3712	7.3846	8.1030	11.3860	0.3114	0.2719
%RSD		TM 1.9749	2.6513	2.0274	1.4131	2.9890	0.6561	33.1680	108.3400

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:43:09	-0.1807	1.9143	81.87%	0.0000	0.0000	0.0000	0.0000	T 0.0000
2	15:43:49	-0.4593	1.6775	81.42%	0.0000	0.0000	0.0000	0.0000	T 0.0000
3	15:44:29	0.4429	0.7244	81.69%	0.0000	0.0000	0.0000	0.0000	T 0.0000
4	15:45:09	-0.2323	1.0590	82.00%	0.0000	0.0000	0.0000	0.0000	T 0.0000
5	15:45:48	-0.0597	0.6913	82.14%	0.0000	0.0000	0.0000	0.0000	T 0.0000
X		-0.0978	1.2133	81.83%	0.0000	0.0000	0.0000	0.0000	T 0.0000
%RSD		342.6900	45.9290	0.34	0.0000	0.0000	0.0000	0.0000	T 0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:43:09	79.79%	0.0566	13.6290	0.0586	0.3900	0.0000	0.0000	1.3106
2	15:43:49	79.50%	0.0452	13.2190	0.0588	0.3794	0.0000	0.0000	1.3937
3	15:44:29	80.03%	0.0448	15.1540	0.0516	0.0832	0.0000	0.0000	1.2515
4	15:45:09	80.21%	0.0410	14.1000	0.0419	-0.0274	0.0000	0.0000	1.2148
5	15:45:48	79.94%	0.0319	13.2830	0.0454	0.3337	0.0000	0.0000	1.2414
X		79.89%	0.0439	13.8770	0.0513	0.2318	0.0000	0.0000	1.2824
%RSD		0.33	20.2520	5.7292	14.9210	82.5570	0.0000	0.0000	5.5667

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:43:09	1.3168	1.5372	86.03%	0.0512	0.0560	4.6010	4.1933	4.2922
2	15:43:49	1.4406	1.5753	86.56%	0.0553	0.0553	4.8087	4.2351	4.3988
3	15:44:29	1.6326	1.5032	87.35%	0.0350	0.0352	4.7979	4.3088	4.4409
4	15:45:09	1.3923	1.5108	87.82%	0.0377	0.0337	4.7701	4.3114	4.4483
5	15:45:48	1.6662	1.4249	87.95%	0.0279	0.0272	4.7932	4.1741	4.4073
X		1.4897	1.5103	87.14%	0.0414	0.0415	4.7542	4.2446	4.3975
%RSD		10.2550	3.6713	0.95	27.7060	32.0650	1.8254	1.5030	1.4223

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:43:09	79.48%	-0.5383
2	15:43:49	79.37%	0.1438
3	15:44:29	80.64%	-0.5383
4	15:45:09	80.76%	-0.5383
5	15:45:48	80.39%	0.1351
X		80.13%	-0.2672
%RSD		0.82	138.9300

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:47:30	79.79%	19.2320	T 95958.0000	T 97864.0000	T 99396.0000	TM 102400.0000	TM 101660.0000	TM 104080.0000
2	15:48:09	80.54%	19.2910	T 96796.0000	T 99503.0000	TM 100710.0000	TM 103640.0000	TM 102060.0000	TM 106380.0000
3	15:48:49	78.99%	19.9990	T 98864.0000	TM 100330.0000	TM 102220.0000	TM 104640.0000	TM 103780.0000	TM 107460.0000
4	15:49:29	80.57%	19.1000	T 97158.0000	T 99023.0000	TM 100400.0000	TM 102700.0000	TM 101540.0000	TM 107150.0000
5	15:50:09	80.48%	18.8610	T 97501.0000	T 98271.0000	TM 100340.0000	TM 102400.0000	TM 101280.0000	TM 104860.0000
X		80.07%	19.2970	T 97255.0000	TM 98999.0000	TM 100610.0000	TM 103150.0000	TM 102060.0000	TM 105990.0000
%RSD		0.85	2.2065	T 1.0966	TM 0.9912	TM 1.0182	TM 0.9449	TM 0.9791	TM 1.3807

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:47:30	TM 103190.0000	85.79%	284.2500	17.4190	38.1720	TM 103280.0000	28.3470	TM 105410.0000
2	15:48:09	TM 105630.0000	85.71%	291.0800	17.4130	38.9780	TM 105270.0000	29.0860	TM 106790.0000
3	15:48:49	TM 106030.0000	86.33%	289.0000	16.9880	39.3050	TM 105660.0000	29.4060	TM 107140.0000
4	15:49:29	TM 105700.0000	85.78%	286.7100	17.3850	39.1060	TM 104780.0000	28.9920	TM 106140.0000
5	15:50:09	TM 105200.0000	86.56%	287.0300	17.6230	38.8450	TM 104320.0000	28.2790	TM 105360.0000
X		TM 105150.0000	86.03%	287.6100	17.3660	38.8810	TM 104660.0000	28.8220	TM 106170.0000
%RSD		TM 1.0762	0.45	0.8933	1.3312	1.1098	TM 0.8815	1.6999	TM 0.7565

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:47:30	TM 105560.0000	20.4560	25.1280	25.1850	25.2800	28.0810	18.3530	17.8920
2	15:48:09	TM 107700.0000	20.5970	25.8220	25.3970	26.1740	27.6210	18.2800	17.9930
3	15:48:49	TM 106690.0000	20.7590	25.5260	25.7740	26.3890	28.2320	18.8110	17.8130
4	15:49:29	TM 106890.0000	20.5540	25.3200	25.0870	25.9830	28.3730	18.4270	17.2150
5	15:50:09	TM 106000.0000	20.5610	25.1730	24.8700	25.6880	28.3030	18.3860	17.0190
X		TM 106570.0000	20.5850	25.3940	25.2630	25.9030	28.1220	18.4510	17.5860
%RSD		TM 0.7789	0.5359	1.1245	1.3582	1.6723	1.0672	1.1261	2.4948

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:47:30	18.4010	-0.2124	81.69%	0.0000	0.0000	0.0000	0.0000	T 0.0000
2	15:48:09	17.3760	2.2453	82.39%	0.0000	0.0000	0.0000	0.0000	T 0.0000
3	15:48:49	17.2070	1.4417	81.59%	0.0000	0.0000	0.0000	0.0000	T 0.0000
4	15:49:29	16.8350	1.4574	82.43%	0.0000	0.0000	0.0000	0.0000	T 0.0000
5	15:50:09	16.9770	2.3779	83.24%	0.0000	0.0000	0.0000	0.0000	T 0.0000
X		17.3590	1.4620	82.27%	0.0000	0.0000	0.0000	0.0000	T 0.0000
%RSD		3.5634	70.5590	0.81	0.0000	0.0000	0.0000	0.0000	T 0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:47:30	79.27%	18.5310	14.2240	18.7350	19.8720	0.0000	0.0000	19.5160
2	15:48:09	79.77%	18.8690	13.3840	18.8810	20.1180	0.0000	0.0000	19.8740
3	15:48:49	80.37%	19.0320	14.0740	19.0100	20.4500	0.0000	0.0000	19.9430
4	15:49:29	80.35%	18.7340	13.3800	18.7780	19.6790	0.0000	0.0000	19.5070
5	15:50:09	80.89%	18.5950	12.8850	18.8120	20.0040	0.0000	0.0000	19.2230
X		80.13%	18.7520	13.5900	18.8430	20.0250	0.0000	0.0000	19.6130
%RSD		0.78	1.0855	4.0635	0.5710	1.4409	0.0000	0.0000	1.5067

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:47:30	21.9660	22.2770	87.94%	21.0530	20.8270	26.3220	24.7310	24.8810
2	15:48:09	21.5600	23.1080	88.52%	21.5630	21.2070	26.3850	24.8880	25.0850
3	15:48:49	22.2570	22.8200	88.90%	21.4050	21.2600	26.5770	25.1610	25.3050
4	15:49:29	22.2290	22.6590	88.85%	21.3310	21.1580	26.6770	24.6790	25.4090
5	15:50:09	21.4470	22.4270	89.35%	21.1330	21.0630	26.3170	24.3750	24.8590
X		21.8920	22.6580	88.71%	21.2970	21.1030	26.4550	24.7670	25.1080
%RSD		1.7103	1.4423	0.59	0.9691	0.8079	0.6143	1.1650	0.9827

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:47:30	80.20%	-0.5383
2	15:48:09	80.56%	-0.5383
3	15:48:49	80.93%	-0.5383
4	15:49:29	81.19%	0.1285
5	15:50:09	81.42%	0.1266
X		80.86%	-0.2720
%RSD		0.61	134.1000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:51:50	87.66%	↹2515.6000	↹48869.0000	↹49786.0000	↹49547.0000	↹50327.0000	↹50636.0000	↹50644.0000
2	15:52:30	87.94%	↹2557.1000	↹49852.0000	↹50075.0000	↹50534.0000	↹51471.0000	↹51117.0000	↹50407.0000
3	15:53:10	87.96%	↹2590.4000	↹50835.0000	↹50727.0000	↹50414.0000	↹51477.0000	↹51117.0000	↹50964.0000
4	15:53:49	88.27%	↹2534.9000	↹49338.0000	↹49133.0000	↹50119.0000	↹50166.0000	↹51083.0000	↹51293.0000
5	15:54:29	89.69%	↹2503.0000	↹48367.0000	↹48775.0000	↹49287.0000	↹49614.0000	↹50100.0000	↹50264.0000
X		88.30%	↹2540.2000	↹49452.0000	↹49699.0000	↹49980.0000	↹50611.0000	↹50811.0000	↹50714.0000
%RSD		0.91	↹1.3668	↹1.9190	↹1.5522	↹1.0876	↹1.6422	↹0.8787	↹0.8244

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:51:50	↹51132.0000	90.35%	0.1371	↹2655.6000	↹2558.5000	↹52136.0000	↹2537.0000	↹51446.0000
2	15:52:30	51301.0000	90.57%	0.1105	↹2665.7000	↹2552.1000	↹52577.0000	↹2556.9000	↹51272.0000
3	15:53:10	51610.0000	91.04%	0.0790	↹2657.2000	↹2540.4000	↹52254.0000	↹2540.3000	↹51262.0000
4	15:53:49	51282.0000	90.72%	0.0731	↹2645.7000	↹2539.3000	↹51697.0000	↹2547.3000	↹50987.0000
5	15:54:29	↹50648.0000	91.92%	0.0613	↹2614.6000	↹2500.7000	↹51020.0000	↹2483.2000	↹50224.0000
X		↹51194.0000	90.92%	0.0922	↹2647.8000	↹2538.2000	↹51937.0000	↹2532.9000	↹51038.0000
%RSD		↹0.6868	0.68	33.6290	↹0.7496	↹0.8855	↹1.1586	↹1.1373	↹0.9479

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:51:50	51353.0000	↹2528.1000	2530.8000	↹2413.9000	↹2405.6000	2406.0000	2487.5000	251.7000
2	15:52:30	51123.0000	↹2562.4000	↹2478.3000	↹2416.3000	↹2429.2000	2403.0000	2507.0000	255.6200
3	15:53:10	51147.0000	↹2555.7000	↹2493.5000	↹2445.4000	↹2456.8000	2422.0000	2501.0000	254.5800
4	15:53:49	↹50921.0000	↹2516.8000	2526.2000	↹2390.5000	↹2414.7000	2379.3000	2471.9000	252.7700
5	15:54:29	49738.0000	↹2495.3000	2501.8000	↹2381.0000	↹2372.7000	2360.7000	2430.6000	247.1100
X		↹50856.0000	↹2531.6000	↹2506.1000	↹2409.4000	↹2415.8000	2394.2000	2479.6000	252.3600
%RSD		↹1.2660	↹1.0953	↹0.8840	↹1.0431	↹1.2798	1.0083	1.2322	1.3092

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:51:50	254.2400	0.8373	84.64%	0.0000	0.0000	0.0000	0.0000	0.0000
2	15:52:30	251.4200	0.2199	84.51%	0.0000	0.0000	0.0000	0.0000	0.0000
3	15:53:10	256.1400	0.9962	85.26%	0.0000	0.0000	0.0000	0.0000	0.0000
4	15:53:49	253.4400	0.4214	85.73%	0.0000	0.0000	0.0000	0.0000	0.0000
5	15:54:29	247.3300	0.5707	86.46%	0.0000	0.0000	0.0000	0.0000	0.0000
X		252.5100	0.6091	85.32%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		1.3289	51.2730	0.94	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:51:50	83.84%	256.6000	-4.0934	257.0600	2601.3000	0.0000	0.0000	↹2517.0000
2	15:52:30	84.75%	257.7100	-8.1172	258.1900	2583.3000	0.0000	0.0000	↹2535.7000
3	15:53:10	83.59%	264.8100	-2.7369	264.5700	2605.3000	0.0000	0.0000	↹2558.0000
4	15:53:49	84.01%	264.2500	-7.7632	263.5100	2573.7000	0.0000	0.0000	↹2487.6000
5	15:54:29	85.39%	251.3400	2.0829	250.8100	2538.0000	0.0000	0.0000	↹2487.4000
X		84.32%	258.9400	-4.1256	258.8300	2580.3000	0.0000	0.0000	↹2517.1000
%RSD		0.88	2.1802	101.1400	2.1403	1.0446	0.0000	0.0000	↹1.2196

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:51:50	2504.7000	2664.0000	88.25%	↹2621.2000	↹2646.3000	↹2683.0000	↹2575.2000	↹2633.9000
2	15:52:30	2521.6000	2641.2000	87.51%	↹2639.4000	↹2650.7000	↹2676.0000	↹2539.5000	↹2616.6000
3	15:53:10	2563.7000	2666.7000	87.31%	↹2669.4000	↹2673.2000	↹2706.4000	↹2583.0000	↹2643.4000
4	15:53:49	2516.1000	2642.1000	88.54%	↹2655.6000	↹2678.1000	↹2686.4000	↹2555.8000	↹2626.1000
5	15:54:29	2477.0000	2590.4000	89.13%	↹2558.6000	↹2581.1000	↹2626.7000	↹2487.3000	↹2553.4000
X		2516.6000	2640.9000	88.15%	↹2628.8000	↹2645.9000	↹2675.7000	↹2548.2000	↹2614.7000
%RSD		1.2499	1.1595	0.85	↹1.6435	↹1.4640	↹1.1083	↹1.4934	↹1.3625

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:51:50	82.83%	0.7690
2	15:52:30	82.87%	0.1150
3	15:53:10	82.41%	2.0893
4	15:53:49	83.09%	0.1132
5	15:54:29	84.53%	0.1022
X		83.14%	0.6377
%RSD		0.97	134.8800

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:56:11	97.58%	0.6117	22.6170	12.9840	15.6190	14.5520	13.4790	20.3700
2	15:56:50	97.95%	0.4925	18.9310	11.0240	10.4510	11.4480	11.6390	16.7910
3	15:57:30	97.48%	0.3832	15.1440	9.2577	8.8429	8.8956	8.9251	12.2930
4	15:58:10	99.34%	0.3153	11.7630	7.5397	7.0411	6.8965	6.9559	8.3586
5	15:58:49	100.15%	0.2726	9.2239	5.0117	4.4463	5.0558	4.9989	4.7790
X		98.50%	0.4151	15.5360	9.1634	9.2799	9.3697	9.1997	12.5180
%RSD		1.20	33.1960	34.6480	33.6100	45.1160	39.9800	37.2690	50.0700

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:56:11	8.9192	95.41%	0.0277	0.4568	0.4537	14.1580	0.4540	9.6512
2	15:56:50	3.5474	96.23%	0.0055	0.3889	0.3655	13.0430	0.3573	7.8955
3	15:57:30	4.8170	96.77%	0.0140	0.3536	0.2733	12.3910	0.2891	5.5210
4	15:58:10	0.8516	97.88%	0.0137	0.1416	0.1988	8.1839	0.2513	3.2508
5	15:58:49	-0.9383	97.74%	0.0066	0.1076	0.1403	9.0136	0.1822	1.6146
X		3.4394	96.81%	0.0135	0.2897	0.2863	11.3580	0.3068	5.5866
%RSD		110.5200	1.07	65.3980	53.7310	43.9830	23.0100	33.8490	58.7500

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:56:11	13.6920	0.4607	0.5528	0.7028	0.5291	0.6989	0.7812	0.7295
2	15:56:50	13.7800	0.3575	0.4170	0.6114	0.5586	0.7529	0.5585	0.3356
3	15:57:30	12.3420	0.2928	0.3969	0.4518	0.3440	0.5907	0.5070	0.5449
4	15:58:10	7.1639	0.2585	0.2847	0.4298	0.2923	0.6221	0.4152	0.2656
5	15:58:49	6.3131	0.1697	0.2536	0.3350	0.2141	0.5192	0.2489	0.4424
X		10.6580	0.3078	0.3810	0.5062	0.3876	0.6368	0.5022	0.4636
%RSD		34.1120	35.4300	31.2140	29.2750	38.7740	14.3740	38.9170	39.3810

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:56:11	0.3513	-0.3952	92.87%	0.0000	0.0000	0.0000	0.0000	0.0000
2	15:56:50	-0.2430	1.1638	94.17%	0.0000	0.0000	0.0000	0.0000	0.0000
3	15:57:30	0.0579	0.4311	94.90%	0.0000	0.0000	0.0000	0.0000	0.0000
4	15:58:10	0.2058	-0.0418	95.50%	0.0000	0.0000	0.0000	0.0000	0.0000
5	15:58:49	0.2521	-0.7592	95.00%	0.0000	0.0000	0.0000	0.0000	0.0000
X		0.1248	0.0797	94.49%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		185.2000	939.0800	1.08	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:56:11	95.64%	0.1489	0.9086	0.1472	0.4511	0.0000	0.0000	1.5338
2	15:56:50	95.92%	0.1198	0.4500	0.1193	0.3723	0.0000	0.0000	1.1603
3	15:57:30	97.19%	0.1044	0.2120	0.1073	0.2835	0.0000	0.0000	0.9730
4	15:58:10	96.95%	0.0962	0.8067	0.0995	0.2242	0.0000	0.0000	0.7168
5	15:58:49	97.52%	0.0526	0.4616	0.0479	0.1702	0.0000	0.0000	0.6686
X		96.65%	0.1044	0.5678	0.1043	0.3003	0.0000	0.0000	1.0105
%RSD		0.85	33.7760	50.2020	34.8260	37.5810	0.0000	0.0000	35.0200

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	15:56:11	0.4901	0.5039	96.09%	0.7740	0.7495	0.5392	0.4790	0.5077
2	15:56:50	0.4354	0.3512	95.83%	0.5333	0.5175	0.4086	0.3907	0.3929
3	15:57:30	0.2952	0.3199	96.55%	0.3943	0.3871	0.3366	0.3449	0.3341
4	15:58:10	0.2405	0.2398	96.91%	0.3060	0.2957	0.2837	0.2732	0.2685
5	15:58:49	0.1656	0.1758	96.81%	0.2172	0.2175	0.2264	0.2070	0.2055
X		0.3254	0.3181	96.44%	0.4450	0.4335	0.3589	0.3390	0.3418
%RSD		41.4900	39.1330	0.48	48.9650	48.2120	33.7450	30.9620	34.0390

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	15:56:11	97.19%	0.0187
2	15:56:50	97.66%	-0.5383
3	15:57:30	98.05%	0.0138
4	15:58:10	97.69%	-0.5383
5	15:58:49	97.60%	-0.5383
X		97.64%	-0.3165
%RSD		0.31	95.9850

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:00:31	102.58%	0.1126	6.3831	2.6894	3.1269	3.0871	1.9217	2.5626
2	16:01:11	102.21%	0.1279	6.9239	2.6087	2.8014	2.7148	2.0317	2.0456
3	16:01:51	103.98%	0.1242	5.5390	2.3939	2.3262	3.0486	1.8198	1.0501
4	16:02:30	104.03%	0.1053	5.1357	2.4057	1.8470	1.9883	1.6298	1.2953
5	16:03:10	103.94%	0.0770	4.3970	1.8383	1.5587	2.2705	1.4211	-0.2281
x		103.35%	0.1094	5.6757	2.3872	2.3320	2.6219	1.7648	1.3451
%RSD		0.85	18.4770	17.6270	13.9250	27.8350	18.4110	13.7410	79.1790

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:00:31	-1.7867	99.72%	0.0161	0.0418	0.0152	9.1745	0.0581	-2.6382
2	16:01:11	0.3936	100.17%	0.0103	0.1009	0.0151	10.5410	0.0683	-1.4286
3	16:01:51	0.0186	100.68%	0.0172	0.0748	-0.0071	9.8191	0.0774	-2.0249
4	16:02:30	-0.7218	100.47%	0.0131	0.0483	-0.0058	10.3790	0.0482	-2.0486
5	16:03:10	-4.4553	101.39%	0.0211	-0.0159	-0.0136	8.3779	0.0459	-1.8131
x		-1.3103	100.49%	0.0155	0.0500	0.0007	9.6583	0.0596	-1.9907
%RSD		148.4400	0.62	26.3410	87.2730	1805.8000	9.2573	22.4050	22.0590

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:00:31	3.4939	0.0792	0.1835	0.1834	0.0834	0.6608	0.2196	0.1585
2	16:01:11	0.7110	0.0766	0.1870	0.1877	0.1533	0.6340	0.0675	0.2766
3	16:01:51	1.8049	0.0777	0.1356	0.1461	0.1434	0.5510	0.1321	0.1739
4	16:02:30	0.5207	0.0594	0.1456	0.1346	0.1041	0.6589	0.0627	0.1475
5	16:03:10	3.1646	0.0478	0.1486	0.0747	0.1183	0.5485	0.0632	0.2664
x		1.9390	0.0681	0.1601	0.1453	0.1205	0.6106	0.1090	0.2046
%RSD		70.4190	20.4500	14.6980	31.4450	23.6550	9.2635	62.7620	30.2600

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:00:31	0.2337	-1.3028	95.95%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:01:11	-0.1645	-0.1870	96.88%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:01:51	-0.0768	0.2719	97.32%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:02:30	-0.1643	-0.0221	97.19%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:03:10	-0.0478	-0.0765	98.17%	0.0000	0.0000	0.0000	0.0000	0.0000
x		-0.0439	-0.2633	97.10%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		372.4800	229.8900	0.82	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:00:31	98.95%	0.0303	0.7434	0.0299	0.0751	0.0000	0.0000	0.3955
2	16:01:11	98.70%	0.0394	0.8389	0.0347	0.0901	0.0000	0.0000	0.3419
3	16:01:51	100.34%	0.0501	0.4545	0.0484	0.0604	0.0000	0.0000	0.3519
4	16:02:30	99.77%	0.0591	0.4337	0.0760	0.0862	0.0000	0.0000	0.3047
5	16:03:10	100.52%	0.0367	0.3988	0.0316	0.0562	0.0000	0.0000	0.2790
x		99.66%	0.0431	0.5738	0.0441	0.0736	0.0000	0.0000	0.3346
%RSD		0.82	26.5510	35.2330	43.6720	20.4940	0.0000	0.0000	13.4120

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:00:31	0.0895	0.0791	98.39%	0.1249	0.1160	0.1428	0.0823	0.1061
2	16:01:11	0.0562	0.0713	98.44%	0.0951	0.0975	0.1104	0.0803	0.0889
3	16:01:51	0.0291	0.0744	98.99%	0.0862	0.0800	0.0884	0.0499	0.0827
4	16:02:30	0.0694	0.0947	97.95%	0.0742	0.0717	0.0720	0.0608	0.0743
5	16:03:10	0.0754	0.0550	98.91%	0.0589	0.0642	0.0643	0.0423	0.0583
x		0.0639	0.0749	98.53%	0.0879	0.0859	0.0956	0.0631	0.0821
%RSD		35.7090	19.0750	0.43	28.2000	24.3000	33.2250	28.2940	21.5630

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:00:31	98.34%	0.0122
2	16:01:11	98.99%	-0.5383
3	16:01:51	99.97%	-0.5383
4	16:02:30	99.26%	1.0979
5	16:03:10	99.96%	-0.5383
x		99.30%	-0.1010
%RSD		0.70	704.4500

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:04:53	102.53%	2.0098	T955.5000	T960.6300	941.6700	964.4300	40.9870	1013.9000
2	16:05:32	104.34%	1.9463	T958.8000	957.4300	956.3500	977.5300	39.7940	1017.1000
3	16:06:12	104.82%	2.0597	T966.9000	949.9900	960.8000	977.4600	40.4970	1025.2000
4	16:06:52	105.43%	1.9855	T968.4900	962.0600	970.4400	969.2300	39.0890	1030.7000
5	16:07:31	104.24%	1.9257	T924.1700	921.2900	916.2800	949.5100	38.6770	976.2200
X		104.27%	1.9854	T954.7700	T950.2800	949.1100	967.6300	39.8090	1012.6000
%RSD		1.04	2.6653	T1.8798	T1.7748	2.2210	1.1960	2.4038	2.1149

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:04:53	931.5100	100.90%	0.0143	10.2280	3.7763	401.1500	1.9588	398.7100
2	16:05:32	944.5100	101.92%	0.0058	10.3320	3.7016	398.2900	1.9246	394.3700
3	16:06:12	957.0600	102.39%	0.0057	10.4750	3.7470	391.8400	1.9662	401.5900
4	16:06:52	930.1700	101.71%	0.0224	9.9905	3.7615	394.7400	1.9055	392.3200
5	16:07:31	919.6700	102.22%	0.0085	9.9446	3.6787	380.2100	1.9085	386.4400
X		936.5900	101.83%	0.0114	10.1940	3.7330	393.2500	1.9327	394.6900
%RSD		1.5426	0.57	62.4120	2.2081	1.1058	2.0581	1.4622	1.4856

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:04:53	385.4800	1.9068	2.1047	4.0492	3.9369	4.6723	1.5208	8.7877
2	16:05:32	391.1900	1.9942	2.0699	4.0223	4.2206	4.7215	2.2626	8.2706
3	16:06:12	398.1400	1.9169	2.0990	3.8941	4.0247	4.6890	1.7943	8.6261
4	16:06:52	390.1100	1.8971	2.1361	3.9991	3.9899	4.5023	1.8850	9.2788
5	16:07:31	376.1800	1.8430	1.9392	3.8919	3.8783	4.2475	1.8341	9.1260
X		388.2200	1.9116	2.0698	3.9713	4.0101	4.5665	1.8594	8.8179
%RSD		2.0898	2.8416	3.7043	1.8552	3.2439	4.3264	14.2990	4.5524

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:04:53	8.4877	0.3721	96.53%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:05:32	9.6748	-0.4046	97.40%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:06:12	8.5914	-0.5292	97.42%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:06:52	8.5928	0.0732	97.52%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:07:31	8.7034	-0.7889	97.89%	0.0000	0.0000	0.0000	0.0000	0.0000
X		8.8100	-0.2555	97.35%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		5.5550	183.9800	0.51	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:04:53	98.67%	2.0170	0.1047	1.9627	1.8113	0.0000	0.0000	3.7282
2	16:05:32	99.08%	2.0094	0.0383	2.0223	1.9018	0.0000	0.0000	3.9062
3	16:06:12	99.93%	2.0120	0.5098	2.0975	1.8755	0.0000	0.0000	3.7694
4	16:06:52	100.11%	2.0200	0.4396	2.1358	1.8742	0.0000	0.0000	3.6896
5	16:07:31	99.75%	1.9596	-0.0750	1.9453	1.7810	0.0000	0.0000	3.8009
X		99.51%	2.0036	0.2035	2.0327	1.8488	0.0000	0.0000	3.7788
%RSD		0.61	1.2452	126.2900	4.0770	2.7270	0.0000	0.0000	2.1869

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:04:53	18.7450	18.9010	98.68%	1.9173	1.9062	1.9780	1.8688	1.8796
2	16:05:32	19.1660	19.5390	98.06%	1.9711	1.8827	2.0132	1.8673	1.9032
3	16:06:12	18.8270	19.5350	98.33%	1.9440	1.9176	1.9339	2.0054	1.9325
4	16:06:52	18.6550	19.9420	98.50%	1.9052	1.9481	1.8999	1.9055	1.8572
5	16:07:31	18.4430	18.2530	98.94%	1.8966	1.8075	1.7614	1.8564	1.8401
X		18.7670	19.2340	98.50%	1.9269	1.8924	1.9173	1.9007	1.8825
%RSD		1.4118	3.4473	0.34	1.5842	2.7995	5.0682	3.2318	1.9483

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:04:53	98.50%	1.6602
2	16:05:32	98.88%	-0.5383
3	16:06:12	99.76%	0.0044
4	16:06:52	99.84%	-0.5383
5	16:07:31	99.37%	-0.5383
X		99.27%	0.0099
%RSD		0.58	9597.3000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:09:13	96.57%	0.8054	71.5520	↹1927.3000	1899.6000	1933.5000	↹16110.0000	↹3435.5000
2	16:09:53	96.57%	0.7908	69.7510	↹1942.8000	1897.6000	1925.5000	↹16035.0000	↹3484.2000
3	16:10:32	96.21%	0.8424	70.9870	↹1959.8000	1944.7000	1983.8000	↹16506.0000	↹3517.0000
4	16:11:12	96.19%	0.8149	69.4570	↹1938.6000	1902.2000	1946.6000	↹15918.0000	↹3500.7000
5	16:11:52	96.07%	0.7570	67.6320	↹1879.9000	1845.9000	1923.6000	↹15886.0000	↹3364.8000
x		96.32%	0.8021	69.8760	↹1929.7000	1898.0000	1942.6000	↹16091.0000	↹3460.4000
%RSD		0.24	3.9250	2.1788	↹1.5632	1.8455	1.2742	↹1.5466	↹1.7779

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:09:13	3902.7000	99.54%	21.5340	31.4460	24.4470	16302.0000	↹412.6400	↹16418.0000
2	16:09:53	3873.5000	101.38%	24.4190	32.3060	24.6430	16260.0000	422.1300	↹16498.0000
3	16:10:32	4022.8000	100.64%	21.4720	32.4340	24.8090	16620.0000	429.4900	↹16755.0000
4	16:11:12	3982.0000	100.04%	20.9340	31.3290	24.5080	16165.0000	↹411.9500	↹16380.0000
5	16:11:52	3880.1000	100.61%	22.3670	31.0960	24.2330	16002.0000	↹407.3600	↹16282.0000
x		3932.2000	100.44%	22.1450	31.7220	24.5280	16270.0000	↹416.7100	↹16466.0000
%RSD		1.6924	0.69	6.1888	1.9111	0.8795	1.3962	↹2.1441	↹1.0862

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:09:13	15895.0000	7.1488	14.2520	209.4800	208.8500	179.9700	5.1136	-0.3355
2	16:09:53	15852.0000	7.2741	14.3970	210.1400	211.0600	180.2400	5.3025	0.0039
3	16:10:32	16072.0000	7.2482	14.6840	212.8200	212.6300	181.2200	5.2613	-0.6233
4	16:11:12	15826.0000	7.1147	14.9600	210.3100	210.4200	179.1100	4.9196	-0.4734
5	16:11:52	15580.0000	7.1706	14.4900	204.7800	205.9100	178.5300	5.0938	-0.2998
x		15845.0000	7.1913	14.5570	209.5100	209.7800	179.8100	5.1382	-0.3456
%RSD		1.1138	0.9378	1.8867	1.3988	1.2166	0.5783	2.9597	67.5230

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:09:13	0.0669	0.6698	99.05%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:09:53	0.5223	0.2077	99.66%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:10:32	0.6061	0.1907	100.11%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:11:12	-0.1768	0.7403	99.86%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:11:52	0.5226	-0.3842	99.79%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.3082	0.2849	99.69%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		111.6900	158.7400	0.40	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:09:13	95.05%	0.0885	-0.2328	0.0942	0.4766	0.0000	0.0000	0.2811
2	16:09:53	95.78%	0.0867	0.3057	0.0915	0.4754	0.0000	0.0000	0.3166
3	16:10:32	95.56%	0.0965	-0.4649	0.0953	0.4825	0.0000	0.0000	0.2875
4	16:11:12	96.03%	0.1220	0.0310	0.1090	0.5259	0.0000	0.0000	0.2479
5	16:11:52	96.07%	0.0852	0.1596	0.0730	0.4743	0.0000	0.0000	0.2360
x		95.70%	0.0958	-0.0403	0.0926	0.4869	0.0000	0.0000	0.2738
%RSD		0.43	15.9750	767.0900	13.9170	4.5186	0.0000	0.0000	11.7950

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:09:13	128.4900	132.6900	95.93%	0.1719	0.1714	99.8320	92.2290	94.3120
2	16:09:53	131.4200	134.5900	95.58%	0.1682	0.1624	99.8930	91.7620	94.6740
3	16:10:32	134.2900	137.4700	96.54%	0.1889	0.1719	101.8200	93.7960	96.0810
4	16:11:12	130.8300	134.7000	96.03%	0.1771	0.1616	99.5620	91.9220	94.3300
5	16:11:52	127.4900	130.4800	95.88%	0.1584	0.1591	97.7560	89.4580	91.8850
x		130.5000	133.9800	95.99%	0.1729	0.1653	99.7730	91.8330	94.2570
%RSD		2.0430	1.9385	0.36	6.5078	3.5928	1.4469	1.6927	1.6035

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:09:13	95.17%	-0.5383
2	16:09:53	95.94%	-0.5383
3	16:10:32	94.97%	0.0318
4	16:11:12	95.16%	-0.5383
5	16:11:52	95.54%	-0.5383
x		95.36%	-0.4243
%RSD		0.41	60.0850

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:33	95.49%	0.6951	53.4460	↹1581.0000	1542.8000	1607.3000	↹16305.0000	↹2724.3000
2	16:14:13	96.44%	0.7444	55.0890	↹1593.8000	1557.8000	1575.5000	↹16346.0000	↹2751.2000
3	16:14:53	98.01%	0.6671	54.2710	↹1573.7000	1558.2000	1574.4000	↹16102.0000	↹2751.6000
4	16:15:32	97.30%	0.7265	52.5680	↹1557.5000	1527.1000	1531.5000	↹15908.0000	↹2769.5000
5	16:16:12	97.32%	0.6737	52.9390	↹1521.6000	1497.3000	1544.6000	↹15804.0000	↹2655.5000
x		96.91%	0.7013	53.6630	↹1565.5000	1536.6000	1566.7000	↹16093.0000	↹2730.4000
%RSD		1.00	4.7640	1.9035	↹1.7791	1.6548	1.8915	↹1.4799	↹1.6436

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:33	2304.7000	99.94%	23.2250	31.2330	20.6670	14953.0000	↹268.7200	↹15127.0000
2	16:14:13	2328.4000	100.04%	23.9340	31.0490	20.5980	15013.0000	272.1600	↹15230.0000
3	16:14:53	2329.7000	100.92%	23.2640	30.5780	20.5900	14918.0000	272.1300	↹15312.0000
4	16:15:32	2241.4000	100.72%	22.4580	30.7890	20.3820	14710.0000	266.1100	↹14940.0000
5	16:16:12	2214.1000	101.34%	22.4530	29.6090	19.8120	14282.0000	259.8800	↹14608.0000
x		2283.7000	100.59%	23.0670	30.6520	20.4100	14775.0000	↹267.8000	↹15043.0000
%RSD		2.3165	0.59	2.7103	2.0672	1.7182	2.0198	↹1.9067	↹1.8625

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:33	14552.0000	5.0971	12.2820	232.8100	234.5200	171.7600	4.4346	-0.1277
2	16:14:13	14621.0000	5.1469	11.9770	236.3700	234.6600	170.2900	4.3768	-0.4310
3	16:14:53	14576.0000	5.1625	11.9410	235.0500	235.2000	173.1900	4.7002	-0.0583
4	16:15:32	14407.0000	5.1141	11.8910	230.8800	232.5800	170.6200	4.5777	-0.1995
5	16:16:12	14054.0000	4.9442	11.6670	225.6700	226.3200	166.9600	4.2740	-0.2306
x		14442.0000	5.0930	11.9520	232.1500	232.6600	170.5600	4.4727	-0.2094
%RSD		1.6000	1.7101	1.8458	1.8057	1.5805	1.3567	3.7569	67.1780

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:33	0.3125	-0.2111	98.70%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:14:13	0.1090	1.0528	99.56%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:14:53	0.7051	0.6005	100.13%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:15:32	0.7222	-0.2659	99.77%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:16:12	0.4653	-0.9777	99.73%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.4628	0.0397	99.58%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		56.5310	2003.5000	0.53	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:33	95.84%	0.0994	0.4544	0.1020	0.3912	0.0000	0.0000	0.2504
2	16:14:13	96.23%	0.0979	0.7632	0.0992	0.4335	0.0000	0.0000	0.1926
3	16:14:53	96.08%	0.1131	-0.0448	0.1256	0.4772	0.0000	0.0000	0.2304
4	16:15:32	96.75%	0.1211	-0.5291	0.1235	0.4401	0.0000	0.0000	0.2175
5	16:16:12	95.99%	0.1044	-0.2944	0.0894	0.4035	0.0000	0.0000	0.1777
x		96.18%	0.1072	0.0698	0.1080	0.4291	0.0000	0.0000	0.2137
%RSD		0.36	9.1285	762.1000	14.7240	7.8617	0.0000	0.0000	13.6030

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:13:33	95.9730	97.8390	95.11%	0.1435	0.1603	47.1420	42.9880	44.2570
2	16:14:13	96.0690	97.8940	94.97%	0.1516	0.1670	47.4570	43.0600	44.6660
3	16:14:53	96.6710	100.5000	95.39%	0.1654	0.1611	48.4700	42.9240	44.8300
4	16:15:32	94.5410	96.8990	96.15%	0.1715	0.1508	47.2400	42.1820	44.0570
5	16:16:12	94.4830	96.7640	94.82%	0.1567	0.1644	45.7710	41.3140	42.9650
x		95.5480	97.9790	95.29%	0.1577	0.1607	47.2160	42.4930	44.1550
%RSD		1.0282	1.5332	0.55	7.0001	3.8198	2.0443	1.7607	1.6612

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:13:33	94.50%	0.6074
2	16:14:13	94.57%	0.0342
3	16:14:53	95.14%	-0.5383
4	16:15:32	95.11%	-0.5383
5	16:16:12	95.02%	-0.5383
x		94.87%	-0.1947
%RSD		0.32	263.1800

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:17:54	95.87%	0.3911	35.2450	972.4700	974.5600	981.4300	T11013.0000	T1970.0000
2	16:18:33	98.62%	0.4379	31.8960	972.3300	948.4400	982.2200	T10834.0000	T2001.2000
3	16:19:13	97.20%	0.4322	31.3330	968.0000	964.0600	967.7600	T10876.0000	T2009.1000
4	16:19:53	98.32%	0.4392	31.1440	943.4800	939.3000	961.7500	T10525.0000	T1988.0000
5	16:20:32	97.78%	0.4271	29.6740	943.3200	926.3500	953.8100	T10594.0000	T1901.4000
X		97.56%	0.4255	31.8580	959.9200	950.5400	969.3900	T10768.0000	T1973.9000
%RSD		1.11	4.6575	6.4761	1.5820	2.0204	1.2775	T1.8875	T2.1860

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:17:54	1291.4000	99.50%	20.8840	19.6300	14.1680	11515.0000	T494.0000	T11889.0000
2	16:18:33	1299.1000	100.56%	19.9350	19.7400	13.9320	11398.0000	T487.3700	T11826.0000
3	16:19:13	1315.1000	100.22%	19.5540	19.8940	14.0540	11643.0000	T492.1200	T11907.0000
4	16:19:53	1300.6000	100.70%	20.0570	19.4960	13.7280	11256.0000	T477.1200	T11601.0000
5	16:20:32	1268.4000	101.23%	18.8850	19.3770	13.3880	11194.0000	T473.8600	T11503.0000
X		1294.9000	100.44%	19.8630	19.6270	13.8540	11401.0000	T484.8900	T11745.0000
%RSD		1.3238	0.64	3.6805	1.0310	2.2177	1.6123	T1.8547	T1.5496

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:17:54	11354.0000	6.5310	7.3066	55.2040	56.6550	121.3000	3.3909	-0.5610
2	16:18:33	11283.0000	6.6074	7.1775	55.8610	56.5050	122.8800	3.4813	-0.4260
3	16:19:13	11422.0000	6.6472	7.6280	55.6600	56.8230	123.5000	3.5123	-0.4323
4	16:19:53	11018.0000	6.5051	7.0245	54.6950	55.4270	119.9300	3.2444	-0.2303
5	16:20:32	10859.0000	6.3436	7.2519	54.3300	54.5740	118.5700	3.2604	-0.5344
X		11187.0000	6.5269	7.2777	55.1500	55.9970	121.2300	3.3779	-0.4368
%RSD		2.1350	1.7974	3.0595	1.1642	1.7226	1.6819	3.6427	29.7910

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:17:54	0.6207	-0.6506	97.87%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:18:33	0.0099	0.2819	98.31%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:19:13	0.5885	-0.6135	98.29%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:19:53	0.5277	0.1998	98.73%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:20:32	0.2729	-0.6358	97.27%	0.0000	0.0000	0.0000	0.0000	0.0000
X		0.4040	-0.2837	98.09%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		64.1750	169.1800	0.56	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:17:54	96.22%	0.0531	-0.5384	0.0544	0.3100	0.0000	0.0000	0.1906
2	16:18:33	96.69%	0.0481	0.5145	0.0521	0.3048	0.0000	0.0000	0.2116
3	16:19:13	96.89%	0.0584	-0.0270	0.0584	0.3161	0.0000	0.0000	0.2137
4	16:19:53	96.72%	0.0700	-0.0927	0.0750	0.3145	0.0000	0.0000	0.1959
5	16:20:32	96.52%	0.0559	0.7456	0.0409	0.2993	0.0000	0.0000	0.1870
X		96.61%	0.0571	0.1204	0.0561	0.3089	0.0000	0.0000	0.1997
%RSD		0.26	14.3190	425.0100	22.0490	2.2534	0.0000	0.0000	6.1109

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:17:54	78.7780	81.7180	94.60%	0.1163	0.1093	31.9250	28.9670	29.9500
2	16:18:33	78.7500	81.3790	95.74%	0.1193	0.1159	31.4470	29.2880	29.8760
3	16:19:13	80.0660	81.2960	95.45%	0.1243	0.1174	31.8620	29.2070	30.0980
4	16:19:53	78.6310	79.6340	95.40%	0.1282	0.1133	31.2080	28.6290	29.5640
5	16:20:32	75.2870	77.4090	95.69%	0.1168	0.1055	30.0990	27.8170	28.6670
X		78.3030	80.2870	95.38%	0.1210	0.1123	31.3080	28.7820	29.6310
%RSD		2.2791	2.2425	0.48	4.2346	4.3486	2.3572	2.0730	1.9337

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:17:54	94.81%	-0.5383
2	16:18:33	94.91%	-0.5383
3	16:19:13	95.13%	-0.5383
4	16:19:53	94.45%	1.1813
5	16:20:32	95.35%	-0.5383
X		94.93%	-0.1944
%RSD		0.36	395.5700

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:14	97.83%	0.4817	38.1600	1087.7000	1084.4000	1082.5000	τ12152.0000	τ2205.9000
2	16:22:54	96.96%	0.4692	33.8230	1113.7000	1092.7000	1111.2000	τ12353.0000	τ2239.3000
3	16:23:34	97.37%	0.5062	35.5590	1118.3000	1109.7000	1146.3000	τ12523.0000	τ2281.1000
4	16:24:14	97.60%	0.5024	33.9610	1109.2000	1120.9000	1134.9000	τ12414.0000	τ2272.4000
5	16:24:53	97.88%	0.4887	32.8990	1118.1000	1104.2000	1130.3000	τ12478.0000	τ2214.6000
x		97.53%	0.4896	34.8800	1109.4000	1102.4000	1121.0000	τ12384.0000	τ2242.7000
%RSD		0.39	3.0929	5.9287	1.1461	1.2961	2.2273	τ1.1690	τ1.4979

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:14	1501.8000	99.51%	19.1960	22.8350	16.9110	14065.0000	τ606.6700	τ14390.0000
2	16:22:54	1506.0000	99.81%	19.5650	23.3830	16.7040	τ14390.0000	τ615.3500	τ14330.0000
3	16:23:34	1501.6000	99.77%	20.3810	23.3140	16.9780	14320.0000	τ617.2300	τ14716.0000
4	16:24:14	1543.1000	100.73%	19.1110	23.4010	16.9530	14149.0000	τ620.0700	τ14562.0000
5	16:24:53	1534.7000	100.83%	20.5040	23.1280	16.6180	14283.0000	τ611.3500	τ14579.0000
x		1517.4000	100.13%	19.7510	23.2120	16.8330	τ14242.0000	τ614.1300	τ14515.0000
%RSD		1.3104	0.60	3.3161	1.0203	0.9601	τ0.9270	τ0.8527	τ1.0685

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:14	13780.0000	8.4358	8.5936	126.7300	129.7900	173.9500	4.1518	-0.5942
2	16:22:54	13853.0000	8.4265	8.5862	129.3300	130.2100	172.5100	3.9177	-0.5271
3	16:23:34	14083.0000	8.5986	8.8496	131.8800	132.4300	175.5000	4.0633	-0.5129
4	16:24:14	13826.0000	8.4380	8.6105	129.2700	131.9200	176.7100	4.3392	-0.7075
5	16:24:53	13821.0000	8.5221	8.5836	128.8900	130.9400	172.4900	3.8927	-0.3416
x		13873.0000	8.4842	8.6447	129.2200	131.0600	174.2300	4.0730	-0.5366
%RSD		0.8677	0.8809	1.3305	1.4155	0.8492	1.0664	4.4906	24.8670

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:14	0.1715	0.5282	97.22%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:22:54	0.3128	-0.5673	98.67%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:23:34	0.0389	0.8336	98.21%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:24:14	0.6642	-0.5288	97.65%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:24:53	-0.1345	1.1436	98.90%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.2106	0.2819	98.13%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		143.7100	279.6900	0.71	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:14	95.24%	0.0705	-0.2363	0.0770	0.4270	0.0000	0.0000	0.1324
2	16:22:54	96.31%	0.0572	0.2345	0.0709	0.4576	0.0000	0.0000	0.1535
3	16:23:34	96.23%	0.0878	-0.1349	0.0814	0.3660	0.0000	0.0000	0.1431
4	16:24:14	95.96%	0.0842	0.7447	0.0792	0.3622	0.0000	0.0000	0.1613
5	16:24:53	95.74%	0.0642	-0.1035	0.0631	0.3662	0.0000	0.0000	0.1775
x		95.90%	0.0728	0.1009	0.0743	0.3958	0.0000	0.0000	0.1536
%RSD		0.45	17.8680	397.5800	9.9387	11.0700	0.0000	0.0000	11.2170

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:22:14	93.7280	95.0830	94.46%	0.1289	0.1301	36.6790	33.5200	34.6460
2	16:22:54	94.0120	95.5380	95.14%	0.1253	0.1351	36.7600	33.8560	35.1590
3	16:23:34	95.0330	97.7840	95.58%	0.1341	0.1263	37.2480	34.1280	35.2550
4	16:24:14	93.2110	95.8840	95.43%	0.1456	0.1359	37.1340	34.2860	35.2580
5	16:24:53	92.6330	96.1950	95.62%	0.1402	0.1400	37.0530	34.2810	35.2980
x		93.7230	96.0970	95.25%	0.1348	0.1335	36.9750	34.0140	35.1230
%RSD		0.9619	1.0715	0.50	6.1146	4.0063	0.6627	0.9611	0.7727

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:22:14	94.40%	0.0352
2	16:22:54	94.81%	0.6037
3	16:23:34	95.26%	0.0300
4	16:24:14	95.55%	0.0283
5	16:24:53	95.62%	0.0278
x		95.13%	0.1450
%RSD		0.54	176.8700

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:26:35	97.71%	0.3806	40.6160	3700.3000	3607.3000	3661.5000	8656.8000	1597.8000
2	16:27:15	98.23%	0.3373	40.3380	3686.7000	3637.6000	3654.8000	8620.6000	1591.2000
3	16:27:54	98.16%	0.3775	41.5050	3717.6000	3615.5000	3710.1000	8662.1000	1604.5000
4	16:28:34	98.45%	0.3740	40.4340	3638.6000	3578.4000	3664.6000	8472.2000	1627.9000
5	16:29:14	98.28%	0.3514	39.1920	3582.8000	3574.4000	3625.1000	8520.9000	1534.9000
x		98.17%	0.3641	40.4170	3665.2000	3602.7000	3663.2000	8586.5000	1591.2000
%RSD		0.28	5.1904	2.0437	1.4906	0.7337	0.8329	0.9949	2.1638

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:26:35	7054.8000	98.48%	16.8180	15.3070	11.7770	8408.0000	439.8700	8611.3000
2	16:27:15	7072.5000	99.84%	16.9970	15.3090	11.5470	8211.2000	430.5800	8556.9000
3	16:27:54	7045.1000	99.27%	16.6450	15.4540	11.5990	8295.7000	437.8100	8638.0000
4	16:28:34	7029.2000	99.86%	16.2150	14.6160	11.2350	8180.4000	430.1900	8451.1000
5	16:29:14	6955.9000	99.87%	16.2170	14.9850	11.3950	8165.7000	425.7300	8495.9000
x		7031.5000	99.46%	16.5780	15.1340	11.5110	8252.2000	432.8400	8550.6000
%RSD		0.6412	0.61	2.1315	2.2254	1.7884	1.2192	1.3512	0.9107

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:26:35	8160.6000	3.3877	6.9261	19.9390	20.1210	144.8600	3.2582	0.1250
2	16:27:15	8211.7000	3.3542	6.7157	19.8720	20.3730	143.1200	3.2896	-0.2064
3	16:27:54	8147.2000	3.2665	6.8739	20.1930	20.7810	144.2400	3.0513	-0.4668
4	16:28:34	8040.2000	3.2523	6.6163	19.7800	20.2270	141.7300	3.1657	-0.2621
5	16:29:14	8135.6000	3.2438	6.4908	19.7410	19.8780	141.1000	3.0581	-0.0549
x		8139.1000	3.3009	6.7246	19.9050	20.2760	143.0100	3.1646	-0.1730
%RSD		0.7672	1.9858	2.6744	0.8976	1.6537	1.1181	3.4819	128.6200

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:26:35	0.3061	-0.4630	96.53%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:27:15	0.4252	-0.2020	95.97%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:27:54	0.3351	0.0826	96.48%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:28:34	0.4074	0.3746	96.64%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:29:14	0.3934	-0.1674	96.51%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.3735	-0.0750	96.43%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		13.5460	422.6300	0.27	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:26:35	95.72%	0.1533	0.6216	0.1502	0.9246	0.0000	0.0000	0.1618
2	16:27:15	95.02%	0.1502	0.7508	0.1477	0.8576	0.0000	0.0000	0.1684
3	16:27:54	95.93%	0.1618	0.9795	0.1538	0.9664	0.0000	0.0000	0.1703
4	16:28:34	95.54%	0.1485	0.2573	0.1561	0.9232	0.0000	0.0000	0.1959
5	16:29:14	96.15%	0.1401	0.0551	0.1368	0.8900	0.0000	0.0000	0.1596
x		95.67%	0.1507	0.5329	0.1489	0.9124	0.0000	0.0000	0.1712
%RSD		0.45	5.2180	70.1520	5.0379	4.4848	0.0000	0.0000	8.4901

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:26:35	81.2610	82.8610	94.42%	0.0975	0.0968	79.0130	72.2860	74.4970
2	16:27:15	80.1040	83.1420	93.85%	0.0943	0.0962	78.1970	72.3290	74.5850
3	16:27:54	81.1280	82.6630	95.06%	0.1028	0.0965	79.4160	73.3830	75.0090
4	16:28:34	80.1180	82.3880	94.72%	0.1018	0.1014	78.2910	72.4940	74.0630
5	16:29:14	80.1400	80.7230	95.63%	0.0829	0.0945	77.8080	70.8340	73.2650
x		80.5500	82.3550	94.74%	0.0959	0.0971	78.5450	72.2650	74.2840
%RSD		0.7329	1.1577	0.71	8.3589	2.6472	0.8314	1.2672	0.8900

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:26:35	94.11%	0.0370
2	16:27:15	94.42%	-0.5383
3	16:27:54	94.39%	-0.5383
4	16:28:34	94.48%	0.0347
5	16:29:14	94.03%	-0.5383
x		94.29%	-0.3087
%RSD		0.21	101.8800

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:30:56	99.14%	0.4235	48.9380	↹4894.5000	4800.4000	4899.3000	↹10254.0000	↹1761.2000
2	16:31:36	99.75%	0.4025	50.2160	↹4882.4000	4868.6000	4856.4000	↹10270.0000	↹1757.9000
3	16:32:15	99.22%	0.3839	50.1510	↹4905.2000	4806.9000	4966.6000	↹10391.0000	↹1813.9000
4	16:32:55	100.35%	0.3566	49.6630	↹4786.9000	4690.2000	4801.7000	↹9999.3000	↹1791.6000
5	16:33:35	100.81%	0.3927	45.9830	↹4675.2000	4596.3000	4670.4000	↹9867.3000	↹1677.8000
X		99.85%	0.3919	48.9900	↹4828.9000	4752.5000	4838.9000	↹10156.0000	↹1760.5000
%RSD		0.72	6.2738	3.5865	↹2.0282	2.2812	2.3118	↹2.1222	↹2.9335

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:30:56	9015.2000	100.68%	18.9900	17.5930	13.2850	9566.0000	↹472.7700	↹9871.1000
2	16:31:36	9103.5000	100.34%	19.1070	17.9210	13.3160	9610.0000	↹475.8300	↹10004.0000
3	16:32:15	9176.4000	100.38%	18.7130	17.5810	13.3000	9742.5000	↹479.2500	↹9945.7000
4	16:32:55	8916.8000	100.92%	18.1740	17.6370	12.8790	9429.6000	↹466.2600	↹9698.6000
5	16:33:35	8790.0000	100.83%	18.4480	17.3200	12.9570	9237.6000	↹459.6300	↹9573.0000
X		9000.4000	100.63%	18.6860	17.6100	13.1470	9517.1000	↹470.7500	↹9818.6000
%RSD		1.6948	0.26	2.0544	1.2133	1.6066	2.0183	↹1.6658	↹1.8232

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:30:56	9428.8000	3.6999	8.3167	20.8090	21.4710	154.8700	3.4737	-0.4683
2	16:31:36	9416.0000	3.7919	7.9332	21.2580	21.5610	157.1400	3.5757	-0.2442
3	16:32:15	9464.6000	3.8854	8.5532	21.4240	21.8220	159.4700	3.5738	-0.3647
4	16:32:55	9229.1000	3.6607	7.8718	20.9980	20.9200	153.8900	3.6853	-0.6158
5	16:33:35	9111.2000	3.7577	8.1213	20.6760	20.9530	152.1000	3.3548	-0.1800
X		9329.9000	3.7591	8.1592	21.0330	21.3450	155.5000	3.5327	-0.3746
%RSD		1.6369	2.3116	3.4399	1.4705	1.8517	1.8474	3.5222	46.6050

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:30:56	0.4213	-0.9745	96.76%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:31:36	0.2604	-0.9117	96.76%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:32:15	0.6560	-0.3023	96.72%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:32:55	0.5936	-0.6950	97.29%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:33:35	0.5811	-0.6792	96.93%	0.0000	0.0000	0.0000	0.0000	0.0000
X		0.5025	-0.7125	96.89%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		31.9740	36.9970	0.24	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:30:56	93.99%	0.1289	-0.0059	0.1328	0.8183	0.0000	0.0000	0.1884
2	16:31:36	95.17%	0.1503	0.0642	0.1421	0.7523	0.0000	0.0000	0.1528
3	16:32:15	95.20%	0.1515	-0.1322	0.1397	0.7578	0.0000	0.0000	0.1746
4	16:32:55	96.03%	0.1490	-0.1993	0.1516	0.7531	0.0000	0.0000	0.1578
5	16:33:35	95.64%	0.1364	0.1217	0.1273	0.6256	0.0000	0.0000	0.1570
X		95.21%	0.1432	-0.0303	0.1387	0.7414	0.0000	0.0000	0.1662
%RSD		0.80	7.0062	441.8300	6.6683	9.5009	0.0000	0.0000	9.0235

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:30:56	93.0180	96.8580	93.00%	0.0892	0.1063	81.1480	73.0610	76.0860
2	16:31:36	92.4620	96.2070	93.94%	0.1115	0.1016	80.3180	73.6290	75.8520
3	16:32:15	93.7220	95.2390	93.54%	0.1137	0.1134	80.7230	74.5670	76.4870
4	16:32:55	92.8890	94.7470	93.49%	0.1148	0.1098	79.1180	73.3120	75.0900
5	16:33:35	90.2510	92.3180	93.18%	0.1033	0.1068	77.2030	70.9110	72.6490
X		92.4690	95.0740	93.43%	0.1065	0.1076	79.7020	73.0960	75.2330
%RSD		1.4273	1.8365	0.39	10.0070	4.0538	1.9935	1.8444	2.0353

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:30:56	92.57%	0.0465
2	16:31:36	92.66%	0.0460
3	16:32:15	93.66%	-0.5383
4	16:32:55	93.54%	-0.5383
5	16:33:35	93.86%	0.0385
X		93.26%	-0.1891
%RSD		0.64	168.5500

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:35:15	96.82%	10.2200	51.3650	↹4869.4000	4729.7000	4853.0000	↹10726.0000	↹1759.5000
2	16:35:55	99.16%	10.3640	52.5320	↹4841.3000	4820.6000	4883.1000	↹10852.0000	↹1808.4000
3	16:36:34	100.16%	10.4150	50.5310	↹4985.8000	4843.9000	4916.7000	↹10943.0000	↹1804.4000
4	16:37:14	99.48%	10.3950	50.5500	↹4949.6000	4929.0000	4923.2000	↹10871.0000	↹1822.0000
5	16:37:54	100.75%	10.3680	50.5260	↹4862.8000	4830.8000	4811.3000	↹10759.0000	↹1746.3000
X		99.27%	10.3530	51.1010	↹4901.8000	4830.8000	4877.5000	↹10830.0000	↹1788.1000
%RSD		1.51	0.7417	1.7160	↹1.2731	1.4688	0.9528	↹0.8086	↹1.8522

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:35:15	9086.9000	99.05%	19.1550	117.6100	50.0950	9501.6000	↹576.1600	↹9702.2000
2	16:35:55	9104.4000	98.91%	19.7520	119.0800	50.5230	9612.9000	↹580.9900	↹9874.2000
3	16:36:34	9228.5000	100.47%	18.8880	119.9400	51.3910	9591.6000	↹585.0100	↹9835.2000
4	16:37:14	9202.5000	100.56%	19.6080	119.4500	50.2980	9567.3000	↹580.1600	↹9739.0000
5	16:37:54	9123.4000	101.45%	19.7170	118.8200	50.7330	9648.7000	↹579.8400	↹9841.5000
X		9149.1000	100.09%	19.4240	118.9800	50.6080	9584.4000	↹580.4300	↹9798.4000
%RSD		0.6846	1.08	1.9728	0.7315	0.9862	0.5749	↹0.5445	↹0.7525

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:35:15	9290.7000	96.5980	102.0900	67.9750	68.3510	241.5000	10.3330	16.0720
2	16:35:55	9433.7000	97.8960	104.1500	69.0270	69.0990	245.2900	10.6240	16.5800
3	16:36:34	9358.7000	98.0640	104.3900	68.9330	70.2840	251.2800	10.5810	16.5650
4	16:37:14	9287.2000	98.4580	104.3500	69.5700	70.4520	247.7300	10.3200	16.0480
5	16:37:54	9281.4000	97.5440	103.9700	69.3600	69.0410	247.0900	10.8610	16.7580
X		9330.3000	97.7120	103.7900	68.9730	69.4450	246.5800	10.5440	16.4050
%RSD		0.7051	0.7208	0.9326	0.8900	1.2876	1.4499	2.1390	1.9729

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:35:15	17.6520	-1.1263	94.70%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:35:55	17.6560	0.2312	96.02%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:36:34	16.7810	-0.5777	96.06%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:37:14	16.7340	0.6551	96.96%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:37:54	17.8830	0.8342	95.82%	0.0000	0.0000	0.0000	0.0000	0.0000
X		17.3410	0.0033	95.91%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		3.1215	25445.0000	0.85	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:35:15	93.30%	9.6085	-0.4478	9.6683	9.8836	0.0000	0.0000	5.6317
2	16:35:55	94.15%	9.6710	-1.1244	9.6307	10.0980	0.0000	0.0000	5.6979
3	16:36:34	94.58%	9.9641	-0.1744	9.9463	10.2090	0.0000	0.0000	5.6521
4	16:37:14	95.07%	9.9756	0.0494	10.0320	9.9486	0.0000	0.0000	5.7615
5	16:37:54	94.18%	9.6323	0.4128	9.6849	10.4470	0.0000	0.0000	5.5053
X		94.26%	9.7703	-0.2569	9.7924	10.1170	0.0000	0.0000	5.6497
%RSD		0.69	1.8788	225.1600	1.8692	2.2115	0.0000	0.0000	1.6795

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:35:15	463.2900	477.3000	90.32%	9.5429	9.3485	82.5320	76.3490	78.4060
2	16:35:55	462.5500	478.8500	91.76%	9.6947	9.5757	84.2230	77.6480	79.7960
3	16:36:34	471.6900	485.9100	91.20%	9.8387	9.7095	84.8710	77.4770	80.1740
4	16:37:14	473.8100	483.1900	91.55%	9.8376	9.6601	84.8480	78.3830	80.2170
5	16:37:54	468.9500	481.0600	92.05%	9.8074	9.5820	84.2010	77.3880	79.4430
X		468.0600	481.2600	91.38%	9.7443	9.5751	84.1350	77.4490	79.6070
%RSD		1.0697	0.7113	0.73	1.3041	1.4458	1.1326	0.9413	0.9315

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:35:15	91.10%	-0.5383
2	16:35:55	91.07%	0.0561
3	16:36:34	91.42%	-0.5383
4	16:37:14	91.60%	-0.5383
5	16:37:54	90.95%	0.0569
X		91.23%	-0.3004
%RSD		0.30	108.4700

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:39:37	100.55%	0.4100	50.3400	┬4709.2000	4606.0000	4685.6000	┬10352.0000	┬1741.0000
2	16:40:16	100.22%	0.4210	50.3430	┬4807.9000	4692.5000	4720.0000	┬10484.0000	┬1801.4000
3	16:40:56	99.55%	0.4543	┬55.8570	┬4869.6000	4770.5000	4869.0000	┬10629.0000	┬1822.5000
4	16:41:36	101.94%	0.4379	50.6830	┬4850.7000	4693.1000	4824.7000	┬10431.0000	┬1796.8000
5	16:42:15	102.68%	0.4029	49.9230	┬4799.5000	4771.3000	4708.8000	┬10441.0000	┬1757.8000
x		100.99%	0.4252	┬51.4290	┬4807.4000	4706.7000	4761.6000	┬10467.0000	┬1783.9000
%RSD		1.27	4.9279	┬4.8416	┬1.2927	1.4556	1.6873	┬0.9737	┬1.8778

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:39:37	8769.6000	100.48%	19.6320	17.9290	13.4210	9437.2000	┬464.4600	┬9740.2000
2	16:40:16	8895.4000	100.85%	20.3560	17.9090	13.6710	9633.3000	┬469.5000	┬9885.2000
3	16:40:56	9004.3000	100.95%	21.0790	18.6470	13.8420	9749.7000	┬471.0900	┬10029.0000
4	16:41:36	8991.2000	102.11%	20.9210	18.6190	13.6160	9578.8000	┬473.5100	┬9906.0000
5	16:42:15	8848.0000	102.35%	20.3770	18.4980	13.7110	9721.7000	┬467.7100	┬9840.6000
x		8901.7000	101.35%	20.4730	18.3200	13.6520	9624.1000	┬469.2500	┬9880.3000
%RSD		1.1080	0.82	2.7825	2.0219	1.1245	1.2973	┬0.7293	┬1.0627

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:39:37	9229.0000	3.7583	8.2016	21.2110	21.3400	154.7200	3.4469	-0.7095
2	16:40:16	9330.1000	3.7574	8.4404	21.4480	21.8330	158.5400	3.5539	-0.1873
3	16:40:56	9552.3000	3.9347	8.3048	21.6890	21.9770	156.6300	3.5726	-0.2758
4	16:41:36	9382.7000	3.8358	8.8160	21.2560	22.0890	160.7400	3.7562	-0.2979
5	16:42:15	9435.7000	3.8866	8.4597	21.4460	21.8190	157.3700	3.4783	-0.1411
x		9386.0000	3.8346	8.4445	21.4100	21.8120	157.6000	3.5616	-0.3223
%RSD		1.2819	2.0412	2.7568	0.8864	1.3113	1.4190	3.3859	70.0250

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:39:37	0.3512	-0.0812	95.91%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:40:16	0.5611	-0.4206	95.26%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:40:56	0.2761	0.6334	96.20%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:41:36	0.4520	-1.0207	96.20%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:42:15	0.4067	-0.3624	96.42%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.4094	-0.2503	96.00%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		26.1980	240.0800	0.47	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:39:37	93.75%	0.1382	-0.2779	0.1323	0.6196	0.0000	0.0000	0.2141
2	16:40:16	94.15%	0.1379	0.3146	0.1456	0.6940	0.0000	0.0000	0.1799
3	16:40:56	94.24%	0.1397	0.0418	0.1466	0.6817	0.0000	0.0000	0.1716
4	16:41:36	94.71%	0.1489	-0.2202	0.1432	0.7252	0.0000	0.0000	0.1839
5	16:42:15	95.90%	0.1366	-0.0885	0.1314	0.5784	0.0000	0.0000	0.2005
x		94.55%	0.1403	-0.0460	0.1398	0.6597	0.0000	0.0000	0.1900
%RSD		0.87	3.5255	513.8600	5.3018	9.0222	0.0000	0.0000	8.9936

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:39:37	91.9590	94.4420	90.58%	0.1157	0.1119	77.3650	71.8740	73.4460
2	16:40:16	94.3490	96.9270	91.64%	0.1039	0.1159	79.0670	72.3010	74.1560
3	16:40:56	94.3650	98.3640	92.20%	0.1233	0.1224	78.8310	72.5770	74.6390
4	16:41:36	94.4780	96.4230	91.79%	0.1289	0.1166	80.0250	73.0980	75.6950
5	16:42:15	92.6780	95.7200	91.42%	0.1153	0.1151	79.2100	72.1470	74.7440
x		93.5660	96.3750	91.53%	0.1174	0.1164	78.9000	72.3990	74.5360
%RSD		1.2481	1.5060	0.65	8.0560	3.2710	1.2275	0.6434	1.1082

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:39:37	90.80%	-0.5383
2	16:40:16	91.66%	0.6429
3	16:40:56	91.51%	0.0533
4	16:41:36	90.84%	0.0576
5	16:42:15	90.96%	0.0568
x		91.16%	0.0545
%RSD		0.44	766.6300

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:43:56	100.59%	0.1067	7.1518	943.4200	937.4800	943.3900	T2046.5000	331.8500
2	16:44:36	101.14%	0.0930	6.9764	964.2500	950.3900	947.7600	T2041.3000	338.4500
3	16:45:15	102.08%	0.0865	7.1700	966.3100	942.0400	956.4400	T2044.0000	336.5300
4	16:45:55	102.42%	0.1095	8.2947	958.1500	934.8700	951.2600	T2034.3000	T337.0700
5	16:46:35	102.41%	0.0873	7.1947	934.8900	913.5200	930.1700	T2004.0000	328.7900
x		101.73%	0.0966	7.3575	953.4100	935.6600	945.8100	T2034.0000	T334.5400
%RSD		0.81	11.2310	7.2160	1.4355	1.4652	1.0532	T0.8552	T1.2138

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:43:56	1765.7000	99.59%	3.7220	3.3778	2.5919	1869.4000	92.0230	T1961.7000
2	16:44:36	1756.4000	100.09%	3.6840	3.5993	2.6481	1891.8000	92.4150	T1968.5000
3	16:45:15	1771.7000	101.30%	4.2573	3.4784	2.6985	1889.8000	92.8350	T1984.5000
4	16:45:55	1786.3000	100.71%	3.6997	3.5185	2.6550	1872.6000	92.6790	T1972.2000
5	16:46:35	1756.4000	99.99%	3.7740	3.5815	2.6486	1862.5000	91.0340	T1944.2000
x		1767.3000	100.34%	3.8274	3.5111	2.6484	1877.2000	92.1970	T1966.2000
%RSD		0.7048	0.67	6.3415	2.5332	1.4313	0.6886	0.7802	T0.7550

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:43:56	1827.4000	0.7715	1.7693	4.3497	4.6739	33.4280	0.7658	-0.7343
2	16:44:36	1838.9000	0.7623	1.8348	4.4209	4.6845	33.4750	0.9838	-0.8837
3	16:45:15	1862.8000	0.7655	1.7707	4.4210	4.6212	33.1660	0.6804	-0.7836
4	16:45:55	1836.6000	0.7384	1.7632	4.3917	4.5795	33.3230	0.6909	-0.5990
5	16:46:35	1803.9000	0.7684	1.6633	4.2796	4.5149	31.9830	0.7860	-0.7210
x		1833.9000	0.7612	1.7603	4.3726	4.6148	33.0750	0.7814	-0.7443
%RSD		1.1592	1.7373	3.4968	1.3637	1.5172	1.8793	15.6290	13.8860

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:43:56	0.4375	-0.3201	93.33%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:44:36	0.4058	-0.6491	93.59%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:45:15	-0.0770	0.9347	93.10%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:45:55	-0.2872	-0.0986	93.75%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:46:35	0.1489	-0.7250	93.90%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.1256	-0.1716	93.53%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		247.9000	389.2700	0.35	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:43:56	95.08%	0.0257	0.0908	0.0282	0.1833	0.0000	0.0000	0.0482
2	16:44:36	95.36%	0.0334	-0.1000	0.0290	0.1532	0.0000	0.0000	0.0495
3	16:45:15	95.43%	0.0271	0.4982	0.0400	0.1010	0.0000	0.0000	0.0479
4	16:45:55	95.93%	0.0444	-0.0202	0.0405	0.1986	0.0000	0.0000	0.0348
5	16:46:35	96.80%	0.0309	0.0109	0.0349	0.1411	0.0000	0.0000	0.0504
x		95.72%	0.0323	0.0959	0.0345	0.1554	0.0000	0.0000	0.0462
%RSD		0.71	23.0010	245.0000	16.9170	24.5340	0.0000	0.0000	13.9220

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:43:56	18.0520	18.6300	91.04%	0.0193	0.0206	15.7680	14.6290	14.8340
2	16:44:36	18.1310	19.1660	91.20%	0.0157	0.0179	15.5330	14.2430	14.7250
3	16:45:15	17.7130	18.3330	91.54%	0.0202	0.0175	15.7170	14.6860	14.9300
4	16:45:55	18.0460	18.9220	91.80%	0.0234	0.0312	15.8150	14.5360	14.8440
5	16:46:35	17.4920	18.3900	92.08%	0.0234	0.0230	15.5550	14.0090	14.4780
x		17.8870	18.6880	91.53%	0.0204	0.0220	15.6780	14.4200	14.7620
%RSD		1.5280	1.8954	0.46	15.6390	25.2770	0.8104	1.9842	1.1849

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:43:56	92.25%	0.0485
2	16:44:36	92.43%	-0.5383
3	16:45:15	92.40%	1.8053
4	16:45:55	92.89%	-0.5383
5	16:46:35	92.79%	-0.5383
x		92.55%	0.0478
%RSD		0.30	2124.3000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:48:16	102.18%	9.9847	┬4809.9000	┬9498.5000	9359.0000	┬9277.4000	┬10216.0000	┬6273.0000
2	16:48:55	101.03%	10.1910	┬4878.3000	┬9600.3000	9459.7000	9559.6000	┬10241.0000	┬6260.4000
3	16:49:35	100.22%	10.4930	┬4908.5000	┬9655.5000	9562.4000	┬9480.3000	┬10320.0000	┬6309.8000
4	16:50:15	101.73%	10.3430	┬4838.9000	┬9505.6000	9385.5000	9511.2000	┬10218.0000	┬6286.3000
5	16:50:54	101.52%	9.8834	┬4777.0000	┬9429.0000	9345.6000	9459.0000	┬10142.0000	┬6227.1000
x		101.34%	10.1790	┬4842.5000	┬9537.8000	9422.4000	┬9457.5000	┬10227.0000	┬6271.3000
%RSD		0.74	2.4615	┬1.0836	┬0.9404	0.9532	┬1.1373	┬0.6216	┬0.4904

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:48:16	13403.0000	99.76%	20.5510	68.1890	31.1470	11247.0000	┬471.5200	┬11554.0000
2	16:48:55	13331.0000	101.36%	20.1230	67.2850	31.0530	11248.0000	┬472.4400	┬11437.0000
3	16:49:35	13406.0000	101.52%	19.3320	67.8350	31.8420	11324.0000	┬469.3200	┬11469.0000
4	16:50:15	13375.0000	101.32%	19.1670	65.9480	30.3160	11025.0000	┬458.7900	┬11140.0000
5	16:50:54	13200.0000	100.97%	18.7340	66.1820	30.8470	11094.0000	┬465.6300	┬11314.0000
x		13343.0000	100.99%	19.5820	67.0880	31.0410	11188.0000	┬467.5400	┬11383.0000
%RSD		0.6403	0.71	3.7750	1.4774	1.7764	1.1052	┬1.1872	┬1.4113

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:48:16	11032.0000	12.6770	17.2110	39.4650	39.4150	169.6000	12.0890	42.5550
2	16:48:55	10954.0000	12.6360	16.8830	39.0590	39.8470	170.2600	11.4590	44.3350
3	16:49:35	10872.0000	12.6290	17.6890	38.9470	40.1530	170.4500	12.3790	42.6110
4	16:50:15	10631.0000	12.3780	16.8000	38.0920	38.3090	164.1100	10.6420	39.9960
5	16:50:54	10844.0000	12.6100	17.6010	38.7720	39.9450	166.9300	11.4260	43.0050
x		10867.0000	12.5860	17.2370	38.8670	39.5340	168.2700	11.5990	42.5000
%RSD		1.3876	0.9432	2.3463	1.2929	1.8614	1.6171	5.8059	3.7035

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:48:16	43.2980	-0.5666	94.56%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:48:55	43.0840	0.3365	94.84%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:49:35	44.0220	0.4499	95.00%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:50:15	39.4870	-0.9327	┬104.56%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:50:54	41.7330	-0.4046	94.90%	0.0000	0.0000	0.0000	0.0000	0.0000
x		42.3250	-0.2235	┬96.77%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		4.2277	266.6200	┬4.50	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:48:16	92.64%	9.6571	0.6774	9.6943	9.6471	0.0000	0.0000	18.1440
2	16:48:55	92.99%	9.9293	-0.3142	9.8980	9.8960	0.0000	0.0000	18.3330
3	16:49:35	92.61%	10.0260	-0.1212	10.0990	9.9467	0.0000	0.0000	18.6300
4	16:50:15	92.77%	10.0800	0.5633	10.0400	9.5765	0.0000	0.0000	18.5540
5	16:50:54	93.33%	9.6449	0.3596	9.5692	9.3879	0.0000	0.0000	18.2800
x		92.87%	9.8673	0.2330	9.8601	9.6909	0.0000	0.0000	18.3880
%RSD		0.32	2.0747	185.5600	2.2843	2.3887	0.0000	0.0000	1.0890

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:48:16	182.6000	185.8300	89.70%	9.5348	9.3115	88.9240	83.3480	84.7250
2	16:48:55	180.9300	186.6300	90.10%	9.5372	9.4975	89.2110	82.5490	84.7720
3	16:49:35	185.5000	191.9600	89.87%	9.6426	9.5972	90.4920	82.7570	84.5180
4	16:50:15	180.9600	188.4900	90.25%	9.6884	9.4100	88.2120	82.4540	84.2920
5	16:50:54	179.9400	186.0100	90.06%	9.4184	9.3993	87.6190	81.9380	83.6320
x		181.9900	187.7800	90.00%	9.5643	9.4431	88.8920	82.6090	84.3880
%RSD		1.1998	1.3653	0.24	1.1020	1.1483	1.2253	0.6190	0.5489

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:48:16	87.57%	-0.5383
2	16:48:55	88.66%	0.0723
3	16:49:35	88.56%	0.0730
4	16:50:15	88.65%	-0.5383
5	16:50:54	88.19%	0.0755
x		88.33%	-0.1712
%RSD		0.52	195.8200

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:52:35	100.17%	0.4713	46.0050	┬1650.3000	1624.6000	1633.6000	┬12025.0000	┬1911.3000
2	16:53:15	100.27%	0.4686	46.2700	┬1655.9000	1644.9000	1630.3000	┬12048.0000	┬1940.0000
3	16:53:55	99.64%	0.4573	46.6070	┬1668.8000	1631.1000	1620.2000	┬12130.0000	┬1931.0000
4	16:54:35	101.31%	0.4115	44.2890	┬1627.0000	1572.6000	1600.7000	┬11830.0000	┬1911.4000
5	16:55:14	102.26%	0.4420	44.1960	┬1603.9000	1554.8000	1581.8000	┬11681.0000	┬1880.1000
x		100.73%	0.4501	45.4730	┬1641.2000	1605.6000	1613.4000	┬11943.0000	┬1914.8000
%RSD		1.04	5.4395	2.5162	┬1.5696	2.4563	1.3515	┬1.5335	┬1.2032

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:52:35	3596.3000	100.30%	21.3260	21.9980	15.9970	10830.0000	345.3100	┬11064.0000
2	16:53:15	3649.3000	100.27%	21.7020	22.1890	16.0120	10921.0000	349.5600	┬11165.0000
3	16:53:55	3660.3000	100.72%	21.5430	22.5380	16.1180	10915.0000	347.4000	┬11179.0000
4	16:54:35	3582.6000	102.75%	20.6840	21.4680	15.5660	10659.0000	339.6900	┬10878.0000
5	16:55:14	3562.6000	101.44%	21.2310	21.4720	15.6970	10630.0000	338.8600	┬10837.0000
x		3610.2000	101.10%	21.2970	21.9330	15.8780	10791.0000	344.1700	┬11024.0000
%RSD		1.1807	1.03	1.8268	2.1202	1.4770	1.2900	1.3711	┬1.4461

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:52:35	10461.0000	4.7880	11.2510	229.5800	228.9400	328.9700	2.9959	-0.2697
2	16:53:15	10610.0000	4.7815	11.1150	231.4400	229.9000	325.1100	2.9458	-0.5814
3	16:53:55	10570.0000	4.8374	11.6450	230.9200	234.7300	326.2000	3.0648	-0.7129
4	16:54:35	10436.0000	4.7665	10.8870	227.8800	227.9300	323.6300	2.9449	-0.6549
5	16:55:14	10333.0000	4.5871	10.9070	225.2600	226.4800	319.7000	2.9670	-0.3534
x		10482.0000	4.7521	11.1610	229.0200	229.6000	324.7200	2.9837	-0.5145
%RSD		1.0540	2.0198	2.7765	1.0962	1.3656	1.0533	1.6709	37.5720

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:52:35	0.1622	0.5461	94.55%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:53:15	0.3993	0.2737	95.02%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:53:55	0.5035	0.5223	94.92%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:54:35	0.6281	-0.5325	96.09%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:55:14	0.1588	0.1514	96.01%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.3703	0.1922	95.32%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		56.1720	227.9400	0.73	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:52:35	93.99%	0.1940	0.1229	0.2156	0.9345	0.0000	0.0000	0.2616
2	16:53:15	93.10%	0.2162	-0.1831	0.2154	1.0621	0.0000	0.0000	0.2462
3	16:53:55	93.59%	0.1954	-0.1542	0.2128	0.9958	0.0000	0.0000	0.2511
4	16:54:35	94.40%	0.1991	0.5434	0.2192	1.0154	0.0000	0.0000	0.2461
5	16:55:14	94.39%	0.2021	-0.3979	0.2029	0.9729	0.0000	0.0000	0.2153
x		93.89%	0.2014	-0.0137	0.2132	0.9962	0.0000	0.0000	0.2441
%RSD		0.59	4.4178	2635.9000	2.8945	4.7765	0.0000	0.0000	7.0782

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:52:35	122.4200	129.3700	89.76%	0.1226	0.1327	106.4700	97.2810	99.9120
2	16:53:15	124.1300	128.4500	89.52%	0.1372	0.1408	106.0100	97.5910	100.2600
3	16:53:55	124.7300	128.7300	90.86%	0.1418	0.1248	107.0600	97.3400	100.7000
4	16:54:35	123.2000	127.9800	91.60%	0.1352	0.1355	104.9500	95.7060	99.2200
5	16:55:14	123.3600	126.7100	90.69%	0.1231	0.1286	104.0200	94.4280	97.6090
x		123.5700	128.2500	90.49%	0.1320	0.1325	105.7000	96.4690	99.5390
%RSD		0.7170	0.7776	0.94	6.5538	4.6539	1.1493	1.4121	1.2119

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:52:35	89.23%	-0.5383
2	16:53:15	89.41%	-0.5383
3	16:53:55	89.49%	-0.5383
4	16:54:35	91.30%	-0.5383
5	16:55:14	91.16%	-0.5383
x		90.12%	-0.5383
%RSD		1.13	0.0000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:56	99.41%	0.6831	⊤62.3330	⊤1607.3000	1555.1000	1553.3000	⊤14313.0000	⊤2614.4000
2	16:57:35	100.23%	0.7373	60.9590	⊤1640.1000	1582.4000	1582.6000	⊤14633.0000	⊤2639.6000
3	16:58:15	100.79%	0.7093	62.8220	⊤1649.4000	1611.7000	1604.1000	⊤14756.0000	⊤2648.5000
4	16:58:54	100.85%	0.7530	61.8310	⊤1644.5000	1587.3000	1596.1000	⊤14618.0000	⊤2670.9000
5	16:59:34	101.66%	0.7470	59.5830	⊤1622.5000	1565.2000	1563.1000	⊤14375.0000	⊤2599.9000
x		100.59%	0.7259	⊤61.5060	⊤1632.8000	1580.4000	1579.8000	⊤14539.0000	⊤2634.7000
%RSD		0.83	4.0270	⊤2.0754	⊤1.0711	1.3802	1.3582	⊤1.2890	⊤1.0640

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:56	2522.1000	100.58%	19.7490	28.8220	21.0680	15012.0000	⊤468.0900	⊤15262.0000
2	16:57:35	2553.4000	100.39%	19.3520	29.1310	21.7180	15264.0000	⊤475.3800	⊤15454.0000
3	16:58:15	2611.2000	100.91%	19.3990	29.2960	21.9450	15282.0000	⊤474.5900	⊤15422.0000
4	16:58:54	2562.3000	100.92%	19.5010	28.9080	21.5060	15189.0000	⊤473.0900	⊤15225.0000
5	16:59:34	2530.0000	101.31%	19.3680	28.6610	21.5000	15025.0000	⊤467.2700	⊤15182.0000
x		2555.8000	100.82%	19.4740	28.9630	21.5470	15154.0000	⊤471.6800	⊤15309.0000
%RSD		1.3721	0.35	0.8436	0.8679	1.5054	0.8517	⊤0.7969	⊤0.7962

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:56	14393.0000	7.6232	13.7130	61.0230	62.5970	149.8700	4.6613	-0.8398
2	16:57:35	14673.0000	7.8533	13.2810	61.6700	62.9350	152.5200	4.7016	-0.7364
3	16:58:15	14651.0000	7.8306	13.4770	61.1200	63.0790	152.5900	4.8716	-0.5522
4	16:58:54	14618.0000	7.7485	13.1120	61.2750	62.1790	151.8900	4.8021	-0.8680
5	16:59:34	14478.0000	7.5880	12.7490	59.7950	61.6560	149.4000	4.7709	-0.5553
x		14563.0000	7.7287	13.2670	60.9770	62.4890	151.2500	4.7615	-0.7103
%RSD		0.8341	1.5479	2.7582	1.1563	0.9297	1.0006	1.7411	21.2760

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:56	0.6461	0.1627	95.92%	0.0000	0.0000	0.0000	0.0000	0.0000
2	16:57:35	0.2340	0.6736	95.57%	0.0000	0.0000	0.0000	0.0000	0.0000
3	16:58:15	0.3653	0.5857	95.97%	0.0000	0.0000	0.0000	0.0000	0.0000
4	16:58:54	0.4677	-0.8916	96.20%	0.0000	0.0000	0.0000	0.0000	0.0000
5	16:59:34	0.3665	-0.3188	95.64%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.4159	0.0423	95.86%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		36.8150	1545.0000	0.27	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:56	93.04%	0.0861	0.1657	0.0801	0.5639	0.0000	0.0000	0.1670
2	16:57:35	92.94%	0.0758	0.1752	0.0811	0.5599	0.0000	0.0000	0.1821
3	16:58:15	92.81%	0.0884	-0.4113	0.0883	0.5947	0.0000	0.0000	0.1865
4	16:58:54	93.13%	0.0720	-0.0825	0.0792	0.5835	0.0000	0.0000	0.1637
5	16:59:34	92.84%	0.0783	0.0643	0.0715	0.6497	0.0000	0.0000	0.1739
x		92.95%	0.0801	-0.0177	0.0800	0.5903	0.0000	0.0000	0.1746
%RSD		0.14	8.6209	1371.4000	7.4692	6.1144	0.0000	0.0000	5.5539

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	16:56:56	115.3400	117.9700	90.17%	0.1263	0.1247	88.8460	81.6290	83.9290
2	16:57:35	117.8300	119.9300	89.23%	0.1398	0.1455	89.6070	81.6090	84.3070
3	16:58:15	118.2600	119.8900	89.25%	0.1418	0.1401	91.0610	83.1050	85.2990
4	16:58:54	118.0500	120.2400	89.61%	0.1369	0.1358	90.4150	83.0810	85.1140
5	16:59:34	115.9700	120.2600	88.96%	0.1344	0.1356	88.8020	81.2430	83.6230
x		117.0900	119.6600	89.44%	0.1358	0.1364	89.7460	82.1330	84.4540
%RSD		1.1434	0.8012	0.52	4.4379	5.6284	1.0996	1.0828	0.8655

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	16:56:56	89.10%	-0.5383
2	16:57:35	89.38%	-0.5383
3	16:58:15	89.12%	0.0692
4	16:58:54	88.92%	-0.5383
5	16:59:34	89.31%	-0.5383
x		89.17%	-0.4168
%RSD		0.21	65.1790

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:01:16	99.44%	0.7715	↹65.9750	↹1724.6000	1687.9000	1687.9000	↹15302.0000	↹2736.8000
2	17:01:55	101.31%	0.7547	66.3770	↹1767.6000	1696.0000	1737.5000	↹15442.0000	↹2766.4000
3	17:02:35	101.64%	0.7563	↹68.3240	↹1779.4000	1712.5000	1730.8000	↹15456.0000	↹2764.5000
4	17:03:15	101.60%	0.8147	↹67.0770	↹1771.4000	1704.2000	1729.4000	↹15376.0000	↹2773.0000
5	17:03:54	102.88%	0.7596	↹66.5500	↹1710.7000	1694.8000	1685.2000	↹15100.0000	↹2674.2000
x		101.37%	0.7714	↹66.8610	↹1750.7000	1699.1000	1714.2000	↹15335.0000	↹2743.0000
%RSD		1.22	3.2518	↹1.3594	↹1.7654	0.5593	1.4835	↹0.9436	↹1.4906

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:01:16	3042.1000	98.40%	18.3800	32.0620	23.0010	17254.0000	↹607.8600	↹17297.0000
2	17:01:55	3015.2000	99.78%	18.9130	32.3870	23.5270	17704.0000	↹620.1000	↹17636.0000
3	17:02:35	3060.1000	101.87%	18.8610	32.2430	23.3310	17390.0000	↹622.5200	↹17686.0000
4	17:03:15	3029.4000	101.28%	18.6390	32.0530	23.1800	17441.0000	↹613.1200	↹17476.0000
5	17:03:54	3022.7000	101.06%	18.2330	31.7890	22.9300	17413.0000	↹609.7500	↹17395.0000
x		3033.9000	100.48%	18.6050	32.1070	23.1940	17441.0000	↹614.6700	↹17498.0000
%RSD		0.5823	1.38	1.5916	0.7019	1.0494	0.9398	↹1.0418	↹0.9302

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:01:16	16655.0000	9.3983	14.3590	258.9600	259.3400	224.7100	5.4423	-0.6548
2	17:01:55	16820.0000	9.5089	14.6280	260.7800	262.7200	226.3700	5.4635	-0.7098
3	17:02:35	16762.0000	9.6083	14.3780	261.6500	264.3800	227.5900	5.3608	-0.7164
4	17:03:15	16718.0000	9.4649	14.8300	261.8000	261.9400	224.7500	5.5930	-0.4870
5	17:03:54	16498.0000	9.5477	14.2020	260.8100	258.9200	224.3600	5.5762	-0.9855
x		16691.0000	9.5056	14.4790	260.8000	261.4600	225.5600	5.4872	-0.7107
%RSD		0.7387	0.8401	1.7178	0.4332	0.8826	0.6109	1.7685	25.2410

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:01:16	0.4639	0.0775	94.29%	0.0000	0.0000	0.0000	0.0000	0.0000
2	17:01:55	0.0425	0.8515	94.70%	0.0000	0.0000	0.0000	0.0000	0.0000
3	17:02:35	0.3222	-0.0711	95.51%	0.0000	0.0000	0.0000	0.0000	0.0000
4	17:03:15	0.5453	-0.1208	95.36%	0.0000	0.0000	0.0000	0.0000	0.0000
5	17:03:54	0.3508	0.4054	95.89%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.3449	0.2285	95.15%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		55.4450	176.9600	0.68	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:01:16	90.89%	0.1068	-0.2672	0.1078	0.6860	0.0000	0.0000	0.1710
2	17:01:55	91.93%	0.1213	-0.2401	0.1036	0.6784	0.0000	0.0000	0.1903
3	17:02:35	92.84%	0.1156	-0.0027	0.1273	0.6531	0.0000	0.0000	0.2040
4	17:03:15	92.35%	0.1284	-0.5588	0.1217	0.6820	0.0000	0.0000	0.1875
5	17:03:54	92.30%	0.1054	-0.2029	0.1040	0.6204	0.0000	0.0000	0.1762
x		92.06%	0.1155	-0.2544	0.1129	0.6640	0.0000	0.0000	0.1858
%RSD		0.79	8.3936	78.3930	9.6429	4.1488	0.0000	0.0000	6.9377

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:01:16	132.3900	135.9300	88.17%	0.1428	0.1433	97.7400	89.2960	92.9080
2	17:01:55	133.9400	137.4500	88.90%	0.1409	0.1431	99.2100	91.4650	93.6010
3	17:02:35	131.9200	138.6600	89.95%	0.1585	0.1516	99.7640	92.1010	94.4230
4	17:03:15	133.2400	138.0700	89.48%	0.1520	0.1660	99.1470	90.5280	92.9900
5	17:03:54	131.2600	135.4500	89.24%	0.1513	0.1492	97.3670	90.0250	92.2780
x		132.5500	137.1100	89.15%	0.1491	0.1506	98.6450	90.6830	93.2400
%RSD		0.8001	1.0051	0.75	4.8492	6.2104	1.0479	1.2335	0.8694

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	17:01:16	87.77%	0.0785
2	17:01:55	89.36%	-0.5383
3	17:02:35	89.34%	0.0677
4	17:03:15	89.38%	-0.5383
5	17:03:54	89.21%	-0.5383
x		89.01%	-0.2938
%RSD		0.78	114.0100

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:36	100.37%	0.7690	61.0660	┬1942.5000	1879.1000	1890.2000	┬16120.0000	┬3163.6000
2	17:06:19	102.24%	0.7241	62.9190	┬1958.6000	1901.3000	1871.7000	┬16047.0000	┬3169.6000
3	17:06:59	101.42%	0.7892	62.7300	┬1966.9000	1917.1000	1913.3000	┬16304.0000	┬3200.6000
4	17:07:40	101.93%	0.7770	62.8310	┬1963.4000	1918.0000	1927.0000	┬16057.0000	┬3134.1000
5	17:08:20	101.70%	0.7592	┬63.7300	┬1928.7000	1876.8000	1907.5000	┬16110.0000	┬3114.8000
x		101.53%	0.7637	┬62.6550	┬1952.0000	1898.4000	1901.9000	┬16128.0000	┬3156.5000
%RSD		0.71	3.2379	┬1.5525	┬0.8220	1.0485	1.1279	┬0.6419	┬1.0513

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:36	3262.5000	99.96%	22.7290	32.1560	22.6870	16764.0000	293.1600	┬17074.0000
2	17:06:19	3313.7000	100.65%	24.8490	31.4880	22.4440	16978.0000	291.3100	┬17126.0000
3	17:06:59	3334.4000	101.44%	23.4790	31.8310	22.9230	17126.0000	292.5000	┬17184.0000
4	17:07:40	3283.3000	101.29%	22.9530	31.9660	22.3960	16902.0000	289.7000	┬16972.0000
5	17:08:20	3302.1000	100.01%	23.0130	31.4810	22.4810	16827.0000	291.2300	┬17040.0000
x		3299.2000	100.67%	23.4050	31.7840	22.5860	16919.0000	291.5800	┬17079.0000
%RSD		0.8374	0.69	3.6423	0.9345	0.9679	0.8312	0.4561	┬0.4748

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:36	16212.0000	6.0028	15.5360	45.7600	45.8920	147.2200	4.7877	-0.8950
2	17:06:19	16209.0000	5.8430	15.5230	45.5870	46.4100	148.4800	4.6948	-0.9131
3	17:06:59	16389.0000	6.0549	15.1240	46.1580	46.8670	148.6300	4.9564	-0.7186
4	17:07:40	16131.0000	6.0195	15.1490	45.3600	46.6150	148.1400	4.8210	-0.6206
5	17:08:20	16064.0000	5.8497	14.9020	45.4160	45.7800	146.2900	4.8652	-0.8512
x		16201.0000	5.9540	15.2470	45.6560	46.3130	147.7500	4.8250	-0.7997
%RSD		0.7517	1.6804	1.8071	0.7039	1.0063	0.6651	1.9994	15.7250

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:36	0.7619	0.1260	94.33%	0.0000	0.0000	0.0000	0.0000	0.0000
2	17:06:19	0.0575	1.4198	94.41%	0.0000	0.0000	0.0000	0.0000	0.0000
3	17:06:59	0.7423	0.2818	94.70%	0.0000	0.0000	0.0000	0.0000	0.0000
4	17:07:40	0.1624	0.1159	94.34%	0.0000	0.0000	0.0000	0.0000	0.0000
5	17:08:20	0.7034	-1.2971	94.17%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.4855	0.1293	94.39%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		71.1650	746.2100	0.21	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:36	91.96%	0.0662	-0.3824	0.0689	0.5458	0.0000	0.0000	0.1130
2	17:06:19	91.92%	0.0841	-0.0994	0.0651	0.5308	0.0000	0.0000	0.1304
3	17:06:59	90.90%	0.0823	0.1890	0.0822	0.4933	0.0000	0.0000	0.1400
4	17:07:40	91.74%	0.0855	0.2334	0.0734	0.4285	0.0000	0.0000	0.0898
5	17:08:20	91.94%	0.0638	-0.2590	0.0660	0.5251	0.0000	0.0000	0.1081
x		91.69%	0.0764	-0.0637	0.0711	0.5047	0.0000	0.0000	0.1163
%RSD		0.49	13.6980	425.2200	9.8416	9.2505	0.0000	0.0000	16.8640

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:05:36	102.4000	104.7300	88.04%	0.1417	0.1359	55.8570	50.9420	52.5940
2	17:06:19	104.1200	105.9700	88.36%	0.1540	0.1434	56.4110	51.5230	52.9950
3	17:06:59	105.3400	107.4300	87.14%	0.1345	0.1401	57.0790	52.1500	53.6740
4	17:07:40	103.0700	105.6600	87.38%	0.1587	0.1736	56.4570	51.3600	52.9730
5	17:08:20	101.6800	107.1100	87.27%	0.1375	0.1331	55.4050	50.7270	52.1530
x		103.3200	106.1800	87.64%	0.1453	0.1452	56.2420	51.3410	52.8780
%RSD		1.3961	1.0353	0.61	7.2637	11.2460	1.1330	1.0779	1.0625

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	17:05:36	88.10%	0.6907
2	17:06:19	87.80%	-0.5383
3	17:06:59	87.26%	0.0821
4	17:07:40	87.13%	-0.5383
5	17:08:20	87.34%	0.0815
x		87.53%	-0.0445
%RSD		0.47	1158.1000

MF9K12-5x 06/29/2015 17:09:23

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:02	99.90%	0.6781	80.3320	↹2048.6000	1997.4000	2049.4000	↹16505.0000	↹2892.7000
2	17:10:42	100.62%	0.7395	↹86.5660	↹2112.2000	2024.4000	2013.8000	↹16568.0000	↹2932.4000
3	17:11:22	101.37%	0.7076	81.1620	↹2102.8000	2028.5000	2048.5000	↹16465.0000	↹2916.8000
4	17:12:01	102.00%	0.6804	81.3070	↹2118.2000	2025.5000	2039.2000	↹16388.0000	↹2930.7000
5	17:12:41	102.23%	0.6275	↹83.2150	↹2027.8000	1973.1000	1997.7000	↹16219.0000	↹2878.2000
x		101.22%	0.6866	↹82.5160	↹2081.9000	2009.8000	2029.7000	↹16429.0000	↹2910.2000
%RSD		0.96	6.0238	↹3.0271	↹1.9663	1.1959	1.1309	↹0.8164	↹0.8215

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:02	4989.9000	99.72%	24.2600	30.6220	20.9410	16186.0000	↹613.7200	↹16274.0000
2	17:10:42	5069.9000	99.33%	24.6250	30.8950	21.1940	16402.0000	↹624.8500	↹16467.0000
3	17:11:22	5063.5000	100.66%	24.2470	30.7890	21.0080	16487.0000	↹621.6900	↹16423.0000
4	17:12:01	5009.8000	99.86%	23.7800	30.8320	21.1090	16155.0000	↹619.9200	↹16484.0000
5	17:12:41	4933.4000	100.48%	23.7800	30.6660	20.7020	16075.0000	↹615.4200	↹16288.0000
x		5013.3000	100.01%	24.1390	30.7610	20.9910	16261.0000	↹619.1200	↹16387.0000
%RSD		1.1232	0.55	1.4943	0.3704	0.8961	1.0770	↹0.7356	↹0.6061

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:02	15576.0000	8.9270	12.9630	189.9500	190.0000	317.2500	4.6389	-0.7075
2	17:10:42	15552.0000	8.9558	13.2910	194.0400	195.9200	317.7100	4.6259	-0.6666
3	17:11:22	15652.0000	9.0216	13.1470	191.9500	193.9400	315.6300	4.3344	-0.3332
4	17:12:01	15583.0000	9.0626	13.2450	191.3500	193.5800	313.7800	4.5361	-0.6895
5	17:12:41	15430.0000	8.8434	13.0100	189.0900	188.3100	311.6400	4.5924	-0.8425
x		15559.0000	8.9621	13.1310	191.2700	192.3500	315.2000	4.5455	-0.6479
%RSD		0.5217	0.9502	1.0893	1.0013	1.6143	0.7996	2.7398	29.1380

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:02	0.7868	-0.4362	93.11%	0.0000	0.0000	0.0000	0.0000	0.0000
2	17:10:42	0.7716	0.4447	93.15%	0.0000	0.0000	0.0000	0.0000	0.0000
3	17:11:22	0.5863	-0.5259	93.55%	0.0000	0.0000	0.0000	0.0000	0.0000
4	17:12:01	0.2690	0.0230	93.93%	0.0000	0.0000	0.0000	0.0000	0.0000
5	17:12:41	0.6008	-0.5932	93.68%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.6029	-0.2175	93.49%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		34.6010	203.0700	0.38	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:02	90.14%	0.1831	-0.1739	0.1798	0.8521	0.0000	0.0000	0.2934
2	17:10:42	90.88%	0.1558	-0.0928	0.1558	1.0421	0.0000	0.0000	0.2739
3	17:11:22	90.44%	0.1775	-0.1226	0.1690	0.9120	0.0000	0.0000	0.2498
4	17:12:01	91.35%	0.1741	-0.2893	0.1625	0.8634	0.0000	0.0000	0.3018
5	17:12:41	92.10%	0.1548	0.4766	0.1629	0.8552	0.0000	0.0000	0.2828
x		90.98%	0.1691	-0.0404	0.1660	0.9050	0.0000	0.0000	0.2804
%RSD		0.85	7.6605	738.9000	5.4303	8.8837	0.0000	0.0000	7.1554

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:10:02	151.0500	155.3300	86.86%	0.1575	0.1644	102.0000	93.5680	96.6150
2	17:10:42	151.7700	156.5800	86.35%	0.1588	0.1588	102.6700	93.5070	96.5930
3	17:11:22	155.1300	157.6400	86.76%	0.1646	0.1778	101.3000	93.7690	96.1180
4	17:12:01	150.3400	152.9400	87.49%	0.1592	0.1768	103.0400	94.1800	96.8670
5	17:12:41	146.2300	153.3100	87.76%	0.1566	0.1655	100.4800	91.8250	94.8350
x		150.9100	155.1600	87.04%	0.1593	0.1687	101.9000	93.3700	96.2060
%RSD		2.1170	1.3103	0.66	1.9508	4.9290	1.0170	0.9669	0.8447

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	17:10:02	86.41%	-0.5383
2	17:10:42	86.66%	-0.5383
3	17:11:22	87.11%	0.0832
4	17:12:01	87.41%	0.7004
5	17:12:41	88.44%	-0.5383
x		87.21%	-0.1663
%RSD		0.91	333.3200

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:14:23	101.36%	0.4091	31.6520	↹1197.4000	1172.7000	1170.0000	↹11712.0000	↹1516.8000
2	17:15:02	102.21%	0.4404	32.6410	1209.9000	1192.9000	1195.1000	↹11667.0000	↹1536.7000
3	17:15:42	102.30%	0.4058	32.6810	1230.7000	1213.1000	1204.3000	↹11816.0000	↹1535.3000
4	17:16:22	102.43%	0.3873	33.5890	1215.7000	1189.6000	1183.7000	↹11720.0000	↹1539.2000
5	17:17:01	103.32%	0.4322	31.9170	↹1210.4000	1169.3000	1185.3000	↹11574.0000	↹1518.3000
x		102.32%	0.4150	32.4960	↹1212.8000	1187.5000	1187.7000	↹11698.0000	↹1529.3000
%RSD		0.68	5.1494	2.3326	↹0.9930	1.4810	1.0882	↹0.7530	↹0.7053

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:14:23	1535.3000	99.79%	21.3810	21.6830	13.6570	9729.5000	318.8300	↹9866.6000
2	17:15:02	1574.8000	100.83%	20.8280	21.9580	13.3690	9725.5000	321.4900	↹10043.0000
3	17:15:42	1535.7000	101.21%	21.6870	21.9900	13.3800	9819.1000	324.4100	↹10010.0000
4	17:16:22	1528.4000	101.15%	21.0850	21.9270	13.5610	9808.4000	325.4500	↹10030.0000
5	17:17:01	1521.1000	101.35%	20.8990	22.2020	13.6790	9693.7000	321.6600	↹9959.1000
x		1539.0000	100.87%	21.1760	21.9520	13.5290	9755.2000	322.3700	↹9981.8000
%RSD		1.3553	0.63	1.6856	0.8428	1.0941	0.5669	0.8134	↹0.7204

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:14:23	9366.2000	4.8073	7.9292	61.4330	61.4380	108.8100	2.7946	-0.7378
2	17:15:02	9419.0000	4.8958	8.1666	62.0090	62.6950	111.9200	2.9041	-0.4441
3	17:15:42	9452.6000	4.8551	8.1875	61.7530	61.6140	110.4600	2.9518	-0.7390
4	17:16:22	9410.5000	4.9247	8.3442	62.3760	62.7720	112.0600	2.8210	-0.3320
5	17:17:01	9490.8000	4.9906	8.0368	61.4620	62.9490	111.3900	2.8468	-0.5804
x		9427.8000	4.8947	8.1329	61.8070	62.2940	110.9300	2.8636	-0.5667
%RSD		0.4964	1.4193	1.9396	0.6401	1.1387	1.2066	2.2276	31.7240

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:14:23	0.1499	0.4303	93.35%	0.0000	0.0000	0.0000	0.0000	0.0000
2	17:15:02	0.2410	-0.1903	93.07%	0.0000	0.0000	0.0000	0.0000	0.0000
3	17:15:42	0.4469	-0.3128	94.24%	0.0000	0.0000	0.0000	0.0000	0.0000
4	17:16:22	0.3601	-0.4649	93.52%	0.0000	0.0000	0.0000	0.0000	0.0000
5	17:17:01	0.4071	0.4366	93.02%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.3210	-0.0202	93.44%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		38.3090	2102.1000	0.53	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:14:23	92.35%	0.1228	0.3133	0.0944	0.3478	0.0000	0.0000	0.1393
2	17:15:02	92.41%	0.1224	-0.0270	0.1117	0.3954	0.0000	0.0000	0.0967
3	17:15:42	92.94%	0.1212	0.1972	0.1084	0.3775	0.0000	0.0000	0.1459
4	17:16:22	91.66%	0.1212	0.0341	0.1132	0.4127	0.0000	0.0000	0.1086
5	17:17:01	92.93%	0.1132	0.1660	0.1114	0.3460	0.0000	0.0000	0.1093
x		92.45%	0.1202	0.1367	0.1078	0.3759	0.0000	0.0000	0.1200
%RSD		0.57	3.2918	98.8140	7.1649	7.7844	0.0000	0.0000	17.8430

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:14:23	69.5620	69.7970	88.38%	0.1289	0.1214	45.7390	40.8650	42.5150
2	17:15:02	67.9960	71.1640	87.95%	0.1354	0.1272	46.3100	41.7540	43.2210
3	17:15:42	69.0820	71.9030	88.85%	0.1230	0.1237	46.4720	42.1350	43.5670
4	17:16:22	70.8520	72.1670	89.05%	0.1291	0.1333	45.8720	41.3650	43.0640
5	17:17:01	67.3020	70.9250	88.55%	0.1339	0.1246	45.4910	41.4990	42.6580
x		68.9590	71.1910	88.56%	0.1300	0.1260	45.9770	41.5240	43.0050
%RSD		2.0039	1.3092	0.48	3.7514	3.6036	0.8830	1.1340	0.9917

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	17:14:23	87.99%	0.0769
2	17:15:02	87.87%	-0.5383
3	17:15:42	88.76%	-0.5383
4	17:16:22	88.46%	0.0737
5	17:17:01	89.05%	0.0697
x		88.43%	-0.1713
%RSD		0.56	195.6200

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:18:43	101.50%	0.5591	⊤55.7590	⊤7489.5000	7295.5000	7337.7000	⊤14515.0000	⊤2162.2000
2	17:19:23	102.16%	0.5787	55.3330	⊤7487.2000	7323.7000	7362.1000	⊤14475.0000	⊤2173.2000
3	17:20:03	103.39%	0.5414	54.4120	⊤7302.7000	7177.9000	7219.9000	⊤14253.0000	⊤2187.4000
4	17:20:42	103.12%	0.4858	⊤57.9520	⊤7435.4000	7234.6000	7258.8000	⊤14385.0000	⊤2195.6000
5	17:21:22	102.13%	0.5540	54.0010	⊤7385.9000	7166.4000	7135.2000	⊤14315.0000	⊤2125.6000
x		102.46%	0.5438	⊤55.4910	⊤7420.1000	7239.6000	7262.7000	⊤14389.0000	⊤2168.8000
%RSD		0.76	6.4550	⊤2.7831	⊤1.0545	0.9613	1.2622	⊤0.7565	⊤1.2616

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:18:43	12973.0000	100.55%	22.8200	28.3870	18.1900	15157.0000	⊤635.9900	⊤15260.0000
2	17:19:23	12966.0000	101.06%	22.5430	28.3010	17.9940	15220.0000	⊤635.2100	⊤15351.0000
3	17:20:03	13006.0000	101.25%	22.9790	28.3530	18.0940	15245.0000	⊤636.7000	⊤15356.0000
4	17:20:42	12811.0000	101.28%	22.2710	28.2290	17.5560	14987.0000	⊤635.4000	⊤15197.0000
5	17:21:22	12706.0000	101.95%	22.6160	27.8660	17.7150	14843.0000	⊤626.4500	⊤14955.0000
x		12892.0000	101.22%	22.6460	28.2270	17.9100	15090.0000	⊤633.9500	⊤15224.0000
%RSD		0.9971	0.50	1.1947	0.7459	1.4821	1.1342	⊤0.6676	⊤1.0802

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:18:43	14549.0000	7.0100	10.8510	53.3410	54.2500	144.8200	7.1575	-0.6462
2	17:19:23	14592.0000	6.9673	10.9280	53.2030	53.8430	146.8600	7.6090	-1.1021
3	17:20:03	14511.0000	6.8997	11.2140	53.7550	54.3950	147.2800	7.2553	-0.4778
4	17:20:42	14426.0000	6.9669	11.0030	53.5300	54.4960	145.6900	7.5358	-0.5601
5	17:21:22	14195.0000	6.7219	10.9180	52.3900	53.0800	144.7700	6.8609	-0.3832
x		14454.0000	6.9132	10.9830	53.2440	54.0130	145.8800	7.2837	-0.6339
%RSD		1.0897	1.6490	1.2738	0.9772	1.0695	0.7912	4.1467	44.0580

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:18:43	0.3469	1.0699	93.04%	0.0000	0.0000	0.0000	0.0000	0.0000
2	17:19:23	0.4055	0.0394	93.45%	0.0000	0.0000	0.0000	0.0000	0.0000
3	17:20:03	0.0732	1.0171	93.81%	0.0000	0.0000	0.0000	0.0000	0.0000
4	17:20:42	0.5950	-1.0079	94.52%	0.0000	0.0000	0.0000	0.0000	0.0000
5	17:21:22	-0.0170	0.6277	93.98%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.2807	0.3492	93.76%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		89.1250	247.1900	0.59	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:18:43	91.21%	0.1146	0.4576	0.1204	0.6691	0.0000	0.0000	0.1603
2	17:19:23	90.92%	0.1102	-0.7142	0.1183	0.6586	0.0000	0.0000	0.1329
3	17:20:03	91.51%	0.1298	-0.3328	0.1197	0.6409	0.0000	0.0000	0.1505
4	17:20:42	92.41%	0.1127	-1.1348	0.1164	0.5271	0.0000	0.0000	0.1453
5	17:21:22	92.37%	0.1132	-0.0603	0.1143	0.6105	0.0000	0.0000	0.1678
x		91.68%	0.1161	-0.3569	0.1178	0.6212	0.0000	0.0000	0.1513
%RSD		0.74	6.7352	170.7100	2.1029	9.1927	0.0000	0.0000	8.9157

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:18:43	94.4360	97.7360	87.57%	0.1368	0.1514	61.8540	56.5950	58.1790
2	17:19:23	95.9140	97.3700	86.86%	0.1538	0.1518	61.3100	55.6550	57.7400
3	17:20:03	96.1340	98.3090	87.16%	0.1566	0.1574	61.5230	56.1300	58.1200
4	17:20:42	94.3650	96.8900	87.55%	0.1421	0.1537	61.2910	55.6930	57.7140
5	17:21:22	94.0480	96.7080	87.57%	0.1558	0.1572	59.9220	54.1050	56.5230
x		94.9790	97.4020	87.34%	0.1490	0.1543	61.1800	55.6360	57.6550
%RSD		1.0189	0.6652	0.37	6.0295	1.8548	1.2079	1.6843	1.1581

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	17:18:43	86.11%	-0.5383
2	17:19:23	86.43%	1.3409
3	17:20:03	86.87%	-0.5383
4	17:20:42	86.75%	-0.5383
5	17:21:22	87.24%	0.7028
x		86.68%	0.0858
%RSD		0.50	1030.7000

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:23:05	102.04%	-0.0113	6.6221	2.1969	2.0970	1.6999	10.1890	-8.6380
2	17:23:44	102.96%	-0.0095	6.6747	1.3840	1.2133	1.6684	8.2668	-8.5999
3	17:24:24	103.84%	-0.0140	6.8277	1.0920	1.0380	1.0644	7.6135	-9.4548
4	17:25:05	106.19%	-0.0135	7.0120	1.0074	1.2183	0.9398	6.7177	-8.4549
5	17:25:45	105.61%	-0.0061	6.9163	0.6835	0.6688	0.6896	6.2452	-8.6840
X		104.13%	-0.0109	6.8105	1.2728	1.2471	1.2124	7.8064	-8.7663
%RSD		1.68	29.3560	2.3908	45.0800	42.1000	37.2320	19.7910	4.4980

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:23:05	0.4021	98.20%	0.0051	-0.0242	-0.0128	8.3371	0.2009	2.1171
2	17:23:44	-0.4862	100.43%	0.0117	-0.0315	-0.0402	4.7761	0.1163	-0.2351
3	17:24:24	-0.2541	101.69%	0.0004	0.0183	-0.0792	3.9347	0.0859	-0.6713
4	17:25:05	-1.1231	102.00%	0.0059	-0.0255	-0.0736	1.6536	0.0546	-1.6363
5	17:25:45	-0.7579	102.12%	0.0044	0.0139	-0.0207	2.6003	0.0480	-1.7323
X		-0.4439	100.89%	0.0055	-0.0098	-0.0453	4.2604	0.1011	-0.4316
%RSD		129.1000	1.63	73.9980	242.8800	66.5060	60.4640	61.3700	361.4500

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:23:05	6.2052	0.0041	0.2390	0.0017	0.1169	2.1149	-0.0224	-0.7416
2	17:23:44	3.5558	0.0040	0.2355	-0.0218	0.1186	2.1573	-0.0200	-0.7149
3	17:24:24	1.9922	0.0018	0.2486	-0.0015	0.1272	2.2508	-0.0286	-0.7157
4	17:25:05	-0.8932	0.0012	0.2121	-0.0212	0.1228	2.2431	-0.0069	-0.6282
5	17:25:45	-0.0934	0.0012	0.2351	-0.0018	0.0896	2.0941	-0.0279	-0.6716
X		2.1533	0.0025	0.2341	-0.0089	0.1150	2.1720	-0.0212	-0.6944
%RSD		132.8600	60.1050	5.7430	129.8700	12.8440	3.3206	41.4380	6.4424

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:23:05	-0.0459	-0.2900	91.62%	0.0000	0.0000	0.0000	0.0000	0.0000
2	17:23:44	-0.0462	0.8646	91.25%	0.0000	0.0000	0.0000	0.0000	0.0000
3	17:24:24	-0.2281	0.1282	92.87%	0.0000	0.0000	0.0000	0.0000	0.0000
4	17:25:05	-0.0313	0.2006	92.65%	0.0000	0.0000	0.0000	0.0000	0.0000
5	17:25:45	-0.0616	-0.4740	93.58%	0.0000	0.0000	0.0000	0.0000	0.0000
X		-0.0826	0.0859	92.39%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		99.3240	603.8700	1.03	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:23:05	94.24%	0.0011	1.0092	-0.0021	-0.0322	0.0000	0.0000	0.0051
2	17:23:44	94.82%	0.0022	0.0477	0.0045	0.0076	0.0000	0.0000	0.0138
3	17:24:24	95.74%	0.0037	0.1606	0.0019	0.0052	0.0000	0.0000	0.0065
4	17:25:05	96.02%	0.0032	0.1360	0.0019	0.0034	0.0000	0.0000	-0.0008
5	17:25:45	96.41%	0.0059	0.5309	-0.0002	-0.0084	0.0000	0.0000	0.0035
X		95.45%	0.0032	0.3769	0.0012	-0.0049	0.0000	0.0000	0.0056
%RSD		0.94	55.9020	105.8700	204.4600	337.5500	0.0000	0.0000	94.9760

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:23:05	0.0398	0.0479	89.66%	-0.0140	-0.0132	0.0325	0.0180	0.0269
2	17:23:44	0.0181	0.0435	89.97%	-0.0076	-0.0072	0.0131	0.0120	0.0121
3	17:24:24	0.0536	0.0474	90.01%	0.0013	-0.0019	0.0243	0.0188	0.0211
4	17:25:05	0.0180	0.0390	90.02%	0.0085	0.0026	0.0007	0.0038	0.0031
5	17:25:45	0.0108	0.0264	90.29%	-0.0003	-0.0052	0.0066	0.0145	0.0085
X		0.0280	0.0408	89.99%	-0.0024	-0.0050	0.0154	0.0134	0.0143
%RSD		64.0200	21.6720	0.25	355.3400	119.2200	83.8380	45.0960	67.0320

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	17:23:05	90.50%	-0.5383
2	17:23:44	91.26%	-0.5383
3	17:24:24	91.42%	-0.5383
4	17:25:05	90.81%	0.0579
5	17:25:45	91.68%	0.0522
X		91.13%	-0.3010
%RSD		0.52	107.9800

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:27:25	93.34%	↹2615.9000	↹50325.0000	↹50044.0000	↹49255.0000	↹48004.0000	↹48938.0000	↹44120.0000
2	17:28:05	95.17%	↹2597.7000	↹50544.0000	↹49425.0000	↹48767.0000	↹47856.0000	↹48969.0000	↹44462.0000
3	17:28:45	95.34%	↹2611.6000	↹50356.0000	↹49417.0000	↹48642.0000	↹47489.0000	↹48910.0000	↹44642.0000
4	17:29:25	95.09%	↹2642.0000	↹50448.0000	↹49506.0000	↹48794.0000	↹48021.0000	↹49031.0000	↹44523.0000
5	17:30:04	95.22%	↹2605.3000	↹49401.0000	↹49301.0000	↹48713.0000	↹48267.0000	↹48135.0000	↹43730.0000
x		94.83%	↹2614.5000	↹50215.0000	↹49539.0000	↹48834.0000	↹47928.0000	↹48797.0000	↹44295.0000
%RSD		0.88	↹0.6438	↹0.9218	↹0.5893	↹0.4966	↹0.5969	↹0.7640	↹0.8373

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:27:25	49234.0000	91.75%	0.0295	↹2646.8000	↹2497.0000	↹50405.0000	↹2421.0000	↹48451.0000
2	17:28:05	48835.0000	93.15%	0.0304	↹2647.1000	↹2493.3000	↹50295.0000	↹2419.1000	↹48559.0000
3	17:28:45	49593.0000	92.85%	0.0305	↹2654.2000	↹2507.2000	↹50708.0000	↹2452.9000	↹49117.0000
4	17:29:25	↹48650.0000	93.90%	0.0270	↹2665.1000	↹2503.4000	↹50317.0000	↹2438.1000	↹48681.0000
5	17:30:04	48227.0000	94.27%	0.0388	↹2617.1000	↹2483.4000	↹49374.0000	↹2405.3000	↹48156.0000
x		↹48908.0000	93.18%	0.0313	↹2646.1000	↹2496.9000	↹50220.0000	↹2427.3000	↹48593.0000
%RSD		↹1.0777	1.06	14.2580	↹0.6726	↹0.3710	↹0.9965	↹0.7607	↹0.7240

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:27:25	48038.0000	↹2478.4000	↹2462.2000	↹2421.6000	↹2420.0000	2313.4000	2499.0000	250.0500
2	17:28:05	47675.0000	↹2495.4000	↹2462.0000	↹2426.3000	↹2411.5000	2320.7000	2501.9000	253.0300
3	17:28:45	47937.0000	↹2506.9000	↹2476.1000	↹2436.2000	↹2452.8000	2331.3000	2522.4000	253.2500
4	17:29:25	47789.0000	↹2502.6000	↹2466.7000	↹2430.9000	↹2461.0000	2327.8000	2507.5000	251.3500
5	17:30:04	47016.0000	↹2479.3000	2499.5000	↹2399.9000	↹2406.1000	2302.1000	2497.0000	248.6300
x		47691.0000	↹2492.5000	↹2473.3000	↹2423.0000	↹2430.3000	2319.1000	2505.6000	251.2600
%RSD		0.8431	↹0.5267	↹0.6360	↹0.5786	↹1.0276	0.5058	0.4082	0.7829

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:27:25	250.6800	1.8319	81.39%	0.0000	0.0000	0.0000	0.0000	0.0000
2	17:28:05	252.4500	3.1801	81.32%	0.0000	0.0000	0.0000	0.0000	0.0000
3	17:28:45	254.4300	2.3631	81.73%	0.0000	0.0000	0.0000	0.0000	0.0000
4	17:29:25	253.5200	1.0836	81.60%	0.0000	0.0000	0.0000	0.0000	0.0000
5	17:30:04	249.7700	0.4003	82.23%	0.0000	0.0000	0.0000	0.0000	0.0000
x		252.1700	1.7718	81.66%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		0.7670	61.1200	0.44	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:27:25	81.17%	252.7600	-11.0420	254.7800	2504.2000	0.0000	0.0000	↹2545.4000
2	17:28:05	81.09%	257.5300	-12.7810	258.1000	2510.8000	0.0000	0.0000	↹2535.4000
3	17:28:45	81.27%	260.3300	-6.9100	261.2500	2515.8000	0.0000	0.0000	↹2551.9000
4	17:29:25	80.76%	263.5000	-3.4042	264.4400	2529.4000	0.0000	0.0000	↹2569.9000
5	17:30:04	80.91%	257.9200	-1.1229	257.3800	2525.8000	0.0000	0.0000	↹2561.1000
x		81.04%	258.4100	-7.0519	259.1900	2517.2000	0.0000	0.0000	↹2552.7000
%RSD		0.25	1.5303	69.9100	1.4407	0.4141	0.0000	0.0000	↹0.5255

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:27:25	2447.1000	2569.4000	79.45%	↹2643.1000	↹2661.7000	↹2710.6000	↹2588.6000	↹2653.3000
2	17:28:05	2463.2000	2580.3000	79.75%	↹2663.1000	↹2680.5000	↹2687.7000	↹2575.2000	↹2630.1000
3	17:28:45	2481.0000	2579.8000	79.78%	↹2631.4000	↹2663.6000	↹2682.6000	↹2562.0000	↹2634.8000
4	17:29:25	2485.2000	2602.9000	79.65%	↹2659.0000	↹2662.9000	↹2691.7000	↹2562.1000	↹2636.0000
5	17:30:04	2500.2000	2584.5000	79.00%	↹2627.4000	↹2646.7000	↹2679.4000	↹2531.2000	↹2618.0000
x		2475.4000	2583.4000	79.53%	↹2644.8000	↹2663.1000	↹2690.4000	↹2563.8000	↹2634.4000
%RSD		0.8313	0.4743	0.41	↹0.6042	↹0.4493	↹0.4544	↹0.8305	↹0.4829

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	17:27:25	74.14%	-0.5383
2	17:28:05	74.74%	3.0837
3	17:28:45	74.99%	0.9056
4	17:29:25	75.11%	1.6241
5	17:30:04	74.66%	-0.5383
x		74.73%	0.9073
%RSD		0.50	169.2200

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:32:19	104.46%	0.3837	6.2029	4.9718	5.4240	4.8942	4.6959	-3.5048
2	17:32:58	105.06%	0.3279	4.9346	3.8371	3.9924	3.2188	3.7681	-6.5668
3	17:33:38	106.65%	0.2411	3.4676	3.1759	3.1693	2.7603	2.9737	-6.8722
4	17:34:18	107.33%	0.1803	2.4367	2.3023	1.9595	2.0137	2.4163	-8.0247
5	17:34:57	107.61%	0.1339	1.4186	1.7278	1.5496	1.3868	1.6744	-9.2265
x		106.22%	0.2534	3.6921	3.2030	3.2189	2.8548	3.1057	-6.8390
%RSD		1.31	40.5930	51.8230	39.8570	48.7140	46.8750	37.7860	31.2740

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:32:19	-2.0348	98.40%	-0.0049	0.2053	0.1886	8.3037	0.2311	-2.3361
2	17:32:58	-3.8492	100.44%	0.0020	0.2175	0.1608	5.1694	0.1980	-3.2435
3	17:33:38	-0.8598	100.36%	0.0062	0.1175	0.1035	3.9317	0.1406	-3.5569
4	17:34:18	-5.0784	101.58%	0.0018	0.0893	0.1183	4.2907	0.1131	-4.9123
5	17:34:57	-5.4134	103.23%	-0.0093	0.0910	0.0703	3.9206	0.0767	-5.8549
x		-3.4471	100.80%	-0.0009	0.1441	0.1283	5.1232	0.1519	-3.9807
%RSD		56.8800	1.76	718.9800	43.4150	36.5030	36.0920	41.2270	35.0990

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:32:19	5.2540	0.2318	0.3068	0.3919	0.3107	0.3742	0.4602	-0.0457
2	17:32:58	3.5758	0.1865	0.2689	0.3015	0.2705	0.3255	0.3249	-0.3614
3	17:33:38	4.6169	0.1508	0.2082	0.2682	0.2216	0.2146	0.3325	-0.4990
4	17:34:18	1.0022	0.1216	0.1769	0.2123	0.1158	0.1796	0.3019	-0.6326
5	17:34:57	2.1905	0.0672	0.1312	0.1623	0.0875	0.1928	0.3052	-0.2222
x		3.3279	0.1516	0.2184	0.2672	0.2012	0.2573	0.3450	-0.3522
%RSD		52.3400	41.3020	32.2090	32.8130	48.0850	33.8400	19.0540	65.2250

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:32:19	0.2863	-0.3505	88.94%	0.0000	0.0000	0.0000	0.0000	0.0000
2	17:32:58	-0.2481	0.2947	90.00%	0.0000	0.0000	0.0000	0.0000	0.0000
3	17:33:38	0.0307	-0.4350	91.68%	0.0000	0.0000	0.0000	0.0000	0.0000
4	17:34:18	0.0301	-0.3333	92.04%	0.0000	0.0000	0.0000	0.0000	0.0000
5	17:34:57	0.3783	-1.0582	92.48%	0.0000	0.0000	0.0000	0.0000	0.0000
x		0.0955	-0.3765	91.03%	0.0000	0.0000	0.0000	0.0000	0.0000
%RSD		258.1600	127.4800	1.65	0.0000	0.0000	0.0000	0.0000	0.0000

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:32:19	91.94%	0.0948	0.9306	0.0861	0.2258	0.0000	0.0000	0.9837
2	17:32:58	93.54%	0.0734	0.5511	0.0774	0.1714	0.0000	0.0000	0.7797
3	17:33:38	93.89%	0.0632	0.7366	0.0700	0.1106	0.0000	0.0000	0.6810
4	17:34:18	94.82%	0.0609	-0.1868	0.0672	0.1020	0.0000	0.0000	0.5349
5	17:34:57	94.70%	0.0397	0.2576	0.0289	0.0765	0.0000	0.0000	0.4511
x		93.78%	0.0664	0.4578	0.0659	0.1373	0.0000	0.0000	0.6861
%RSD		1.24	30.2040	95.5530	33.3290	44.1010	0.0000	0.0000	30.5250

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1	17:32:19	0.2718	0.2027	86.12%	0.4052	0.3963	0.2700	0.3097	0.2834
2	17:32:58	0.1574	0.1990	87.70%	0.3127	0.3065	0.2242	0.2417	0.2411
3	17:33:38	0.1636	0.1636	88.41%	0.2128	0.2342	0.1594	0.1571	0.1750
4	17:34:18	0.0978	0.1247	88.46%	0.1851	0.1903	0.1587	0.1409	0.1492
5	17:34:57	0.1697	0.0905	88.84%	0.1378	0.1412	0.0966	0.0751	0.0859
x		0.1720	0.1561	87.91%	0.2507	0.2537	0.1818	0.1849	0.1869
%RSD		36.4790	30.9960	1.23	42.8520	39.5070	36.7770	49.5520	41.4490

Run	Time	209Bi	220Bkg
		ug/L	ug/L
1	17:32:19	87.73%	0.0788
2	17:32:58	88.58%	-0.5383
3	17:33:38	89.18%	-0.5383
4	17:34:18	90.20%	0.0619
5	17:34:57	90.96%	-0.5383
x		89.33%	-0.2949
%RSD		1.44	113.0800

Mass Uncorrected ICPS

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	14:50:55	258507.4900	31.6667	24012.0450	150.0014	25.0000	35.0001	1815.1977	40586.0940
2	14:51:35	256986.5200	30.0001	23826.5140	175.0018	45.0001	35.0001	1712.6760	41319.6860
3	14:52:14	259580.9300	26.6667	23605.8870	150.0014	30.0001	50.0001	1657.6649	42040.7790
4	14:52:54	263787.4800	33.3334	23919.2790	150.0014	50.0001	30.0001	1517.6382	41734.2440
5	14:53:34	265198.7300	32.5001	23959.3940	140.0012	20.0000	40.0001	1597.6531	41932.7360
X		260812.2300	30.8334	23864.6240	153.0014	34.0001	38.0001	1660.1660	41522.7080
%RSD		1.350	8.547	0.669	8.522	38.065	19.955	6.803	1.425

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	14:50:55	370.0082	470782.8800	20.0000	2530.3841	1235.0915	2352.8321	145.0013	109167.9000
2	14:51:35	442.5118	475419.0300	30.0001	2010.2424	1282.5987	2460.3631	140.0012	108919.6900
3	14:52:14	457.5126	474771.1200	27.5000	1565.1470	1065.0681	2172.7832	145.0013	107655.9200
4	14:52:54	362.5079	481723.5800	20.0000	1432.6231	1110.0739	2320.3230	137.5011	109428.7900
5	14:53:34	372.5083	479914.8100	22.5000	1687.6709	1150.0794	2265.3079	195.0023	108724.6700
X		401.0098	476522.2800	24.0000	1845.2135	1168.5823	2314.3219	152.5014	108779.4000
%RSD		11.271	0.913	18.923	23.780	7.642	4.597	15.724	0.626

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	14:50:55	667.5267	25.0000	45.0001	595.0212	172.5018	195.0023	78.3337	843.3760
2	14:51:35	790.0375	17.5000	42.5001	655.0257	165.0016	202.5025	71.6670	833.3750
3	14:52:14	722.5313	15.0000	25.0000	580.0202	190.0022	127.5010	47.5001	832.5416
4	14:52:54	655.0257	30.0001	12.5000	622.5233	185.0021	130.0010	40.0001	895.8815
5	14:53:34	667.5267	22.5000	42.5001	605.0220	240.0035	142.5012	55.8335	893.3812
X		700.5296	22.0000	33.5001	611.5225	190.5022	159.5016	58.6669	859.7111
%RSD		8.058	27.130	42.413	4.711	15.428	22.806	27.445	3.742

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:50:55	78.3337	72.5003	804142.9300	37.5001	5.0000	15.0000	10.0000	7.5000
2	14:51:35	70.8336	78.3337	803123.8300	62.5002	7.5000	20.0000	2.5000	10.0000
3	14:52:14	83.3337	75.8337	806211.7100	30.0001	7.5000	10.0000	5.0000	10.0000
4	14:52:54	94.1672	85.8338	807096.5200	37.5001	2.5000	10.0000	2.5000	5.0000
5	14:53:34	85.8338	77.5004	811169.9900	45.0001	2.5000	15.0000	7.5000	10.0000
X		82.5004	78.0004	806349.0000	42.5001	5.0000	14.0000	5.5000	8.5000
%RSD		10.522	6.303	0.388	29.116	50.000	29.881	59.265	26.307

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	14:50:55	949357.4900	21.2500	5.0000	28.7500	3.7500	874519.3400	35.0001	20.0000
2	14:51:35	940809.7200	20.0000	0.0000	13.7500	2.5000	869660.6700	37.5001	17.5000
3	14:52:14	953030.9400	26.2500	7.5000	25.0000	2.5000	872010.7600	20.0000	25.0000
4	14:52:54	955872.9800	50.0001	2.5000	26.2500	1.2500	879294.8000	17.5000	17.5000
5	14:53:34	952592.2800	37.5001	7.5000	20.0000	3.7500	886282.6400	40.0001	25.0000
X		950332.6800	31.0001	4.5000	22.7500	2.7500	876353.6400	30.0001	21.0000
%RSD		0.611	40.863	72.436	26.178	38.030	0.753	34.861	18.054

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	14:50:55	2.5000	2.5000	1378231.4000	60.0002	140.0012	40.0001	65.0003	117.5008
2	14:51:35	2.5000	12.5000	1368697.5000	75.0003	175.0018	70.0003	47.5001	142.5012
3	14:52:14	0.0000	2.5000	1375521.1000	97.5006	211.2527	55.0002	67.5003	172.5018
4	14:52:54	5.0000	0.0000	1389204.3000	86.2504	240.0035	80.0004	62.5002	155.0014
5	14:53:34	10.0000	5.0000	1395021.6000	67.5003	186.2521	92.5005	92.5005	200.0024
X		4.0000	4.5000	1381335.2000	77.2504	190.5023	67.5003	67.0003	157.5015
%RSD		94.786	106.863	0.770	19.296	19.798	30.542	24.239	19.730

Run	Time	209Bi	220Bkg
1	14:50:55	967048.8300	0.0000
2	14:51:35	966718.6100	0.0000
3	14:52:14	966470.9500	2.5000
4	14:52:54	975131.8900	2.5000
5	14:53:34	980748.4800	7.5000
X		971223.7500	2.5000
%RSD		0.664	122.475

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	14:55:14	263784.0400	782.5367	826535.4300	470878.0300	58595.2830	66484.1550	56375.0460	445640.4100
2	14:55:54	265809.4000	817.5401	856056.8900	484093.9400	60398.0850	70270.0290	57560.6090	462310.2300
3	14:56:34	268444.3700	847.5431	T892230.3500	492352.3100	62856.1630	70421.2980	58159.7480	470241.0300
4	14:57:13	269335.7900	828.3745	T888885.3000	484252.7800	60186.5630	69574.2270	57069.7510	465387.1000
5	14:57:53	269638.6800	824.2074	833282.8500	473066.9300	59395.9210	67310.7510	55745.8340	439699.4700
X		267402.4600	820.0404	T859398.1600	480928.8000	60286.4030	68812.0920	56982.1980	456655.6500
%RSD		0.943	2.896	T3.549	1.843	2.659	2.617	1.671	2.900

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	14:55:14	15151.2610	474813.4300	20.0000	18949.0190	7748.6008	20099.2090	4843.9074	418440.7600
2	14:55:54	15689.7560	483567.1300	35.0001	18688.4320	8043.8804	20297.1880	4728.8413	429731.6500
3	14:56:34	16348.5210	488316.1600	27.5000	18898.9060	7656.0153	20963.8360	5034.0200	434525.9100
4	14:57:13	16213.2570	486972.0800	30.0001	18224.9070	7731.0845	20480.1350	4698.8244	429021.4200
5	14:57:53	15401.7200	490796.9700	30.0001	18540.6020	7806.1545	20557.8260	4741.3484	422450.6700
X		15760.9030	484893.1500	28.5000	18660.3730	7797.1471	20479.6390	4809.3883	426834.0800
%RSD		3.259	1.281	19.218	1.574	1.898	1.580	2.847	1.491

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	14:55:14	8509.3423	4433.6791	1045.0655	5259.1590	2492.8728	1637.6609	548.3514	1544.3097
2	14:55:54	8584.4193	4651.2977	1132.5770	5711.9569	2602.9064	1685.1704	529.1835	1582.6503
3	14:56:34	8376.7080	4578.7576	1222.5897	5596.8789	2730.4472	1747.6832	565.8525	1582.6503
4	14:57:13	8724.5647	4788.8756	1047.5658	5599.3806	2777.9629	1822.6993	541.6843	1500.1350
5	14:57:53	8659.4969	4473.7005	1145.0787	5389.2421	2542.8879	1762.6864	526.6833	1528.4735
X		8570.9062	4585.2621	1118.5753	5511.3235	2629.4155	1731.1800	542.3510	1547.6438
%RSD		1.578	3.109	6.655	3.319	4.623	4.136	2.926	2.304

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:55:14	377.5086	84.1671	803079.8800	47.5001	12.5000	17.5000	2.5000	2.5000
2	14:55:54	347.5073	75.0003	808014.4000	52.5002	5.0000	15.0000	2.5000	7.5000
3	14:56:34	402.5097	85.0004	810974.8000	42.5001	2.5000	12.5000	10.0000	7.5000
4	14:57:13	390.0091	89.1671	815707.4700	55.0002	0.0000	7.5000	2.5000	7.5000
5	14:57:53	384.1755	80.0004	815487.4200	50.0001	2.5000	17.5000	0.0000	10.0000
X		380.3420	82.6671	810652.7900	49.5001	4.5000	14.0000	3.5000	7.0000
%RSD		5.397	6.510	0.657	9.715	106.863	29.881	108.327	39.123

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	14:55:14	952516.8500	3336.9180	75.0003	3079.3188	650.0254	873234.5000	25.0000	3670.8083
2	14:55:54	956792.5800	3501.9857	30.0001	3293.1506	661.2762	873392.3300	20.0000	3763.3496
3	14:56:34	964054.9100	3603.2788	57.5002	3303.1545	731.2821	871625.9600	27.5000	3788.3609
4	14:57:13	971737.6100	3523.2446	65.0003	3400.6937	756.2843	883748.5200	57.5002	3660.8039
5	14:57:53	964580.8700	3271.8922	42.5001	3086.8216	633.7741	892324.2100	27.5000	3738.3383
X		961936.5600	3447.4639	54.0002	3232.6279	686.5284	878865.1100	31.5001	3724.3322
%RSD		0.776	3.999	33.159	4.420	7.851	1.016	47.154	1.514

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	14:55:14	3468.2216	6137.2591	1380218.6000	2644.1694	6137.2591	2167.7819	1977.7347	4523.7275
2	14:55:54	3508.2383	6620.1285	1377484.2000	2662.9254	6561.3320	2112.7678	1942.7264	4648.7963
3	14:56:34	3818.3746	6289.8729	1374958.6000	2709.1903	6588.8538	2135.2735	1935.2247	4623.7824
4	14:57:13	3775.8552	6562.5830	1387435.2000	2737.9497	6747.7308	2077.7590	1997.7394	4778.8699
5	14:57:53	3548.2552	6407.4624	1388186.2000	2599.1553	6136.0082	2007.7418	1875.2110	4363.6422
X		3623.7890	6403.4612	1381656.5000	2670.6780	6434.2368	2100.2648	1945.7272	4587.7637
%RSD		4.455	3.084	0.429	2.041	4.365	2.916	2.414	3.375

Run	Time	209Bi	220Bkg
1	14:55:14	966213.5100	2.5000
2	14:55:54	969546.8700	0.0000
3	14:56:34	966887.9100	2.5000
4	14:57:13	972093.2200	0.0000
5	14:57:53	978524.6700	0.0000
X		970653.2400	1.0000
%RSD		0.513	136.931

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	14:59:34	264373.9700	7862.0403	56981.6510	10686.8480	1325.1053	1680.1694	32691.4990	52769.0470
2	15:00:13	264925.2300	8078.0801	58625.4940	11127.4240	1445.1253	1630.1594	32751.7340	52816.8480
3	15:00:53	269496.7000	8165.6654	59259.9580	10771.9580	1565.1470	1445.1253	32478.1670	52316.2050
4	15:01:32	266846.7700	8278.2764	59038.3940	10776.9640	1265.0960	1550.1442	33060.4500	53423.1950
5	15:02:12	270445.8900	8094.7629	59139.1040	10311.3760	1255.0945	1475.1305	32179.5120	51953.9490
X		267217.7100	8095.7650	58608.9200	10734.9140	1371.1136	1556.1458	32632.2720	52655.8490
%RSD		1.009	1.885	1.605	2.711	9.644	6.409	1.005	1.055

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	14:59:34	840.0423	479212.3100	35.0001	35450.2430	34174.9320	3440.7102	47321.4790	124706.1700
2	15:00:13	872.5457	481338.5000	22.5000	35289.5630	34551.4800	3475.7247	47344.1070	124571.6800
3	15:00:53	790.0375	483106.5400	22.5000	35771.6120	35199.1820	3685.8149	47957.6000	125647.6500
4	15:01:32	907.5494	487169.3700	20.0000	35492.9240	34742.2710	3555.7584	48048.1190	124234.2000
5	15:02:12	777.5363	487815.5800	32.5001	35525.5630	35513.0100	3498.2341	47761.4780	123513.6000
X		837.5422	483728.4600	26.5000	35505.9810	34836.1750	3531.2485	47686.5570	124534.6600
%RSD		6.537	0.767	25.489	0.490	1.517	2.718	0.711	0.622

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	14:59:34	1147.5790	46325.9080	10651.8030	24987.4060	11996.1280	9345.2371	5174.1058	2229.4649
2	15:00:13	1090.0713	46484.2870	10641.7910	25172.9630	11963.5810	9305.1923	5149.9241	2315.3216
3	15:00:53	1137.5776	46308.3110	10832.0350	25539.0750	12549.4420	9325.2147	5337.5421	2235.2998
4	15:01:32	1120.0753	47072.5750	11087.3710	25335.9560	12744.7380	9287.6728	5167.4350	2313.6545
5	15:02:12	1150.0794	46305.7970	10734.4090	25037.5560	12529.4120	9257.6394	5205.7922	2271.9763
X		1129.0765	46499.3760	10789.4820	25214.5910	12356.6600	9304.1912	5206.9598	2273.1434
%RSD		2.196	0.707	1.699	0.897	2.867	0.363	1.455	1.809

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:59:34	624.1900	73.3337	808239.7600	52.5002	12.5000	12.5000	2.5000	5.0000
2	15:00:13	677.5275	95.0005	811871.0900	60.0002	5.0000	15.0000	5.0000	5.0000
3	15:00:53	704.1964	71.6670	810980.3000	62.5002	5.0000	15.0000	0.0000	10.0000
4	15:01:32	714.1973	67.5003	813548.4400	45.0001	7.5000	10.0000	5.0000	17.5000
5	15:02:12	674.1939	76.6670	815891.7700	55.0002	2.5000	17.5000	10.0000	15.0000
X		678.8610	76.8337	812106.2700	55.0002	6.5000	14.0000	4.5000	10.5000
%RSD		5.157	13.898	0.352	12.448	58.330	20.360	82.402	54.294

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	14:59:34	960659.3000	32614.9490	475.0135	31066.5500	6902.8578	875145.2100	37.5001	17528.4150
2	15:00:13	959929.4400	33193.4770	457.5126	32450.5600	7095.5195	877765.4800	42.5001	17798.9880
3	15:00:53	963968.1800	34302.9570	562.5190	32779.3430	7228.1334	884821.4100	32.5001	18290.0500
4	15:01:32	967071.2200	34427.2170	480.0138	32701.5380	7134.3026	878568.9000	20.0000	17801.4930
5	15:02:12	963680.0400	33278.8160	460.0127	31525.7700	7085.5110	879319.7400	42.5001	17964.3420
X		963061.6400	33563.4830	487.0143	32104.7520	7089.2649	879124.1500	35.0001	17876.6580
%RSD		0.298	2.313	8.887	2.384	1.671	0.404	26.726	1.561

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	14:59:34	3633.2919	6364.9298	1381813.3000	25960.3740	62467.0030	21425.0060	17876.6540	45157.0190
2	15:00:13	3463.2195	6422.4739	1385686.9000	26463.2010	63584.1550	22039.1050	18320.1150	46152.4500
3	15:00:53	3695.8194	6665.1644	1392969.5000	26750.3660	65449.7650	22134.3570	18573.1750	46770.8840
4	15:01:32	3645.7973	6449.9952	1370222.8000	26558.5040	63849.9250	21753.3550	18375.2370	45765.3240
5	15:02:12	3670.8083	6329.9031	1382291.2000	25855.0470	62419.1470	21445.0580	17991.9020	44908.1800
X		3621.7873	6446.4933	1382596.7000	26317.4980	63553.9990	21759.3760	18227.4160	45750.7710
%RSD		2.536	2.032	0.595	1.482	1.951	1.506	1.572	1.645

Run	Time	209Bi	220Bkg
1	14:59:34	970872.4500	2.5000
2	15:00:13	975678.1200	0.0000
3	15:00:53	976613.8000	2.5000
4	15:01:32	974064.7400	2.5000
5	15:02:12	972794.6900	0.0000
X		974004.7600	1.5000
%RSD		0.235	91.287

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:03:53	267664.0300	40874.1630	107904.1000	49345.6680	6152.2702	7067.9961	149959.7400	80857.8860
2	15:04:33	267278.6200	40608.7040	108749.9900	49084.1310	6627.6345	7128.0472	149239.4900	81882.8210
3	15:05:12	267167.6400	41077.6600	110348.3000	50653.4800	6002.1608	7238.1421	152981.4300	80406.0460
4	15:05:52	268662.9200	40075.2970	107134.2700	48334.7700	6117.2444	7062.9919	146249.6700	80668.5640
5	15:06:32	268249.0700	37942.0130	102691.3600	48400.1470	5556.8521	6762.7430	141157.9900	76587.8320
X		267804.4500	40115.5670	107365.6000	49163.6390	6091.2324	7051.9841	147917.6700	80080.6300
%RSD		0.239	3.170	2.675	1.911	6.282	2.502	3.024	2.536

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:03:53	2060.2546	476610.5400	35.0001	174135.5800	169657.1100	8434.2661	235357.3000	183866.2800
2	15:04:33	1990.2376	477302.2400	30.0001	174607.8100	170078.0600	8369.2005	233182.4300	183194.2100
3	15:05:12	1952.7288	479347.2500	25.0000	176519.9600	173058.4900	8814.6594	237468.4400	184998.4200
4	15:05:52	1917.7206	483208.4500	22.5000	170823.0700	166881.9100	8737.0778	234591.1500	182565.6400
5	15:06:32	1810.1966	477166.0100	22.5000	162917.1000	159489.2400	8471.8041	223356.2000	178675.1700
X		1946.2277	478726.9000	27.0000	171800.7000	167832.9600	8565.4016	232791.1000	182659.9500
%RSD		4.758	0.566	20.074	3.127	3.070	2.306	2.361	1.316

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:03:53	2332.8265	230609.8000	52814.3330	124203.7500	60274.6970	37137.5680	26233.7280	7953.7940
2	15:04:33	2632.9159	235493.5700	52587.9070	123371.5200	59549.5110	38207.3880	26079.0770	8031.3683
3	15:05:12	2700.4375	234408.6200	53848.4190	125175.6300	61639.6270	38167.2040	26339.0590	7907.9170
4	15:05:52	2555.3917	230841.0800	52364.0040	123407.0400	59280.1010	37968.8010	25681.1770	7922.0971
5	15:06:32	2552.8910	217591.6600	49617.2740	116582.3200	57019.4080	35214.2460	24436.6100	7559.2603
X		2554.8925	229788.9500	52246.3870	122548.0500	59552.6690	37339.0410	25753.9300	7874.8873
%RSD		5.416	3.111	3.016	2.787	2.831	3.385	3.020	2.321

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:03:53	3064.7301	87.5005	791156.2400	90.0005	10.0000	32.5001	5.0000	15.0000
2	15:04:33	3142.2590	68.3336	794646.0100	77.5004	12.5000	40.0001	7.5000	25.0000
3	15:05:12	3004.7083	81.6671	795551.6000	97.5006	7.5000	37.5001	10.0000	22.5000
4	15:05:52	2962.1930	75.8337	797022.7000	72.5003	15.0000	40.0001	7.5000	7.5000
5	15:06:32	2843.8185	65.8336	799932.7000	80.0004	15.0000	25.0000	5.0000	32.5001
X		3003.5418	75.8337	795661.8500	83.5004	12.0000	35.0001	7.0000	20.5000
%RSD		3.730	11.912	0.405	12.088	27.163	18.211	29.881	46.757

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:03:53	944716.8800	164904.3700	2335.3272	158280.2700	34546.4590	864096.5800	60.0002	88762.7250
2	15:04:33	947237.9200	167219.8300	2302.8181	160579.8900	34939.3420	869109.9100	40.0001	90491.1660
3	15:05:12	947631.6300	167954.3800	2295.3161	161683.4200	35496.6900	868371.0100	50.0001	89700.1830
4	15:05:52	952894.0300	169615.0200	2427.8536	161766.2600	33995.4500	869912.5300	72.5003	87971.9050
5	15:06:32	949801.5700	154921.7800	2175.2839	148804.3100	32648.8320	870145.0300	77.5004	85933.2990
X		948456.4100	164923.0800	2307.3198	158222.8300	34325.3550	868327.0100	60.0002	88571.8560
%RSD		0.323	3.542	3.931	3.444	3.164	0.284	25.854	1.981

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:03:53	17881.6650	31823.1470	1353809.0000	130021.4800	312283.6500	106698.7300	90402.7140	227087.5300
2	15:04:33	18555.6360	32229.7050	1357311.0000	132356.5600	316461.9200	105969.5200	89892.2360	226406.8800
3	15:05:12	18435.3690	32244.7630	1356644.4000	131677.1800	318695.9300	108620.8300	90867.7300	227174.8700
4	15:05:52	18222.4020	32540.9110	1363561.2000	132432.7600	317563.9300	107210.2300	91759.9270	224714.4900
5	15:06:32	17287.9140	30357.6950	1373239.1000	123261.1600	297734.1400	102493.9500	85817.1110	214582.6200
X		18076.5970	31839.2440	1360912.9000	129949.8300	312547.9100	106198.6500	89747.9440	223993.2800
%RSD		2.820	2.722	0.570	2.973	2.761	2.153	2.565	2.390

Run	Time	209Bi	220Bkg
1	15:03:53	956718.5100	2.5000
2	15:04:33	950111.6100	0.0000
3	15:05:12	961048.0200	2.5000
4	15:05:52	964610.2500	0.0000
5	15:06:32	966575.8900	5.0000
X		959812.8500	2.0000
%RSD		0.687	104.583

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:08:13	264607.0200	159887.6000	352235.1000	189127.0600	23583.3230	27184.2670	553119.3300	199189.9800
2	15:08:52	263156.3200	160254.5500	356866.0200	189500.4000	24099.7980	27901.6320	566721.7000	200139.8400
3	15:09:32	262860.5400	161941.7000	359902.5100	192687.2400	24626.3340	27359.8400	565182.2400	199358.9500
4	15:10:12	261235.6200	159808.6100	355118.7000	190257.3600	24420.7300	26542.2020	557724.0500	200011.8200
5	15:10:52	262891.4900	156420.2200	343441.7400	186028.4800	23112.0060	26221.1880	544215.8500	191093.6700
x		262950.2000	159662.5400	353512.8200	189520.1100	23968.4380	27041.8260	557392.6300	197958.8500
%RSD		0.456	1.258	1.776	1.263	2.586	2.469	1.653	1.950

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:08:13	6670.1684	468488.8600	37.5001	687389.8400	669868.1000	28275.3890	934994.0600	414655.9400
2	15:08:52	6647.6504	468765.0100	20.0000	689387.6900	673382.6100	27394.9550	942779.8300	413190.7900
3	15:09:32	6547.5712	461234.2500	40.0001	685994.0600	670795.9600	27134.1040	934586.9700	410526.3300
4	15:10:12	6475.0146	465574.6500	50.0001	676183.8700	662556.8700	27588.0910	931303.0300	409628.7400
5	15:10:52	6545.0693	463377.1100	32.5001	668001.8500	650894.3900	26454.4240	909200.4900	404030.1000
x		6577.0948	465487.9700	36.0001	681391.4600	665499.5900	27369.3920	930572.8700	410406.3800
%RSD		1.225	0.699	30.508	1.328	1.367	2.425	1.361	0.998

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:08:13	8249.0808	925371.0900	207850.1700	484072.7600	234760.8300	148636.3500	100703.9900	28272.0440
2	15:08:52	8153.9873	927399.0400	206217.8600	491287.1200	236054.1000	150954.9700	101662.1900	28737.8000
3	15:09:32	8421.7534	938273.7900	208273.0400	491207.6400	235933.2500	150573.1600	102191.1000	28670.0670
4	15:10:12	8166.4995	925493.6500	206092.3100	492097.9300	234632.2800	147783.8900	100877.7400	28481.0870
5	15:10:52	7958.7987	901533.2600	203013.1000	480579.0000	230293.7400	144807.3100	99365.5670	27866.5150
x		8190.0240	923614.1700	206289.3000	487848.8900	234334.8400	148551.1400	100960.1200	28405.5030
%RSD		2.048	1.456	1.004	1.066	1.003	1.665	1.065	1.238

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:08:13	11601.4030	74.1670	789916.5000	140.0012	22.5000	80.0004	15.0000	35.0001
2	15:08:52	11563.8510	68.3336	781941.9500	215.0028	10.0000	57.5002	17.5000	42.5001
3	15:09:32	11468.7200	75.0003	771801.3100	122.5009	20.0000	60.0002	12.5000	32.5001
4	15:10:12	11693.1980	67.5003	777271.3500	145.0013	32.5001	57.5002	17.5000	42.5001
5	15:10:52	11228.3930	75.8337	774103.3400	135.0011	30.0001	70.0003	7.5000	20.0000
x		11511.1130	72.1670	779006.8900	151.5014	23.0000	65.0003	14.0000	34.5001
%RSD		1.541	5.453	0.923	24.072	38.736	15.142	29.881	26.821

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:08:13	931712.7600	652063.1700	9072.4359	622849.1900	136497.5600	849543.1800	112.5008	351309.7500
2	15:08:52	928872.9300	662383.9000	9275.1588	635683.5900	139105.1500	848273.0500	115.0008	355582.8800
3	15:09:32	922410.8000	668561.6800	9337.7287	639801.5200	137901.6500	838427.4900	120.0009	353608.9900
4	15:10:12	918825.2500	674936.0400	8932.2846	651554.3400	136538.2200	842010.6800	130.0010	354636.2900
5	15:10:52	932568.5100	634469.8700	8882.2311	605351.4200	132284.1800	836985.2500	117.5008	348982.4600
x		926878.0500	658482.9300	9099.9678	631048.0100	136465.3500	843047.9300	119.0009	352824.0700
%RSD		0.649	2.408	2.222	2.797	1.887	0.673	5.676	0.757

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:08:13	70595.2600	125779.6200	1338822.5000	519543.4300	1263184.5000	425689.4000	357791.9800	909662.0100
2	15:08:52	71460.0850	125518.2200	1320770.8000	526087.9800	1288159.6000	427964.0800	362365.8900	916548.8500
3	15:09:32	72198.9120	127523.3200	1326517.8000	528007.6100	1293052.6000	434436.4200	362647.7700	917041.3700
4	15:10:12	71439.9130	125355.8100	1334400.2000	526944.6400	1294109.4000	431499.5800	363083.6400	910913.2600
5	15:10:52	69180.9730	122341.5000	1338977.1000	505978.2400	1230337.6000	412555.4400	350757.1800	884120.0000
x		70975.0290	125303.7000	1331897.7000	521312.3800	1273768.7000	426428.9900	359329.2900	907657.1000
%RSD		1.624	1.492	0.602	1.762	2.147	1.980	1.461	1.494

Run	Time	209Bi	220Bkg
1	15:08:13	949962.1800	0.0000
2	15:08:52	951965.0600	0.0000
3	15:09:32	939505.4000	7.5000
4	15:10:12	943149.6200	0.0000
5	15:10:52	944330.2700	2.5000
x		945782.5100	2.0000
%RSD		0.539	162.980

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:12:33	258252.2600	389436.9000	820148.2300	468266.8900	59134.0680	67023.4490	T 1364566.7000	426562.3900
2	15:13:12	260140.4800	390515.6600	T 847925.2800	469789.0800	59632.6020	66559.7550	1390480.7000	429200.2900
3	15:13:52	258763.5900	393503.9200	833373.8000	467347.3700	59290.1720	65294.8060	T 1361389.2000	423349.6100
4	15:14:32	255348.1300	383859.3400	827331.4100	460897.6200	57724.2350	63334.7660	1352984.8000	420886.9500
5	15:15:12	258090.7000	370525.7100	779317.3400	444422.9100	55413.6300	62987.1470	1315970.3000	395303.6700
X		258119.0300	385568.3100	T 821619.2100	462144.7700	58238.9410	65039.9850	T 1357078.3000	419060.5800
%RSD		0.677	2.361	T 3.135	2.266	2.986	2.817	T 1.983	3.257

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:12:33	15436.7840	458536.3000	17.5000	T 1729404.3000	1694779.9000	65471.1820	T 2297150.2000	882099.2500
2	15:13:12	15672.2230	460443.5200	22.5000	T 1714300.9000	1688337.3000	65040.3280	T 2290017.7000	875690.8000
3	15:13:52	15659.7000	458253.8800	15.0000	T 1703988.0000	1683359.9000	65660.1600	T 2292728.9000	879527.5500
4	15:14:32	15233.9120	455853.7200	35.0001	T 1656934.4000	1636766.2000	63065.2340	T 2220375.0000	850653.3200
5	15:15:12	14522.6430	455972.4600	30.0001	T 1604637.9000	1585277.1000	61314.7430	T 2141069.5000	826417.0100
X		15305.0520	457811.9700	24.0000	T 1681853.1000	1657704.1000	64110.3290	T 2248268.2000	862877.5900
%RSD		3.091	0.421	35.016	T 3.030	2.806	2.921	T 3.015	2.773

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:12:33	19430.1250	T 2289999.3000	510151.5000	1210716.3000	588514.7100	367553.3300	249857.9100	M 68644.0610
2	15:13:12	19818.5380	T 2307765.3000	513468.7200	1210069.1000	581296.0100	369211.7800	251066.7800	M 68143.3090
3	15:13:52	19362.4680	T 2290463.7000	512050.3100	1207998.5000	579004.4400	366613.2500	248699.0100	M 68680.1900
4	15:14:32	18620.7810	T 2258407.0000	500104.0800	1183750.4000	569782.7200	358097.1800	243768.1500	M 66944.4850
5	15:15:12	18064.5580	T 2177007.1000	478202.9900	1137513.5000	543645.3600	340390.2900	234453.1800	63445.6050
X		19059.2940	T 2264728.5000	502795.5200	1190009.6000	572448.6500	360373.1600	245569.0100	M 67171.5300
%RSD		3.699	T 2.304	2.926	2.641	3.046	3.322	2.771	M 3.272

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:12:33	M 28310.5080	68.3336	770088.1700	280.0047	27.5000	120.0009	22.5000	70.0003
2	15:13:12	M 28265.3550	82.5004	766665.6600	200.0024	37.5001	115.0008	25.0000	77.5004
3	15:13:52	M 28398.3060	73.3337	766961.0700	250.0038	12.5000	122.5009	27.5000	57.5002
4	15:14:32	M 27652.4700	72.5003	753524.3000	215.0028	45.0001	97.5006	27.5000	60.0002
5	15:15:12	26158.4920	77.5004	757550.9700	167.5017	42.5001	110.0007	35.0001	50.0001
X		M 27757.0260	74.8337	762958.0300	222.5031	33.0001	113.0008	27.5000	63.0002
%RSD		M 3.390	7.191	0.924	19.655	40.230	8.766	17.008	17.160

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:12:33	922728.2200	M 1638822.7000	22761.0420	M 1566618.9000	339942.5600	841646.5000	82.5004	892998.5300
2	15:13:12	916882.7600	M 1647476.2000	22846.2740	M 1579498.4000	341651.6200	837175.5100	60.0002	895679.6600
3	15:13:52	916654.5800	M 1652837.4000	22705.8910	M 1583091.7000	341017.6800	835893.3900	82.5004	905589.7500
4	15:14:32	908830.7300	M 1652015.9000	21891.2160	M 1578965.1000	331775.6000	832954.8600	87.5005	873605.5400
5	15:15:12	911430.4900	1501563.3000	21209.4560	1432421.6000	317097.9200	827380.9800	87.5005	841343.0300
X		915305.3600	M 1618543.1000	22282.7760	M 1548119.2000	334297.0800	835010.2500	80.0004	881843.3000
%RSD		0.589	M 4.055	3.198	M 4.197	3.113	0.634	14.321	2.884

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:12:33	178225.7000	311336.6800	1333373.7000	1329646.3000	3333223.1000	1088416.8000	904303.1400	2336480.7000
2	15:13:12	177977.9900	312727.3300	1335205.1000	1339174.0000	3363465.3000	1094382.6000	923655.5000	2362719.0000
3	15:13:52	178023.9600	312623.5400	1331032.4000	1349547.3000	T 3273415.3000	1096046.4000	918691.6500	2370547.2000
4	15:14:32	175848.4900	304091.3800	1322486.1000	1329516.6000	T 3212944.7000	1066628.4000	894116.9600	2320847.7000
5	15:15:12	163286.7300	289981.5800	1313677.2000	1225052.3000	3072166.9000	1019238.7000	855175.4000	2192269.3000
X		174672.5700	306152.1000	1327154.9000	1314587.3000	T 3251043.0000	1072942.6000	899188.5300	2316572.8000
%RSD		3.686	3.174	0.676	3.859	T 3.552	3.005	3.029	3.121

Run	Time	209Bi	220Bkg
1	15:12:33	949125.6800	2.5000
2	15:13:12	953003.0000	12.5000
3	15:13:52	946791.1700	5.0000
4	15:14:32	949121.4900	10.0000
5	15:15:12	939728.5800	2.5000
X		947553.9800	6.5000
%RSD		0.518	69.869

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:16:53	249620.1100	↹1862285.0000	↹3957328.8000	↹2244963.2000	276223.3200	311100.6100	↹6440629.8000	↹1808089.4000
2	15:17:33	248832.9200	↹1858435.8000	↹3955252.2000	↹2260600.0000	274817.9900	310151.1800	↹6435558.2000	↹1799429.7000
3	15:18:13	249751.4600	↹1873450.6000	↹3996391.8000	↹2275008.5000	276435.1800	309367.8600	↹6530112.3000	↹1817426.8000
4	15:18:53	246760.9900	↹1812864.4000	↹3943443.5000	↹2220610.4000	269183.4800	304399.8400	↹6262848.8000	↹1795024.6000
5	15:19:32	245630.8300	↹1789583.6000	↹3820204.3000	↹2141836.1000	268734.3300	298212.0300	↹6246985.9000	↹1705302.9000
x		248119.2600	↹1839323.9000	↹3934524.1000	↹2228603.6000	273078.8600	306646.3000	↹6383227.0000	↹1785054.7000
%RSD		0.739	↹1.966	↹1.701	↹2.357	1.397	1.754	↹1.929	↹2.543

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:16:53	71523.1220	434406.1500	50.0001	↹8095739.3000	↹7896339.2000	297414.2700	↹10742525.0000	↹3731828.2000
2	15:17:33	71311.3180	433519.2100	35.0001	↹8114142.9000	↹7873155.8000	298986.5600	↹10751368.0000	↹3724617.0000
3	15:18:13	72693.1810	428732.0900	27.5000	↹8191656.1000	↹7914569.6000	300800.1000	↹10834358.0000	↹3752674.3000
4	15:18:53	69964.9780	430922.0700	192.5022	↹7922961.2000	↹7629653.4000	291487.7800	↹10489551.0000	↹3647515.8000
5	15:19:32	67915.6290	427305.2800	27.5000	↹7710448.4000	↹7549302.3000	286121.5300	↹10292552.0000	↹3596405.4000
x		70681.6460	430976.9600	66.5005	↹8006989.6000	↹7772604.1000	294962.0500	↹10622071.0000	↹3690608.1000
%RSD		2.581	0.703	106.817	↹2.406	↹2.190	2.052	↹2.118	↹1.789

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:16:53	87496.9440	↹10884616.0000	↹2383307.1000	↹5672571.9000	↹2749212.6000	1721429.2000	1193917.5000	714.1973
2	15:17:33	88560.5910	↹10864933.0000	↹2392249.9000	↹5687161.3000	↹2723133.2000	1724859.4000	1186060.2000	719.1977
3	15:18:13	87350.4190	↹10994552.0000	↹2423029.2000	↹5713009.2000	↹2741211.0000	1732290.3000	1186683.6000	730.8654
4	15:18:53	85344.7980	↹10723943.0000	↹2346616.3000	↹5589007.8000	↹2712323.9000	1681563.0000	1159561.4000	697.5292
5	15:19:32	83592.1670	↹10378974.0000	↹2284379.1000	↹5441769.8000	↹2625881.2000	1652552.0000	1135916.0000	678.3609
x		86468.9840	↹10769404.0000	↹2365916.3000	↹5620704.0000	↹2710352.4000	1702538.8000	1172427.8000	708.0301
%RSD		2.295	↹2.215	↹2.244	↹1.962	↹1.823	2.009	2.067	2.890

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:16:53	89.1671	77.5004	720760.1300	990.0588	97.5006	222.5030	60.0002	272.5045
2	15:17:33	102.5006	75.0003	708869.7600	647.5252	90.0005	247.5037	82.5004	267.5043
3	15:18:13	100.0006	61.6669	707973.1400	462.5128	120.0009	232.5032	70.0003	280.0047
4	15:18:53	78.3337	75.8337	712435.4400	427.5110	77.5004	167.5017	85.0004	225.0030
5	15:19:32	107.5007	73.3337	710296.4000	350.0074	102.5006	172.5018	72.5003	250.0038
x		95.5006	72.6670	712066.9700	575.5230	97.5006	208.5027	74.0003	259.0041
%RSD		12.257	8.711	0.722	44.517	16.115	17.409	13.640	8.487

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:16:53	848637.5100	1983.9861	105045.4300	1856.4568	1624681.9000	788186.0900	47.5001	↹4403554.9000
2	15:17:33	855136.7200	2101.5149	105139.1000	2114.0181	1627728.2000	780604.8900	45.0001	↹4373029.4000
3	15:18:13	856631.7000	3230.6261	105078.3400	3141.8422	1628175.6000	775494.1700	57.5002	↹4379239.1000
4	15:18:53	852617.1200	3879.6529	102126.9800	3733.3361	1585088.3000	776950.9400	67.5003	↹4281199.7000
5	15:19:32	842579.0500	1346.3588	100573.2600	1267.5964	1555676.0000	784252.1400	52.5002	↹4214293.3000
x		851120.4200	2508.4278	103592.6200	2422.6499	1604270.0000	781097.6500	54.0002	↹4330263.3000
%RSD		0.664	40.815	2.046	41.200	2.036	0.668	16.564	↹1.842

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:16:53	844565.8700	1506329.7000	1259893.9000	↹6247079.9000	↹15248351.0000	↹4990242.8000	↹4496021.6000	↹11034262.0000
2	15:17:33	841903.0800	1502157.5000	1246567.6000	↹6262470.6000	↹15303218.0000	↹5000418.1000	↹4499552.2000	↹11083359.0000
3	15:18:13	837608.4500	1492064.8000	1245334.6000	↹6297704.1000	↹15430531.0000	↹5016238.0000	↹4534560.2000	↹11171539.0000
4	15:18:53	826177.4000	1472010.8000	1251394.7000	↹6272270.7000	↹15290485.0000	↹4933777.6000	↹4445999.6000	↹10953321.0000
5	15:19:32	802467.3800	1436529.3000	1260550.5000	↹5998401.4000	↹14621241.0000	↹4827345.8000	↹4367305.9000	↹10695811.0000
x		830544.4400	1481818.4000	1252748.3000	↹6215585.3000	↹15178765.0000	↹4953604.5000	↹4468687.9000	↹10987658.0000
%RSD		2.071	1.929	0.574	↹1.976	↹2.102	↹1.557	↹1.452	↹1.650

Run	Time	209Bi	220Bkg
1	15:16:53	890703.8400	10.0000
2	15:17:33	885428.6100	2.5000
3	15:18:13	885072.3300	2.5000
4	15:18:53	887828.7000	2.5000
5	15:19:32	890852.2700	0.0000
x		887977.1500	3.5000
%RSD		0.312	108.327

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:21:14	249001.1700	T 3626398.0000	T 7865099.3000	T 4439969.0000	542496.5000	604320.4800	T 12509785.0000	T 3420909.5000
2	15:21:54	247637.2500	TM 3634140.2000	T 7936759.7000	T 4486477.8000	547871.6200	608788.7800	T 12556700.0000	T 3463680.7000
3	15:22:35	245983.5000	TM 3632643.1000	T 7911391.2000	T 4492052.2000	555951.2700	617748.4500	T 12709921.0000	T 3509238.2000
4	15:23:15	255807.7400	T 3700349.7000	T 8104988.8000	T 4505256.1000	549354.6300	614312.9000	T 12777871.0000	T 3522026.9000
5	15:23:55	250288.9000	T 3660597.7000	T 7896518.1000	T 4462077.8000	543589.3800	611383.8200	T 12737871.0000	T 3430133.9000
X		249743.7100	TM 3650825.7000	T 7942951.4000	T 4477166.6000	547852.6800	611310.8800	T 12658430.0000	T 3469197.8000
%RSD		1.501	TM 0.839	T 1.186	T 0.581	0.977	0.841	T 0.932	T 1.312

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:21:14	137589.0400	432213.9600	42.5001	T 15952259.0000	T 15364369.0000	586791.8500	T 20947444.0000	T 7175169.6000
2	15:21:54	142225.9200	431082.5600	72.5003	TM 16036226.0000	TM 15602257.0000	584777.3700	TM 21203032.0000	T 7262180.9000
3	15:22:35	141691.9400	435427.4400	45.0001	TM 16141963.0000	TM 15629087.0000	594401.2700	TM 21351661.0000	T 7275675.4000
4	15:23:15	140873.2400	440261.7700	57.5002	TM 16324735.0000	T 15716730.0000	590495.2100	T 21210902.0000	T 7274227.6000
5	15:23:55	139510.6000	435824.9300	30.0001	T 15955599.0000	T 15594552.0000	582891.9100	T 20840929.0000	T 7202608.4000
X		140378.1500	434962.1300	49.5002	TM 16082156.0000	TM 15581399.0000	587871.5200	TM 21110794.0000	T 7237972.4000
%RSD		1.329	0.826	32.614	TM 0.970	TM 0.839	0.784	TM 0.994	T 0.638

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:21:14	168973.4300	TM 21312949.0000	T 4679298.2000	T 10980348.0000	T 5284954.4000	T 3221440.5000	T 2319149.8000	703.3630
2	15:21:54	170792.4500	T 21152815.0000	T 4660990.5000	T 10995063.0000	TM 5343555.2000	TM 3267231.5000	TM 2338743.2000	722.5313
3	15:22:35	171374.2100	TM 21386439.0000	TM 4749739.2000	TM 11157531.0000	TM 5389786.9000	T 3272949.5000	TM 2359100.7000	723.3647
4	15:23:15	169248.9300	T 21424623.0000	T 4717180.4000	T 11147586.0000	T 5407661.9000	T 3247014.3000	T 2337010.0000	735.0324
5	15:23:55	168409.6900	T 21225946.0000	T 4690759.4000	T 11134623.0000	TM 5392485.3000	T 3246134.6000	T 2334943.5000	744.1999
X		169759.7400	TM 21300554.0000	TM 4699593.5000	TM 11083030.0000	TM 5363688.8000	TM 3250954.1000	TM 2337789.5000	725.6983
%RSD		0.744	TM 0.527	TM 0.737	TM 0.790	TM 0.934	TM 0.626	TM 0.609	2.117

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:21:14	100.0006	65.0003	697560.0600	435.0114	197.5023	265.0042	115.0008	517.5161
2	15:21:54	103.3340	77.5004	697750.0100	437.5115	237.5034	280.0047	120.0009	487.5143
3	15:22:35	107.5007	77.5004	697779.8700	442.5118	182.5020	257.5040	132.5011	417.5105
4	15:23:15	105.0007	78.3337	704344.1100	317.5061	187.5021	262.5041	112.5008	445.0119
5	15:23:55	95.8339	76.6670	702625.2000	350.0074	237.5034	225.0030	100.0006	467.5131
X		102.3340	75.0003	700011.8500	396.5096	208.5026	258.0040	116.0008	467.0132
%RSD		4.438	7.495	0.461	14.751	12.959	7.854	10.177	8.228

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:21:14	824536.1800	1122.5756	200951.5300	1120.0753	T 3026843.2000	758529.2300	75.0003	T 8336487.0000
2	15:21:54	837928.3300	1463.8786	199927.3300	1441.3746	T 3055352.3000	763061.2900	52.5002	TM 8474299.0000
3	15:22:35	832326.4900	2919.2612	200234.5700	2928.0143	T 3076666.0000	765109.4100	72.5003	TM 8464967.5000
4	15:23:15	835523.9500	2924.2630	198913.5000	2835.4823	T 3031543.7000	763140.5800	100.0006	T 8344249.1000
5	15:23:55	835606.6600	1042.5652	198626.7800	993.8093	T 3026289.7000	769863.8000	77.5004	T 8373930.9000
X		833184.3200	1894.5087	199730.7400	1863.7512	T 3043339.0000	763940.8600	75.5004	TM 8398786.7000
%RSD		0.628	50.198	0.480	50.655	T 0.727	0.536	22.385	TM 0.789

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:21:14	TM 1672856.1000	T 2820600.9000	1212609.1000	TM 11991847.0000	T 28973645.0000	T 9485592.8000	T 8551135.5000	T 21055089.0000
2	15:21:54	TM 1694471.6000	T 2857308.2000	1228112.4000	TM 12212712.0000	T 29580835.0000	T 9643810.7000	T 8693527.5000	T 21388391.0000
3	15:22:35	TM 1706384.9000	TM 2879716.8000	1223940.3000	TM 12227300.0000	T 29734315.0000	T 9690267.8000	T 8707705.4000	T 21475280.0000
4	15:23:15	TM 1676644.4000	T 2840941.0000	1220340.1000	TM 12170432.0000	T 29504294.0000	T 9569761.5000	T 8671824.0000	T 21343095.0000
5	15:23:55	TM 1695928.6000	T 2836672.7000	1226778.2000	T 11963539.0000	T 29100483.0000	T 9572918.1000	T 8645791.0000	T 21260767.0000
X		TM 1689257.1000	TM 2847047.9000	1222356.0000	TM 12113166.0000	T 29378715.0000	T 9592470.2000	T 8653996.7000	T 21304524.0000
%RSD		TM 0.834	TM 0.789	0.508	TM 1.039	T 1.109	T 0.816	T 0.717	T 0.749

Run	Time	209Bi	220Bkg
1	15:21:14	840820.2600	5.0000
2	15:21:54	852864.3500	10.0000
3	15:22:35	852525.9600	12.5000
4	15:23:15	856431.3400	10.0000
5	15:23:55	861467.9400	12.5000
X		852821.9700	10.0000
%RSD		0.893	30.619

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:25:37	232853.4200	1201.7533	76361082.0000	43107224.0000	5390855.9000	5936609.7000	121392830.0000	33947510.0000
2	15:26:16	236310.3800	761.7015	79662512.0000	44604031.0000	5557955.5000	6136956.3000	124316510.0000	34920431.0000
3	15:26:56	236534.0900	540.0175	79637323.0000	45228155.0000	5618404.9000	6200413.4000	126497290.0000	35415237.0000
4	15:27:36	238871.8800	403.3431	81544484.0000	45374484.0000	5652653.2000	6171035.6000	126531460.0000	36075869.0000
5	15:28:16	239881.0900	318.3394	77167217.0000	43859206.0000	5463778.6000	5969018.3000	122088230.0000	33721693.0000
X		236890.1700	645.0310	78874523.0000	44434620.0000	5536729.6000	6082806.7000	124165260.0000	34816148.0000
%RSD		1.149	54.796	2.657	2.145	1.961	1.994	1.934	2.839

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:25:37	1430281.4000	422666.2000	40.0001	5974.6410	5554.3504	4075469.2000	9990.9856	68547193.0000
2	15:26:16	1481467.6000	428636.0800	55.0002	3700.8216	4153.5349	4172725.7000	7968.8083	70505397.0000
3	15:26:56	1499403.8000	432649.4600	72.5003	2360.3342	3063.0628	4245863.4000	6620.1285	70832258.0000
4	15:27:36	1496634.5000	438664.5100	25.0000	1945.2270	2862.9917	4229613.7000	6122.2481	70580910.0000
5	15:28:16	1446049.5000	439894.3600	47.5001	2072.7577	2427.8536	4096392.1000	5799.5174	68992230.0000
X		1470767.4000	432502.1200	48.0002	3210.7563	3612.3587	4164012.8000	7300.3376	69891598.0000
%RSD		2.110	1.653	36.718	52.807	34.826	1.840	23.517	1.493

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:25:37	1691000.8000	6677.6744	2055.2534	4966.4795	2415.3500	2312.8209	834.2084	670.0269
2	15:26:16	1736943.8000	4503.7167	1642.6619	4068.4929	1782.6907	1915.2201	536.6840	699.1960
3	15:26:56	1765109.9000	3585.7713	1462.6283	3508.2383	1505.1359	1755.1848	411.6768	733.3656
4	15:27:36	1745595.7000	2812.9747	1320.1046	3023.0482	1362.6114	1677.6689	348.3406	739.1995
5	15:28:16	1696087.7000	2467.8654	1232.5912	2827.9798	1262.5956	1555.1451	267.5043	778.3697
X		1726947.6000	4009.6005	1542.6479	3678.8477	1665.6767	1843.2079	479.6828	724.0315
%RSD		1.865	42.014	21.126	23.513	27.769	15.907	46.127	5.696

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:25:37	75.8337	62.5002	669281.1400	97.5006	52.5002	140.0012	17.5000	62.5002
2	15:26:16	66.6669	66.6669	682081.6500	125.0009	30.0001	180.0019	37.5001	90.0005
3	15:26:56	73.3337	66.6669	685994.0600	165.0016	45.0001	157.5015	30.0001	75.0003
4	15:27:36	79.1670	75.8337	694255.4600	120.0009	57.5002	150.0014	45.0001	80.0004
5	15:28:16	77.5004	79.1670	700409.8500	160.0015	50.0001	155.0014	40.0001	87.5005
X		74.5003	70.1670	686404.4300	133.5011	47.0001	156.5015	34.0001	79.0004
%RSD		6.551	9.986	1.739	21.335	22.378	9.424	31.455	13.903

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:25:37	785587.0200	496.2648	65.0003	473.7635	791.2876	723919.6800	50.0001	4553.7439
2	15:26:16	783270.9900	641.2747	35.0001	637.5244	473.7635	725857.8800	57.5002	3100.5767
3	15:26:56	797168.1800	1101.3228	27.5000	1132.5770	283.7548	737678.8300	40.0001	2325.3244
4	15:27:36	802873.8800	1433.8733	10.0000	1442.6249	213.7527	741458.1700	50.0001	1817.6982
5	15:28:16	801915.3500	612.5225	27.5000	517.5161	152.5014	746396.1400	57.5002	1607.6551
X		794163.0800	857.0516	33.0001	840.8012	383.0120	735062.1400	51.0002	2680.9996
%RSD		1.156	46.266	60.937	50.735	67.399	1.335	14.122	44.553

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:25:37	425.0108	812.5396	1169975.8000	4063.4905	9397.7961	2777.9629	2527.8834	5844.5488
2	15:26:16	285.0049	437.5115	1168315.3000	2597.9049	6304.8842	1767.6875	1735.1806	3685.8149
3	15:26:56	197.5023	347.5073	1180169.3000	1742.6822	4138.5274	1252.5941	1112.5743	2755.4555
4	15:27:36	132.5011	237.5034	1183122.4000	1331.3563	3283.1466	1007.5609	862.5446	2105.2659
5	15:28:16	92.5005	135.0011	1196124.7000	948.8040	2417.8507	812.5396	672.5271	1572.6484
X		226.5039	394.0126	1179541.5000	2136.8476	5108.4410	1523.6690	1382.1420	3192.7467
%RSD		58.596	66.037	0.953	57.981	54.795	51.661	54.667	52.582

Run	Time	209Bi	220Bkg
1	15:25:37	780870.6400	2.5000
2	15:26:16	780225.4500	5.0000
3	15:26:56	785133.3600	0.0000
4	15:27:36	787695.2800	2.5000
5	15:28:16	791857.1000	2.5000
X		785156.3700	2.5000
%RSD		0.618	70.711

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:30:05	223934.7500	167.5017	TM 156264620.0000	TM 86824116.0000	T 10558092.0000	TM 11771173.0000	TM 241978300.0000	TM 66813979.0000
2	15:30:44	224191.5200	157.5015	TM 156090020.0000	TM 87781124.0000	TM 10873735.0000	TM 11933646.0000	TM 245005340.0000	TM 67837164.0000
3	15:31:24	223361.3300	144.1679	TM 157968630.0000	TM 88500959.0000	TM 10958965.0000	TM 11926247.0000	TM 245510710.0000	TM 68126484.0000
4	15:32:04	227626.1000	126.6676	TM 159911170.0000	T 87291873.0000	T 10792126.0000	T 11809237.0000	T 243632380.0000	T 67869807.0000
5	15:32:44	231045.8000	103.3340	T 153641410.0000	T 85215961.0000	T 10601973.0000	T 11455725.0000	T 235889430.0000	T 63980836.0000
X		226031.9000	139.8345	TM 156775170.0000	TM 87122806.0000	TM 10756978.0000	TM 11779206.0000	TM 242403230.0000	TM 66925654.0000
%RSD		1.444	18.239	TM 1.489	TM 1.416	TM 1.605	TM 1.650	TM 1.605	TM 2.572

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:30:05	TM 2904753.5000	423753.1100	35.0001	1030.0637	1535.1414	TM 8083539.2000	9039.9005	TM 135511710.0000
2	15:30:44	TM 2973709.8000	426720.1600	60.0002	802.5386	1647.6629	TM 8239913.8000	9638.0703	TM 137968200.0000
3	15:31:24	TM 2957222.7000	427231.6500	60.0002	727.5318	1710.1755	TM 8237129.8000	9452.8584	TM 137672290.0000
4	15:32:04	TM 2973492.1000	433849.5000	65.0003	750.0338	1610.1555	T 8038952.1000	9613.0414	T 134907340.0000
5	15:32:44	T 2841864.6000	433519.2100	75.0003	1080.0700	1682.6699	T 7901895.3000	9227.6061	T 131072600.0000
X		TM 2930208.5000	429014.7300	59.0002	878.0476	1637.1610	TM 8100286.1000	9394.2953	TM 135426430.0000
%RSD		TM 1.942	1.041	24.996	18.772	4.171	TM 1.764	2.735	TM 2.047

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:30:05	TM 3324152.4000	2790.4671	1807.6960	3150.5955	1577.6493	1392.6164	180.0019	810.8728
2	15:30:44	TM 3387256.6000	2950.5222	1867.7093	3410.6978	1540.1423	1445.1253	151.6681	799.2050
3	15:31:24	TM 3383009.4000	3040.5546	1820.1988	3330.6655	1655.1644	1277.5979	150.8347	839.2089
4	15:32:04	T 3298164.9000	3070.5656	1710.1755	3290.6496	1630.1594	1372.6130	160.8349	856.7107
5	15:32:44	T 3246607.5000	2918.0108	1600.1536	3280.6456	1467.6292	1357.6106	155.8348	839.2089
X		TM 3327838.1000	2954.0241	1761.1866	3292.6508	1574.1489	1369.1126	159.8349	829.0413
%RSD		TM 1.782	3.752	6.058	2.870	4.734	4.450	7.478	2.824

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:30:05	70.0003	69.1670	656475.1900	247.5037	97.5006	272.5045	62.5002	147.5013
2	15:30:44	85.8338	90.0005	657944.5600	177.5019	97.5006	290.0051	47.5001	117.5008
3	15:31:24	65.0003	81.6671	659173.7300	180.0019	130.0010	292.5051	57.5002	125.0009
4	15:32:04	75.0003	77.5004	668150.6000	187.5021	100.0006	322.5062	60.0002	130.0010
5	15:32:44	65.8336	104.1673	665552.0000	147.5013	107.5007	315.0060	52.5002	127.5010
X		72.3337	84.5004	661459.2100	188.0022	106.5007	298.5054	56.0002	129.5010
%RSD		11.788	15.758	0.771	19.462	12.922	6.768	10.751	8.569

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:30:05	756638.3800	482.5140	15.0000	382.5088	41.2501	706902.7400	52.5002	787.5372
2	15:30:44	758846.2400	515.0159	10.0000	501.2651	57.5002	708853.4600	37.5001	905.0491
3	15:31:24	761196.7900	962.5556	5.0000	828.7912	65.0003	707247.7500	65.0003	735.0324
4	15:32:04	763258.1500	1032.5640	7.5000	1006.3108	37.5001	709945.8300	55.0002	820.0404
5	15:32:44	766326.4900	348.7573	20.0000	310.0058	32.5001	716497.5200	42.5001	817.5401
X		761253.2100	668.2814	11.5000	605.7763	46.7501	709889.4600	50.5002	813.0398
%RSD		0.495	46.085	52.355	49.414	29.630	0.548	21.408	7.599

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:30:05	42.5001	70.0003	1110298.6000	391.2592	960.0553	462.5128	455.0124	1057.5671
2	15:30:44	55.0002	102.5006	1113720.8000	403.7598	967.5562	445.0119	447.5120	1057.5671
3	15:31:24	40.0001	82.5004	1107670.9000	410.0101	945.0536	480.0138	412.5102	997.5597
4	15:32:04	35.0001	112.5008	1108987.5000	375.0084	836.2920	475.0135	372.5083	992.5591
5	15:32:44	52.5002	82.5004	1110967.0000	300.0054	721.2812	392.5092	355.0076	977.5573
X		45.0001	90.0005	1110329.0000	376.0086	886.0476	451.0123	408.5101	1016.5621
%RSD		18.840	19.044	0.205	11.846	12.001	7.845	10.850	3.753

Run	Time	209Bi	220Bkg
1	15:30:05	724306.1900	0.0000
2	15:30:44	719796.9900	2.5000
3	15:31:24	720799.5900	2.5000
4	15:32:04	719044.7700	2.5000
5	15:32:44	727317.2600	2.5000
X		722252.9600	2.0000
%RSD		0.481	55.902

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Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:34:26	260661.3900	80693.8070	↹3536077.0000	↹1189552.0000	143230.4100	158014.0400	↹1437401.3000	↹1518090.8000
2	15:35:05	263008.4300	80916.7870	↹3543463.1000	1190825.0000	145377.1000	160480.5000	↹1444803.1000	↹1543881.6000
3	15:35:45	263135.6900	81146.5040	↹3594132.8000	↹1204456.5000	144802.2300	160505.9900	↹1451943.3000	↹1556456.9000
4	15:36:24	264524.4600	80870.5080	↹3596939.0000	1193844.8000	144954.8400	161071.7500	↹1432304.7000	↹1552076.9000
5	15:37:04	266298.8200	80646.6870	↹3558863.8000	1185310.6000	142431.9000	158763.0700	↹1423768.9000	↹1525796.6000
x		263525.7600	80854.8590	↹3565895.1000	↹1192797.8000	144159.3000	159767.0700	↹1438044.3000	↹1539260.6000
%RSD		0.789	0.246	↹0.794	↹0.604	0.876	0.818	↹0.759	↹1.083

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:34:26	62778.0780	464494.3000	42.5001	337792.7400	319304.8400	93822.7050	440173.5400	↹1652005.5000
2	15:35:05	63309.5760	473225.5700	47.5001	335648.6600	322894.2500	94990.8270	444899.8700	1687306.4000
3	15:35:45	64098.0690	467453.0500	35.0001	337870.8100	326103.1500	95524.3740	451174.0700	1691288.1000
4	15:36:24	63778.1290	470241.0300	37.5001	336541.0900	322250.0200	95081.8570	444067.1800	1664266.3000
5	15:37:04	62740.2950	473698.8500	42.5001	334321.8900	324094.5200	93754.4440	443603.4300	1656285.9000
x		63340.8290	469822.5600	41.0001	336435.0400	322929.3600	94634.8410	444783.6200	↹1670230.4000
%RSD		0.948	0.830	11.886	0.446	0.775	0.844	0.899	↹1.078

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:34:26	37740.2670	450831.2500	100343.0100	239847.6500	118671.5000	145107.4700	101511.2000	28021.1990
2	15:35:05	38066.7470	457495.1000	102845.7400	245774.1300	120144.8900	148755.9500	102458.5200	28387.4350
3	15:35:45	38302.8250	458809.4900	104556.8400	246461.4900	119886.2000	150797.1500	102553.0000	28550.4910
4	15:36:24	37895.9710	454901.2300	102792.5900	246639.1300	119148.2300	148837.3900	101552.5300	28522.8970
5	15:37:04	36944.2110	453423.8900	100714.9500	242253.2500	117647.1300	147857.6800	101070.8900	27733.5720
x		37790.0040	455092.1900	102250.6300	244195.1300	119099.5900	148271.1300	101829.2300	28243.1190
%RSD		1.368	0.700	1.691	1.233	0.840	1.395	0.635	1.255

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:34:26	11432.0030	64.1669	754152.4900	147.5013	12.5000	65.0003	12.5000	27.5000
2	15:35:05	11457.0370	72.5003	755840.6300	132.5011	27.5000	62.5002	12.5000	17.5000
3	15:35:45	11585.5480	69.1670	761959.4900	137.5011	22.5000	62.5002	7.5000	22.5000
4	15:36:24	11341.8800	80.8337	759611.4600	150.0014	10.0000	67.5003	17.5000	35.0001
5	15:37:04	11444.5200	74.1670	765757.5900	115.0008	15.0000	52.5002	25.0000	5.0000
x		11452.1970	72.1670	759464.3300	136.5011	17.5000	62.0002	15.0000	21.5000
%RSD		0.762	8.548	0.615	10.247	41.650	9.195	44.096	52.390

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:34:26	897331.4900	312975.1200	4246.0815	300237.8600	65222.9970	808520.1000	75.0003	326511.1700
2	15:35:05	911322.0400	319380.1500	4273.5955	307046.8400	66091.0460	818081.6500	102.5006	330678.2500
3	15:35:45	909903.9100	326513.7700	4546.2398	312065.7100	66915.0830	824739.9400	75.0003	334634.0500
4	15:36:24	911132.9400	325547.0300	4538.7357	314010.5000	66025.5300	819773.9500	67.5003	333187.8000
5	15:37:04	918488.4800	314770.9000	4386.1540	301272.9800	65932.2960	826857.6700	92.5005	332339.9300
x		909635.7700	319837.3900	4398.1613	306926.7800	66037.3910	819594.6600	82.5004	331470.2400
%RSD		0.842	1.916	3.225	2.017	0.911	0.872	17.539	0.941

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:34:26	34154.8500	59720.7300	1273437.0000	506087.0600	1233878.3000	405249.7400	352180.3600	865117.2700
2	15:35:05	34498.7620	60559.2490	1279020.5000	513950.8700	1258627.2000	409093.3700	355598.5200	879458.2800
3	15:35:45	35081.1860	61561.5530	1279849.5000	520786.2700	1268945.5000	410237.6200	355854.0900	880378.2300
4	15:36:24	34704.6140	61015.0550	1287438.6000	516484.2800	1260178.8000	406645.3200	357708.5100	883859.4100
5	15:37:04	34207.5660	59818.9300	1285779.3000	506384.3300	1243310.6000	403245.9600	355155.2100	876131.1800
x		34529.3960	60535.1030	1281105.0000	512738.5600	1252988.1000	406894.4000	355299.3400	876988.8800
%RSD		1.103	1.296	0.439	1.252	1.127	0.696	0.562	0.819

Run	Time	209Bi	220Bkg
1	15:34:26	895930.8900	0.0000
2	15:35:05	906729.2400	0.0000
3	15:35:45	907677.0700	2.5000
4	15:36:24	907164.2300	0.0000
5	15:37:04	919440.3700	2.5000
x		907388.3600	1.0000
%RSD		0.917	136.931

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:38:49	263497.6900	86.6671	32033.9520	3295.6516	370.0082	400.0096	8454.2863	40432.8520
2	15:39:29	264539.9400	93.3339	31712.7270	3745.8417	475.0135	570.0195	10066.0760	40058.5500
3	15:40:09	266752.1500	100.8339	32194.5700	3970.9459	525.0165	505.0153	11472.8920	40631.3130
4	15:40:48	271172.2600	85.0004	31035.1840	4015.9674	460.0127	585.0205	11783.3250	39520.9930
5	15:41:28	269489.8200	84.1671	29961.2640	3655.8017	390.0091	430.0111	10731.9060	39666.6830
X		267090.3700	90.0005	31387.5390	3736.8417	444.0120	498.0152	10501.6970	40062.0780
%RSD		1.212	7.829	2.908	7.733	14.320	16.507	12.615	1.191

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:38:49	352.5075	467322.2700	35.0001	1010.0612	1040.0649	2515.3796	292.5051	101011.0100
2	15:39:29	295.0052	469999.1900	20.0000	742.5331	965.0559	2340.3286	230.0032	103711.3700
3	15:40:09	350.0074	472203.7300	32.5001	462.5128	1077.5697	2432.8551	272.5045	103843.0000
4	15:40:48	355.0076	480387.1400	10.0000	505.0153	1110.0739	2505.3766	250.0038	105442.9000
5	15:41:28	297.5053	478573.3700	17.5000	605.0220	990.0588	2450.3602	192.5022	105189.7300
X		330.0066	473697.1400	23.0000	665.0289	1036.5646	2448.8600	247.5038	103839.6000
%RSD		9.356	1.180	45.730	33.224	5.783	2.863	15.632	1.696

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:38:49	755.0342	102.5006	172.5018	885.0470	277.5046	600.0216	76.6670	861.7112
2	15:39:29	860.0444	137.5011	197.5023	830.0413	260.0041	587.5207	77.5004	851.7102
3	15:40:09	842.5426	175.0018	120.0009	762.5349	325.0063	542.5177	55.0002	836.7087
4	15:40:48	927.5516	122.5009	182.5020	732.5322	322.5062	552.5183	58.3335	812.5396
5	15:41:28	892.5478	110.0007	150.0014	715.0307	332.5066	500.0150	65.0003	810.8728
X		855.5441	129.5011	164.5017	785.0372	303.5056	556.5187	66.5003	834.7085
%RSD		7.585	22.155	18.407	9.050	10.718	7.108	15.511	2.733

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:38:49	65.8336	60.8336	758157.5900	32.5001	7.5000	7.5000	7.5000	2.5000
2	15:39:29	77.5004	62.5002	769439.6800	17.5000	5.0000	12.5000	5.0000	7.5000
3	15:40:09	78.3337	83.3337	774642.6700	17.5000	2.5000	7.5000	2.5000	10.0000
4	15:40:48	86.6671	79.1670	780832.2800	20.0000	5.0000	7.5000	2.5000	5.0000
5	15:41:28	81.6671	60.8336	778076.5400	17.5000	15.0000	0.0000	0.0000	5.0000
X		78.0004	69.3336	772229.7500	21.0000	7.0000	7.0000	3.5000	6.0000
%RSD		9.867	15.864	1.158	31.044	68.698	63.888	81.441	47.507

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:38:49	916365.2000	502.5152	7.5000	507.5155	16.2500	827436.0700	45.0001	1647.6629
2	15:39:29	920130.6900	572.5197	10.0000	470.0133	21.2500	831541.0800	20.0000	1147.5790
3	15:40:09	928385.3200	740.0329	10.0000	701.2795	13.7500	837605.6900	37.5001	1000.0600
4	15:40:48	934815.6000	830.0413	5.0000	852.5436	21.2500	839925.1300	30.0001	835.0418
5	15:41:28	938541.5700	318.7561	0.0000	276.2546	11.2500	845970.7200	25.0000	775.0360
X		927647.6800	592.7730	6.5000	561.5213	16.7500	836495.7400	31.5001	1081.0760
%RSD		1.015	33.910	64.358	39.511	26.699	0.865	31.547	32.249

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:38:49	5.0000	30.0001	1289713.4000	261.2541	720.0311	152.5014	185.0021	397.5095
2	15:39:29	12.5000	35.0001	1286968.6000	277.5046	683.7781	162.5016	142.5012	405.0098
3	15:40:09	5.0000	25.0000	1306900.3000	276.2546	640.0246	175.0018	180.0019	330.0065
4	15:40:48	15.0000	5.0000	1305847.9000	282.5048	711.2804	117.5008	87.5005	330.0065
5	15:41:28	17.5000	15.0000	1318089.3000	222.5030	576.2699	127.5010	127.5010	320.0061
X		11.0000	22.0000	1301503.9000	264.0042	666.2768	147.0013	144.5013	356.5077
%RSD		52.322	54.735	0.997	9.287	8.883	16.330	27.774	11.540

Run	Time	209Bi	220Bkg
1	15:38:49	919786.9100	0.0000
2	15:39:29	925114.8500	0.0000
3	15:40:09	930302.4900	0.0000
4	15:40:48	940724.6200	5.0000
5	15:41:28	938633.6300	0.0000
X		930912.5000	1.0000
%RSD		0.951	223.607

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:43:09	210813.2300	231.6699	T 141249330.0000	T 80190700.0000	T 10052604.0000	TM 11254829.0000	TM 230577120.0000	TM 65547195.0000
2	15:43:49	211193.5100	232.5032	T 141185750.0000	T 81568673.0000	T 10137432.0000	TM 11368379.0000	TM 232266560.0000	TM 66959274.0000
3	15:44:29	209961.2800	223.3363	T 144416570.0000	T 81343522.0000	TM 10257928.0000	TM 11492859.0000	TM 231341870.0000	TM 68045498.0000
4	15:45:09	210913.2100	245.0036	T 141544450.0000	T 80576919.0000	TM 10319111.0000	TM 11539014.0000	TM 232849440.0000	TM 68843041.0000
5	15:45:48	209902.3300	224.1697	T 141086190.0000	T 79773987.0000	TM 10127443.0000	TM 11399666.0000	TM 234467930.0000	TM 67146674.0000
X		210556.7100	231.3366	T 141896460.0000	T 80690760.0000	TM 10178904.0000	TM 11410950.0000	TM 232300580.0000	TM 67308336.0000
%RSD		0.279	3.766	T 1.000	T 0.940	TM 1.056	TM 0.974	TM 0.642	TM 1.842

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:43:09	TM 2837858.0000	414867.3300	438003.5700	7568.4353	58998.1100	TM 8058738.6000	33557.4300	TM 135307510.0000
2	15:43:49	TM 2889930.5000	408210.3700	444401.8300	7067.9961	59929.7220	TM 8137359.1000	34438.5140	TM 137734630.0000
3	15:44:29	TM 2948185.6000	407298.5900	442739.2400	7223.1291	60284.7690	TM 8254288.5000	34488.7210	TM 139301860.0000
4	15:45:09	TM 2977690.7000	408834.8900	439786.3800	7135.5537	59836.5560	TM 8243649.6000	34425.9620	TM 139922830.0000
5	15:45:48	TM 2918322.0000	408998.9000	446958.2500	7320.7142	59139.1040	TM 8256419.2000	34358.1830	TM 139302490.0000
X		TM 2914397.4000	409642.0200	442377.8500	7263.1657	59637.6520	TM 8190091.0000	34253.7620	TM 138313860.0000
%RSD		TM 1.849	0.731	0.808	2.688	0.919	TM 1.082	1.145	TM 1.349

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:43:09	TM 3340651.9000	5171.6042	5596.8789	15942.7360	8146.4800	7198.1074	375.8418	749.2003
2	15:43:49	TM 3412337.1000	5416.7599	5681.9364	15825.0120	8524.3577	7153.0687	398.3429	703.3630
3	15:44:29	TM 3455227.2000	5281.6732	5709.4552	16180.6940	8491.8245	7140.5579	388.3424	770.8690
4	15:45:09	TM 3471510.8000	5094.0565	5822.0331	16160.6550	8096.4312	7240.6442	383.3422	711.6971
5	15:45:48	TM 3447179.0000	5251.6543	5576.8655	15759.8880	8544.3781	7123.0430	371.6750	782.5367
X		TM 3425381.2000	5243.1496	5677.4338	15973.7970	8360.6943	7171.0842	383.5088	743.5332
%RSD		TM 1.520	2.317	1.729	1.198	2.630	0.666	2.742	4.721

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:43:09	81.6671	86.6671	660170.7000	977628.0200	1778450.5000	1929790.6000	1090794.7000	T 3129786.6000
2	15:43:49	65.0003	83.3337	656545.4100	991766.4700	1802702.8000	1944259.2000	1096688.2000	T 3176212.1000
3	15:44:29	97.5006	72.5003	658719.8600	1000793.6000	1831908.3000	1957495.3000	1120036.7000	T 3216891.5000
4	15:45:09	69.1670	76.6670	661205.6100	997908.9700	1826511.1000	1961139.1000	1115658.6000	T 3206180.4000
5	15:45:48	73.3337	72.5003	662348.7600	990621.5400	1822944.4000	1959034.5000	1111595.6000	T 3202013.2000
X		77.3337	78.3337	659798.0700	991743.7200	1812503.4000	1950343.8000	1106954.8000	T 3186216.8000
%RSD		16.614	8.206	0.342	0.902	1.214	0.680	1.138	T 1.096

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:43:09	758225.9000	177.5019	1430.1227	170.0017	1747.6832	720460.8400	277.5046	2160.2800
2	15:43:49	755518.2800	146.2513	1390.1159	170.0017	1697.6729	724676.4000	262.5041	2310.3202
3	15:44:29	760510.6900	146.2513	1550.1442	152.5014	1721.4278	725386.9000	252.5038	2095.2634
4	15:45:09	762241.0800	136.2511	1505.1359	127.5010	1606.4048	732797.5800	287.5050	2045.2510
5	15:45:48	759718.0500	111.2507	1425.1218	136.2511	1710.1755	726756.3500	257.5040	2092.7627
X		759242.8000	143.5013	1460.1281	151.2514	1696.6728	726015.6100	267.5043	2140.7755
%RSD		0.334	16.578	4.485	12.777	3.167	0.614	5.450	4.822

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:43:09	420.0106	835.0418	1188360.1000	175.0018	451.2622	8066.4021	6627.6345	16255.8400
2	15:43:49	460.0127	857.5441	1195757.1000	183.7520	447.5120	8419.2509	6685.1804	16566.4500
3	15:44:29	525.0165	825.0408	1206592.4000	141.2512	345.0071	8531.8653	6907.8619	17039.9040
4	15:45:09	450.0122	832.5416	1213017.7000	147.5013	337.5068	8496.8296	6922.8744	17162.6550
5	15:45:48	537.5173	785.0370	1214850.6000	125.0009	301.2555	8501.8347	6675.1724	16964.7510
X		478.5139	827.0411	1203715.6000	154.5015	376.5087	8403.2365	6763.7447	16797.9200
%RSD		10.564	3.195	0.945	15.757	18.211	2.295	2.073	2.241

Run	Time	209Bi	220Bkg
1	15:43:09	771976.4700	0.0000
2	15:43:49	770842.0800	2.5000
3	15:44:29	783195.6300	0.0000
4	15:45:09	784315.1800	0.0000
5	15:45:48	780758.3100	2.5000
X		778217.5300	1.0000
%RSD		0.817	136.931

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:47:30	208146.6000	11870.1150	T 139878110.0000	T 79585897.0000	T 10008462.0000	TM 11311413.0000	TM 230982630.0000	TM 66357426.0000
2	15:48:09	210130.4700	12009.4810	T 141811400.0000	T 81305351.0000	TM 10187017.0000	TM 11496964.0000	TM 232800940.0000	TM 67870786.0000
3	15:48:49	206100.0000	12233.1390	T 143641240.0000	TM 81359915.0000	TM 10267727.0000	TM 11535911.0000	TM 235406720.0000	TM 68749253.0000
4	15:49:29	210205.6600	11895.1500	T 142415570.0000	T 80956524.0000	TM 10160863.0000	TM 11399141.0000	TM 231746380.0000	TM 68409141.0000
5	15:50:09	209951.0300	11742.4340	T 143372560.0000	T 80618207.0000	TM 10192319.0000	TM 11411074.0000	TM 232134920.0000	TM 67449725.0000
X		208906.7500	11950.0640	T 142223780.0000	TM 80765179.0000	TM 10163278.0000	TM 11430901.0000	TM 232614320.0000	TM 67767266.0000
%RSD		0.854	1.544	T 1.057	TM 0.896	TM 0.937	TM 0.771	TM 0.728	TM 1.375

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:47:30	TM 2876298.0000	408824.4000	435141.8400	68230.6870	115370.6300	TM 8079164.3000	112869.2300	TM 138069730.0000
2	15:48:09	TM 2942130.9000	408430.7800	445368.9600	68621.3750	117852.5000	TM 8243550.1000	115958.7100	TM 140092380.0000
3	15:48:49	TM 2972186.5000	411357.0800	445000.0100	68089.5390	119340.9600	TM 8303335.8000	117601.4900	TM 140941480.0000
4	15:49:29	TM 2946201.5000	408735.1700	439012.1100	67298.1500	118339.3300	TM 8210923.0000	115659.6000	TM 139323210.0000
5	15:50:09	TM 2958323.6000	412479.3100	443534.9200	68966.7080	118595.4300	TM 8250851.1000	113872.7400	TM 139594670.0000
X		TM 2939028.1000	409965.3500	441611.5700	68241.2920	117899.7700	TM 8217564.9000	115192.3500	TM 139604290.0000
%RSD		TM 1.258	0.447	0.999	0.922	1.283	TM 1.024	1.609	TM 0.756

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:47:30	TM 3404044.1000	82150.4360	22267.2100	53138.8860	25699.5670	17458.2680	8353.3513	2782.9646
2	15:48:09	TM 3479199.1000	82892.7320	22936.5220	53745.2560	26695.1900	17237.8100	8421.7534	2812.1411
3	15:48:49	TM 3454809.7000	83680.5470	22700.8780	54537.8810	26893.3250	17596.0580	8661.1653	2775.4621
4	15:49:29	TM 3455241.6000	82774.0610	22505.3480	53128.8220	26517.1220	17713.8070	8508.5081	2722.9448
5	15:50:09	TM 3458610.6000	83579.5410	22585.5650	53171.5940	26466.9630	17839.0740	8492.6586	2726.2792
X		TM 3450381.0000	83015.4630	22599.1050	53544.4880	26454.4340	17569.0030	8487.4873	2763.9584
%RSD		TM 0.805	0.758	1.091	1.145	1.716	1.324	1.356	1.392

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:47:30	950.8876	61.6669	658687.4400	980856.3900	1788168.3000	1925860.4000	1100761.5000	T 3166087.1000
2	15:48:09	936.7193	90.8338	664346.2500	1000908.8000	1822590.5000	1971200.5000	1110045.5000	T 3212398.7000
3	15:48:49	912.5500	80.8337	657906.7400	1009157.9000	1853316.0000	1990591.4000	1126357.1000	T 3264310.0000
4	15:49:29	901.7155	81.6671	664638.2100	992179.0200	1816740.6000	1965481.0000	1110529.0000	T 3211877.8000
5	15:50:09	928.3850	93.3339	671223.4100	997614.1000	1828336.5000	1956805.5000	1112414.9000	T 3219707.6000
X		926.0515	81.6671	663360.4100	996143.2400	1821830.4000	1961987.8000	1112021.6000	T 3214876.2000
%RSD		2.099	15.255	0.812	1.057	1.285	1.208	0.827	T 1.085

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:47:30	753344.0400	49780.7450	2160.2800	48323.4540	12698.4180	728188.6500	247.5037	32626.2440
2	15:48:09	758059.2100	51006.8760	2180.2852	49007.4310	12903.7330	731903.9300	212.5027	33444.4780
3	15:48:49	763796.8100	51824.3970	2110.2672	49700.2660	13100.2890	731754.0900	232.5032	33703.0160
4	15:49:29	763553.4500	50998.0720	2217.7951	49076.5860	12778.5400	732476.0700	295.0052	32947.5040
5	15:50:09	768687.2700	50955.3120	2147.7767	49491.5300	12950.0540	738254.0800	250.0038	32651.3420
X		761488.1600	50913.0800	2163.2808	49119.8540	12886.2070	732515.3600	247.5037	33074.5160
%RSD		0.776	1.433	1.838	1.079	1.209	0.495	12.309	1.456

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:47:30	7017.9539	12173.8860	1214732.6000	46973.2670	112496.7400	46335.9640	39191.9440	94401.6890
2	15:48:09	6932.8827	12709.6850	1222802.5000	48339.7990	115080.4100	46662.7800	39621.4680	95946.6840
3	15:48:49	7198.1074	12622.0520	1228002.9000	48206.5300	115902.9400	47218.3970	40241.9310	97218.8010
4	15:49:29	7185.5966	12526.9080	1227247.9000	48172.5850	115684.9500	47537.7040	39591.3260	98888.2730
5	15:50:09	6975.4182	12474.3300	1234192.6000	47875.8820	115515.1100	47037.3770	39219.5740	96262.7990
X		7061.9918	12501.3720	1225395.7000	47913.6130	114936.0300	46958.4450	39573.2490	96543.6490
%RSD		1.733	1.632	0.589	1.153	1.215	1.001	1.072	1.716

Run	Time	209Bi	220Bkg
1	15:47:30	778868.1100	0.0000
2	15:48:09	782391.3300	0.0000
3	15:48:49	786024.2600	0.0000
4	15:49:29	788537.0800	2.5000
5	15:50:09	790766.7400	2.5000
X		785317.5100	1.0000
%RSD		0.606	136.931

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:51:50	228651.0900	↓1697126.2000	↓76886289.0000	↓43645842.0000	↓5372370.8000	↓5980163.3000	↓123620710.0000	↓34253272.0000
2	15:52:30	229388.4500	↓1730504.7000	↓78657683.0000	↓44024597.0000	↓5494926.3000	↓6133257.3000	↓125141000.0000	↓34180644.0000
3	15:53:10	229428.7000	↓1754015.3000	↓80393203.0000	↓44706095.0000	↓5495896.7000	↓6150535.5000	↓125494290.0000	↓34709373.0000
4	15:53:49	230239.7800	↓1721549.2000	↓78067091.0000	↓43316005.0000	↓5464606.9000	↓5993694.7000	↓125385920.0000	↓34849020.0000
5	15:54:29	233939.0300	↓1726939.4000	↓77670680.0000	↓43637173.0000	↓5453198.7000	↓6014719.8000	↓124768450.0000	↓34620530.0000
x		230329.4100	↓1726026.9000	↓78334989.0000	↓43865942.0000	↓5456199.9000	↓6054474.1000	↓124882080.0000	↓34522568.0000
%RSD		0.909	↓1.180	↓1.683	↓1.214	↓0.925	↓1.338	↓0.607	↓0.845

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:51:50	↓1502394.7000	430522.1800	242.5035	↓8295610.4000	↓7876526.6000	↓4281033.1000	↓10584735.0000	↓70712144.0000
2	15:52:30	1511065.8000	431571.9400	200.0024	↓8339057.8000	↓7870789.2000	↓4324114.6000	↓10683783.0000	↓70573656.0000
3	15:53:10	1527833.1000	433806.0800	150.0014	↓8365112.9000	↓7880200.2000	↓4323219.7000	↓10678764.0000	↓70993995.0000
4	15:53:49	1513064.5000	432278.4300	140.0012	↓8317340.7000	↓7860552.7000	↓4270237.9000	↓10693321.0000	↓70528225.0000
5	15:54:29	↓1514363.2000	438035.1600	122.5009	↓8310940.1000	↓7838084.7000	↓4266203.9000	↓10551352.0000	↓70313972.0000
x		↓1513744.2000	433242.7600	171.0019	↓8325612.4000	↓7865230.7000	↓4292961.8000	↓10638391.0000	↓70624398.0000
%RSD		↓0.605	0.677	28.809	↓0.325	↓0.215	↓0.665	↓0.616	↓0.356

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:51:50	1736443.9000	↓10631563.0000	2345207.9000	↓5275751.8000	↓2540000.0000	1550838.9000	1138204.0000	31060.2770
2	15:52:30	1730907.2000	↓10788296.0000	↓2299007.1000	↓5285259.1000	↓2566531.8000	1549695.0000	1147779.4000	31516.1500
3	15:53:10	1742633.6000	↓10828891.0000	↓2328142.7000	↓5384960.6000	↓2613652.6000	1572897.0000	1153081.1000	31642.4610
4	15:53:49	↓1733142.3000	↓10658122.0000	2357831.6000	↓5265478.3000	↓2570540.4000	1546509.0000	1142354.3000	31525.3520
5	15:54:29	1713213.4000	↓10691182.0000	2362213.8000	↓5303726.4000	↓2553850.8000	1551278.0000	1135064.2000	31135.5570
x		↓1731268.1000	↓10719611.0000	↓2338480.6000	↓5303035.2000	↓2568915.1000	1554243.6000	1143296.6000	31375.9590
%RSD		↓0.636	↓0.794	↓1.100	↓0.904	↓1.079	0.682	0.634	0.829

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:51:50	12788.1380	76.6670	682452.7700	735.0324	1147.5790	1302.6018	672.5271	1862.7082
2	15:52:30	12628.7290	69.1670	681469.4800	532.5170	837.5421	1035.0643	502.5152	1267.5964
3	15:53:10	12980.9360	79.1670	687528.0700	487.5143	612.5225	787.5372	397.5095	1135.0773
4	15:53:49	12889.9610	72.5003	691247.7000	362.5079	607.5221	717.5309	362.5079	835.0418
5	15:54:29	12699.6700	75.0003	697153.0200	410.0101	492.5146	605.0220	307.5057	820.0404
x		12797.4870	74.5003	687970.2100	505.5163	739.5361	889.5512	448.5131	1184.0928
%RSD		1.107	5.162	0.942	28.547	35.176	31.433	32.113	35.936

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:51:50	796761.9500	726173.7000	98496.1700	697359.2500	1530932.1000	749696.0400	95.0005	↓4220401.8000
2	15:52:30	805423.1500	736249.0600	98341.8640	706627.0100	1532471.6000	746821.8600	87.5005	↓4215963.9000
3	15:53:10	794399.0400	746797.3000	98916.1000	715044.0300	1527743.7000	745301.9000	97.5006	↓4243300.2000
4	15:53:49	798392.4700	749417.5900	98283.6830	716418.6600	1518566.0000	748336.6200	95.0005	↓4184679.0000
5	15:54:29	811491.6700	724017.6700	99280.3940	692390.7400	1521072.5000	752014.0900	115.0008	↓4212319.0000
x		801293.6600	736531.0600	98663.6420	705567.9400	1526157.2000	748434.1000	98.0006	↓4215332.8000
%RSD		0.877	1.571	0.430	1.503	0.399	0.346	10.425	↓0.497

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:51:50	821796.8900	1492435.8000	1219041.6000	↓6012896.2000	↓14711444.0000	↓4864574.6000	↓4204678.4000	↓10567027.0000
2	15:52:30	827317.6300	1478658.0000	1208769.1000	↓6051573.7000	↓14733896.0000	↓4851929.8000	↓4147167.9000	↓10515194.0000
3	15:53:10	835030.4700	1482686.0000	1206040.4000	↓6089056.5000	↓14780410.0000	↓4881007.3000	↓4195554.8000	↓10530604.0000
4	15:53:49	827785.8900	1484275.1000	1223032.9000	↓6111400.6000	↓14936299.0000	↓4886447.7000	↓4186338.2000	↓10568604.0000
5	15:54:29	823828.5600	1470669.5000	1231188.1000	↓5982684.0000	↓14632192.0000	↓4857333.1000	↓4142819.7000	↓10423765.0000
x		827151.8900	1481744.9000	1217614.4000	↓6049522.2000	↓14758848.0000	↓4868258.5000	↓4175311.8000	↓10521039.0000
%RSD		0.611	0.538	0.849	↓0.875	↓0.764	↓0.307	↓0.682	↓0.562

Run	Time	209Bi	220Bkg
1	15:51:50	804414.8900	5.0000
2	15:52:30	804848.9500	2.5000
3	15:53:10	800418.7100	10.0000
4	15:53:49	807011.3300	2.5000
5	15:54:29	820942.2500	2.5000
x		807527.2300	4.5000
%RSD		0.974	72.436

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	15:56:11	254487.3900	487.5143	61760.5170	12514.3900	1870.2098	1910.2189	37207.8810	54404.5130
2	15:56:50	255474.4100	400.0096	55783.5860	10711.8800	1270.0968	1520.1386	32555.9690	52238.2180
3	15:57:30	254265.7800	316.6727	49252.6200	9019.8789	1080.0700	1190.0850	25361.0320	49174.6620
4	15:58:10	259111.6600	270.8377	44118.9810	7488.3630	880.0465	945.0536	20422.4940	46896.5870
5	15:58:49	261223.5800	240.0035	39834.9830	5046.5276	570.0195	705.0298	15181.3160	44257.2110
x		256912.5600	343.0076	50150.1370	8956.2078	1134.0885	1254.1052	26145.7380	49394.2380
%RSD		1.206	29.387	17.557	32.161	42.881	37.873	34.051	8.215

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	15:56:11	660.0261	454649.2700	70.0003	3043.0555	2595.4041	3433.2071	2162.7806	117216.1200
2	15:56:50	497.5149	458553.4600	32.5001	2275.3106	2320.3230	3368.1805	1750.1838	115788.8700
3	15:57:30	540.0175	461126.0000	47.5001	1722.6780	2027.7467	3330.6655	1452.6266	112970.5900
4	15:58:10	420.0106	466427.9400	47.5001	1422.6214	1807.6960	2988.0356	1295.1006	110708.0200
5	15:58:49	362.5079	465742.4000	35.0001	1917.7206	1602.6541	3055.5601	977.5573	107985.1400
x		496.0154	461299.8100	46.5001	2076.2772	2070.7648	3235.1298	1527.6498	112933.7500
%RSD		23.084	1.072	31.943	29.998	19.130	6.170	29.552	3.311

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	15:56:11	1157.5804	2092.7627	580.0202	2225.2971	780.0365	635.0242	384.1755	899.2152
2	15:56:50	1172.5825	1645.1624	450.0122	2032.7479	822.5406	680.0278	330.8399	858.3775
3	15:57:30	1127.5763	1360.1110	432.5112	1665.1664	580.0202	570.0195	265.8376	892.5478
4	15:58:10	947.5539	1215.0886	322.5062	1627.6589	525.0165	597.5214	217.5028	861.7112
5	15:58:49	912.5500	802.5386	290.0051	1395.1168	432.5112	522.5164	191.6689	881.7133
x		1063.5686	1423.1327	415.0110	1789.1974	628.0250	601.0219	278.0049	878.7130
%RSD		11.619	33.883	27.721	18.669	26.654	10.030	28.622	2.070

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	15:56:11	90.8338	67.5003	748844.3300	140.0012	202.5025	202.5025	115.0008	397.5095
2	15:56:50	80.0004	89.1671	759343.6300	125.0009	215.0028	230.0032	130.0010	305.0056
3	15:57:30	87.5005	80.0004	765246.1600	95.0005	207.5026	170.0017	90.0005	275.0045
4	15:58:10	90.0005	74.1670	770049.8700	100.0006	140.0012	155.0014	70.0003	250.0038
5	15:58:49	82.5004	64.1669	766050.2400	65.0003	172.5018	125.0009	100.0006	262.5041
x		86.1671	75.0003	761906.8400	105.0007	187.5022	176.5020	101.0006	298.0055
%RSD		5.496	13.333	1.082	27.562	16.573	23.180	22.794	19.883

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	15:56:11	908866.8700	508.7655	32.5001	475.0135	326.2564	821458.3300	32.5001	2820.4772
2	15:56:50	911563.9700	416.2604	10.0000	390.0091	248.7537	829339.5600	37.5001	2132.7729
3	15:57:30	923669.4300	371.2583	15.0000	357.5077	196.2523	835432.9700	27.5000	1805.1955
4	15:58:10	921380.6400	343.7571	22.5000	332.5066	175.0018	833503.3500	32.5001	1340.1077
5	15:58:49	926744.3600	202.5025	12.5000	172.5018	126.2510	832839.1000	35.0001	1250.0938
x		918445.0500	368.5088	18.5000	345.5078	214.5030	830514.6600	33.0001	1869.7294
%RSD		0.850	30.379	49.283	32.033	35.614	0.665	11.237	34.264

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	15:56:11	182.5020	317.5061	1327348.3000	2140.2748	5045.2768	1207.5875	980.0576	2530.3841
2	15:56:50	162.5016	222.5030	1323753.1000	1503.8857	3555.7584	935.0525	815.0399	1982.7358
3	15:57:30	112.5008	205.0025	1333653.6000	1136.3275	2717.9432	785.0370	730.0320	1715.1765
4	15:58:10	92.5005	155.0014	1338659.1000	896.2982	2114.0181	670.0269	590.0209	1382.6147
5	15:58:49	65.0003	115.0008	1337311.2000	657.5259	1602.6541	547.5180	462.5128	1077.5697
x		123.0010	203.0028	1332145.0000	1266.8624	3007.1301	829.0444	715.5326	1737.6962
%RSD		39.632	37.793	0.482	45.767	44.951	30.812	27.939	32.180

Run	Time	209Bi	220Bkg
1	15:56:11	943918.5600	2.5000
2	15:56:50	948447.0400	0.0000
3	15:57:30	952238.8600	2.5000
4	15:58:10	948747.2600	0.0000
5	15:58:49	947927.6300	0.0000
x		948255.8700	1.0000
%RSD		0.312	136.931

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:00:31	267540.1500	120.0009	35633.5220	2840.4840	420.0106	455.0124	6997.9370	43513.3090
2	16:01:11	266595.5900	131.6677	36602.7090	2760.4571	380.0087	405.0098	7308.2032	43264.5180
3	16:01:51	271189.4700	130.8344	34523.8660	2575.3979	325.0063	455.0124	6792.7674	42809.6780
4	16:02:30	271322.8800	115.8341	33768.2790	2585.4010	265.0042	310.0058	6254.8465	42920.2450
5	16:03:10	271089.6400	93.3339	32543.4210	2020.2449	230.0032	350.0074	5696.9466	42083.4940
x		269547.5400	118.3342	34614.3600	2556.3970	324.0066	395.0096	6610.1401	42918.2490
%RSD		0.849	13.147	4.569	12.539	24.239	16.285	9.661	1.267

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:00:31	342.5070	475188.9500	52.5002	1430.1227	1325.1053	3125.5860	420.0106	103402.5700
2	16:01:11	415.0103	477311.5000	42.5001	1060.0674	1335.1069	3268.1407	470.0133	105858.1100
3	16:01:51	405.0098	479777.2200	55.0002	765.0351	1295.1006	3218.1213	515.0159	105468.2200
4	16:02:30	380.0087	478742.6900	47.5001	610.0223	1282.5987	3263.1388	377.5086	105225.1700
5	16:03:10	260.0041	483125.0700	62.5002	727.5318	1265.0960	3108.0795	370.0082	106579.7200
x		360.5080	478829.0900	52.0002	918.5559	1300.6015	3196.6133	430.5113	105306.7600
%RSD		17.409	0.617	14.582	35.983	2.244	2.366	14.357	1.122

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:00:31	822.5406	392.5092	222.5030	1047.5658	285.0049	632.5240	117.5008	854.2104
2	16:01:11	722.5313	382.5088	227.5031	1065.0681	370.0082	617.5229	83.3337	877.5462
3	16:01:51	767.5354	390.0091	175.0018	967.5562	360.0078	560.0188	90.0005	867.5452
4	16:02:30	717.5309	302.5055	185.0021	937.5527	312.5059	637.5244	78.3337	862.5446
5	16:03:10	825.0408	250.0038	190.0022	797.5382	332.5066	562.5190	79.1670	887.5473
x		771.0358	343.5073	200.0024	963.0562	332.0067	602.0218	89.6672	869.8787
%RSD		6.738	18.702	11.759	11.089	10.453	6.301	18.100	1.494

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:00:31	75.0003	57.5002	773717.3500	70.0003	80.0004	57.5002	50.0001	172.5018
2	16:01:11	68.3336	73.3337	781196.6700	57.5002	95.0005	125.0009	90.0005	110.0007
3	16:01:51	80.0004	80.0004	784737.2800	72.5003	65.0003	77.5004	47.5001	115.0008
4	16:02:30	70.8336	75.8337	783649.1900	72.5003	100.0006	87.5005	50.0001	107.5007
5	16:03:10	77.5004	75.8337	791575.9200	57.5002	112.5008	122.5009	55.0002	142.5012
x		74.3337	72.5003	782975.2800	66.0003	90.5005	94.0006	58.5002	129.5010
%RSD		6.411	12.028	0.824	11.858	20.337	31.107	30.459	21.471

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:00:31	940343.7700	131.2510	7.5000	117.5008	66.2503	841050.6000	105.0007	760.0347
2	16:01:11	937975.3300	161.2516	5.0000	132.5011	75.0003	855109.0900	152.5014	660.0261
3	16:01:51	953564.6300	200.0024	10.0000	178.7519	55.0002	853249.7100	167.5017	682.5280
4	16:02:30	948137.0700	228.7531	7.5000	266.2543	68.7503	856302.8400	112.5008	587.5207
5	16:03:10	955274.8800	155.0014	12.5000	125.0009	53.7502	851586.8300	132.5011	545.0178
x		947059.1300	175.2519	8.5000	164.0018	63.7502	851459.8100	134.0011	647.0255
%RSD		0.815	22.131	33.535	37.771	14.342	0.715	19.639	12.965

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:00:31	37.5001	55.0002	1359053.7000	413.7603	948.8040	372.5083	225.0030	627.5236
2	16:01:11	25.0000	50.0001	1359746.8000	335.0067	832.5416	305.0056	222.5030	552.5183
3	16:01:51	15.0000	52.5002	1367353.9000	313.7559	723.7814	260.0041	165.0016	610.0223
4	16:02:30	30.0001	65.0003	1352987.7000	278.7547	663.7764	222.5030	185.0021	545.0178
5	16:03:10	32.5001	40.0001	1366235.8000	238.7534	618.7730	207.5026	150.0014	457.5126
x		28.0001	52.5002	1361075.6000	316.0062	757.5353	273.5047	189.5022	558.5189
%RSD		30.540	17.169	0.430	20.798	17.636	24.482	17.759	11.955

Run	Time	209Bi	220Bkg
1	16:00:31	955049.9000	2.5000
2	16:01:11	961407.4000	0.0000
3	16:01:51	970903.2500	0.0000
4	16:02:30	964067.5000	7.5000
5	16:03:10	970831.8500	0.0000
x		964451.9800	2.0000
%RSD		0.696	162.980

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:04:53	267416.2600	1611.8225	T 1747238.6000	T 964472.2600	116813.0200	130950.8700	115859.8500	812508.9900
2	16:05:32	272118.1900	1588.4847	T 1778230.8000	974809.7700	120281.8400	134547.4800	114057.7400	824156.2000
3	16:06:12	273402.5500	1686.8374	T 1801309.4000	971684.4100	121397.8500	135157.2300	116577.2500	834206.2300
4	16:06:52	274988.4800	1635.1604	T 1804710.6000	983979.3900	122569.8200	133927.6200	112468.8700	834421.2400
5	16:07:31	271879.7600	1570.9814	T 1716190.3000	938812.1600	115352.8900	130828.9700	111029.7600	794544.4800
X		271961.0500	1618.6573	T 1769535.9000	T 966751.6000	119283.0800	133082.4300	113998.7000	819967.4300
%RSD		1.039	2.789	T 2.127	T 1.770	2.578	1.539	2.023	2.051

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:04:53	31002.5620	480825.1000	50.0001	34380.7760	14297.2540	39249.7150	9325.2147	723214.7400
2	16:05:32	31752.8800	485682.4900	35.0001	35151.4820	14179.5530	39370.2820	9255.1366	723552.2300
3	16:06:12	32317.5440	487914.9000	35.0001	35159.0130	14419.9650	38913.1420	9485.3953	737335.3400
4	16:06:52	31220.8750	484656.5200	65.0003	33715.5670	14362.3660	38985.9820	9152.5234	719475.9600
5	16:07:31	31015.1090	487084.6300	40.0001	34353.1630	14149.5020	37815.6070	9210.0867	713661.4700
X		31461.7940	485232.7300	45.0001	34552.0000	14281.7280	38866.9460	9285.6713	723447.9500
%RSD		1.802	0.570	28.328	1.770	0.812	1.587	1.382	1.206

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:04:53	15396.7100	9039.9005	2227.7977	10576.7080	4876.4264	3555.7584	1010.8946	2040.2497
2	16:05:32	15772.4120	9545.4638	2212.7937	10611.7520	5264.1622	3625.7886	1044.2321	1987.7370
3	16:06:12	16088.0140	9205.0812	2250.3038	10321.3880	5041.5246	3610.7821	1051.7330	2039.4162
4	16:06:52	15714.8030	9072.4359	2280.3119	10546.6700	4983.9900	3463.2195	1006.7275	2127.7716
5	16:07:31	15246.4340	8854.7018	2082.7602	10326.3940	4871.4234	3290.6496	1009.2278	2115.2684
X		15643.6750	9143.5167	2210.7935	10476.5820	5007.5053	3509.2396	1024.5630	2062.0886
%RSD		2.115	2.813	3.436	1.349	3.209	3.927	2.108	2.834

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:04:53	567.5193	80.8337	778377.8200	52.5002	52.5002	42.5001	35.0001	87.5005
2	16:05:32	630.0238	70.8336	785345.8000	30.0001	50.0001	65.0003	40.0001	75.0003
3	16:06:12	566.6859	69.1670	785540.4200	57.5002	65.0003	70.0003	35.0001	97.5006
4	16:06:52	575.0198	77.5004	786332.6700	45.0001	45.0001	82.5004	35.0001	105.0007
5	16:07:31	571.6863	65.8336	789304.9200	45.0001	67.5003	87.5005	37.5001	90.0005
X		582.1870	72.8337	784980.3300	46.0001	56.0002	69.5003	36.5001	91.0005
%RSD		4.629	8.470	0.512	22.605	17.462	25.359	6.126	12.378

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:04:53	937690.8200	6723.9616	92.5005	6254.8465	1257.5949	850029.2000	132.5011	7010.4475
2	16:05:32	941582.6400	6721.4596	77.5004	6463.7558	1303.8520	855628.5700	137.5011	7298.1944
3	16:06:12	949661.9200	6785.2613	132.5011	6756.4879	1356.3604	861759.6600	117.5008	7062.9919
4	16:06:52	951349.0700	6824.0429	82.5004	6891.5985	1308.8528	853799.4700	142.5012	6925.3765
5	16:07:31	947997.4400	6601.3636	92.5005	6262.3521	1246.3432	851075.8700	120.0009	7165.5794
X		945656.3800	6731.2178	95.5006	6525.8082	1294.6006	854458.5600	130.0010	7092.5179
%RSD		0.612	1.255	22.701	4.426	3.411	0.543	8.383	2.033

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:04:53	7035.4686	12088.7620	1363069.7000	5269.1653	12729.7150	4316.1174	3685.8149	8929.7819
2	16:05:32	7180.5923	12469.3220	1354542.6000	5429.2680	12613.2880	4406.1645	3695.8194	9102.4686
3	16:06:12	7090.5152	12529.4120	1358296.3000	5399.2485	12951.3060	4271.0943	3998.4590	9347.7399
4	16:06:52	7037.9707	12812.3420	1360574.5000	5297.9336	13166.6430	4201.0587	3805.8689	8949.8034
5	16:07:31	6965.4098	11743.2680	1366669.0000	5255.4066	12181.3970	3883.4046	3693.3183	9150.0206
X		7061.9913	12328.6210	1360630.4000	5330.2044	12728.4700	4215.5679	3775.8561	9095.9629
%RSD		1.130	3.379	0.339	1.481	2.924	4.745	3.548	1.867

Run	Time	209Bi	220Bkg
1	16:04:53	956643.0400	10.0000
2	16:05:32	960369.8700	0.0000
3	16:06:12	968879.2600	2.5000
4	16:06:52	969707.8300	0.0000
5	16:07:31	965120.8500	0.0000
X		964144.1700	2.5000
%RSD		0.579	173.205

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:09:13	253493.6100	628.3570	147330.9700	T1861484.4000	226938.5600	253137.1900	T43327931.0000	T2598240.6000
2	16:09:53	253498.7600	618.3563	145346.5800	T1892120.2000	228695.6200	254430.7000	T43548479.0000	T2675424.6000
3	16:10:32	252597.8500	654.1923	146733.0600	T1898450.4000	233100.1700	260689.7500	T44575402.0000	T2682088.8000
4	16:11:12	252516.2700	633.3574	143688.1900	T1872656.9000	227328.9800	255002.7900	T42847074.0000	T2656373.4000
5	16:11:52	252143.5700	590.0209	140761.3700	T1819321.8000	221058.6400	252544.6100	T42862289.0000	T2566538.7000
X		252850.0100	624.8568	144772.0300	T1868806.7000	227424.3900	255161.0100	T43432235.0000	T2635733.2000
%RSD		0.243	3.754	1.827	T1.679	1.899	1.271	T1.627	T1.929

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:09:13	127317.7100	474308.3500	38345.5200	108656.2800	85195.7840	1495184.4000	T1923757.8000	T25320100.0000
2	16:09:53	128619.9800	483085.3600	44259.7240	112433.3900	87264.5260	1515051.7000	1998796.7000	T25835294.0000
3	16:10:32	132594.0400	479566.8600	38659.4660	113082.0800	87383.2610	1541103.9000	2024349.2000	T26121869.0000
4	16:11:12	130509.0200	476705.7600	37471.5580	109117.2500	85887.8340	1491097.4000	T1931613.3000	T25410401.0000
5	16:11:52	127873.6300	479409.4300	40251.9790	108734.8000	85319.5410	1482505.1000	T1918113.0000	T25360457.0000
X		129382.8800	478615.1500	39797.6490	110404.7600	86210.1890	1504988.5000	T1959326.0000	T25609625.0000
%RSD		1.671	0.691	6.758	1.963	1.218	1.558	T2.490	T1.379

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:09:13	601330.3700	33800.9110	14893.2970	517839.6300	250009.8700	131753.3700	2859.6572	805.8723
2	16:09:53	608718.9400	34892.8980	15258.9570	526431.1600	255902.2400	133607.5400	2925.5134	860.8778
3	16:10:32	614710.6900	34646.8750	15511.9240	531854.8200	257319.9100	134115.6000	2899.6711	774.2026
4	16:11:12	602250.9100	33843.5840	15727.3270	523164.7800	253526.2500	131981.9400	2787.9663	792.5377
5	16:11:52	595224.5300	34232.6680	15286.5080	510995.9500	248771.1100	131898.1300	2805.4722	817.5401
X		604447.0900	34283.3870	15335.6030	522057.2700	253105.8800	132671.3200	2855.6560	810.2061
%RSD		1.236	1.408	2.032	1.534	1.453	0.832	2.067	4.023

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:09:13	95.0005	86.6671	798658.7700	2627.9143	692.5288	1232.5912	457.5126	1067.5684
2	16:09:53	115.8341	80.8337	803579.8000	2692.9350	670.0269	1387.6155	460.0127	1247.5934
3	16:10:32	120.8342	80.8337	807264.1500	2682.9318	657.5259	1270.0968	437.5115	1295.1006
4	16:11:12	82.5004	88.3338	805206.1100	2810.4738	632.5240	1105.0733	425.0108	1055.0668
5	16:11:52	107.5007	72.5003	804615.4400	2577.8987	710.0303	1092.5716	422.5107	1125.0759
X		104.3340	81.8337	803864.8500	2678.4307	672.5272	1217.5897	440.5117	1158.0810
%RSD		14.990	7.600	0.399	3.251	4.484	10.074	4.001	9.328

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:09:13	903325.1100	312.5059	62.5002	310.0058	351.2574	819595.0800	547.5180	532.5170
2	16:09:53	910176.3900	308.7557	50.0001	303.7555	348.7573	826821.8600	577.5200	595.0212
3	16:10:32	908102.3800	340.0069	45.0001	315.0060	336.2568	826268.2900	512.5158	547.5180
4	16:11:12	912570.7400	423.7608	40.0001	358.7577	367.5081	825943.3200	612.5225	472.5134
5	16:11:52	912935.0900	305.0056	32.5001	247.5037	330.0065	829854.7600	545.0178	450.0122
X		909421.9400	338.0070	46.0001	307.0057	346.7572	825696.6600	559.0188	519.5164
%RSD		0.432	14.758	24.487	12.929	4.193	0.454	6.750	11.263

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:09:13	46677.8640	82178.2070	1325081.5000	523.7665	1271.3470	207383.7700	172726.7100	427248.7400
2	16:09:53	47796.6790	83420.4590	1320258.3000	517.5161	1222.5897	209029.1200	173150.3700	434586.4500
3	16:10:32	49071.5570	85645.3580	1333487.4000	567.5193	1272.5972	211164.4500	175335.3500	434333.7700
4	16:11:12	47766.5070	83814.3820	1326538.2000	537.5173	1208.8377	206807.2000	172134.6500	428466.4300
5	16:11:52	46509.4260	81122.9430	1324359.0000	490.0144	1197.5860	203804.5700	168157.1600	417594.8800
X		47564.4070	83236.2700	1325944.9000	527.2667	1234.5915	207637.8200	172300.8500	428446.0500
%RSD		2.171	2.060	0.363	5.381	2.856	1.315	1.516	1.615

Run	Time	209Bi	220Bkg
1	16:09:13	924355.9000	0.0000
2	16:09:53	931769.9000	0.0000
3	16:10:32	922330.0500	2.5000
4	16:11:12	924212.4800	0.0000
5	16:11:52	927926.9900	0.0000
X		926119.0700	0.5000
%RSD		0.405	223.607

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:13:33	250612.5700	540.8509	115408.6500	τ1520404.3000	183595.4000	209685.3000	τ43713948.0000	τ2072134.1000
2	16:14:13	253084.8000	582.5204	118968.1900	τ1541710.0000	186422.1300	206661.1400	τ44052214.0000	τ2097272.3000
3	16:14:53	257226.2500	533.3504	119087.3700	τ1541946.2000	188845.7900	209090.6300	τ43928402.0000	τ2118570.1000
4	16:15:32	255343.8300	574.1865	115512.5800	τ1518609.2000	184198.4900	202470.1300	τ43206586.0000	τ2126037.5000
5	16:16:12	255358.4400	535.0172	116485.9900	τ1487949.8000	181168.1400	204852.3000	τ43069503.0000	τ2050974.4000
X		254325.1800	553.1851	117092.5600	τ1522123.9000	184845.9900	206551.9000	τ43594131.0000	τ2092997.7000
%RSD		0.999	4.217	1.551	τ1.454	1.577	1.449	τ1.001	τ1.504

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:13:33	75692.2040	476212.4700	41508.1190	107068.4300	72297.2590	1375014.2000	τ1255694.6000	τ23386707.0000
2	16:14:13	76560.0790	476695.1800	42832.2940	106050.5400	72239.2590	1384109.1000	1275328.7000	τ23615143.0000
3	16:14:53	77291.7870	480904.4900	41995.5520	105660.6300	72791.5340	1386607.9000	1285524.1000	τ23932193.0000
4	16:15:32	74226.6100	479943.9200	40457.9730	105850.5200	71906.3990	1364128.9000	1254105.5000	τ23297981.0000
5	16:16:12	73777.6490	482921.2500	40686.5820	103351.9500	70295.2400	1330895.4000	1230470.2000	τ22885724.0000
X		75509.6660	479335.4600	41496.1040	105596.4100	71905.9380	1368151.1000	τ1260224.6000	τ23423550.0000
%RSD		1.982	0.594	2.339	1.295	1.327	1.653	τ1.689	τ1.656

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:13:33	551507.5900	24144.9280	12857.4110	575956.1900	280882.7500	125805.0000	2467.8654	833.3750
2	16:14:13	555860.5100	24465.8620	12584.4950	587217.8400	282325.2900	125315.2000	2455.3617	796.7048
3	16:14:53	558567.8500	24731.6450	12644.5860	588324.4500	285053.3400	128373.7300	2559.5597	854.2104
4	16:15:32	550744.5200	24438.2810	12559.4570	576370.9500	281112.8200	126122.2400	2513.7124	831.7082
5	16:16:12	539647.6600	23723.7210	12371.6770	565329.2300	274427.9400	123792.7000	2396.1778	828.3745
X		551265.6300	24300.8870	12603.5250	578639.7300	280760.4300	125881.7700	2478.5354	828.8746
%RSD		1.314	1.579	1.387	1.632	1.392	1.315	2.490	2.491

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:13:33	96.6672	74.1670	795872.6900	3768.3518	407.5100	1190.0850	250.0038	760.0347
2	16:14:13	103.3340	92.5005	802840.9200	3838.3838	407.5100	1182.5839	242.5035	757.5344
3	16:14:53	132.5011	86.6671	807368.5800	5454.2844	482.5140	1217.5889	295.0052	790.0375
4	16:15:32	120.8342	74.1670	804475.3300	4171.0436	482.5140	962.5556	287.5050	692.5288
5	16:16:12	95.8339	64.1669	804151.1700	3763.3496	505.0153	1172.5825	270.0044	685.0282
X		109.8341	78.3337	802941.7400	4199.0826	457.0126	1145.0792	269.0044	737.0327
%RSD		14.726	14.352	0.533	17.181	10.090	9.029	8.482	6.234

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:13:33	910835.4000	350.0074	67.5003	336.2568	315.0060	821328.9600	2080.2596	472.5134
2	16:14:13	914470.5500	346.2572	35.0001	328.7565	316.2560	827744.5700	2320.3230	367.5081
3	16:14:53	913071.3800	395.0094	52.5002	410.0101	347.5073	830736.4600	2235.2998	437.5115
4	16:15:32	919406.9600	423.7608	45.0001	406.2599	311.2558	831948.9300	2107.7665	417.5105
5	16:16:12	912209.1800	366.2581	37.5001	297.5053	282.5048	833657.7000	2072.7577	340.0069
X		913998.6900	376.2586	47.5001	355.7577	314.5060	829083.3200	2163.2813	407.0101
%RSD		0.361	8.711	27.600	14.052	7.332	0.584	5.065	13.106

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:13:33	34820.0950	60481.1850	1313837.2000	446.2620	1192.5853	97264.3280	79969.3740	199087.5800
2	16:14:13	34882.8560	60551.6940	1311791.9000	467.5131	1235.0915	97967.4930	80151.1070	201927.1900
3	16:14:53	35169.0550	62296.9880	1317696.3000	506.2654	1205.0871	100654.2300	80375.7550	202698.0700
4	16:15:32	34651.8960	60516.4390	1328106.0000	522.5164	1140.0780	98116.7330	78987.5760	199955.4900
5	16:16:12	34240.1990	59738.3560	1309738.4000	482.5140	1223.8399	94907.3850	77253.9380	195133.1800
X		34752.8200	60716.9320	1316234.0000	485.0142	1199.3364	97782.0330	79347.5500	199760.3000
%RSD		0.984	1.558	0.551	6.247	3.083	2.104	1.619	1.486

Run	Time	209Bi	220Bkg
1	16:13:33	917830.2900	5.0000
2	16:14:13	918470.3900	2.5000
3	16:14:53	924018.9200	0.0000
4	16:15:32	923709.8100	0.0000
5	16:16:12	922888.3300	0.0000
X		921383.5500	1.5000
%RSD		0.324	149.071

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:17:54	251009.2500	318.3394	84059.3310	935465.3000	115986.5900	128025.9400	↹29514302.0000	↹1505289.5000
2	16:18:33	258195.5400	362.5079	79918.8930	954458.8400	115134.9100	130630.9000	↹29587074.0000	↹1549077.4000
3	16:19:13	254477.9400	353.3408	78162.3500	941261.7500	115961.2500	127569.0100	↹29447025.0000	↹1546981.5000
4	16:19:53	257422.1600	362.5079	78505.5540	925203.9800	113923.4300	127807.6300	↹28723839.0000	↹1540229.4000
5	16:20:32	255986.4400	351.6741	75848.6170	924451.9900	112311.7700	126741.5300	↹28919900.0000	↹1480189.0000
x		255418.2700	349.6740	79298.9490	936168.3700	114663.5900	128155.0000	↹29238428.0000	↹1524353.4000
%RSD		1.114	5.212	3.829	1.328	1.361	1.145	↹1.333	↹1.992

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:17:54	42447.8340	474152.3300	37157.6570	67250.2650	49740.5050	1053862.0000	↹2296121.3000	↹18305515.0000
2	16:18:33	43163.9990	479212.3100	35839.4020	68129.8670	49395.9650	1052997.2000	↹2286291.5000	↹18375335.0000
3	16:19:13	43535.9260	477561.4800	35038.5070	68649.1020	49690.2070	1072610.7000	↹2302350.1000	↹18451157.0000
4	16:19:53	43292.1610	479876.4400	36113.0800	66695.8360	48797.4540	1042014.2000	↹2242787.5000	↹18065876.0000
5	16:20:32	42412.6560	482397.1600	34149.8300	67116.6950	47701.1340	1037335.9000	↹2228689.3000	↹17916340.0000
x		42970.5150	478639.9500	35659.6950	67568.3530	49065.0530	1051764.0000	↹2271248.0000	↹18222845.0000
%RSD		1.189	0.638	3.181	1.182	1.732	1.296	↹1.466	↹1.230

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:17:54	428069.2800	30756.6540	7618.4809	136211.6900	67575.3800	88328.1440	1831.0345	767.5354
2	16:18:33	429213.4400	31386.4960	7548.4172	138946.2900	67925.7100	90165.1610	1951.8952	790.8709
3	16:19:13	433370.5200	31499.4210	8001.3394	138155.8100	68172.7150	90448.2030	1868.5428	789.2040
4	16:19:53	420088.1200	30972.4510	7405.7893	136407.3500	66814.2790	88247.2940	1801.0279	820.8738
5	16:20:32	413862.9400	30164.4950	7630.9923	135075.9300	65521.5760	86857.8100	1813.5306	770.8690
x		424920.8600	30955.9030	7641.0038	136959.4100	67201.9320	88809.3220	1853.2062	787.8706
%RSD		1.843	1.730	2.885	1.142	1.592	1.678	3.278	2.694

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:17:54	107.5007	67.5003	789154.0900	4133.5249	467.5131	1247.5934	315.0060	742.5331
2	16:18:33	85.8338	80.8337	792728.1100	4178.5474	482.5140	1195.0857	262.5041	717.5309
3	16:19:13	106.6674	68.3336	792560.7600	4838.9045	455.0124	1212.5882	325.0063	827.5411
4	16:19:53	115.0008	80.0004	796105.9800	4361.1409	382.5088	1115.0746	312.5059	755.0342
5	16:20:32	87.5005	67.5003	784323.4100	3905.9152	442.5118	1172.5825	275.0045	765.0351
x		100.5006	72.8337	790974.4700	4283.6066	446.0120	1188.5849	298.0054	761.5349
%RSD		12.987	9.525	0.564	8.176	8.626	4.156	9.217	5.378

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:17:54	914392.6500	201.2524	45.0001	190.0022	227.5031	824040.5600	727.5318	362.5079
2	16:18:33	918878.1300	186.2521	62.5002	183.7520	258.7540	831050.5800	770.0356	405.0098
3	16:19:13	920784.8700	220.0029	62.5002	203.7525	257.5040	829849.2500	652.5256	407.5100
4	16:19:53	919184.2900	257.5040	40.0001	255.0039	233.7533	826978.8500	625.0234	375.0084
5	16:20:32	917213.8900	211.2527	32.5001	148.7513	230.0032	828581.9700	690.0286	360.0078
x		918090.7700	215.2528	48.5001	196.2524	241.5035	828100.2500	693.0290	382.0088
%RSD		0.264	12.424	27.902	19.668	6.354	0.329	8.350	5.988

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:17:54	28541.2930	50427.1130	1306781.1000	376.2585	872.5457	66065.8480	54062.2970	135408.7700
2	16:18:33	28787.1360	50681.1480	1322445.3000	385.0089	916.3004	65194.0220	54744.2270	135302.0500
3	16:19:13	29243.7220	50578.0240	1318496.8000	398.7595	927.5516	66186.8020	54708.9970	136813.9400
4	16:19:53	28689.3000	49494.0440	1317777.8000	406.2599	895.0481	64387.7900	53257.1370	133709.1500
5	16:20:32	27492.7760	48161.2690	1321836.6000	380.0087	853.7937	62669.7670	52228.1560	131131.1700
x		28550.8450	49868.3200	1317467.5000	389.2591	893.0479	64900.8460	53800.1630	134473.0200
%RSD		2.266	2.134	0.479	3.280	3.404	2.225	1.983	1.612

Run	Time	209Bi	220Bkg
1	16:17:54	920784.8700	0.0000
2	16:18:33	921813.5700	0.0000
3	16:19:13	923967.4000	0.0000
4	16:19:53	917316.8600	7.5000
5	16:20:32	926054.9100	0.0000
x		921987.5200	1.5000
%RSD		0.359	223.607

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:22:14	256241.6000	392.5092	90129.7810	1057929.8000	130432.8400	142640.4200	τ32879433.0000	τ1686163.7000
2	16:22:54	253990.9100	380.0087	82243.8500	1079484.2000	131001.6600	145987.6400	τ33336627.0000	τ1712870.7000
3	16:23:34	255060.3500	409.1767	85453.4020	1086175.7000	133312.8800	150878.6100	τ33854954.0000	τ1744773.4000
4	16:24:14	255689.1800	407.5100	83122.5040	1083436.1000	135441.8000	150288.0800	τ33769547.0000	τ1752968.7000
5	16:24:53	256399.6900	398.3429	81430.9250	1094416.6000	133693.9100	149967.3800	τ34006567.0000	τ1711703.5000
X		255476.3500	397.5095	84476.0920	1080288.5000	132776.6200	147952.4200	τ33569426.0000	τ1721696.0000
%RSD		0.385	2.998	4.144	1.263	1.547	2.393	τ1.368	τ1.578

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:22:14	49335.6090	474207.8600	34149.8300	77904.9570	59098.8200	1285155.7000	τ2815778.5000	τ22098799.0000
2	16:22:54	49584.5800	475593.5800	34925.5350	80196.5410	58665.7760	τ1321890.1000	τ2872212.8000	τ22137962.0000
3	16:23:34	49448.7770	475432.2600	36361.6580	79515.0570	59554.5470	1313825.6000	τ2877120.8000	τ22697462.0000
4	16:24:14	51249.6080	480003.4500	34400.8590	79593.2990	59886.9160	1306472.9000	τ2907875.3000	τ22590729.0000
5	16:24:53	51038.3170	480485.0500	36964.3000	79714.4490	58899.9190	1323391.9000	τ2877635.2000	τ22706346.0000
X		50131.3780	477144.4400	35360.4360	79384.8610	59221.1960	τ1310147.2000	τ2870124.5000	τ22446260.0000
%RSD		1.858	0.605	3.507	1.094	0.836	τ1.185	τ1.167	τ1.350

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:22:14	518464.2300	39639.0520	8934.7873	311079.8500	154109.4300	126208.5300	2316.1552	759.2013
2	16:22:54	524446.7200	39862.6140	8989.8464	319948.8500	155902.3200	126244.0700	2151.1109	777.5363
3	16:23:34	532315.3700	40606.1910	9247.6283	325531.4300	158187.2800	128117.3300	2321.9901	776.7029
4	16:24:14	525428.2400	40033.4300	9037.3978	320141.0200	157978.3700	129285.1600	2324.4908	748.3669
5	16:24:53	527482.1000	40626.2890	9054.9168	321075.9800	157812.7800	127046.1200	2222.7964	806.7057
X		525627.3300	40153.5150	9052.9153	319555.4300	156798.0300	127380.2400	2267.3087	773.7026
%RSD		0.956	1.108	1.308	1.644	1.122	1.035	3.426	2.865

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:22:14	97.5006	83.3337	783958.8800	4311.1149	557.5187	1452.6266	357.5077	857.5441
2	16:22:54	91.6672	69.1670	795606.4900	4618.7796	580.0202	1460.1279	402.5097	950.0542
3	16:23:34	95.0005	88.3338	791896.8700	4631.2866	565.0192	1410.1193	382.5088	892.5478
4	16:24:14	111.6674	69.1670	787410.1300	4638.7907	565.0192	1402.6180	342.5070	985.0582
5	16:24:53	90.0005	93.3339	797470.1200	4313.6161	555.0185	1345.1086	392.5092	905.0491
X		97.1672	80.6671	791268.5000	4502.7176	564.5191	1414.1201	375.5085	918.0507
%RSD		8.863	13.732	0.709	3.862	1.727	3.262	6.631	5.445

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:22:14	905056.1900	255.0039	37.5001	257.5040	296.2553	824522.4100	700.0294	257.5040
2	16:22:54	915230.0300	215.0028	52.5002	241.2535	340.0069	828314.7700	672.5271	297.5053
3	16:23:34	914556.7800	313.7559	60.0002	273.7545	283.7548	824404.0100	690.0286	280.0047
4	16:24:14	911925.5100	301.2555	52.5002	266.2543	287.5050	830667.5700	682.5280	312.5059
5	16:24:53	909876.1000	236.2534	52.5002	216.2528	276.2546	830166.1000	607.5221	342.5070
X		911328.9200	264.2543	51.0002	251.0038	296.7553	827614.9700	670.5270	298.0054
%RSD		0.451	15.960	16.110	9.118	8.501	0.363	5.464	10.816

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:22:14	33778.3200	58383.8060	1304734.5000	407.5100	1000.0600	75583.7270	62289.4320	156444.8400
2	16:22:54	34184.9730	59181.9060	1314262.0000	400.0096	1036.3144	76090.8100	63193.7020	160689.4700
3	16:23:34	34636.8330	60725.4520	1320325.2000	425.0108	985.0582	77465.8920	64002.3380	160750.6300
4	16:24:14	33898.8080	59418.5820	1318147.5000	456.2625	1048.8160	77443.1820	64483.5260	161214.4700
5	16:24:53	33695.4860	59632.6020	1320834.8000	442.5118	1076.3195	77339.7280	64523.8360	161856.7400
X		34038.8840	59468.4700	1315660.8000	426.2609	1029.3136	76784.6680	63698.5670	160191.2300
%RSD		1.123	1.424	0.504	5.510	3.587	1.152	1.496	1.340

Run	Time	209Bi	220Bkg
1	16:22:14	916867.4500	2.5000
2	16:22:54	920828.0200	5.0000
3	16:23:34	925187.2600	2.5000
4	16:24:14	928031.4700	2.5000
5	16:24:53	928719.6800	2.5000
X		923926.7800	3.0000
%RSD		0.543	37.268

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:26:35	255646.2300	315.8393	93923.8350	↹3579238.0000	431325.9300	479515.2700	↹23278606.0000	↹1221591.1000
2	16:27:15	257036.3600	285.0049	94282.8550	↹3598961.1000	439064.7800	483257.4200	↹23410207.0000	↹1231945.1000
3	16:27:54	256827.5600	315.0060	96050.3690	↹3618211.8000	435031.2800	488966.4200	↹23443502.0000	↹1235772.9000
4	16:28:34	257590.5800	313.3392	94576.1510	↹3556538.7000	432446.8400	485115.8700	↹23033324.0000	1260090.6000
5	16:29:14	257160.0900	295.8386	92316.0180	↹3499022.8000	431620.6100	479531.1400	↹23149074.0000	↹1190215.5000
X		256852.1600	305.0056	94229.8460	↹3570394.5000	433897.8900	483277.2300	↹23262942.0000	↹1227923.0000
%RSD		0.284	4.552	1.423	↹1.289	0.746	0.827	↹0.745	↹2.066

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:26:35	226720.2300	469271.0800	29615.0300	53060.8910	41143.8190	761677.9100	↹2021902.6000	↹13141332.0000
2	16:27:15	230368.2600	475748.3000	30315.0400	52751.4360	40802.1450	751110.2800	↹1997460.2000	↹13173677.0000
3	16:27:54	228212.6500	473047.1000	29534.7450	53209.3330	40809.6820	756250.4300	↹2024627.7000	↹13259353.0000
4	16:28:34	229029.6100	475862.0300	28937.6560	51307.4630	39782.2310	749524.0500	↹1999226.0000	↹13037551.0000
5	16:29:14	226666.3000	475909.6300	28942.6740	52278.4700	40322.3180	748041.8400	↹1978078.8000	↹13102732.0000
X		228199.4100	473967.6300	29469.0290	52521.5190	40572.0390	753320.9000	↹2004259.0000	↹13142929.0000
%RSD		0.691	0.610	1.935	1.459	1.306	0.744	↹0.961	↹0.628

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:26:35	305055.6800	15782.4310	7140.5579	49003.6590	23834.0350	104192.3200	1782.6907	850.8768
2	16:27:15	309507.9200	15742.3550	6972.9161	49114.3080	24245.2190	103389.9100	1729.3461	805.0389
3	16:27:54	306302.6900	15299.0310	7123.0430	49843.6190	24711.5860	104159.4100	1657.6649	771.7024
4	16:28:34	303705.1700	15301.5350	6887.8454	49038.8650	24152.4500	102744.5100	1691.0049	801.7052
5	16:29:14	307205.0100	15256.4530	6755.2369	48920.6740	23726.2280	102225.6800	1677.6689	829.2079
X		306355.2900	15476.3610	6975.9198	49184.2250	24133.9030	103342.3700	1707.6751	811.7062
%RSD		0.718	1.694	2.325	0.763	1.608	0.838	2.895	3.688

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:26:35	90.8338	69.1670	778328.5200	3360.6775	370.0082	927.5516	242.5035	607.5221
2	16:27:15	100.8339	72.5003	773865.1700	3320.6615	405.0098	925.0513	245.0036	607.5221
3	16:27:54	100.0006	76.6670	777969.7300	3643.2962	355.0076	980.0576	185.0021	542.5177
4	16:28:34	108.3340	80.8337	779224.2000	3418.2009	375.0084	892.5478	250.0038	575.0198
5	16:29:14	100.0006	73.3337	778243.6200	3638.2941	425.0108	932.5522	250.0038	530.0169
X		100.0006	74.5003	777526.2500	3476.2260	386.0090	931.5521	234.5033	572.5197
%RSD		6.208	5.951	0.270	4.436	7.351	3.366	11.881	6.275

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:26:35	909684.2500	522.5164	77.5004	483.7640	660.0261	818398.0700	1987.7370	310.0058
2	16:27:15	902955.6000	508.7655	102.5006	472.5134	640.0246	819476.7400	2145.2761	320.0061
3	16:27:54	911664.0900	551.2682	72.5003	496.2648	688.7785	821268.4100	2167.7819	327.5064
4	16:28:34	907935.5900	506.2654	55.0002	501.2651	631.2739	821312.4500	2015.2436	372.5083
5	16:29:14	913725.0400	482.5140	80.0004	445.0119	635.0242	824684.8700	1972.7335	310.0058
X		909192.9100	514.2659	77.5004	479.7638	651.0255	821028.1100	2057.7544	328.0065
%RSD		0.451	4.900	21.997	4.673	3.662	0.291	4.461	7.910

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:26:35	29344.0740	50970.4040	1304286.9000	325.0063	787.5372	162264.5500	133848.8700	334457.1600
2	16:27:15	28734.4550	50806.9100	1296387.3000	317.5061	786.2871	161036.0700	134326.4600	337959.2900
3	16:27:54	29436.9000	51101.2010	1313106.9000	340.0069	788.7873	163618.1400	136308.2500	336936.6000
4	16:28:34	28960.2340	50738.9980	1308421.0000	337.5068	820.0404	161408.1600	134758.3500	333200.8000
5	16:29:14	29206.0900	50127.8160	1320965.9000	287.5050	773.7859	159787.3700	131123.5500	328894.7000
X		29136.3510	50749.0660	1308633.6000	321.5062	791.2876	161622.8600	134073.1000	334289.7100
%RSD		0.987	0.739	0.706	6.566	2.169	0.883	1.409	1.066

Run	Time	209Bi	220Bkg
1	16:26:35	913982.3400	2.5000
2	16:27:15	917049.7100	0.0000
3	16:27:54	916736.6700	0.0000
4	16:28:34	917585.4000	2.5000
5	16:29:14	913229.9200	0.0000
X		915716.8100	1.0000
%RSD		0.215	136.931

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:30:56	259597.2600	353.3408	110322.9700	T4820353.5000	584530.9500	653523.6900	T28090583.0000	T1370763.4000
2	16:31:36	261171.1500	339.1736	112808.4100	T4816952.2000	593738.9700	648616.6600	T28163131.0000	T1365642.9000
3	16:32:15	259769.1600	323.3396	112370.0500	T4826187.8000	584697.0200	661735.2800	T28432226.0000	T1407184.2000
4	16:32:55	262703.1900	305.8390	112484.0700	T4750389.6000	575322.0600	645066.3300	T27581713.0000	T1399127.0000
5	16:33:35	263917.3300	335.0067	106164.4700	T4649199.4000	564909.6600	628558.6400	T27263160.0000	T1312856.6000
X		261431.6200	331.3399	110829.9900	T4772616.5000	580639.7300	647500.1200	T27906163.0000	T1371114.8000
%RSD		0.715	5.384	2.514	T1.583	1.884	1.899	T1.696	T2.707

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:30:56	295997.6400	479763.9900	34152.3400	61518.7380	47075.0890	882007.7800	T2211560.2000	T15307955.0000
2	16:31:36	297945.2400	478139.5000	34252.7510	62586.6460	47065.0330	883679.2200	T2220110.9000	T15474331.0000
3	16:32:15	300403.6800	478343.2000	33559.9400	61407.9250	47032.3490	896048.8700	T2236572.6000	T15387193.0000
4	16:32:55	293519.7700	480885.9700	32766.7930	61161.1200	45818.1130	872057.8300	T2187785.2000	T15089373.0000
5	16:33:35	289140.6000	480469.1800	33228.6170	60947.0610	46036.8130	853111.5900	T2153429.7000	T14871957.0000
X		295401.3900	479520.3700	33592.0880	61524.2980	46605.4790	877381.0600	T2201891.7000	T15226162.0000
%RSD		1.462	0.258	1.862	1.030	1.339	1.826	T1.467	T1.603

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:30:56	358371.0900	17508.3730	8699.5385	51833.2010	25754.7370	112793.2100	1893.5484	775.8695
2	16:31:36	357035.5500	17901.7080	8281.6131	52834.4600	25814.9230	114247.8200	1978.5682	805.8723
3	16:32:15	358952.8400	18345.1710	8927.2792	53244.5570	26125.8900	115940.9700	1936.0582	789.2040
4	16:32:55	351930.1200	17380.6060	8264.0957	52487.2760	25193.0240	112514.4800	1941.8929	759.2013
5	16:33:35	346861.6100	17809.0090	8509.3423	51586.6780	25177.9780	110961.3600	1829.3674	816.7067
X		354630.2400	17788.9730	8536.3738	52397.2340	25613.3100	113291.5700	1915.8870	789.3707
%RSD		1.452	2.118	3.309	1.313	1.621	1.664	2.975	2.911

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:30:56	90.8338	62.5002	780251.4800	4201.0587	362.5079	1050.0662	235.0033	637.5244
2	16:31:36	82.5004	63.3336	780243.2600	4328.6239	435.0114	1090.0713	232.5032	680.0278
3	16:32:15	113.3341	71.6670	779887.1200	4201.0587	405.0098	1067.5684	220.0029	687.5284
4	16:32:55	105.0007	66.6669	784471.4100	4038.4783	380.0087	1092.5716	237.5034	627.5236
5	16:33:35	104.1673	66.6669	781621.3600	4311.1149	315.0060	1052.5665	267.5043	652.5256
X		99.1673	66.1669	781294.9300	4216.0669	379.5087	1070.5688	238.5034	657.0259
%RSD		12.422	5.461	0.243	2.748	11.916	1.879	7.360	3.977

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:30:56	893242.7400	436.2614	45.0001	422.5107	543.7677	821535.4000	2320.3230	352.5075
2	16:31:36	904439.2900	510.0156	70.0003	456.2625	533.7671	819619.8400	2207.7924	292.5051
3	16:32:15	904717.1700	513.7658	72.5003	448.7621	536.2672	825334.7200	2257.8058	330.0065
4	16:32:55	912576.3000	510.0156	60.0002	488.7643	523.7665	824026.8000	2080.2596	300.0054
5	16:33:35	908933.5900	467.5131	60.0002	412.5102	447.5120	824657.3300	2287.8140	297.5053
X		904781.8200	487.5143	61.5002	445.7620	517.0161	823034.8200	2230.7990	314.5060
%RSD		0.803	7.053	17.626	6.744	7.641	0.290	4.204	8.211

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:30:56	33040.3700	58612.9060	1284671.3000	298.7554	833.7917	163934.2600	133076.6500	336489.0500
2	16:31:36	33208.5370	58862.1540	1297630.3000	356.2576	806.2890	162501.6100	134288.3500	335484.7500
3	16:32:15	33582.5310	58124.5030	1292078.8000	365.0080	887.5473	164941.3400	137390.8100	341949.7300
4	16:32:55	33396.7870	58001.1480	1291451.8000	367.5081	863.7948	161469.3300	134913.3300	335354.6700
5	16:33:35	32330.0930	56309.6060	1287067.3000	338.7569	847.5431	158024.2300	130897.5400	324247.8200
X		33111.6640	57982.0630	1290579.9000	345.2572	847.7932	162174.1500	134113.3400	334705.2000
%RSD		1.455	1.723	0.387	8.206	3.614	1.648	1.781	1.925

Run	Time	209Bi	220Bkg
1	16:30:56	899033.6200	2.5000
2	16:31:36	899901.4700	2.5000
3	16:32:15	909650.8900	0.0000
4	16:32:55	908512.4100	0.0000
5	16:33:35	911544.5100	2.5000
X		905728.5800	1.5000
%RSD		0.643	91.287

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:35:15	253526.2500	7641.0015	112288.9700	↹4699204.0000	564455.3700	634580.3300	↹28811128.0000	↹1345813.5000
2	16:35:55	259609.3000	7919.5947	115786.3400	↹4729485.5000	581981.4600	645508.7000	↹29447237.0000	↹1385434.6000
3	16:36:34	262288.7700	8042.2121	113692.8100	↹4932763.5000	592344.8100	658433.5000	↹30087371.0000	↹1403130.5000
4	16:37:14	260513.5400	7977.1496	113330.4200	↹4880822.0000	600884.8900	657390.8100	↹29809528.0000	↹1415944.3000
5	16:37:54	263821.0200	8055.5583	114544.3500	↹4847918.7000	595331.8000	649383.0300	↹29817478.0000	↹1371742.3000
x		259951.7700	7927.1032	113928.5800	↹4818038.7000	586999.6700	649059.2700	↹29594549.0000	↹1384413.1000
%RSD		1.516	2.131	1.156	↹2.074	2.445	1.501	↹1.668	↹1.977

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:35:15	293478.3500	472009.4200	33883.7470	383524.4400	170899.6100	860960.5500	↹2648310.9000	↹14784454.0000
2	16:35:55	293804.5500	471303.6100	34912.9820	388046.7500	172532.7500	872536.7900	↹2676131.8000	↹15081698.0000
3	16:36:34	302471.4900	478773.1200	33891.2770	394900.2000	177842.6400	881569.8800	↹2727602.5000	↹15200941.0000
4	16:37:14	301815.8500	479185.8600	35226.7990	394892.3400	174462.3100	881669.6600	↹2712711.9000	↹15099072.0000
5	16:37:54	301901.3700	483428.1600	35701.3120	395843.4100	176913.1700	893103.9800	↹2721957.7000	↹15309980.0000
x		298694.3200	476940.0300	34723.2230	391441.4300	174530.1000	877968.1700	↹2697343.0000	↹15095229.0000
%RSD		1.547	1.082	2.341	1.384	1.666	1.365	↹1.259	↹1.300

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:35:15	346929.3400	448397.5700	104496.0800	164862.3000	80060.2400	172514.8900	5409.2550	2978.8657
2	16:35:55	353249.2000	456030.5100	107025.3800	168233.6800	81393.0580	176269.7500	5608.5534	3078.0684
3	16:36:34	354508.5300	461745.1600	108390.3500	169583.1300	83503.7870	182075.0900	5716.9603	3088.9057
4	16:37:14	352925.9300	465284.0800	108767.7200	171899.8700	84104.7860	180404.3300	5561.8554	3040.5546
5	16:37:54	353775.8500	461903.5800	108537.2500	171404.8300	82357.4640	179709.5600	5755.3201	3116.4159
x		352277.7700	458672.1800	107443.3600	169196.7600	82283.8670	178194.7200	5610.3889	3060.5621
%RSD		0.866	1.447	1.659	1.673	1.973	2.141	2.444	1.737

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:35:15	1047.5658	59.1669	763578.0600	3585.7713	397.5095	962.5556	207.5026	675.0273
2	16:35:55	1078.4031	78.3337	774264.8700	3438.2091	377.5086	1020.0624	262.5041	675.0273
3	16:36:34	1020.8959	67.5003	774609.8200	3830.8803	497.5149	1047.5658	310.0058	665.0265
4	16:37:14	1043.3987	85.0004	781867.9600	3565.7627	415.0103	1077.5697	255.0039	712.5305
5	16:37:54	1101.7395	86.6671	772666.2100	3463.2195	467.5131	1072.5690	285.0049	650.0254
x		1058.4006	75.3337	773397.3800	3576.7686	431.0113	1036.0645	264.0043	675.5274
%RSD		2.998	15.617	0.845	4.351	11.598	4.539	14.464	3.416

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:35:15	886679.1800	30109.2960	482.5140	28950.2000	6456.2500	800407.7200	1697.6729	9683.1225
2	16:35:55	894708.1400	30594.8100	427.5110	29120.7920	6585.1008	801382.5700	1670.1674	9953.4407
3	16:36:34	898825.3500	31641.2060	487.5143	30177.0400	6743.9778	810309.5100	1630.1594	9813.2746
4	16:37:14	903511.2600	31839.4590	470.0133	30589.7910	6601.3636	815842.2600	1762.6864	10041.0460
5	16:37:54	894988.4800	30488.1700	477.5137	29302.6780	6875.3350	817223.2400	1675.1684	9648.0819
x		895742.4800	30934.5880	469.0132	29628.1000	6652.4055	809033.0600	1687.1709	9827.7931
%RSD		0.692	2.459	5.135	2.416	2.420	0.973	2.888	1.723

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:35:15	161288.3800	282878.5900	1247613.1000	23945.6040	57014.3730	163954.6600	136785.9900	341546.1700
2	16:35:55	163133.7800	287575.3100	1267561.7000	24365.5690	58454.2980	167427.6900	139162.3500	347109.1000
3	16:36:34	166091.3500	291234.1400	1259830.3000	24790.5700	59446.2780	169254.0400	139327.5700	350566.9200
4	16:37:14	167573.0700	290864.0500	1264629.8000	24843.2260	59272.5470	169567.8200	141249.5300	350040.4700
5	16:37:54	165716.5000	289497.6800	1271580.5000	24627.5870	58434.1570	167200.7000	138531.9700	344246.4500
x		164760.6100	288409.9500	1262243.1000	24514.5110	58524.3310	167480.9800	139011.4800	346701.8200
%RSD		1.526	1.182	0.732	1.503	1.644	1.336	1.155	1.106

Run	Time	209Bi	220Bkg
1	16:35:15	884781.2100	0.0000
2	16:35:55	884527.5300	2.5000
3	16:36:34	887880.0100	0.0000
4	16:37:14	889670.4600	0.0000
5	16:37:54	883321.6200	2.5000
x		886036.1700	1.0000
%RSD		0.298	136.931

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:39:37	263285.3000	347.5073	113606.6500	↹4669064.2000	564396.5800	628693.2500	↹28515964.0000	↹1356192.6000
2	16:40:16	262449.5500	355.0076	113586.3700	↹4766616.9000	575070.5600	633502.8000	↹28891476.0000	↹1405477.4000
3	16:40:56	260710.3800	378.3419	↹122981.1000	↹4812369.8000	582875.8400	651671.7600	↹29214976.0000	↹1421177.8000
4	16:41:36	266955.1600	374.1751	115913.0800	↹4881011.0000	583684.6100	657093.7000	↹29166042.0000	↹1420474.9000
5	16:42:15	268848.7700	349.1740	115129.8400	↹4853705.7000	596302.6700	644370.4700	↹29330316.0000	↹1394885.0000
X		264449.8300	360.8412	↹116243.4100	↹4796553.5000	580466.0500	643066.3900	↹29023755.0000	↹1399641.5000
%RSD		1.268	3.997	↹3.353	↹1.738	2.028	1.857	↹1.125	↹1.905

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:39:37	287489.9400	478796.9300	35224.2880	62891.4280	47417.0200	867159.0200	↹2164872.3000	↹15049578.0000
2	16:40:16	292631.8500	480581.6400	36640.3740	63201.2590	48377.5170	886429.6100	↹2191024.8000	↹15286898.0000
3	16:40:56	296461.1900	481048.7200	37993.9150	64176.1670	49094.1900	899683.4600	↹2205192.4000	↹15559149.0000
4	16:41:36	299491.7200	486556.3200	38119.4870	64561.6270	48762.2490	891910.7700	↹2235877.4000	↹15499099.0000
5	16:42:15	295477.1500	487718.9100	37217.9250	65027.7300	49217.4130	907326.8300	↹2213729.2000	↹15433876.0000
X		294310.3700	482940.5000	37039.1980	63971.6420	48573.6780	890501.9400	↹2202139.2000	↹15365720.0000
%RSD		1.540	0.817	3.184	1.412	1.491	1.713	↹1.200	↹1.326

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:39:37	349438.4800	17708.7960	8541.8756	52565.2650	25466.3530	112088.8000	1866.8758	737.5326
2	16:40:16	353538.6000	17708.7960	8789.6330	53106.1780	26018.0530	114683.7500	1906.8848	805.0389
3	16:40:56	363138.4600	18615.7700	8684.5229	53951.5830	26324.0120	113905.6900	2010.2424	799.2050
4	16:41:36	359659.8700	18287.5440	9285.1700	53234.4930	26617.4420	117571.0700	1997.7394	798.3716
5	16:42:15	362512.0500	18573.1750	8932.2846	53830.8060	26356.6140	115380.7700	1886.8803	821.7072
X		357657.4900	18178.8160	8846.6972	53337.6650	26156.4950	114726.0100	1933.7245	792.3711
%RSD		1.667	2.460	3.207	1.061	1.684	1.752	3.405	4.046

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:39:37	98.3339	74.1670	773386.1200	4010.9650	402.5097	1245.0930	237.5034	602.5218
2	16:40:16	105.0007	69.1670	768112.7400	4286.1020	382.5088	1127.5763	307.5057	615.0227
3	16:40:56	104.1673	84.1671	775721.4300	4221.0688	362.5079	1187.5846	247.5037	575.0198
4	16:41:36	91.6672	61.6669	775721.4300	4373.6474	355.0076	1085.0706	247.5037	707.5300
5	16:42:15	98.3339	70.8336	777498.6600	4108.5125	352.5075	1150.0794	255.0039	632.5240
X		99.5006	72.0003	774088.0800	4200.0591	371.0083	1159.0808	259.0041	626.5237
%RSD		5.415	11.387	0.471	3.411	5.710	5.241	10.740	7.964

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:39:37	890970.1800	463.7629	75.0003	418.7605	443.7618	808434.9000	1860.2076	387.5090
2	16:40:16	894719.2500	465.0130	60.0002	461.2628	486.2642	808371.6800	1855.2065	332.5066
3	16:40:56	895588.0600	471.2633	65.0003	465.0130	480.0138	808280.9900	1947.7276	320.0061
4	16:41:36	900011.1700	502.5152	75.0003	456.2625	513.7658	815094.0900	1935.2247	340.0069
5	16:42:15	911355.4100	468.7632	75.0003	425.0108	428.7610	805305.0100	1960.2305	367.5081
X		898528.8100	474.2635	70.0003	445.2619	470.5133	809097.3300	1911.7194	349.5074
%RSD		0.875	3.389	10.102	4.868	7.260	0.446	2.622	7.859

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:39:37	32136.8470	56181.2440	1251264.7000	358.7577	851.2935	153251.3200	128386.4200	318157.1700
2	16:40:16	33253.7160	58167.3000	1265911.8000	332.5066	883.7969	158123.5800	130379.5100	322834.5000
3	16:40:56	33389.2570	59270.0290	1273576.0000	381.2587	922.5511	157456.1200	130694.3900	326220.0900
4	16:41:36	33411.8470	58051.4970	1267865.6000	392.5092	881.2966	158707.0200	130691.8500	329170.2700
5	16:42:15	32872.2070	57764.5130	1262847.4000	358.7577	872.5457	157252.3300	129137.9000	325165.0400
X		33012.7750	57886.9170	1264293.1000	364.7580	882.2967	156958.0800	129858.0100	324309.4200
%RSD		1.621	1.920	0.654	6.363	2.934	1.370	0.803	1.272

Run	Time	209Bi	220Bkg
1	16:39:37	881908.0100	0.0000
2	16:40:16	890240.5400	5.0000
3	16:40:56	888724.5600	2.5000
4	16:41:36	882280.7900	2.5000
5	16:42:15	883460.2300	2.5000
X		885322.8300	2.5000
%RSD		0.438	70.711

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:43:56	262567.3400	113.3341	36587.6430	931840.9800	114425.2300	126056.2500	T 5612347.2000	290105.7900
2	16:44:36	264006.7600	103.3340	36469.6280	957466.2700	116615.2800	127310.1000	T 5627798.8000	296564.7800
3	16:45:15	266435.5900	99.1673	37200.3470	969629.4500	116818.0900	129848.8200	T 5695761.1000	298546.1800
4	16:45:55	267321.6300	117.5008	39199.4800	960553.0300	115793.9400	128965.2600	T 5659462.2000	T 297641.7300
5	16:46:35	267319.9100	100.0006	37099.9010	934065.5800	112747.6000	125634.9600	T 5553294.5000	289580.4800
X		265530.2500	106.6674	37311.4000	950711.0600	115280.0300	127563.0800	T 5629732.8000	T 294487.7900
%RSD		0.806	7.754	2.953	1.771	1.474	1.426	T 0.948	T 1.461

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:43:56	57704.0960	474567.5000	6632.6385	12849.9000	9998.4946	171409.9400	423391.6700	T 3074928.1000
2	16:44:36	57704.0960	476968.9400	6597.6107	13010.1480	10246.2950	174230.0200	427122.5100	T 3099063.6000
3	16:45:15	58889.8480	482724.0500	7706.0614	12371.6770	10504.1160	175488.5200	432441.5800	T 3146631.6000
4	16:45:55	59040.9110	479922.7500	6665.1644	12416.7440	10308.8720	173385.1700	430536.6400	T 3120148.7000
5	16:46:35	57653.7500	476479.6100	6752.7349	12935.0310	10228.7740	171555.3800	420747.6800	T 3062375.4000
X		58198.5400	478132.5700	6870.8420	12716.7000	10257.3100	173213.8100	426848.0200	T 3100629.5000
%RSD		1.207	0.670	6.847	2.361	1.768	1.010	1.136	T 1.097

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:43:56	68780.1760	3598.2767	1840.2032	11072.3510	5624.3974	23906.7430	402.5097	717.5309
2	16:44:36	69506.1630	3570.7649	1915.2201	11290.1430	5659.4211	24034.6100	465.8464	700.0294
3	16:45:15	70895.2910	3608.2810	1860.2076	11342.7140	5606.8856	23896.7140	389.1758	712.5305
4	16:45:55	69750.6930	3475.7247	1850.2054	11267.6120	5559.3538	24022.0740	406.6766	740.0329
5	16:46:35	68213.0430	3600.7778	1740.1817	10957.1990	5466.7926	22996.6870	422.5107	723.3647
X		69429.0730	3570.7650	1841.2036	11186.0040	5583.3701	23771.3660	417.3438	718.6977
%RSD		1.469	1.540	3.449	1.464	1.334	1.841	7.094	2.046

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:43:56	97.5006	69.1670	752522.0200	895.0481	105.0007	272.5045	45.0001	127.5010
2	16:44:36	91.6672	65.0003	754649.6100	835.0418	87.5005	230.0032	50.0001	142.5012
3	16:45:15	85.8338	85.8338	750698.0000	892.5478	75.0003	190.0022	62.5002	152.5014
4	16:45:55	60.8336	72.5003	755963.5700	860.0444	85.0004	195.0023	62.5002	142.5012
5	16:46:35	76.6670	64.1669	757162.9700	757.5344	72.5003	257.5040	50.0001	132.5011
X		82.5004	71.3336	754199.2300	848.0433	85.0004	229.0032	54.0002	139.5012
%RSD		17.393	12.297	0.346	6.643	15.141	16.019	14.858	6.987

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:43:56	903569.6100	111.2507	12.5000	107.5007	125.0009	810446.9700	445.0119	102.5006
2	16:44:36	906245.6300	136.2511	10.0000	110.0007	101.2506	815242.6200	457.5126	105.0007
3	16:45:15	906893.2200	116.2508	27.5000	143.7512	95.0005	814637.5200	482.5140	102.5006
4	16:45:55	911633.5000	172.5018	12.5000	146.2513	133.7511	818852.0900	445.0119	80.0004
5	16:46:35	919933.0500	130.0010	20.0000	130.0010	106.2507	816032.0600	610.0223	107.5007
X		909655.0000	133.2511	16.5000	127.5010	112.2508	815042.2500	488.0145	99.5006
%RSD		0.708	18.125	43.651	14.292	14.634	0.372	14.324	11.152

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:43:56	6367.4317	11179.9950	1257528.4000	120.0009	302.5055	31760.4080	26584.8380	64914.3510
2	16:44:36	6409.9643	11527.9680	1259853.4000	111.2507	286.2549	31348.8540	25935.2960	65304.8850
3	16:45:15	6277.3634	11054.8280	1264456.2000	122.5009	283.7548	31717.7460	26735.3180	65811.3460
4	16:45:55	6419.9720	11452.8650	1268088.5000	131.2510	370.0082	32079.1260	26599.8860	65524.0960
5	16:46:35	6257.3484	11190.0080	1271870.1000	131.2510	318.7561	31527.0250	25616.8130	63881.4150
X		6346.4160	11281.1330	1264359.3000	123.2509	312.2559	31686.6320	26294.4300	65087.2190
%RSD		1.184	1.774	0.463	6.826	11.278	0.864	1.863	1.151

Run	Time	209Bi	220Bkg
1	16:43:56	895961.4200	2.5000
2	16:44:36	897678.5600	0.0000
3	16:45:15	897414.7900	10.0000
4	16:45:55	902154.1200	0.0000
5	16:46:35	901226.3200	0.0000
X		898887.0400	2.5000
%RSD		0.296	173.205

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:48:16	267516.0600	7850.3626	T8636964.0000	T9467001.9000	1152129.5000	T1249833.9000	T28238121.0000	T4760347.5000
2	16:48:55	264530.4800	7938.7797	T8765479.0000	T9581537.7000	1166932.7000	1291425.7000	T28406345.0000	T4807473.7000
3	16:49:35	262420.3200	8113.1141	T8784943.2000	T9601237.2000	1175563.9000	T1276634.3000	T28539167.0000	T4845287.6000
4	16:50:15	266373.6600	8108.1092	T8727044.6000	T9520360.6000	1161633.2000	1288924.1000	T28424488.0000	T4830503.4000
5	16:50:54	265779.2900	7731.9186	T8592412.0000	T9417871.3000	1153495.5000	1278252.5000	T28134047.0000	T4769722.5000
X		265323.9600	7948.4568	T8701368.6000	T9517601.8000	1161951.0000	T1277014.1000	T28348434.0000	T4802666.9000
%RSD		0.734	2.079	T0.958	T0.807	0.837	T1.293	T0.568	T0.771

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:48:16	436050.0100	475352.9200	36595.1760	224493.6600	107443.2100	1024090.5000	T2178372.6000	T17672273.0000
2	16:48:55	440439.5600	483025.8000	36389.2780	224660.5600	108598.0300	1037798.6000	T2210962.4000	T17716973.0000
3	16:49:35	443469.0500	483770.9700	35013.4020	226029.3400	111495.9200	1046401.3000	T2199867.4000	T17793751.0000
4	16:50:15	441751.3300	482804.7800	34802.5210	222290.7700	107704.0400	1037609.6000	T2195098.5000	T17685078.0000
5	16:50:54	434468.0100	481124.1400	33753.2190	220945.7000	107559.6900	1020567.6000	T2172880.7000	T17479105.0000
X		439235.5900	481215.7200	35310.7190	223684.0100	108560.1800	1033293.5000	T2191436.3000	T17669436.0000
%RSD		0.871	0.710	3.347	0.909	1.569	1.035	T0.715	T0.659

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:48:16	414057.2400	59116.4440	17716.3120	96300.7330	46388.7570	121552.5800	6481.6864	6535.0614
2	16:48:55	416213.2700	59620.0130	17578.5210	96320.9650	47361.7060	123201.5300	6381.6092	6815.2857
3	16:49:35	413768.4200	59677.9250	18445.3910	96202.1040	47801.7080	123538.9800	6564.2510	6593.4407
4	16:50:15	414887.0200	60246.9980	18084.6020	97790.4310	47613.1330	124437.1900	6542.5673	6703.5285
5	16:50:54	411004.0300	59353.1180	18282.5330	95425.7540	47391.8770	120586.1900	6349.0844	6632.6385
X		413986.0000	59602.8990	18021.4720	96407.9970	47311.4360	122663.3000	6463.8397	6655.9910
%RSD		0.463	0.712	2.041	0.889	1.154	1.273	1.478	1.624

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:48:16	2484.5370	66.6669	762487.1300	4191.0536	352.5075	1057.5671	225.0030	615.0227
2	16:48:55	2497.0407	79.1670	764753.9000	4101.0088	325.0063	1095.0719	210.0027	710.0303
3	16:49:35	2555.3917	80.8337	766055.7100	4241.0789	395.0094	1142.5783	295.0052	632.5240
4	16:50:15	2473.7004	67.5003	T843117.4100	3895.9105	390.0091	1120.0753	275.0045	557.5187
5	16:50:54	2411.1821	69.1670	765224.2800	4183.5499	422.5107	1060.0674	267.5043	605.0220
X		2484.3704	72.6670	T780327.6800	4122.5203	377.0086	1095.0720	254.5040	624.0235
%RSD		2.079	9.331	T4.501	3.306	10.159	3.390	14.003	8.899

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:48:16	880414.2600	30047.8250	505.0153	28823.5120	6309.8880	791951.7400	2112.7678	30939.8300
2	16:48:55	883742.9800	31012.6000	492.5146	29542.2720	6456.2500	792958.5600	2197.7898	31401.5520
3	16:49:35	880070.6500	31186.9990	467.5131	30021.4800	6442.4894	797000.7400	2535.3856	31830.6760
4	16:50:15	881630.8500	31415.3540	510.0156	29907.3210	6282.3672	793290.5400	2190.2878	31833.1850
5	16:50:54	886925.9900	30224.7130	542.5177	28651.6710	6223.5731	798672.4900	2060.2546	31298.6660
X		882556.9500	30777.4980	503.5153	29389.2510	6342.9135	794774.8100	2219.2971	31460.7820
%RSD		0.321	1.968	5.423	2.122	1.611	0.365	8.365	1.207

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:48:16	63130.7270	109370.5400	1239010.2000	23088.1900	54731.6450	170136.7400	143721.2500	353728.9200
2	16:48:55	62815.8610	110302.7000	1244569.4000	23358.9430	56479.5000	172724.1600	144067.1500	359346.7800
3	16:49:35	64193.8020	113099.8200	1241434.3000	23587.0840	57003.0460	175000.9300	144268.0800	354109.5900
4	16:50:15	62820.8990	111417.3800	1246665.8000	23729.9890	55961.0190	170784.8000	143891.6600	357567.6500
5	16:50:54	62551.3830	110062.0500	1244075.7000	22960.3370	55623.7730	168797.4100	142274.2400	352529.6800
X		63102.5340	110850.5000	1243151.1000	23344.9080	55959.7970	171488.8100	143644.4700	355456.5300
%RSD		1.020	1.314	0.239	1.390	1.542	1.411	0.552	0.808

Run	Time	209Bi	220Bkg
1	16:48:16	850512.4700	0.0000
2	16:48:55	861069.7700	2.5000
3	16:49:35	860151.8400	2.5000
4	16:50:15	860952.2600	0.0000
5	16:50:54	856530.8300	2.5000
X		857843.4300	1.5000
%RSD		0.524	91.287

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:52:35	262410.0000	393.3426	105579.6100	T1631586.0000	198537.1800	218615.4400	T33033139.0000	T1481707.6000
2	16:53:15	262678.2600	391.6759	106096.1100	T1637845.5000	201082.1200	218245.9400	T33104603.0000	T1503105.8000
3	16:53:55	261037.0400	380.8420	106521.4900	T1648333.0000	199187.4200	216721.9300	T33315032.0000	T1500620.8000
4	16:54:35	265393.9600	351.6741	104278.3800	T1636499.1000	195578.4400	218061.1900	T33093027.0000	T1514877.9000
5	16:55:14	267863.6300	378.3419	104083.4700	T1611910.2000	193096.5500	215075.0800	T32594387.0000	T1476938.5000
X		263876.5800	379.1753	105311.8100	T1633234.7000	197496.3400	217343.9200	T33028038.0000	T1495450.1000
%RSD		1.035	4.407	1.032	T0.820	1.598	0.670	T0.802	T1.054

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:52:35	118189.7300	477962.2500	38172.2270	76052.9670	56161.1090	990425.1200	1601986.4000	T16993050.0000
2	16:53:15	119873.5200	477792.9400	38840.3040	75841.0490	56229.0650	999523.9100	1623126.8000	T17164641.0000
3	16:53:55	120740.9100	479955.8300	38719.7450	76766.9690	56807.9710	1002282.6000	1618302.0000	T17239620.0000
4	16:54:35	120563.3700	489610.1200	37911.0390	75147.3060	55957.2440	996844.6800	1611278.6000	T17081158.0000
5	16:55:14	118438.2200	483395.0700	38440.9580	75356.6840	55781.0690	984027.0600	1591443.5000	T16854591.0000
X		119561.1500	481743.2400	38416.8550	75832.9950	56187.2910	994620.6800	1609227.5000	T17066612.0000
%RSD		0.993	1.026	0.997	0.839	0.693	0.741	0.791	T0.879

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:52:35	393176.5000	22422.6260	11633.1140	559083.2500	269330.6200	236270.1000	1685.1704	788.3706
2	16:53:15	399197.8800	22422.6260	11510.4440	564661.1300	271029.3900	234023.0000	1623.4915	749.2003
3	16:53:55	398906.9300	22746.0010	12088.7620	564626.4000	277249.0600	235231.3200	1687.6709	731.6988
4	16:54:35	400909.6900	22806.1650	11500.4300	566577.3600	273653.0800	237177.8400	1628.4924	750.0338
5	16:55:14	393236.7400	21755.8620	11422.8230	555761.7400	269981.1800	232688.9200	1673.5014	788.3706
X		397085.5500	22430.6560	11631.1150	562141.9800	272248.6700	235078.2400	1659.6653	761.5348
%RSD		0.912	1.860	2.293	0.807	1.192	0.757	1.883	3.357

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:52:35	95.0005	81.6671	762416.0500	2925.5134	450.0122	1087.5710	227.5031	707.5300
2	16:53:15	105.0007	78.3337	766148.7000	2985.5347	460.0127	980.0576	292.5051	807.5391
3	16:53:55	114.1675	81.6671	765391.1000	2990.5365	425.0108	997.5597	337.5068	757.5344
4	16:54:35	108.3340	68.3336	774853.4900	2752.9547	512.5158	982.5579	290.0051	692.5288
5	16:55:14	90.8338	77.5004	774201.9000	2742.9514	475.0135	1035.0643	332.5066	885.0470
X		102.6673	77.5004	768602.2500	2879.4981	464.5130	1016.5621	296.0054	770.0359
%RSD		9.350	7.051	0.727	4.266	6.980	4.463	14.914	10.206

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:52:35	893170.5900	640.0246	75.0003	670.0269	642.5248	791263.2100	1637.6609	465.0130
2	16:53:15	884757.6500	703.7797	55.0002	663.7764	691.2787	790607.6600	1505.1359	437.5115
3	16:53:55	889388.9000	642.5248	67.5003	660.0261	667.5267	799979.3800	1425.1218	452.5123
4	16:54:35	897126.0400	660.0261	52.5002	685.0282	681.2779	809157.7600	1412.6197	447.5120
5	16:55:14	897001.1000	668.7768	70.0003	635.0242	656.2758	804384.6700	1532.6409	390.0091
X		892288.8500	663.0264	64.0002	662.7764	667.7768	799078.5400	1502.6359	438.5116
%RSD		0.592	3.884	15.279	2.748	2.904	1.016	6.067	6.583

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:52:35	42598.6010	76595.4010	1239838.3000	370.0082	961.3054	207329.9500	170795.0000	423717.6300
2	16:53:15	42955.4260	75651.8400	1236627.0000	406.2599	1011.3114	206796.9500	171649.8000	427682.6700
3	16:53:55	43631.4240	76668.5690	1255108.5000	418.7605	917.5505	209203.4100	171460.9700	429989.4500
4	16:54:35	43460.5340	76862.8470	1265361.9000	410.0101	1000.0600	209080.3800	171910.0800	433717.9100
5	16:55:14	43259.4920	75621.5670	1252709.5000	378.7586	956.3049	206802.0800	169287.2000	423985.7600
X		43181.0950	76280.0450	1249929.1000	396.7595	969.3064	207842.5500	171020.6100	427818.6800
%RSD		0.953	0.781	0.939	5.331	3.868	0.580	0.616	0.985

Run	Time	209Bi	220Bkg
1	16:52:35	866637.4700	0.0000
2	16:53:15	868368.2500	0.0000
3	16:53:55	869163.8800	0.0000
4	16:54:35	886731.8700	0.0000
5	16:55:14	885314.9300	0.0000
X		875243.2800	0.0000
%RSD		1.131	0.000

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	16:56:56	260770.5600	552.5183	T 134149.9700	T 1584652.1000	189561.7700	207399.1400	T 39239328.0000	T 2013825.7000
2	16:57:35	262880.3100	598.3548	132218.1400	T 1622728.4000	193511.0000	211946.4300	T 40228008.0000	T 2032136.5000
3	16:58:15	264422.9900	580.0202	136262.5100	T 1640750.8000	198168.5600	215972.8500	T 40784641.0000	T 2049506.0000
4	16:58:54	264580.3600	614.1893	134544.9400	T 1636522.7000	195240.6500	214977.6100	T 40416655.0000	T 2066863.0000
5	16:59:34	266645.4800	614.1893	131339.4100	T 1624476.3000	193674.7400	211772.0800	T 39973592.0000	T 2022221.8000
X		263859.9400	591.8544	T 133703.0000	T 1621826.0000	194031.3500	212413.6200	T 40128445.0000	T 2036910.6000
%RSD		0.828	4.412	T 1.460	T 1.366	1.608	1.579	T 1.441	T 1.049

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	16:56:56	83349.7570	479285.0800	35467.8180	99090.6560	73815.4820	1379186.8000	T 2183475.2000	T 23536200.0000
2	16:57:35	84231.0520	478373.6300	34687.0420	100423.9700	75899.0730	1399106.5000	T 2212380.5000	T 23774800.0000
3	16:58:15	86574.8890	480854.2100	34950.6390	100765.5600	77054.6050	1407734.7000	T 2219624.3000	T 23842834.0000
4	16:58:54	84973.5320	480900.5200	35141.4390	100588.4400	75591.2950	1399961.3000	T 2214007.2000	T 23555135.0000
5	16:59:34	84251.2540	482787.5800	35020.9340	99601.6940	75740.1370	1387408.8000	T 2190329.6000	T 23521357.0000
X		84676.0970	480440.2000	35053.5740	100094.0600	75620.1180	1394679.6000	T 2203963.4000	T 23646065.0000
%RSD		1.426	0.353	0.814	0.716	1.538	0.810	T 0.725	T 0.639

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	16:56:56	543722.6700	35922.2580	14269.7070	150188.8100	74380.4720	108633.4900	2502.0422	720.0311
2	16:57:35	552956.5400	36914.0780	13786.3940	151372.4400	74577.2190	110249.5000	2545.3887	731.6988
3	16:58:15	554832.8000	36986.9000	14056.8460	150743.7000	75101.9000	110816.9600	2613.7432	760.0347
4	16:58:54	553992.0300	36630.3300	13688.7340	151285.8900	74118.1510	110444.5600	2612.9096	718.3643
5	16:59:34	549322.6200	35897.1500	13318.1340	147618.4900	73449.7720	108542.3100	2595.4041	758.3678
X		550965.3300	36470.1430	13823.9630	150241.8700	74325.5030	109737.3600	2573.8976	737.6993
%RSD		0.828	1.450	2.629	1.026	0.818	0.975	1.898	2.752

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	16:56:56	118.3342	77.5004	773418.9700	3668.3072	540.0175	1220.0893	350.0074	840.0423
2	16:57:35	101.6673	84.1671	770583.4700	3623.2875	467.5131	1165.0814	345.0071	877.5462
3	16:58:15	108.3340	83.3337	773832.3200	3505.7373	562.5190	1217.5889	332.5066	810.0394
4	16:58:54	94.1672	63.3336	775674.8800	3915.9198	575.0198	1235.0915	312.5059	810.0394
5	16:59:34	95.8339	70.8336	771182.7900	3580.7691	452.5123	1087.5710	310.0058	845.0428
X		103.6673	75.8337	772938.4900	3658.8042	519.5163	1185.0844	330.0066	836.5420
%RSD		9.556	11.604	0.268	4.256	10.779	5.114	5.541	3.366

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	16:56:56	884167.1300	297.5053	82.5004	260.0041	421.2607	791543.0100	692.5288	305.0056
2	16:57:35	883268.9500	265.0042	70.0003	262.5041	406.2599	791430.5400	642.5248	327.5064
3	16:58:15	882021.6400	303.7555	52.5002	283.7548	401.2597	786656.1700	670.0269	335.0067
4	16:58:54	885076.4900	253.7539	67.5003	257.5040	415.0103	793268.5900	710.0303	297.5053
5	16:59:34	882293.2600	272.5045	32.5001	233.7533	422.5107	791959.9700	607.5221	312.5059
X		883365.5000	278.5047	61.0002	259.5041	413.2603	790971.6500	664.5266	315.5060
%RSD		0.145	7.679	31.427	6.851	2.249	0.319	6.121	4.930

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	16:56:56	40071.1110	69773.3820	1245577.1000	378.7586	912.5500	172839.0000	143154.1100	356730.3900
2	16:57:35	40668.9960	70446.5090	1232514.3000	412.5102	1038.8147	174707.3600	143477.1000	359451.1400
3	16:58:15	40802.1450	70398.6070	1232886.3000	416.2604	1003.8105	177061.2700	145702.7200	360896.6500
4	16:58:54	40882.5380	70870.0780	1237844.5000	403.7598	976.3072	175478.3100	145369.4700	359884.2500
5	16:59:34	39937.9740	70479.2850	1228798.4000	398.7595	978.8075	172997.2400	142724.3400	355924.5100
X		40472.5530	70393.5720	1235524.1000	402.0097	982.0580	174616.6400	144085.5500	358577.3900
%RSD		1.079	0.560	0.524	3.663	4.713	1.013	0.941	0.596

Run	Time	209Bi	220Bkg
1	16:56:56	865393.9100	0.0000
2	16:57:35	868033.4100	0.0000
3	16:58:15	865519.7800	2.5000
4	16:58:54	863580.7500	0.0000
5	16:59:34	867441.2500	0.0000
X		865993.8200	0.5000
%RSD		0.205	223.607

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	17:01:16	260919.2700	619.1897	↹139279.8000	↹1683433.0000	203581.7200	222865.8300	↹41463604.0000	↹2067478.0000
2	17:01:55	265777.5700	617.5229	142320.0100	↹1753963.8000	207921.9300	233172.1500	↹42519985.0000	↹2120314.5000
3	17:02:35	266709.1400	621.6899	↹147395.4700	↹1785946.0000	212454.1200	235136.1900	↹43104157.0000	↹2157526.0000
4	17:03:15	266628.2800	666.6933	↹144746.3800	↹1772789.4000	210777.3300	234205.5300	↹42739610.0000	↹2153196.2000
5	17:03:54	269886.5200	630.8572	↹144667.8000	↹1721698.2000	210720.9400	229337.9200	↹42163625.0000	↹2078057.8000
X		265984.1500	631.1906	↹143681.8900	↹1743566.1000	209091.2100	230943.5200	↹42398196.0000	↹2115314.5000
%RSD		1.216	3.248	↹2.120	↹2.374	1.666	2.176	↹1.472	↹1.966

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	17:01:16	98265.9760	468886.5700	32302.4860	108068.7200	78851.2950	1552030.8000	↹2777085.1000	↹26113801.0000
2	17:01:55	98799.7320	475479.8600	33690.4650	109248.9600	81617.7400	1611540.1000	↹2866331.7000	↹26931102.0000
3	17:02:35	102306.6700	485454.7800	34282.8740	112200.2800	82501.3770	1611970.1000	↹2929342.3000	↹27485641.0000
4	17:03:15	100722.5500	482612.8800	33687.9550	111032.3000	81542.0040	1608723.2000	↹2871142.3000	↹27031243.0000
5	17:03:54	100310.1200	481562.1300	32894.7960	109864.4700	80610.5070	1605282.1000	↹2854374.6000	↹26902356.0000
X		100081.0100	478799.2400	33371.7150	110082.9400	81024.5840	1597909.3000	↹2859655.2000	↹26892829.0000
%RSD		1.608	1.384	2.322	1.450	1.712	1.614	↹1.906	↹1.840

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	17:01:16	616253.6300	43390.1690	14640.3490	622880.1300	301577.4500	159654.8700	2836.3159	731.6988
2	17:01:55	629414.7800	44377.8500	15073.6210	633508.1800	308416.0300	162325.7300	2913.0090	729.1986
3	17:02:35	638150.6100	45596.9040	15061.0980	645592.3200	315057.6900	165624.7000	2964.6939	736.6992
4	17:03:15	633518.9600	44717.1560	15466.8400	643351.0400	310944.9600	162942.5900	2979.6993	765.8685
5	17:03:54	625226.4400	45124.3420	14820.6670	641592.9500	307801.4200	162922.2000	2997.2056	700.8628
X		628512.8800	44641.2840	15012.5150	637384.9200	308759.5100	162694.0200	2938.1848	732.8656
%RSD		1.331	1.870	2.074	1.459	1.595	1.307	2.214	3.158

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:01:16	105.0007	75.0003	760319.3600	3490.7310	677.5275	1240.0923	412.5102	957.5550
2	17:01:55	92.5005	85.8338	763635.4800	3710.8260	540.0175	1247.5934	382.5088	900.0486
3	17:02:35	96.6672	74.1670	770156.5800	3498.2341	557.5187	1227.5904	382.5088	842.5426
4	17:03:15	108.3340	73.3337	768925.3000	3588.2724	560.0188	1162.5811	340.0069	937.5527
5	17:03:54	105.0007	80.8337	773183.5500	3618.2853	542.5177	1342.6081	397.5095	1022.5627
X		101.5006	77.8337	767244.0500	3581.2698	575.5200	1244.0931	383.0088	932.0523
%RSD		6.527	6.881	0.676	2.548	10.027	5.186	7.067	7.179

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	17:01:16	863764.6700	353.7575	40.0001	335.0067	438.7616	770142.9000	742.5331	305.0056
2	17:01:55	873683.0700	402.5097	45.0001	326.2564	443.7618	785211.4800	765.0351	340.0069
3	17:02:35	882312.6700	388.7591	70.0003	400.0096	460.0127	791987.4000	792.5377	367.5081
4	17:03:15	877662.9900	426.2609	57.5002	381.2587	455.0124	790547.3200	857.5441	337.5068
5	17:03:54	877125.5000	355.0076	67.5003	328.7565	432.5112	785488.3400	790.0375	317.5061
X		874909.7900	385.2590	56.0002	354.2576	446.0119	784675.4900	789.5375	333.5067
%RSD		0.794	8.103	23.749	9.601	2.549	1.104	5.464	7.163

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	17:01:16	44958.4490	78583.7860	1217956.2000	412.5102	1007.5609	187206.9300	154206.1900	392008.3500
2	17:01:55	45921.1780	80219.2580	1227971.2000	415.0103	1023.8129	193357.5000	160755.7300	398044.6300
3	17:02:35	45725.1040	81817.1810	1242447.5000	458.7626	1075.0693	194516.5100	161900.0700	402286.2000
4	17:03:15	45941.2880	81047.2120	1236067.4000	442.5118	1161.3309	193342.1500	159175.8400	394949.9800
5	17:03:54	45177.1270	79358.5760	1232747.9000	440.0116	1058.8173	189500.4000	157983.4600	392828.1300
X		45544.6290	80205.2030	1231438.0000	433.7613	1065.3183	191584.7000	158804.2600	396023.4600
%RSD		0.988	1.608	0.747	4.529	5.635	1.616	1.872	1.062

Run	Time	209Bi	220Bkg
1	17:01:16	852447.2300	2.5000
2	17:01:55	867922.7200	0.0000
3	17:02:35	867651.5400	2.5000
4	17:03:15	868066.6200	0.0000
5	17:03:54	866405.0700	0.0000
X		864498.6400	1.0000
%RSD		0.783	136.931

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	17:05:36	263452.9800	623.3567	132263.8600	T 1919496.3000	229471.5200	252745.5600	T 44240550.0000	T 2418922.6000
2	17:06:19	268377.2600	599.1882	137378.1100	T 1960879.4000	235177.3300	253410.3000	T 44580785.0000	T 2444449.8000
3	17:06:59	266285.9200	645.8584	136895.2600	T 1967989.2000	237080.1200	259096.1900	T 45319997.0000	T 2481435.4000
4	17:07:40	267603.8100	639.1912	137370.4800	T 1968319.9000	237615.0400	261370.5900	T 44700323.0000	T 2429502.5000
5	17:08:20	266996.4500	623.3567	T 138045.0500	T 1919897.9000	230807.6700	256770.8600	T 44496275.0000	T 2388199.6000
x		266543.2800	626.1902	T 136390.5500	T 1947316.5000	234030.3400	256678.7000	T 44667586.0000	T 2432502.0000
%RSD		0.710	2.880	T 1.718	T 1.304	1.579	1.432	T 0.900	T 1.408

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	17:05:36	107017.7800	476315.6200	40543.3870	109368.0000	78773.0600	1526957.2000	1355717.6000	T 26083452.0000
2	17:06:19	109464.2500	479601.2600	44616.6200	108983.0100	78407.1340	1555003.6000	1354525.0000	T 26301571.0000
3	17:06:59	110974.0300	483395.0700	42480.5000	109132.4400	80623.1280	1579348.6000	1369247.9000	T 26565796.0000
4	17:07:40	109140.0400	482669.7900	41462.8940	109879.6700	78677.1610	1555610.3000	1353350.1000	T 26183846.0000
5	17:08:20	108397.9500	476578.8000	41068.4480	108023.1300	78096.7390	1532696.7000	1346791.5000	T 26030472.0000
x		108998.8100	479712.1100	42034.3700	109077.2500	78915.4440	1549923.3000	1355926.4000	T 26233027.0000
%RSD		1.331	0.689	3.827	0.624	1.255	1.349	0.605	T 0.811

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	17:05:36	606790.6500	28019.5270	16002.8510	111584.6000	53979.2610	105518.8500	2505.3766	702.5296
2	17:06:19	609820.2500	27407.4960	16065.4710	111645.4100	54807.1390	106835.4700	2536.2192	701.6962
3	17:06:59	620612.4600	28578.9210	15749.8690	113695.3400	55655.2320	107526.7700	2613.7432	730.8654
4	17:07:40	609527.4500	28348.1350	15739.8510	111465.5200	55214.8170	106898.7700	2627.0807	741.6997
5	17:08:20	601193.5000	27299.6430	15346.6180	110700.4200	53818.2250	104789.7400	2565.3948	707.5300
x		609588.8600	27930.7440	15780.9320	111818.2600	54694.9350	106313.9200	2569.5629	716.8642
%RSD		1.160	2.021	1.796	0.998	1.441	1.056	1.995	2.549

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:05:36	122.5009	75.8337	760658.2900	5561.8554	505.0153	1337.6073	315.0060	797.5382
2	17:06:19	100.8339	93.3339	761300.6700	5729.4689	492.5146	1510.1368	295.0052	667.5267
3	17:06:59	124.1676	78.3337	763597.2000	5681.9364	437.5115	1330.1061	310.0058	722.5313
4	17:07:40	89.1671	75.8337	760732.1000	5551.8488	477.5137	1365.1118	325.0063	797.5382
5	17:08:20	100.0006	56.6669	759308.1000	5386.7405	492.5146	1447.6257	302.5055	807.5391
x		107.3340	76.0004	761119.2700	5582.3700	481.0139	1398.1176	309.5058	758.5347
%RSD		14.278	17.152	0.206	2.390	5.446	5.583	3.719	8.079

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	17:05:36	873896.2800	232.5032	57.5002	223.7530	373.7584	778679.1100	902.5489	207.5026
2	17:06:19	873580.6100	287.5050	65.0003	212.5027	376.2585	778229.9200	805.0389	237.5034
3	17:06:59	863800.6300	278.7547	60.0002	260.0041	350.0074	779637.8400	872.5457	250.0038
4	17:07:40	871811.4400	291.2551	75.0003	236.2534	328.7565	775770.7200	830.0413	167.5017
5	17:08:20	873691.3700	225.0030	62.5002	215.0028	367.5081	777769.7900	805.0389	197.5023
x		871356.0700	263.0042	64.0002	229.5032	359.2578	778017.4800	843.0427	212.0028
%RSD		0.494	12.055	10.554	8.461	5.538	0.184	5.126	15.475

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	17:05:36	34912.9820	60763.2250	1216068.0000	411.2602	967.5562	107377.3700	88307.9310	221107.4000
2	17:06:19	35570.7550	61614.4410	1220561.9000	440.0116	1008.8111	108124.4300	89040.6670	221461.6300
3	17:06:59	35528.0740	61662.2930	1203694.8000	390.0091	982.5579	108674.0100	89535.9310	223078.9200
4	17:07:40	34955.6600	60967.2070	1207055.3000	447.5120	1176.3330	107364.7000	88070.4380	219798.4500
5	17:08:20	34486.2110	61800.8140	1205474.1000	397.5095	942.5533	105589.7400	87176.1080	216978.4800
x		35090.7360	61361.5960	1210570.8000	417.2605	1015.5623	107426.0500	88426.2150	220484.9700
%RSD		1.304	0.756	0.607	6.112	9.160	1.084	1.029	1.035

Run	Time	209Bi	220Bkg
1	17:05:36	855625.8100	5.0000
2	17:06:19	852767.6600	0.0000
3	17:06:59	847464.1300	2.5000
4	17:07:40	846267.4500	0.0000
5	17:08:20	848252.3400	2.5000
x		850075.4800	2.0000
%RSD		0.466	104.583

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	17:10:02	262167.5400	550.8515	165843.9900	↹2017119.8000	243063.8500	273077.1400	↹45143686.0000	↹2209346.0000
2	17:10:42	264023.1000	601.6884	↹177265.2000	↹2083824.1000	246770.4300	268713.6800	↹45365317.0000	↹2233969.6000
3	17:11:22	265992.6000	581.6870	169381.5900	↹2095823.3000	249839.8900	276223.3200	↹45566101.0000	↹2250247.3000
4	17:12:01	267630.4800	563.3524	169631.6000	↹2110279.1000	249278.4400	274652.6700	↹45285492.0000	↹2247549.0000
5	17:12:41	268184.5400	523.3498	↹173740.5500	↹2028552.2000	243851.3600	270226.4400	↹45016958.0000	↹2220402.8000
X		265599.6500	564.1858	↹171172.5900	↹2067119.7000	246560.7900	272578.6500	↹45275511.0000	↹2232302.9000
%RSD		0.945	5.287	↹2.575	↹2.017	1.246	1.135	↹0.464	↹0.784

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	17:10:02	162876.3200	475196.8800	43148.9210	103901.2100	72693.1810	1467472.6000	↹2824120.6000	↹24739458.0000
2	17:10:42	164872.5000	473307.5300	43633.9370	104463.1800	73348.8890	1482528.8000	↹2866971.2000	↹24960023.0000
3	17:11:22	166851.3100	479684.6100	43523.3610	105382.1400	73578.3990	1507384.9000	↹2884600.9000	↹25169370.0000
4	17:12:01	163832.2800	475851.4500	42369.9400	103815.1500	73497.6920	1469035.4000	↹2861646.2000	↹25140469.0000
5	17:12:41	162320.6300	478800.9000	42613.6780	104369.5100	72425.8690	1468034.9000	↹2852456.0000	↹24939148.0000
X		164150.6100	476568.2700	43057.9670	104386.2400	73108.8060	1478891.3000	↹2857959.0000	↹24989694.0000
%RSD		1.094	0.552	1.286	0.598	0.707	1.157	↹0.778	↹0.696

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	17:10:02	580069.8400	41412.6450	13275.5660	458128.5100	221261.4100	225474.6100	2417.8507	720.0311
2	17:10:42	577612.6600	41442.7950	13578.5540	467014.4600	227711.7200	225395.0000	2411.1821	725.0315
3	17:11:22	587630.4600	42181.4870	13568.5370	466383.0300	227480.5400	225921.4700	2344.4964	774.2026
4	17:12:01	582388.4700	42204.1010	13618.6190	463591.0200	226527.6000	224136.7400	2448.6930	727.5318
5	17:12:41	578755.5100	41317.1730	13418.2940	459229.1800	220812.2300	223009.6000	2440.3573	706.6966
X		581291.3900	41711.6400	13491.9140	462869.2400	224758.7000	224787.4800	2412.5159	730.6987
%RSD		0.682	1.059	1.059	0.876	1.526	0.532	1.702	3.506

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:10:02	115.0008	67.5003	750766.2500	3703.3227	572.5197	1362.6114	400.0096	1035.0643
2	17:10:42	125.8343	79.1670	751123.9300	4106.0113	557.5187	1237.5919	350.0074	947.5539
3	17:11:22	103.3340	66.6669	754349.1500	3913.4187	587.5207	1222.5897	322.5062	912.5500
4	17:12:01	93.3339	74.1670	757425.2800	4256.0866	565.0192	1222.5897	452.5123	982.5579
5	17:12:41	103.3340	65.8336	755395.3500	3963.4423	590.0209	1270.0968	322.5062	960.0553
X		108.1674	70.6670	753811.9900	3988.4563	574.5198	1263.0959	369.5083	967.5563
%RSD		11.561	8.187	0.377	5.214	2.450	4.664	15.200	4.698

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	17:10:02	856604.0600	581.2703	95.0005	540.0175	586.2706	769242.6800	1172.5825	502.5152
2	17:10:42	863651.2700	502.5152	42.5001	473.7635	652.5256	768014.2600	1305.1022	467.5131
3	17:11:22	859503.5400	566.2692	90.0005	510.0156	618.7730	772783.9100	1235.0915	430.0111
4	17:12:01	868088.7500	561.2689	92.5005	496.2648	595.0212	777117.9900	1217.5889	520.0162
5	17:12:41	875289.2200	506.2654	75.0003	501.2651	588.7708	781536.4200	1215.0886	490.0144
X		864627.3700	543.5178	79.0004	504.2653	608.2722	773739.0500	1229.0907	482.0140
%RSD		0.852	6.714	27.642	4.770	4.583	0.726	3.931	7.219

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	17:10:02	50673.6020	88694.5040	1199870.2000	441.2617	1113.8244	192336.7800	159073.9200	399423.3000
2	17:10:42	50915.0670	89361.5740	1192814.2000	445.0119	1083.8205	194066.1900	159382.2200	399294.8600
3	17:11:22	52077.2150	90061.5490	1198385.0000	461.2628	1200.0864	192454.4500	160651.2500	399798.1500
4	17:12:01	50930.1590	88168.9720	1208553.5000	450.0122	1198.8362	196497.1700	161940.8500	403007.3200
5	17:12:41	49795.8340	88828.4190	1212246.6000	448.7621	1145.0787	193777.0800	159708.3800	400694.7100
X		50878.3750	89023.0040	1202373.9000	449.2621	1148.3292	193826.3400	160151.3200	400443.6700
%RSD		1.601	0.808	0.656	1.676	4.481	0.867	0.726	0.383

Run	Time	209Bi	220Bkg
1	17:10:02	839199.7200	0.0000
2	17:10:42	841674.0900	0.0000
3	17:11:22	846019.0200	2.5000
4	17:12:01	848920.5200	5.0000
5	17:12:41	858982.4500	0.0000
X		846959.1600	1.5000
%RSD		0.910	149.071

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	17:14:23	265460.1900	349.1740	80456.5290	τ1188559.9000	143830.6100	157061.2800	τ32259548.0000	τ1181468.0000
2	17:15:02	267715.6500	376.6752	82983.6300	1212266.8000	147671.9300	161948.5000	τ32441366.0000	τ1208501.2000
3	17:15:42	267964.2900	350.0074	83236.1290	1235807.8000	150522.2500	163595.1900	τ32936654.0000	τ1211550.9000
4	17:16:22	268331.6600	335.8401	84910.3940	1221206.9000	147656.6600	160837.2800	τ32674923.0000	τ1214111.2000
5	17:17:01	270611.9800	374.1751	82365.0380	τ1222715.2000	145921.5000	161902.6200	τ32431622.0000	τ1201774.3000
X		268016.7500	357.1743	82790.3440	τ1216111.3000	147120.5900	161068.9700	τ32548822.0000	τ1203481.1000
%RSD		0.685	4.929	1.944	τ1.443	1.680	1.520	τ0.806	τ1.092

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	17:14:23	50502.5680	475498.3700	38059.2120	73331.2350	47673.4770	883959.2100	1468819.3000	τ15057506.0000
2	17:15:02	52326.2680	480482.4100	37438.9120	74241.7440	47092.6880	890271.0500	1491791.8000	τ15430825.0000
3	17:15:42	51234.5160	482301.8800	39146.7330	75389.4790	47391.8770	903922.4700	1514230.6000	τ15474261.0000
4	17:16:22	50967.8880	482008.0900	38024.0520	74153.4630	47914.8550	901013.8300	1515575.3000	τ15467050.0000
5	17:17:01	50832.0630	482967.5700	37750.3120	75293.6180	48367.4580	890853.6600	1498233.7000	τ15358756.0000
X		51172.6610	480651.6600	38083.8440	74481.9080	47688.0710	894004.0500	1497730.1000	τ15357680.0000
%RSD		1.361	0.629	1.692	1.157	1.025	0.923	1.276	τ1.133

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	17:14:23	349347.2700	22339.9040	8143.9775	148783.9500	71780.3190	77556.7310	1540.9758	717.5309
2	17:15:02	353635.0600	22886.3840	8434.2661	150881.1500	73545.6120	80067.8120	1557.6456	756.7010
3	17:15:42	357134.6700	22848.7810	8514.3474	151392.8100	72854.5810	79671.5410	1582.6503	725.0315
4	17:16:22	354594.5700	23106.9920	8649.4865	152360.2000	73926.4590	80489.3440	1535.1414	775.0360
5	17:17:01	357565.0500	23405.3220	8326.6579	149964.8300	74024.8270	79878.5090	1548.4772	739.1995
X		354455.3300	22917.4770	8413.7471	150676.5900	73226.3600	79532.7870	1552.9780	742.6998
%RSD		0.932	1.708	2.274	0.907	1.270	1.440	1.198	3.157

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:14:23	91.6672	79.1670	752696.7900	6249.8428	320.0061	1530.1405	192.5022	517.5161
2	17:15:02	88.3338	70.8336	750455.0000	6314.8918	380.0087	1430.1227	225.0030	622.5233
3	17:15:42	99.1673	70.0003	759895.7100	6460.0029	355.0076	1577.6493	187.5021	580.0202
4	17:16:22	91.6672	67.5003	754081.4700	6057.2006	307.5057	1465.1288	182.5020	550.0181
5	17:17:01	105.8340	79.1670	750078.2400	6379.9413	350.0074	1407.6189	255.0039	580.0202
X		95.3339	73.3337	753441.4400	6292.3759	342.5071	1482.1320	208.5027	570.0196
%RSD		7.433	7.452	0.526	2.428	8.450	4.768	14.798	6.858

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	17:14:23	877602.0400	408.7600	67.5003	300.0054	276.2546	783150.4100	1185.0843	252.5038
2	17:15:02	878161.6400	407.5100	60.0002	351.2574	292.5051	784638.6100	1082.5703	180.0019
3	17:15:42	883194.1100	406.2599	67.5003	343.7571	293.7552	789069.0800	1212.5882	265.0042
4	17:16:22	871039.0900	401.2597	62.5002	353.7575	305.0056	789269.2700	1065.0681	202.5025
5	17:17:01	883124.8100	381.2587	75.0003	352.5075	281.2548	795913.8600	1072.5690	202.5025
X		878624.3400	401.0097	66.5003	340.2570	289.7550	788408.2500	1123.5760	220.5030
%RSD		0.569	2.843	8.655	6.711	3.899	0.632	6.200	16.497

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	17:14:23	23813.9780	40658.9480	1220806.6000	380.0087	881.2966	87860.7420	70781.8330	177962.6700
2	17:15:02	23217.2980	41339.7850	1214819.0000	395.0094	913.8001	88813.2590	72208.9990	180672.5500
3	17:15:42	23786.3990	42126.2090	1227340.1000	368.7582	902.5489	90023.6430	73603.6200	184275.1600
4	17:16:22	24285.3350	42113.6450	1230055.1000	382.5088	956.3049	88598.4910	72035.0030	182154.2900
5	17:17:01	23127.0470	41465.4070	1223194.2000	396.2594	910.0497	88376.1490	72708.3120	180621.4600
X		23646.0110	41540.7990	1223243.0000	384.5089	912.8000	88734.4570	72267.5530	181137.2300
%RSD		2.017	1.471	0.484	2.967	3.000	0.905	1.425	1.278

Run	Time	209Bi	220Bkg
1	17:14:23	854620.0300	2.5000
2	17:15:02	853425.1300	0.0000
3	17:15:42	862033.4200	0.0000
4	17:16:22	859184.2500	2.5000
5	17:17:01	864833.7400	2.5000
X		858819.3100	1.5000
%RSD		0.563	91.287

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	17:18:43	266057.9800	466.6797	↹123946.4500	↹7465589.7000	898555.9900	989392.5900	↹40171311.0000	↹1677654.7000
2	17:19:23	267818.8900	485.0141	123904.3400	↹7506689.4000	907240.6600	998386.4000	↹40288457.0000	↹1694810.9000
3	17:20:03	271000.9900	460.8461	123171.0900	↹7375288.5000	895452.0400	985751.6400	↹39929318.0000	↹1711490.1000
4	17:20:42	270337.4500	415.8437	↹129424.2500	↹7499910.3000	901466.5900	989976.1800	↹40258550.0000	↹1717539.4000
5	17:21:22	267703.6100	465.8464	121953.3800	↹7434198.1000	891455.7200	971863.6200	↹40027112.0000	↹1671003.0000
X		268583.7800	458.8460	↹124479.9000	↹7456335.2000	898834.2000	987074.0900	↹40134950.0000	↹1694499.6000
%RSD		0.760	5.608	↹2.313	↹0.722	0.667	0.981	↹0.382	↹1.201

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	17:18:43	425347.5900	479142.2000	40907.6600	95987.1460	63546.3680	1383059.4000	↹2944552.7000	↹23342808.0000
2	17:19:23	427261.8900	481556.8400	40613.7280	96447.4150	63193.7020	1395638.2000	↹2955286.2000	↹23596265.0000
3	17:20:03	429510.6800	482487.1600	41482.9940	96809.0720	63694.9960	1401186.4000	↹2969301.0000	↹23660701.0000
4	17:20:42	423197.1500	482616.8500	40231.8820	96111.0620	61906.5950	1380077.9000	↹2969189.7000	↹23467857.0000
5	17:21:22	422329.7700	485834.7400	41101.1090	95514.2590	62752.8890	1372214.0000	↹2938171.0000	↹23174028.0000
X		425529.4200	482327.5600	40867.4750	96173.7910	63018.9100	1386435.2000	↹2955300.2000	↹23448332.0000
%RSD		0.691	0.499	1.163	0.507	1.143	0.851	↹0.478	↹0.836

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	17:18:43	545879.5500	32696.5180	11174.9880	129650.7700	63561.4830	103400.0400	3735.8372	729.1986
2	17:19:23	550165.6000	32653.8510	11307.6670	129932.6100	63385.1470	105349.2200	3950.1026	671.6937
3	17:20:03	548437.0500	32420.4430	11633.1140	131634.0000	64213.9560	105959.3900	3830.0466	757.5344
4	17:20:42	546519.5200	32824.5200	11447.8580	131527.3400	64571.7050	105222.6400	3941.7654	750.8672
5	17:21:22	539461.1400	31750.3700	11385.2720	128917.0200	62949.3630	104610.0000	3709.9923	772.5358
X		546092.5700	32469.1400	11389.7800	130332.3500	63736.3310	104908.2600	3833.5488	736.3659
%RSD		0.745	1.317	1.492	0.920	1.023	0.924	2.920	5.347

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:18:43	110.8341	87.5005	750239.3200	6294.8766	485.0141	1662.6659	375.0084	807.5391
2	17:19:23	100.8339	74.1670	753540.6800	6537.5634	527.5167	1560.1460	307.5057	827.5411
3	17:20:03	95.8339	87.5005	756419.8100	6279.8653	495.0147	1642.6619	295.0052	755.0342
4	17:20:42	98.3339	60.8336	762142.6600	6637.6424	432.5112	1555.1451	277.5046	795.0379
5	17:21:22	85.8338	82.5004	757813.2800	6319.8956	487.5143	1582.6503	297.5053	825.0408
X		98.3339	78.5004	756031.1500	6413.9687	485.5142	1600.6538	310.5059	802.0386
%RSD		9.167	14.369	0.593	2.542	7.036	3.068	12.123	3.671

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	17:18:43	866791.0300	378.7586	72.5003	372.5083	471.2633	780489.8200	857.5441	285.0049
2	17:19:23	863991.4700	363.7579	67.5003	365.0080	441.2617	774667.3100	892.5478	237.5034
3	17:20:03	869638.5300	426.2609	67.5003	371.2583	438.7616	784249.4000	860.0444	267.5043
4	17:20:42	878200.4300	377.5086	77.5004	365.0080	371.2583	788309.4900	925.0513	260.0041
5	17:21:22	877801.5000	378.7586	75.0003	358.7577	435.0114	786365.5700	912.5500	297.5053
X		871284.5900	385.0089	72.0003	366.5081	431.5112	782816.3200	889.5475	269.5044
%RSD		0.740	6.212	6.211	1.514	8.492	0.690	3.416	8.588

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	17:18:43	31988.7790	56342.3260	1209611.8000	391.2592	1036.3144	116336.4200	95951.7420	238484.3500
2	17:19:23	32292.4470	55781.0690	1199818.4000	432.5112	1041.3151	115657.0600	94662.1190	238600.0900
3	17:20:03	32520.8330	56581.4380	1204028.2000	441.2617	1078.8198	116648.2300	95959.3290	241591.9600
4	17:20:42	32136.8470	56128.3890	1209416.2000	406.2599	1056.3169	116082.9200	95097.0280	239256.0000
5	17:21:22	32026.4230	56020.1650	1209660.7000	441.2617	1082.5703	114093.2300	92887.3140	236596.6700
X		32193.0660	56170.6770	1206507.1000	422.5107	1059.0673	115763.5700	94911.5060	238905.8100
%RSD		0.677	0.545	0.368	5.350	1.994	0.865	1.330	0.753

Run	Time	209Bi	220Bkg
1	17:18:43	836306.9600	0.0000
2	17:19:23	839387.2800	7.5000
3	17:20:03	843743.4900	0.0000
4	17:20:42	842525.2400	0.0000
5	17:21:22	847273.6400	5.0000
X		841847.3200	2.5000
%RSD		0.498	141.421

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	17:23:05	266155.1700	22.5000	35711.3540	2325.3244	290.0051	265.0042	29562.3430	34601.6880
2	17:23:44	268531.2700	24.1667	36344.0810	1545.1432	185.0021	265.0042	24699.0480	35344.7970
3	17:24:24	270821.9700	20.8334	36999.4560	1265.0960	165.0016	185.0021	23127.0470	35113.8230
4	17:25:05	276968.2800	21.6667	37853.2770	1195.0857	190.0022	170.0017	20851.0530	36092.9930
5	17:25:45	275456.9000	27.5000	37582.0540	860.0444	120.0009	135.0011	19470.2190	35922.2580
X		271586.7200	23.3334	36898.0450	1438.1387	190.0024	204.0027	23541.9420	35415.1120
%RSD		1.681	11.294	2.388	38.429	32.816	28.709	16.666	1.714

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	17:23:05	407.5100	467931.3100	32.5001	995.0594	1130.0766	2983.0338	1057.5671	108096.5700
2	17:23:44	387.5090	478556.1700	45.0001	635.0242	1050.0662	2710.4407	685.0282	106215.1100
3	17:24:24	400.0096	484592.9800	25.0000	442.5118	922.5511	2670.4278	552.5183	107032.9800
4	17:25:05	372.5083	486053.1900	35.0001	377.5086	957.5550	2465.3646	407.5100	105718.8600
5	17:25:45	385.0089	486611.9300	32.5001	742.5331	1127.5763	2560.3933	377.5086	105941.6600
X		390.5092	480749.1100	34.0001	638.5274	1037.5650	2677.9320	616.0264	106601.0400
%RSD		3.489	1.633	21.184	38.719	9.200	7.308	44.761	0.913

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	17:23:05	902.5489	40.0001	272.5045	587.5207	315.0060	1630.1594	25.0000	704.1964
2	17:23:44	817.5401	40.0001	272.5045	537.5173	320.0061	1675.1684	18.3334	709.1968
3	17:24:24	770.0356	30.0001	290.0051	595.0212	335.0067	1767.6875	18.3334	720.8645
4	17:25:05	662.5263	27.5000	252.5038	547.5180	330.0065	1762.6864	17.5000	731.6988
5	17:25:45	695.0290	27.5000	277.5046	597.5214	292.5051	1665.1664	18.3334	731.6988
X		769.5360	33.0001	273.0045	573.0197	318.5061	1700.1736	19.5000	719.5311
%RSD		12.498	19.609	4.949	4.940	5.195	3.628	15.875	1.758

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:23:05	70.0003	68.3336	738763.9300	25.0000	12.5000	22.5000	2.5000	7.5000
2	17:23:44	85.0004	83.3337	735754.3500	30.0001	7.5000	10.0000	7.5000	12.5000
3	17:24:24	66.6669	75.0003	748863.4400	22.5000	7.5000	7.5000	5.0000	12.5000
4	17:25:05	78.3337	75.8337	747105.6900	32.5001	0.0000	12.5000	2.5000	7.5000
5	17:25:45	68.3336	67.5003	754586.7900	25.0000	0.0000	17.5000	2.5000	5.0000
X		73.6670	74.0003	745014.8400	27.0000	5.5000	14.0000	4.0000	9.0000
%RSD		10.539	8.701	1.030	15.215	98.543	43.006	55.902	37.268

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	17:23:05	895554.7500	32.5001	10.0000	15.0000	3.7500	800457.1500	35.0001	27.5000
2	17:23:44	901116.6000	36.2501	0.0000	35.0001	3.7500	800984.3800	17.5000	42.5001
3	17:24:24	909828.8300	41.2501	5.0000	27.5000	8.7500	810326.0100	32.5001	30.0001
4	17:25:05	912498.4200	40.0001	0.0000	27.5000	2.5000	809572.8100	25.0000	17.5000
5	17:25:45	916212.1700	48.7501	2.5000	21.2500	3.7500	815919.2800	35.0001	25.0000
X		907042.1600	39.7501	3.5000	25.2500	4.5000	807451.9300	29.0001	28.5001
%RSD		0.937	15.309	119.523	29.785	54.149	0.820	26.290	31.991

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	17:23:05	17.5000	32.5001	1238545.6000	35.0001	92.5005	125.0009	92.5005	265.0042
2	17:23:44	10.0000	30.0001	1242762.1000	51.2502	130.0010	87.5005	82.5004	195.0023
3	17:24:24	22.5000	32.5001	1243397.2000	73.7503	162.5016	110.0007	95.0005	235.0033
4	17:25:05	10.0000	27.5000	1243405.9000	91.2505	188.7521	62.5002	67.5003	160.0015
5	17:25:45	7.5000	20.0000	1247234.8000	70.0003	142.5012	75.0003	87.5005	175.0018
X		13.5000	28.5000	1243069.1000	64.2503	143.2513	92.0005	85.0004	206.0026
%RSD		46.481	18.190	0.248	33.714	25.152	27.672	12.820	21.048

Run	Time	209Bi	220Bkg
1	17:23:05	878944.3100	0.0000
2	17:23:44	886331.1700	0.0000
3	17:24:24	887927.1500	0.0000
4	17:25:05	881927.4100	2.5000
5	17:25:45	890408.3800	2.5000
X		885107.6800	1.0000
%RSD		0.523	136.931

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	17:27:25	243479.0400	┬1872291.5000	┬82588196.0000	┬45707179.0000	┬5557363.8000	┬5928161.5000	┬124017300.0000	┬30530679.0000
2	17:28:05	248227.7700	┬1895034.9000	┬84415222.0000	┬45935117.0000	┬5598334.0000	┬6012572.0000	┬126237080.0000	┬31257791.0000
3	17:28:45	248708.4500	┬1907907.1000	┬84066741.0000	┬45903182.0000	┬5580274.9000	┬5961644.1000	┬125966010.0000	┬31306398.0000
4	17:29:25	248036.3600	┬1926963.7000	┬84511195.0000	┬46161449.0000	┬5621103.1000	┬6055863.1000	┬126898650.0000	┬31510641.0000
5	17:30:04	248385.7000	┬1903321.3000	┬82968521.0000	┬46089760.0000	┬5626807.2000	┬6103497.6000	┬124926170.0000	┬31060350.0000
x		247367.4600	┬1901103.7000	┬83709975.0000	┬45959337.0000	┬5596776.6000	┬6012347.6000	┬125609040.0000	┬31133172.0000
%RSD		0.884	┬1.048	┬1.047	┬0.385	┬0.515	┬1.172	┬0.906	┬1.198

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	17:27:25	1470838.3000	437188.6500	70.0003	┬8266015.6000	┬7733600.8000	┬4152967.6000	┬10121943.0000	┬66654199.0000
2	17:28:05	1481375.7000	443869.5500	72.5003	┬8360255.8000	┬7817941.9000	┬4192086.1000	┬10227665.0000	┬67525914.0000
3	17:28:45	1499706.8000	442436.2700	72.5003	┬8372418.4000	┬7847537.0000	┬4220693.5000	┬10358386.0000	┬68235780.0000
4	17:29:25	┬1487379.7000	447461.7200	67.5003	┬8451861.2000	┬7906507.0000	┬4223349.7000	┬10378879.0000	┬68154883.0000
5	17:30:04	1480154.5000	449221.4600	87.5005	┬8374374.5000	┬7879567.3000	┬4164217.4000	┬10289452.0000	┬67758314.0000
x		┬1483891.0000	444035.5300	74.0003	┬8364985.1000	┬7837030.8000	┬4190662.8000	┬10275265.0000	┬67665818.0000
%RSD		┬0.717	1.057	10.576	┬0.791	┬0.851	┬0.763	┬1.016	┬0.939

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	17:27:25	1623707.9000	┬10391048.0000	┬2271801.9000	┬5249731.8000	┬2528254.9000	1473559.6000	1117689.0000	30058.2790
2	17:28:05	1628321.7000	┬10563091.0000	┬2292763.8000	┬5302944.5000	┬2537987.9000	1488620.0000	1123452.2000	30493.1880
3	17:28:45	1636051.6000	┬10607940.0000	┬2305446.5000	┬5326650.2000	┬2583470.9000	1496879.6000	1135451.1000	30614.4650
4	17:29:25	1643103.2000	┬10662182.0000	┬2311674.8000	┬5344929.9000	┬2605105.0000	1501676.2000	1131725.0000	30430.4600
5	17:30:04	1624852.1000	┬10618501.0000	2355004.6000	┬5306337.8000	┬2561758.9000	1493827.8000	1134042.2000	30316.7130
x		1631207.3000	┬10568552.0000	┬2307338.3000	┬5306118.8000	┬2563315.5000	1490912.7000	1128471.9000	30382.6210
%RSD		0.504	┬0.996	┬1.330	┬0.674	┬1.238	0.724	0.675	0.694

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:27:25	12235.6430	85.8338	656296.9300	197.5023	165.0016	280.0047	105.0007	335.0067
2	17:28:05	12354.9850	101.6673	655748.6900	200.0024	145.0013	292.5051	117.5008	317.5061
3	17:28:45	12489.3520	92.5005	659041.3500	182.5020	137.5011	340.0069	80.0004	305.0056
4	17:29:25	12432.6010	77.5004	657974.2700	155.0014	202.5025	342.5070	85.0004	295.0052
5	17:30:04	12330.7830	70.0003	663094.7300	222.5030	225.0030	310.0058	105.0007	250.0038
x		12368.6730	85.5004	658431.1900	191.5022	175.0019	313.0059	98.5006	300.5055
%RSD		0.788	14.499	0.443	13.009	21.500	8.919	15.810	10.628

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	17:27:25	771418.1500	689010.8500	90347.1160	664062.4100	1411728.3000	703027.0600	62.5002	┬3842148.6000
2	17:28:05	770632.7300	701554.1100	91171.0160	672377.3500	1415586.8000	702579.0400	75.0003	┬3841794.2000
3	17:28:45	772302.1700	710626.6000	91931.8060	681924.5400	1421552.2000	704998.6400	82.5004	┬3868253.1000
4	17:29:25	767442.5100	714989.6500	92369.1020	686277.2600	1421687.7000	712606.6900	82.5004	┬3889227.8000
5	17:30:04	768911.6200	700658.2400	92639.5790	668471.0800	1420699.8000	711674.3500	105.0007	┬3844173.5000
x		770141.4400	703367.8900	91691.7240	674622.5300	1418251.0000	706977.1600	81.5004	┬3857119.4000
%RSD		0.254	1.430	1.019	1.374	0.312	0.681	18.984	┬0.547

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	17:27:25	745896.7600	1333784.9000	1097423.8000	┬5430689.6000	┬13250659.0000	┬4400486.0000	┬3784043.3000	┬9523476.3000
2	17:28:05	752142.4400	1342082.2000	1101653.6000	┬5513345.9000	┬13447279.0000	┬4397440.9000	┬3794151.8000	┬9501797.0000
3	17:28:45	758422.6600	1343211.9000	1102040.1000	┬5464289.7000	┬13404927.0000	┬4403178.4000	┬3787090.7000	┬9594138.2000
4	17:29:25	756988.1100	1350615.1000	1100284.2000	┬5528270.0000	┬13419433.0000	┬4424494.4000	┬3792851.1000	┬9602232.3000
5	17:30:04	758572.9600	1335313.0000	1091260.1000	┬5428598.9000	┬13255912.0000	┬4377387.4000	┬3724377.3000	┬9489256.9000
x		754404.5800	1341001.4000	1098532.3000	┬5473038.8000	┬13355642.0000	┬4400597.4000	┬3776502.8000	┬9542180.2000
%RSD		0.719	0.504	0.405	┬0.843	┬0.709	┬0.381	┬0.779	┬0.552

Run	Time	209Bi	220Bkg
1	17:27:25	720044.5700	0.0000
2	17:28:05	725844.2700	12.5000
3	17:28:45	728305.7500	5.0000
4	17:29:25	729468.6600	7.5000
5	17:30:04	725106.5000	0.0000
x		725753.9500	5.0000
%RSD		0.503	106.066

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	25Mg	26Mg	27Al	39K
1	17:32:19	272460.7800	338.3402	35455.2640	5136.5826	705.0298	700.0294	14690.4370	38611.7450
2	17:32:58	274042.2200	295.8386	33582.5310	4050.9844	535.0172	480.0138	12289.0550	36999.4560
3	17:33:38	278165.5200	229.1698	31153.1220	3405.6958	435.0114	420.0106	10121.1430	36826.1910
4	17:34:18	279946.1800	180.8353	29519.6920	2535.3856	285.0049	320.0061	8626.9632	36354.1250
5	17:34:57	280697.5000	143.3346	27871.5320	1960.2305	235.0033	235.0033	6575.0929	35932.3010
X		277062.4400	237.5037	31516.4280	3417.7758	439.0133	431.0127	10460.5380	36944.7640
%RSD		1.314	33.762	9.675	36.598	43.419	41.118	30.158	2.764

Run	Time	44Ca	45Sc	47Ti	51V	52Cr	54Fe	55Mn	56Fe
1	17:32:19	330.0065	468891.8500	15.0000	1937.7253	1770.1880	2965.5276	1187.5846	100816.1700
2	17:32:58	277.5046	478602.4700	27.5000	1507.6364	1710.1755	2737.9497	1057.5671	101294.4100
3	17:33:38	375.0084	478261.1900	35.0001	1077.5697	1510.1368	2635.4167	797.5382	101271.6400
4	17:34:18	240.0035	484051.5800	27.5000	852.5436	1587.6512	2695.4359	677.5275	100201.3200
5	17:34:57	232.5032	491899.1900	7.5000	1052.5665	1435.1236	2697.9367	515.0159	100057.1000
X		291.0053	480341.2600	22.5000	1285.6083	1602.6550	2746.4533	847.0467	100728.1300
%RSD		20.891	1.760	49.065	33.898	8.628	4.654	32.424	0.577

Run	Time	57Fe	59Co	60Ni	63Cu	65Cu	66Zn	75As	78Se
1	17:32:19	862.5446	1070.0687	337.5068	1495.1341	530.0169	407.5100	248.3370	777.5363
2	17:32:58	815.0399	880.0465	305.0056	1305.1022	492.5146	380.0087	213.3361	747.5335
3	17:33:38	857.5441	720.0311	245.0036	1235.0915	440.0116	305.0056	174.1685	740.0329
4	17:34:18	730.0320	590.0209	215.0028	1110.0739	320.0061	282.5048	144.1679	726.6984
5	17:34:57	785.0370	340.0069	170.0017	1000.0600	290.0051	295.0052	131.6677	786.7038
X		810.0395	720.0348	254.5041	1229.0924	414.5108	334.0068	182.3354	755.7010
%RSD		6.780	38.629	26.527	15.395	25.448	16.759	26.598	3.368

Run	Time	82Se	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	17:32:19	85.0004	65.8336	717163.8400	20.0000	5.0000	2.5000	5.0000	5.0000
2	17:32:58	65.8336	75.0003	725724.4800	22.5000	10.0000	10.0000	5.0000	10.0000
3	17:33:38	72.5003	66.6669	739273.8100	15.0000	10.0000	12.5000	10.0000	10.0000
4	17:34:18	74.1670	68.3336	742164.5900	17.5000	7.5000	10.0000	10.0000	12.5000
5	17:34:57	84.1671	59.1669	745754.8600	27.5000	12.5000	7.5000	2.5000	10.0000
X		76.3337	67.0003	734016.3200	20.5000	9.0000	8.5000	6.5000	9.5000
%RSD		10.685	8.463	1.647	23.458	31.672	44.605	51.602	28.828

Run	Time	103Rh	107Ag	108Mo O	109Ag	111Cd	115In	118Sn	121Sb
1	17:32:19	873768.9000	320.0061	12.5000	273.7545	158.7515	778106.6700	15.0000	1627.6589
2	17:32:58	888892.3800	258.7540	12.5000	252.5038	122.5009	789126.6700	7.5000	1317.6042
3	17:33:38	892302.0100	227.5031	15.0000	231.2532	91.2505	791916.0800	12.5000	1162.5811
4	17:34:18	901141.6000	222.5030	10.0000	225.0030	67.5003	797585.4100	30.0001	917.5505
5	17:34:57	899958.4000	155.0014	10.0000	108.7507	58.7502	798859.1800	27.5000	780.0365
X		891212.6600	236.7535	12.0000	218.2531	99.7507	791118.8000	18.5000	1161.0862
%RSD		1.237	25.331	17.430	29.391	41.310	1.049	52.858	28.781

Run	Time	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb	207Pb	208Pb
1	17:32:19	95.0005	120.0009	1189611.1000	1042.5652	2485.3706	575.0198	592.5211	1322.6049
2	17:32:58	57.5002	120.0009	1211481.4000	828.7912	1980.2353	492.5146	480.0138	1205.0871
3	17:33:38	60.0002	100.0006	1221287.6000	590.0209	1563.8967	370.0082	335.0067	957.5550
4	17:34:18	37.5001	77.5004	1221924.0000	527.5167	1316.3540	372.5083	310.0058	790.0375
5	17:34:57	62.5002	57.5002	1227121.1000	413.7603	1028.8135	252.5038	195.0023	520.0162
X		62.5003	95.0006	1214285.0000	680.5309	1674.9340	412.5110	382.5099	959.0602
%RSD		33.106	28.768	1.228	37.161	34.146	30.137	40.561	33.546

Run	Time	209Bi	220Bkg
1	17:32:19	852017.7100	2.5000
2	17:32:58	860272.1100	0.0000
3	17:33:38	866167.1400	0.0000
4	17:34:18	876021.7800	2.5000
5	17:34:57	883458.8400	0.0000
X		867587.5100	1.0000
%RSD		1.436	136.931

ALS Environmental - SLC

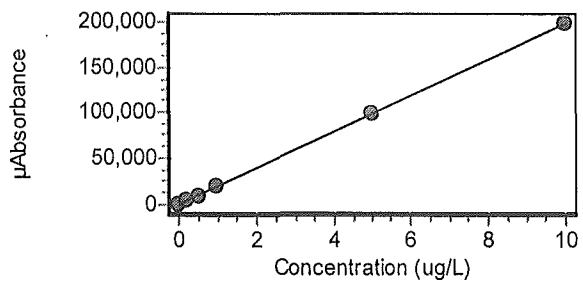
Report Generated By CETAC QuickTrace AACV02
Analyst: Christopher.Hansen Christopher R Hansen
Worksheet file: C:\Program Files\QuickTrace\Worksheets\CV2-15191.wsz
Date Started: 07/01/2015 12:00:29
Comment:
Workorder: 1516424 SDG: MF9K02 Case: 45299 HBN: 151594

Results

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	Flags	calculated Hg (µg/L)	Percent Difference
S0	STD	07/01/15 12:13:24 pm	0.0000	47		-0.0094	NA
S0.2	STD	07/01/15 12:14:31 pm	0.2000	4030		0.1924	3.8%
S0.5	STD	07/01/15 12:15:39 pm	0.5000	9834		0.4864	2.7%
S1.0	STD	07/01/15 12:16:47 pm	1.0000	20320		1.0175	-1.8%
S5.0	STD	07/01/15 12:17:55 pm	5.0000	99496		5.0280	-0.6%
S10	STD	07/01/15 12:19:04 pm	10.0000	197360		9.9851	0.1%

Calibration

Equation: A = 231.716 + 19742.250C
R2: 0.99998
SEE: 400.3739
Flags:



ICV1	ICV	07/01/15 12:20:14 pm	3.9255	77730	
% Recovery 98.14					
ICB1	ICB	07/01/15 12:21:23 pm	-0.0149	-62	
CCV1	CCV	07/01/15 12:22:32 pm	5.0844	100609	
% Recovery 101.69					
CCB1	CCB	07/01/15 12:23:42 pm	-0.0135	-34	

: 00243

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	Flags
PBS1	PBK	07/01/15 12:24:49 pm	-0.0092	51	
MF9K02	UNK	07/01/15 12:25:56 pm	0.0942	2091	
MF9K03	UNK	07/01/15 12:27:03 pm	0.2882	5921	
MF9K04	UNK	07/01/15 12:28:11 pm	0.1271	2741	
MF9K05	UNK	07/01/15 12:29:19 pm	0.1411	3016	
MF9K06	UNK	07/01/15 12:30:26 pm	0.5659	11404	
MF9K07	UNK	07/01/15 12:31:32 pm	0.3029	6211	
MF9K07D	UNK	07/01/15 12:32:39 pm	0.3071	6294	
MF9K07S	UNK	07/01/15 12:33:47 pm	2.8096	55700	
MF9K08	UNK	07/01/15 12:34:54 pm	0.4550	9215	
MF9K09	UNK	07/01/15 12:36:01 pm	0.1727	3641	
MF9K10	UNK	07/01/15 12:37:08 pm	0.1734	3654	
MF9K11	UNK	07/01/15 12:38:16 pm	0.1627	3443	
MF9K12	UNK	07/01/15 12:39:23 pm	0.2505	5178	
MF9K13	UNK	07/01/15 12:40:31 pm	0.2878	5915	
MF9K14	UNK	07/01/15 12:41:38 pm	0.2192	4559	
CCV2	CCV	07/01/15 12:42:47 pm	5.0787	100496	
% Recovery 101.57					

: 00244

Sample Name	Type	Date/Time	Conc (ug/L)	µAbs	Flags
CCB2	CCB	07/01/15 12:43:56 pm	-0.0140	-44	

: 002115

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	36.00	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

: 002415

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

: 00217

ISM 3050B PHYSICAL DESCRIPTION

Sample ID	Matrix	Method	Prep Date	Amount Sample Used(g)	Final Sample Volume	PH	Color/Clarity/Texture Before Color	Before Texture	After Color	After Clarity	Init.
PBS1	ASTM Type II H_2O	3050B	06/18/2015	NA	100 mL	NA	Colorless	Clear	Colorless	Clear	SW
LCS1	ASTM Type II H_2O			NA			Colorless	Clear	Colorless	Clear	
MF9K02	Soil			1.3749			Brown	Fine	Yellow	Clear	
MF9K03				1.3393			Brown	Fine	Yellow	Clear	
MF9K04				1.2787			Brown	Fine	Yellow	Clear	
MF9K05				1.1741			Brown	Fine	Yellow	Clear	
MF9K06				1.0769			Brown	Fine	Yellow	Clear	
MF9K07				1.2405			Brown	Fine	Yellow	Clear	
MF9K07S				1.2425			Brown	Fine	Yellow	Clear	
MF9K07D				1.2470			Brown	Fine	Yellow	Clear	
MF9K08				1.3018			Brown	Fine	Yellow	Clear	
MF9K09				1.3735			Brown	Fine	Yellow	Clear	
MF9K10				1.2486			Brown	Fine	Yellow	Clear	
MF9K11				1.2470			Brown	Fine	Yellow	Clear	
MF9K12				1.3677			Brown	Fine	Yellow	Clear	
MF9K13				1.4839			Brown	Fine	Yellow	Clear	
MF9K14	↓	↓	↓	1.3949	↓	↓	Brown	Fine	Yellow	Clear	↓

PREPARED BY:
Shaina Wiest
Shane Stewart

START DATE/TIME:
06/18/2015 06:10
END DATE/TIME:
06/19/2015 10:20
WORKORDER(S):
1516424

SDG:
MF9K02
CASE:
45299
METHOD/MATRIX:
3050B/Soil
BATCH:
5379
HBN #:
150705
MOD:
NA

QC ID	QC TYPE	MATRIX SOURCE	SPIKE SOURCE	PIPETTE ID	VOLUME SPIKED	INITIALS	Method Reagents	
PBS1	PBS	ASTM Type II H_2O	NA	NA	NA	SW	1:1 HNO_3 Baker LOT #:	0000104117
LCS1	LCS	ASTM Type II H_2O	27708	WR-22	2000 µl	↓	CONC. HNO_3 Baker LOT #:	0000104117
MF9K07S	MS	MF9K07	24679 24680	WR-22	200 µl	↓	30% H_2O_2 Macron LOT #:	0000097855
MF9K07D	MD	MF9K07	NA	NA	NA	↓	CONC. HCl EMD LOT #:	54310

BALANCE ID:
102683

Samples prepared by Shaina Wiest, supervised by Shane Stewart. Samples weighed and transferred into 100 mL flat-bottom tubes. QCs prepared as indicated above. 10 mL 1:1 HNO_3 added to all. Samples 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. Samples returned to hotblock for 30 minutes, removed from heat, and allowed to cool. Samples were returned to heat and allowed to reduce to 5 mL. Temperature was checked with thermometer 12207430, which read 96.2 °C. Samples removed from heat. 2 mL ASTM Type II H_2O and 3 mL 30% H_2O_2 added, returned to hotblock, and heated until bubbling reaction subsided. Samples removed from heat. An additional 1 mL of H_2O_2 was added to all samples and heated until effervesence subsided. Samples removed from heat and allowed to cool. Samples returned to heat and allowed reduce to 5 mL. Samples removed from heat and allowed to cool. 10 mL conc. HCl added. Samples returned to hotblock for 15 minutes, removed from heat, and allowed to cool. Samples diluted to 100 mL final volume with ASTM Type II H_2O. Samples inverted several times to mix. Samples transferred to 50 mL tubes for analysis.

ISM01.3 3050B PHYSICAL DESCRIPTION

Sample ID	Matrix	Method	Prep Date	Amount Sample Used (g)	Final Sample Volume	PH	Color/Clarity/Texture Before Color	Before Texture	After Color	After Clarity	Init.
PBS1	ASTM Type II H_2O	3050B	06/26/15	1.0000	100 mL	NA					KFB
LCS1	ASTM Type II H_2O			1.0000	100 mL						
MF9K02	ASTM Type II H_2O			1.1549	100 mL		Brown	Medium	Brown	Clear	
MF9K03	Soil			1.1676	100 mL		Brown	Medium	Brown	Clear	
MF9K04				1.1453	100 mL		Brown	Medium	Brown	Clear	
MF9K05				1.3769	100 mL		Brown	Medium	Brown	Clear	
MF9K06				1.0891	100 mL		Brown	Medium	Brown	Clear	
MF9K07				1.2102	100 mL		Brown	Medium	Brown	Clear	
MF9K07S				1.2103	100 mL		Brown	Medium	Brown	Clear	
MF9K07D				1.2146	100 mL		Brown	Medium	Brown	Clear	
MF9K08				1.1344	100 mL		Brown	Medium	Brown	Clear	
MF9K09				1.2042	100 mL		Brown	Medium	Brown	Clear	
MF9K10				1.4431	100 mL		Brown	Medium	Brown	Clear	
MF9K11				1.2102	100 mL		Brown	Medium	Brown	Clear	
MF9K12				1.3242	100 mL		Brown	Medium	Brown	Clear	
MF9K13				1.1392	100 mL		Brown	Medium	Brown	Clear	
MF9K14				1.1081	100 mL		Brown	Medium	Brown	Clear	

PREPARED BY:
Kristie Bitner

START DATE/TIME:
06/26/15 10:30
END DATE/TIME:
06/29/15 13:30
WORKORDER(S):
1516424

ISM01.3
SDG: MF9K02
CASE: 45299

METHOD/MATRIX:
3050B/Soil
BATCH:
EMS / 4156
HBN #:151208

Balance ID:
102683

Mod:
NA

QC ID	QC Type	Matrix Source	Spike Source	Pipette ID	Volume Spiked	Initials	Method Reagents		Pipette ID
PBS1	PBS	ASTM Type II H_2O	NA	NA	NA	KFB	1:1 HNO_3 LOT #:	MS-15-113 (4184/98)	ICP-10G
LCS1	LCS	ASTM Type II H_2O	23704	2163121	1 mL		CONC. HNO_3 LOT #:	BDH: 1213120	ICP-10G
MF9K07S	MS	MF9K07	25853	2163121	1 mL		30% H_2O_2 LOT #:	Macron: 0000086427	NA
MF9K07D	MD	MF9K07	NA	NA	NA				

06/26/2015 10:30. Rinsed digestion tubes (SCP Science lot # J200373-263), watch glasses and caps with ASTM Type II water. Samples weighed and transferred into digestion tubes by Jennifer Wilkinson. PBS and LCS are 1 g. aliquots of ASTM Type II water. Spiked as indicated above, added 10 mL of 1:1 HNO_3 to each sample and covered with caps. Time in 14:05. Heated samples to 95°C (±3°), then refluxed for 15 minutes, removed from heat and cooled. Added 5 mL concentrated nitric acid and refluxed for 30 minutes, checking for brown fumes. Exchanged caps for ribbed watch glasses and refluxed for 2 hours. Temperature checked using thermometer 111330864 at 14:17, 93.4 °C. Removed from heat and cooled. Added 2 mL of ASTM Type II water and 3 mL of 30% H2O2, heated with caps on, checking for effervescence. Replaced caps with ribbed watch glasses and continued to heat for 2 hours. Allowed samples to cool and transferred samples to well rinsed 100 mL class A volumetric flasks. Brought samples to volume with ASTM Type II water, stoppered and shook samples to mix. Transferred about 50 mL of samples back to digestion tubes and capped.

ISM01.3-7471B Hg-Soil: Electronic Physical Description Log

File Location: ALSItws013\AA_current\Mercury\Hg-EPA-CLP-DATA			File Name: PD-HGS-MF9K02-45299
HBN:151194	Case:45299	SDG:MF9K02	Mercury in EPA-CLP soil
Workorder ID(s):1516424			

	EPA Sample ID	Matrix	Method **	Prep Date and Time	Amount of Sample Used (g)	Final Volume of Samples (mL)	pH	Color Before	Texture Before	Color After $NH_2OH \cdot HCl$	Clarity After $NH_2OH \cdot HCl$	Init.
Calibration Standards	S0	ASTM Type II H_2O	ISM01.3 7471B	07/01/2015 05:00	NA	100mL + 36mL reagents	NA	Colorless	NA	Colorless	Clear	SS
Calibration Standards	S0.2											
Calibration Standards	S0.5											
Calibration Standards	S1.0											
Calibration Standards	S5.0/CCVs											
Calibration Standards	S10											
	ICV							Yellow				
	ICB/CCBs							Colorless				
	PBS1							Colorless				
	MF9K02	Soil			0.5574			Brown	Medium	Colorless	Clear	
	MF9K03				0.5659			Brown	Medium	Colorless	Clear	
	MF9K04				0.5673			Brown	Medium	Colorless	Clear	
	MF9K05				0.5600			Brown	Medium	Colorless	Clear	
	MF9K06				0.5705			Brown	Medium	Colorless	Clear	
	MF9K07				0.5079			Brown	Medium	Colorless	Clear	
	MF9K07S				0.5075			Brown	Medium	Colorless	Clear	
	MF9K07D				0.5059			Brown	Medium	Colorless	Clear	
	MF9K08				0.5198			Brown	Medium	Colorless	Clear	
	MF9K09				0.5354			Brown	Medium	Colorless	Clear	
	MF9K10				0.5798			Brown	Medium	Colorless	Clear	
	MF9K11				0.5249			Brown	Medium	Colorless	Clear	
	MF9K12				0.5659			Brown	Medium	Colorless	Clear	
	MF9K13				0.5081			Brown	Medium	Colorless	Clear	
	MF9K14				0.5832			Brown	Medium	Colorless	Clear	

ISM01.3-7471B Mercury Standards Preparation Description

Sample ID.	Solution used	Amount	Description of solution	Std. final volume	Std. final conc.
S0, ICB, CCBs, PBS1	NA	NA	NA	100mL sample + 36mL reagents	0 µg/L Hg
S0.2	Hg STD B (28508)	200 µL	STD B = 0.1 mg/L Hg		0.2 µg/L Hg
S0.5		500 µL			0.5 µg/L Hg
S1.0	Hg STD A (28538)	100 µL	STD A = 1.0 mg/L Hg		1.0 µg/L Hg
S5.0, CCVs		500 µL			5.0 µg/L Hg
S10		1000 µL			10 µg/L Hg
ICV	ICV5-0508 Hg (21478)	1000 µL	Hg CLP-ICV = 0.4 mg/L Hg		4.0 µg/L Hg
MS	Hg STD A (28538)	250 µL	STD A = 1.0 mg/L Hg		2.5 µg/L Hg
MD	NA	NA	NA		NA

Comments: NONE

% Moistures & Solids

Analyst: IJO
Queue: EGRV
Batch: 5217
Instrument: GRAV03

Oven Start Time 06/16/2015 13:00 **Start Oven Temp:** 105° **Start Desiccator:** 06/17/2015 08:00
Oven Finish Time 06/17/2015 08:00 **End Oven Temp:** 105° **End Desiccator:** 06/17/2015 09:00

Workorder	Dish#	Lab Sample ID	Dish (g)	Dish + Soil (g)	Soil Weight (g)	Dish + DS (g)	Dry Soil (g)	% Solids	% Moistures
1516424	1	1516424001	1.2856	9.5950	8.3094	9.1042	7.8186	94.0934%	5.9066%
1516424	2	1516424002	1.2906	9.8666	8.5760	9.4963	8.2057	95.6821%	4.3179%
1516424	3	1516424003	1.2873	9.5460	8.2587	9.3233	8.0360	97.3034%	2.6966%
1516424	4	1516424004	1.2913	9.7902	8.4989	9.5032	8.2119	96.6231%	3.3769%
1516424	5	1516424005	1.2893	9.8158	8.5265	9.7223	8.4330	98.9034%	1.0966%
1516424	6	1516424006	1.2989	9.7531	8.4542	9.6086	8.3097	98.2908%	1.7092%
1516424	7	1516424008	1.2884	9.7689	8.4805	9.6299	8.3415	98.3609%	1.6391%
1516424	8	1516424009	1.2944	9.5560	8.2616	9.0525	7.7581	93.9055%	6.0945%
1516424	9	1516424010	1.2863	9.7857	8.4994	9.5407	8.2544	97.1174%	2.8826%
1516424	10	1516424011	1.2834	9.5779	8.2945	9.3002	8.0168	96.6520%	3.3480%
1516424	11	1516424012	1.2893	9.5907	8.3014	9.2445	7.9552	95.8296%	4.1704%
1516424	12	1516424013	1.2801	9.6174	8.3373	9.0881	7.8080	93.6514%	6.3486%
1516424	13	1516424014	1.2848	9.6002	8.3154	9.4652	8.1804	98.3765%	1.6235%
1516424	14	1516424015	1.2826	9.7558	8.4732	9.4333	8.1507	96.1939%	3.8061%

From: (832) 347-4180
Derrick Cobb
Weston Solutions, Inc
5599 San Felipe St
Ste. 700
HOUSTON, TX 77056

Origin ID: HOUA

FedEx Express

J151215022303uv

Ship Date: 12JUN15
ActWgt: 30.0 LB
CAD: 2557564/INET3610

Dims: 22 X 16 X 14 IN

Delivery Address Bar Code

SHIP TO: (801) 266-7700 BILL SENDER

Meredith Edwards
ALS Laboratory Group - Salt Lake
960 West Levoy Street

Salt Lake City, UT 84123

Ref # 20406.016.005.0919.01
Invoice #
PO #
Dept #

MWe 12/13/2015 9:45

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 7738 1984 0927
0201

X0 BTFA

84123
UT-US
SLC

537J1/8A0E/EE4B

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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: MF9K02

[X] ICPAES [X] ICPMS [X] HG [ ] CN

Laboratory Name: ALS Laboratory Group (SLC)

Laboratory Code: DATAC

Contract No.: EPW09036

Case No.: 45299

Analysis Price: N/A

SDG Turnaround: 21

Modified Analysis Requested: NO

Program: ISM01.3

Modification Reference No.: N/A

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) MF9K02	7) MF9K08	13) MF9K14	19)
2) MF9K03	8) MF9K09	14)	20)
3) MF9K04	9) MF9K10	15)	21)
4) MF9K05	10) MF9K11	16)	22)
5) MF9K06	11) MF9K12	17)	23)
6) MF9K07	12) MF9K13	18)	24)

MF9K02

First Sample in SDG

MF9K14

Last Sample in SDG

06/13/15

First Sample Receipt Date

06/13/15

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: 6/15/2015 7:58:48 AM

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

: 3325 4

EPA Sample Receipt History

Client: U. S. EPA Region 6 **Contract:** EPW09036 **Case:** **45299** **SDG:** **MF9K02** **Mod:** None

Due to Client: **Sat, Jul 04, 2015** **TAT:** 21 **Date Reported:** Not Reported **Status:** **CLOSED**

Workorder Information **Program:** ISM01.3 **Region:** 6 **EDD Level:** 2b

Work Order	Received	PR	Fractions
1516424	06/13/15 9:45 AM	No	ICP-AES, ICP-MS, Mercury

Sample Information

Lab ID	Client ID	Type	Matrix	ICPAES	ICPMS	HG	CN
1516424001	MF9K02	SAMPLE	Soil[S]	X	X	X	☐
1516424002	MF9K03	SAMPLE	Soil[S]	X	X	X	☐
1516424003	MF9K04	SAMPLE	Soil[S]	X	X	X	☐
1516424004	MF9K05	SAMPLE	Soil[S]	X	X	X	☐
1516424005	MF9K06	SAMPLE	Soil[S]	X	X	X	☐
1516424006	MF9K07	SAMPLE	Soil[S]	X	X	X	☐
1516424008	MF9K07D	MD	Soil[S]	X	X	X	☐
1516424007	MF9K07S	MS	Soil	X	X	X	☐
1516424009	MF9K08	SAMPLE	Soil[S]	X	X	X	☐
1516424010	MF9K09	SAMPLE	Soil[S]	X	X	X	☐
1516424011	MF9K10	SAMPLE	Soil[S]	X	X	X	☐
1516424012	MF9K11	SAMPLE	Soil[S]	X	X	X	☐
1516424013	MF9K12	SAMPLE	Soil[S]	X	X	X	☐
1516424014	MF9K13	SAMPLE	Soil[S]	X	X	X	☐
1516424015	MF9K14	SAMPLE	Soil[S]	X	X	X	☐

Field Samples: **13** **MS:** **1** **MSD:** 0 **MD:** **1** **PE:** 0

Report Parameters = SDG:MF9K02 Case:<NULL> Region:<NULL>
Mod:<NULL> Workorder:<NULL> BeginDate:<NULL> EndDate:<NULL>
OpenSummary:No SortBy:Case

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW09036	Split:	Workorder ID: 1516424	Level: EPACLP_PDF	Requested Analysis
Client: U. S. EPA Region 6		Account: 8201	Type: 8ozGWM	
Comments:			Preservatives: COOL	

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	ISM01.3 ICP-AES, Soil	ISM01.3 Mercury, Soil	ISM01.3 ICP-MS, Soil									
1	06/08/2015 11:00	MF9K02	1516424001		Soil/Solid/Sediment	A	1	A	A	A									
2	06/08/2015 13:51	MF9K03	1516424002		Soil/Solid/Sediment	A	1	A	A	A									
3	06/08/2015 15:00	MF9K04	1516424003		Soil/Solid/Sediment	A	1	A	A	A									
4	06/08/2015 15:05	MF9K05	1516424004		Soil/Solid/Sediment	A	1	A	A	A									
5	06/08/2015 15:42	MF9K06	1516424005		Soil/Solid/Sediment	A	1	A	A	A									
6	06/08/2015 16:25	MF9K07	1516424006		Soil/Solid/Sediment	A	1	A	A	A									
7	06/08/2015 16:25	MF9K07S	1516424007	MS	Soil/Solid/Sediment	A	1	A	A	A									
8	06/10/2015 16:25	MF9K07D	1516424008	MD	Soil/Solid/Sediment	A	1	A	A	A									
9	06/09/2015 11:26	MF9K08	1516424009		Soil/Solid/Sediment	A	1	A	A	A									
10	06/~~10~~09/2015 16:00	MF9K09	1516424010		Soil/Solid/Sediment	A	1	A	A	A									

DH 7/8/15

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	06/13/2015 09:45	ALS Sample Receiving	Sample Login
Meredith Edwards	06/13/2015 1035	111	Storage
R-33-1 11D IJO	06/16/15 11:00	Jose Orallo solid	
Jose Orallo	06/16/15 16:00	R-33-1 11D IJO	storage
R33-1 11D ss	06/18/2015 0600	metals prep ss	metals

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP

Prepared / Analyzed by: SW

Lab Notebook No.: Network

Date / Time: 06/18/2015 0600

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Metals prep group	06/19/2015 1020	ICP lab group	Analysis

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW09036	Split:	Workorder ID: 1516424	Level: EPACLP_PDF	Requested Analysis
Client: U. S. EPA Region 6		Account: 8201	Type: 8ozGWM	
Comments:			Preservatives: COOL	

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	ISM01.3 ICP-AES, Soil	ISM01.3 Mercury, Soil	ISM01.3 ICP-MS, Soil
11	06/10/2015 16:05 09 PM 1-2-15	MF9K10	1516424011		Soil/Solid/Sediment	A	1	A	A	A
12	06/11/2015 09:43 10 PM 1-2-15	MF9K11	1516424012		Soil/Solid/Sediment	A	1	A	A	A
13	06/10/2015 11:00	MF9K12	1516424013		Soil/Solid/Sediment	A	1	A	A	A
14	06/10/2015 11:50	MF9K13	1516424014		Soil/Solid/Sediment	A	1	A	A	A
15	06/10/2015 14:33	MF9K14	1516424015		Soil/Solid/Sediment	A	1	A	A	A
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.	06/13/2015 09:45	ALS Sample Receiving	Sample Login
Meredith Edwards	6/13/2015 1005	IID	Storage
R 33-111D IJO	06/16/15 16:00	Steve Orralle solid	
Steve Orralle	06/16/15 16:00	R-33-111D IJO	Storage
R33-1 IID-SS	06/18/2015 0600	metals prep SS	metals

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP

Prepared / Analyzed by: SW

Lab Notebook No.: Network

Date / Time: 06/18/2015 0600

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Metals Prep [illegible]	06/18/2015 1020	ICP Lab [illegible]	Analysis

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW09036	Split:	Workorder ID: 1516424	Level: EPACLP_PDF
Client: U. S. EPA Region 6		Account: 8201	

Comments:

Type: 8ozGWM

Preservatives: COOL

Requested Analysis

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	ISM01.3 ICP-AES, Soil	ISM01.3 Mercury, Soil	ISM01.3 ICP-MS, Soil
1	06/08/2015 11:00	MF9K02	1516424001		Soil/Solid/Sediment	A	1	A	A	A
2	06/08/2015 13:51	MF9K03	1516424002		Soil/Solid/Sediment	A	1	A	A	A
3	06/08/2015 15:00	MF9K04	1516424003		Soil/Solid/Sediment	A	1	A	A	A
4	06/08/2015 15:05	MF9K05	1516424004		Soil/Solid/Sediment	A	1	A	A	A
5	06/08/2015 15:42	MF9K06	1516424005		Soil/Solid/Sediment	A	1	A	A	A
6	06/08/2015 16:25	MF9K07	1516424006		Soil/Solid/Sediment	A	1	A	A	A
7	06/08/2015 16:25	MF9K07S	1516424007	MS	Soil/Solid/Sediment	A	1	A	A	A
8	06/10/2015 16:25	MF9K07D	1516424008	MD	Soil/Solid/Sediment	A	1	A	A	A
9	06/09/2015 11:26	MF9K08	1516424009		Soil/Solid/Sediment	A	1	A	A	A
10	06/10/2015 16:00	MF9K09	1516424010		Soil/Solid/Sediment	A	1	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.	06/13/2015 09:45	ALS Sample Receiving	Sample Login
Meredith Edwards	06/13/2015 1635	111	Storage
R_33-1 11DIJO	06/16/15 11:00	Jose Orallo solid	
Jose Orallo	06/16/15 16:00	R_33-1 11DIJO	storage
R33-1 11D ss	06/18/2015 0600	metals prep ss	metals

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP-ms

Lab Notebook No.: 151208

Prepared / Analyzed by: Kristie Bitner

Date / Time: 06/26/2015 10:30

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Kristie Bitner	06/29/2015 14:03	ICP-ms lab	Analysis

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW09036	Split:	Workorder ID: 1516424	Level: EPACLP_PDF	Requested Analysis
Client: U. S. EPA Region 6		Account: 8201	Type: 8ozGWM	
Comments:			Preservatives: COOL	

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	ISM01.3 ICP-AES, Soil	ISM01.3 Mercury, Soil	ISM01.3 ICP-MS, Soil
11	06/10/2015 16:05	MF9K10	1516424011		Soil/Solid/Sediment	A	1	A	A	A
12	06/11/2015 09:43	MF9K11	1516424012		Soil/Solid/Sediment	A	1	A	A	A
13	06/10/2015 11:00	MF9K12	1516424013		Soil/Solid/Sediment	A	1	A	A	A
14	06/10/2015 11:50	MF9K13	1516424014		Soil/Solid/Sediment	A	1	A	A	A
15	06/10/2015 14:33	MF9K14	1516424015		Soil/Solid/Sediment	A	1	A	A	A
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.	06/13/2015 09:45	ALS Sample Receiving	Sample Login
Meredith Edwards	6/13/2015 1035	110	Storage
R_33-110D JTO	06/16/15 11:00	Glue of Oralle	solid
Glue of Oralle	06/16/15 11:00	R_33-110D JTO	Storage
1233-1 110-SS	06/18/2015 0600	metals prep SS	metals

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP-MS

Lab Notebook No.: 151208

Prepared / Analyzed by: Kristie Bitner

Date / Time: 06/26/2015 10:30

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Kristie Bitner	06/29/2015 14:03	ICP-MS Lab KB	Analysis

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW09036	Split:	Workorder ID: 1516424	Level: EPACLP_PDF	Requested Analysis
Client: U. S. EPA Region 6		Account: 8201	Type: 8ozGWM	
Comments:			Preservatives: COOL	

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	ISM01.3 ICP-AES, Soil	ISM01.3 Mercury, Soil	ISM01.3 ICP-MS, Soil
1	06/08/2015 11:00	MF9K02	1516424001		Soil/Solid/Sediment	A	1	A	A	A
2	06/08/2015 13:51	MF9K03	1516424002		Soil/Solid/Sediment	A	1	A	A	A
3	06/08/2015 15:00	MF9K04	1516424003		Soil/Solid/Sediment	A	1	A	A	A
4	06/08/2015 15:05	MF9K05	1516424004		Soil/Solid/Sediment	A	1	A	A	A
5	06/08/2015 15:42	MF9K06	1516424005		Soil/Solid/Sediment	A	1	A	A	A
6	06/08/2015 16:25	MF9K07	1516424006		Soil/Solid/Sediment	A	1	A	A	A
7	06/08/2015 16:25	MF9K07S	1516424007	MS	Soil/Solid/Sediment	A	1	A	A	A
8	06/10/2015 16:25	MF9K07D	1516424008	MD	Soil/Solid/Sediment	A	1	A	A	A
9	06/09/2015 11:26	MF9K08	1516424009		Soil/Solid/Sediment	A	1	A	A	A
10	06/10/2015 16:00	MF9K09	1516424010		Soil/Solid/Sediment	A	1	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.	06/13/2015 09:45	ALS Sample Receiving	Sample Login
Meredith Edwards	06/13/2015 1635	111D	Storage
R-33-1 11DIJO	06/16/15 11:00	Jose Orallo solid	
Jose Orallo	06/16/15 16:00	R-33-1 11DIJO	Storage
R33-1 11D ss	06/18/2015 0600	metals prep ss	metals

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

HBN: 151594

Sample Prep / Analysis for: ISM01.3 Hg Soil

Lab Notebook No.: network

Prepared / Analyzed by: ~~CH / CH~~ SS / CH CH 07/01/2015

Date / Time: 07/01/2015 05:00

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
metals prep CH	07/01/2015 0:58	AA/Rad lab CH	Hg analysis
AA/Rad lab CH	07/01/2015 15:34	Nonhazardous waste CH	Disposal
		CH 07/01/2015 Disposed	

ALS Environmental

CHAIN-OF-CUSTODY

Project / Job / Task: EPW09036	Split:	Workorder ID: 1516424	Level: EPACLP_PDF
Client: U. S. EPA Region 6		Account: 8201	Type: 8ozGWM

Comments:

Preservatives: COOL

Requested Analysis: ISM01.3 ICP-AES, Soil; ISM01.3 Mercury, Soil; ISM01.3 ICP-MS, Soil

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers ID(s)	Containers Count	ISM01.3 ICP-AES, Soil	ISM01.3 Mercury, Soil	ISM01.3 ICP-MS, Soil
11	06/10/2015 16:05	MF9K10	1516424011		Soil/Solid/Sediment	A	1	A	A	A
12	06/11/2015 09:43	MF9K11	1516424012		Soil/Solid/Sediment	A	1	A	A	A
13	06/10/2015 11:00	MF9K12	1516424013		Soil/Solid/Sediment	A	1	A	A	A
14	06/10/2015 11:50	MF9K13	1516424014		Soil/Solid/Sediment	A	1	A	A	A
15	06/10/2015 14:33	MF9K14	1516424015		Soil/Solid/Sediment	A	1	A	A	A
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.	06/13/2015 09:45	ALS Sample Receiving	Sample Login
Meredith Edwards	6/13/2015 1605	110	Storage
R. 33-110 ITO	06/16/15 16:00	Glue of Oralle solid	
Glue of Oralle	06/16/15 16:00	R. 33-110 ITO	storage
R33-1 110-SS	06/18/2015 0600	metals prep SS	metals

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ISM01.3 Hg Soil

Prepared / Analyzed by: SS / CH

Lab Notebook No.: HBN:151594

Date / Time: 07/01/2015 05:00

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
metals prep CH	07/01/2015 05:58	AA/Rad lab CH	Hg analysis
AA/Rad lab CH	07/01/2015 15:34	Nonhazardous waste CH	Disposed

CH 07/01/2015 Disposed

Batch Worklist

Batch: EIPX/ 5379 Created: 6/17/2015 11:53 Instrument: NONE HBN: 150705

Rule: ISM ICP-AES 3050B Prep Analyst: S. Stewart Status: NA

Workorder: 1516424 SDG: MF9K02 Case: 45299

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
1	452108	PBS1	1 grams	100 mL		PBS	4		ISMAESS.4P	6180	12/14/2015	6/19/2015	6/18/2015
2	452109	LCS1	1 grams	100 mL		LCS	4		ISMAESS.4P	6180	12/14/2015	6/19/2015	6/18/2015
3	1516424001	MF9K02	1.3749 grams	100 mL		SAMPLE	4	1516424001-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
4	1516424002	MF9K03	1.3393 grams	100 mL		SAMPLE	4	1516424002-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
5	1516424003	MF9K04	1.2787 grams	100 mL		SAMPLE	4	1516424003-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
6	1516424004	MF9K05	1.1741 grams	100 mL		SAMPLE	4	1516424004-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
7	1516424005	MF9K06	1.0769 grams	100 mL		SAMPLE	4	1516424005-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
8	1516424006	MF9K07	1.2405 grams	100 mL		SAMPLE	4	1516424006-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
9	1516424007	MF9K07S	1.2425 grams	100 mL		MS	4	1516424007-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
10	1516424008	MF9K07D	1.247 grams	100 mL		MD	4	1516424008-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
11	1516424009	MF9K08	1.3018 grams	100 mL		SAMPLE	4	1516424009-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
12	1516424010	MF9K09	1.3735 grams	100 mL		SAMPLE	4	1516424010-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
13	1516424011	MF9K10	1.2486 grams	100 mL		SAMPLE	4	1516424011-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
14	1516424012	MF9K11	1.247 grams	100 mL		SAMPLE	4	1516424012-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
15	1516424013	MF9K12	1.3677 grams	100 mL		SAMPLE	4	1516424013-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
16	1516424014	MF9K13	1.4839 grams	100 mL		SAMPLE	4	1516424014-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015
17	1516424015	MF9K14	1.3949 grams	100 mL		SAMPLE	4	1516424015-A	I13AESS.4P	5936	12/10/2015	6/19/2015	6/18/2015

STANDARD REPORT

Stock Standard - ICP-CLP-CRQL

ICP-CLP-CRQL — **Description - ISM CRQL Solution**

Standard: 27708
MFG: Inorganic Ventures
MFG Lot: J2-MEB563030
Part ID: CLP-AES-CRQL-2

Created By: S. Stewart
Create Date: 4/10/2015
Lab Lot: ICP-CLP

Amount: 125 mL
Expires: 4/10/2016
Usable: Yes

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

STANDARD REPORT

Stock Standard - ICP CLP SPK1

ICP CLP SPK1	Description - ISM ICP Matrix Spike Soln #1

Standard: 24679 **Created By:** K. Lockwood **Amount:** 125 mL
MFG: Inorganic Ventures **Create Date:** 7/29/2014 **Expires:** 7/1/2015
MFG Lot: F2-MEB427123 **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID: CLPP-SPK-1

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

STANDARD REPORT

Stock Standard - ICP CLP SPK2

ICP CLP SPK2	Description - ISM ICP Matrix Spike Soln #2

Standard: 24680 **Created By:** K. Lockwood **Amount:** 125 mL
MFG: Inorganic Ventures **Create Date:** 7/29/2014 **Expires:** 7/1/2015
MFG Lot: F2-MEB418039 **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID: CLPP-SPK-5

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	50 ug/mL
6	7440-28-0	Thallium	50 ug/mL

Batch Worklist

Batch: EICP/ 4999 Created: 6/30/2015 15:16 Instrument: ICP08 HBN: 151519

Rule: ISM ICP-AES Analysis Analyst: N. Edwards Status: WP

Workorder: 1516424 SDG: MF9K02 Case: 45299

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
1	454361	S0				STB	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
	*Run# k15126												
2	454362	SA				STC	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
3	454363	SB				STD	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
4	454364	SC				STD	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
5	454365	SD				STD	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
6	454366	SE				STD	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
7	454367	SF				STD	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
8	454368	S500000				STD	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
9	454369	ICV1				ICV	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
10	454370	ICB1				ICB	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
11	454371	ICSA1				ICSA	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
12	454372	ICSAB1				ICSAB	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
13	454373	CCV1				CCV	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
14	454374	CCB1				CCB	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
15	452108	PBS1	1 grams	100 mL		PBS	4		ISMAESS..4	6180	12/14/2015	7/3/2015	6/30/2015
16	452109	LCS1	1 grams	100 mL		LCS	4		ISMAESS..4	6180	12/14/2015	7/3/2015	6/30/2015
17	1516424001	MF9K02	1.3749 grams	100 mL		SAMPLE	4	1516424001-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
18	1516424002	MF9K03	1.3393 grams	100 mL		SAMPLE	4	1516424002-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
19	1516424003	MF9K04	1.2787 grams	100 mL		SAMPLE	4	1516424003-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
20	1516424004	MF9K05	1.1741 grams	100 mL		SAMPLE	4	1516424004-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
21	1516424005	MF9K06	1.0769 grams	100 mL		SAMPLE	4	1516424005-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
22	1516424006	MF9K07	1.2405 grams	100 mL		SAMPLE	4	1516424006-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
23	1516424007	MF9K07S	1.2425 grams	100 mL		MS	4	1516424007-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
24	1516424008	MF9K07D	1.247 grams	100 mL		MD	4	1516424008-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
25	454375	MF9K07L				SD	4		ISMAESW..3	5609	12/10/2015	7/3/2015	6/30/2015
26	1516424009	MF9K08	1.3018 grams	100 mL		SAMPLE	4	1516424009-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
27	1516424010	MF9K09	1.3735 grams	100 mL		SAMPLE	4	1516424010-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
28	1516424011	MF9K10	1.2486 grams	100 mL		SAMPLE	4	1516424011-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015

Batch Worklist

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
29	1516424012	MF9K11	1.247 grams	100 mL		SAMPLE	4	1516424012-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
30	1516424013	MF9K12	1.3677 grams	100 mL		SAMPLE	4	1516424013-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
31	1516424014	MF9K13	1.4839 grams	100 mL		SAMPLE	4	1516424014-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
32	1516424015	MF9K14	1.3949 grams	100 mL		SAMPLE	4	1516424015-A	I13AESS..4	5936	12/10/2015	7/3/2015	6/30/2015
33	454376	CCV2				CCV	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015
34	454377	CCB2				CCB	3		ISMAESW..3	5609	12/27/2015	7/3/2015	6/30/2015

Batch Worklist

Batch: EMS/ 4156 Created: 6/25/2015 08:20 Instrument: HBN: 151208

Rule: ISM ICP-MS Soil Prep Analyst: K. Bitner Status: NA

Workorder: 1516424 SDG: MF9K02 Case: 45299

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
1	453462	PBS1				PBS	4		ISMMSS..4P	5239	12/22/2015	6/19/2015	
2	453463	LCS1				LCSS	4		ISMMSS..4P	5239	12/22/2015	6/19/2015	
3	1516424001	MF9K02				SAMPLE	4	1516424001-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
4	1516424002	MF9K03				SAMPLE	4	1516424002-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
5	1516424003	MF9K04				SAMPLE	4	1516424003-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
6	1516424004	MF9K05				SAMPLE	4	1516424004-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
7	1516424005	MF9K06				SAMPLE	4	1516424005-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
8	1516424006	MF9K07				SAMPLE	4	1516424006-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
9	1516424007	MF9K07S				MS	4	1516424007-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
10	1516424008	MF9K07D				MD	4	1516424008-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
11	1516424009	MF9K08				SAMPLE	4	1516424009-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
12	1516424010	MF9K09				SAMPLE	4	1516424010-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
13	1516424011	MF9K10				SAMPLE	4	1516424011-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
14	1516424012	MF9K11				SAMPLE	4	1516424012-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
15	1516424013	MF9K12				SAMPLE	4	1516424013-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
16	1516424014	MF9K13				SAMPLE	4	1516424014-A	I13MSS..4P	5936	12/10/2015	6/19/2015	
17	1516424015	MF9K14				SAMPLE	4	1516424015-A	I13MSS..4P	5936	12/10/2015	6/19/2015	

STANDARD REPORT

Stock Standard - ISM-MS-LOW

ISM-MS-LOW — **Description - ISM01.3 ICP-MS LCS/Low STD**

Standard: 23704
MFG: Inorganic Ventures
MFG Lot: H2-MEB527135
Part ID: ALS-54

Created By: K. Bitner
Create Date: 6/6/2014
Lab Lot: ALS-54

Amount: 250 mL
Expires: 7/1/2015
Usable: Yes

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

STANDARD REPORT

Stock Standard - ICPMS CLP MS

ICPMS CLP MS	Description - ICPMS CLP Matrix Spike

Standard: 25853
MFG: Inorganic Ventures
MFG Lot: H2-MEB552044
Part ID: CLP-MS-SPK-REV1

Created By: K. Bitner
Create Date: 10/29/2014
Lab Lot: IP-PS-14-045

Amount: 125 mL
Expires: 11/1/2015
Usable: Yes

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

Batch Worklist

Batch: EMS/ 4172 Created: 6/30/2015 16:08 Instrument: HBN: 151527

Rule: ISM ICP-MS Soil Analysis Analyst: J. Kershisnik Status: WP

Workorder: 1516424 SDG: MF9K02 Case: 45299

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
1	454416	S0				STB	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
	*Run # MS215065												
2	454417	S				STC	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
3	454418	S10				STD	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
4	454419	S50				STD	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
5	454420	S200				STD	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
6	454421	S500				STD	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
7	454422	S2500				STD	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
8	454423	ICV1				ICV	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
9	454424	ICB1				ICB	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
10	454425	ICSA1				ICSA	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
11	454426	ICSAB1				ICSAB	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
12	454427	CCV1				CCV	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
13	454428	CCB1				CCB	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
14	453462	PBS1	1 grams	100 mL		PBS	4		ISMMSS...4	5239	12/22/2015	7/3/2015	
15	453463	LCS1	1 grams	100 mL		LCSS	4		ISMMSS...4	5239	12/22/2015	7/3/2015	
16	1516424001	MF9K02	1.1549 grams	100 mL		SAMPLE	4	1516424001-A	I13MSS...4	5936	12/10/2015	7/3/2015	
17	1516424002	MF9K03	1.1676 grams	100 mL		SAMPLE	4	1516424002-A	I13MSS...4	5936	12/10/2015	7/3/2015	
18	1516424003	MF9K04	1.1453 grams	100 mL		SAMPLE	4	1516424003-A	I13MSS...4	5936	12/10/2015	7/3/2015	
19	1516424004	MF9K05	1.3769 grams	100 mL		SAMPLE	4	1516424004-A	I13MSS...4	5936	12/10/2015	7/3/2015	
20	1516424005	MF9K06	1.0891 grams	100 mL		SAMPLE	4	1516424005-A	I13MSS...4	5936	12/10/2015	7/3/2015	
21	1516424006	MF9K07	1.2102 grams	100 mL		SAMPLE	4	1516424006-A	I13MSS...4	5936	12/10/2015	7/3/2015	
22	1516424007	MF9K07S	1.2103 grams	100 mL		MS	4	1516424007-A	I13MSS...4	5936	12/10/2015	7/3/2015	
23	1516424008	MF9K07D	1.2146 grams	100 mL		MD	4	1516424008-A	I13MSS...4	5936	12/10/2015	7/3/2015	
24	454429	MF9K07L				SD	4		ISMMSS...4	5073	12/10/2015	7/3/2015	
25	1516424009	MF9K08	1.1344 grams	100 mL		SAMPLE	4	1516424009-A	I13MSS...4	5936	12/10/2015	7/3/2015	
26	1516424010	MF9K09	1.2042 grams	100 mL		SAMPLE	4	1516424010-A	I13MSS...4	5936	12/10/2015	7/3/2015	
27	1516424011	MF9K10	1.4431 grams	100 mL		SAMPLE	4	1516424011-A	I13MSS...4	5936	12/10/2015	7/3/2015	
28	1516424012	MF9K11	1.2102 grams	100 mL		SAMPLE	4	1516424012-A	I13MSS...4	5936	12/10/2015	7/3/2015	

Batch Worklist

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
29	1516424013	MF9K12	1.3242 grams	100 mL		SAMPLE	4	1516424013-A	I13MSS...4	5936	12/10/2015	7/3/2015	
30	1516424014	MF9K13	1.1392 grams	100 mL		SAMPLE	4	1516424014-A	I13MSS...4	5936	12/10/2015	7/3/2015	
31	1516424015	MF9K14	1.1081 grams	100 mL		SAMPLE	4	1516424015-A	I13MSS...4	5936	12/10/2015	7/3/2015	
32	454430	CCV2				CCV	4		ISMMSS...4	5073	12/27/2015	7/3/2015	
33	454431	CCB2				CCB	4		ISMMSS...4	5073	12/27/2015	7/3/2015	

Batch Worklist

Batch: EHG/ 5894 Created: 6/25/2015 03:46 Instrument: HBN: 151194

Rule: ISM Mercury CS1 Prep Analyst: S. Stewart Status: NA

Workorder: 1516424 SDG: MF9K02 Case: 45299

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
1	453414	S0				STB	4		ISMHGS..4P	6180	7/21/2015	6/19/2015	
2	453415	S0.2				STC	4		ISMHGS..4P	6180	7/21/2015	6/19/2015	
3	453416	S0.5				STD	4		ISMHGS..4P	6180	7/21/2015	6/19/2015	
4	453417	S1.0				STD	4		ISMHGS..4P	6180	7/21/2015	6/19/2015	
5	453418	S5.0				STD	4		ISMHGS..4P	6180	7/21/2015	6/19/2015	
6	453419	S10				STD	4		ISMHGS..4P	6180	7/21/2015	6/19/2015	
7	453420	ICV				ICV	4		ISMHGS..4P	6180	7/21/2015	6/19/2015	
8	453421	ICB				ICB	4		ISMHGS..4P	6180	7/21/2015	6/19/2015	
9	453422	CCV				CCV	4		ISMHGS..4P	6180	7/21/2015	6/19/2015	
10	453423	CCB				CCB	4		ISMHGS..4P	6180	7/21/2015	6/19/2015	
11	453424	PBS1				PBS	4		ISMHGS..4P	6180	7/21/2015	6/19/2015	
12	1516424001	MF9K02				SAMPLE	4	1516424001-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
13	1516424002	MF9K03				SAMPLE	4	1516424002-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
14	1516424003	MF9K04				SAMPLE	4	1516424003-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
15	1516424004	MF9K05				SAMPLE	4	1516424004-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
16	1516424005	MF9K06				SAMPLE	4	1516424005-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
17	1516424006	MF9K07				SAMPLE	4	1516424006-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
18	1516424007	MF9K07S				MS	4	1516424007-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
19	1516424008	MF9K07D				MD	4	1516424008-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
20	1516424009	MF9K08				SAMPLE	4	1516424009-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
21	1516424010	MF9K09				SAMPLE	4	1516424010-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
22	1516424011	MF9K10				SAMPLE	4	1516424011-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
23	1516424012	MF9K11				SAMPLE	4	1516424012-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
24	1516424013	MF9K12				SAMPLE	4	1516424013-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
25	1516424014	MF9K13				SAMPLE	4	1516424014-A	I13HGS..4P	5936	7/9/2015	6/19/2015	
26	1516424015	MF9K14				SAMPLE	4	1516424015-A	I13HGS..4P	5936	7/9/2015	6/19/2015	

ISM01.3 – Mercury in Soil: Digestion & Analysis:

Workorder and Sample Information + Prep-Batching Information

Workorder ID	HBN	SDG	Case
1516424	151194	MF9K02	45299
	SS 07/02/2015		

Preparation Information

Preparer Name: Shane Stewart	
Prep Start Date: 07/01/2015	Prep Start Time: 0500

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.

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
S0.2	STD B:	200µL	28508	Hg-1A	0.2
S0.5	0.1 µg/mL	500µL	↓	↓	0.5
S1.0	STD A:	100µL	28538	Hg-3	1.0
S5.0/CCV	1.0 µg/mL	500µL	↓	Hg-1A	5.0
S10.0		1000µL	↓	↓	10.0
ICB/CCB/PBS	NONE	NONE	NONE	NONE	0
ICV	STD:ICV5 -0508	1000µL	21478	Hg-1A	4.0
MS	STD A	250µL	28538	↓	0.5 µg/g
MD	NONE	Hg target = Parent sample [Hg]			
MS/MD IDs: MF9K07S, MF9K07D					

5mL of freshly prepared aqua-regia (3:1 HCl + HNO_3) is added to each vessel.

HCl	Lot: 54310	Manufacturer: EMD
HNO_3	Lot: 0000104736	Manufacturer: JT Baker

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 #: 23A	Hood #: 23	Thermometer ID: 14042447 27	
On this hotblock: QCs, Samples			
Start Time	End Time	Start Temp	End Temp
05:42	05:44	88.1 °C	88.1 °C
~~HB #:~~	Hood #:	Thermometer ID:	
On this hotblock: SS 07/01/2015			
Start Time	End Time	Start Temp	End Temp
		°C	°C

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: 0615	End time: 0633
	Reagents Log: AAcurrent\mercury\reagents	
	Entry: #29	Made: 06/17/2015 Exp: 06/17/2016
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 #: 23A	Hood #: 23	Thermometer ID: 14042447 27	
On this hotblock: QCs, Samples			
Start Time	End Time	Start Temp	End Temp
0635	0716	88.2 °C	88.1 °C
~~HB #:~~	Hood #:	Thermometer ID:	
On this hotblock: SS 07/01/2015			
Start Time	End Time	Start Temp	End Temp
		°C	°C

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.

Physical description: Sample colors, textures, and clarities are recorded with the sample weights. (Colors: violet, white, brown, grey, red, blue, yellow, green, orange, or black),(Textures: coarse, medium, or fine) (Clarities: clear, cloudy, or opaque).
Preparation Comments: NA SS 07/01/2015

Analysis Information

Analyst Name: Christopher R Hamer	
Date Received for Analysis: 07/01/2015	Time Received: 09:58

12% $NH_2OH{\cdot}HCl$ is added just prior to analysis in order to reduce any remaining $KMnO_4$ from the digestion. 6 mL 12% $NH_2OH{\cdot}HCl$ 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% $NH_2OH{\cdot}HCl$	Reagents Log: AAcurrent\mercury\reagents		
	Entry: 21	Made: 03/27/2015	Exp: 03/27/2016

CVAA Instrument Information

Type: Cold vapor atomic absorption	Wavelength: 253.7 nm
Instrument Type: CETAC M-7500	Lab ID: AACV02

Reagent Information

10% $SnCl_2$ + 7% HCl	Reagents Log: AAcurrent\mercury\reagents		
	Entry: 31	Made: 06/24/2015	Exp: 06/24/2016
5% HCl + 5% HNO_3	Reagents Log: AAcurrent\mercury\reagents		
	Entry: 30	Made: 06/18/2015	Exp: 06/18/2016

Run Information #1 – SDG: MF9K02

Run Date: 07/01/2015	Start Time: 12:13	End Time: 12:43
Analysis HBN: 151594		Run Data File: CV2-15191

Run Information #2 – SDG:

Run Date:	Start Time:	End Time:
Analysis HBN:		Run Data File: CH

Run Information #3 – SDG: NONE CH ~~06/~~ 07/01/2015

Run Date:	Start Time:	End Time:
Analysis HBN: CH 07/01/2015		Run Data File:

Dilution Information

Sample	Dilution	Pipette(s)	Reason
NONE			
		CH 07/01/2015	

Sample Result Information

Data Conversion: (µg/L result)(dilution factor) = (µg/L final result)
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] MDL: 0.001457 mg/kg [Hg]; Effective 01/15/2015 - 01/15/2016
This log page, prep and analysis batch sheets, and any associated data is scanned and saved as a PDF file named for the analysis HBN and stored in a network folder also named for the analysis HBN. Saved to: \\Alsltws013\DataReview
Mercury reagents notebook pages are scanned and saved online to: \\Alsltws013\AAcurrent\Mercury\Reagents
ALS SOP: IT-EP-ISM-HG

Additional Information

Comments: NONE CH 07/01/2015

STANDARD REPORT

Working Standard - Hg B Cal Sol

Hg B Cal Sol		**Description - Hg B Calibration Solution**
Standard: 28508	**Created By:** S. Stewart	**Amount:** 50 mL
MFG: SS	**Create Date:** 06/29/2015	**Expires:** 07/05/2015
MFG Lot:	**Lab Lot:** HgB 062915-070515	**Usable:** Yes
Part ID:		

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
28470	HNO3	Concentrated Nitric Acid	HNO3 (104736)	1 mL	06/22/2025
28505	Hg Working	Hg CCV/Calibration Working	HgWS 062915	0.5 mL	07/05/2015

STANDARD REPORT

Working Standard - Hg A Cal Sol

Hg A Cal Sol			Description - Hg A Calibration Solution
Standard: 28538	**Created By:** S. Stewart		**Amount:** 50 mL
MFG: SS	**Create Date:** 07/01/2015		**Expires:** 07/05/2015
MFG Lot:	**Lab Lot:** HgA 070115-070515		**Usable:** Yes
Part ID:			

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
28470	HNO3	Concentrated Nitric Acid	HNO3 (104736)	1 mL	06/22/2025
28505	Hg Working	Hg CCV/Calibration Working	HgWS 062915	5 mL	07/05/2015

STANDARD REPORT

Stock Standard - Hg EPA ICV

Hg EPA ICV			Description - Hg EPA ICV
Standard: 21478	**Created By:** C. Hansen		**Amount:** 125 mL
MFG: EPA Reference Material	**Create Date:** 12/2/2013		**Expires:** 12/2/2018
MFG Lot: ICV5-0508 Hg	**Lab Lot:** IHg-CLPICV		**Usable:** Yes
Part ID: ICV-5-0508 Hg			

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: 26171	**Created By:** C. Hansen		**Amount:** 125 mL
MFG: Inorganic Ventures	**Create Date:** 12/1/2015		**Expires:** 12/1/2015
MFG Lot: G2-HG02114	**Lab Lot:** InorganicVenturesHg1000		**Usable:** Yes
Part ID: AAHG1-1			

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:	28505	**Created By:**	S. Stewart	**Amount:**	50 mL
MFG:	SS	**Create Date:**	06/29/2015	**Expires:**	07/05/2015
MFG Lot:		**Lab Lot:**	HgWS 062915	**Usable:**	Yes
Part ID:					

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
26171	Hg WS Stock	Hg CCV/Cal Stock Solution	InorganicVenturesHg10	0.5 mL	12/01/2015
28470	HNO3	Concentrated Nitric Acid	HNO3 (104736)	1 mL	06/22/2025

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: 10/6/2005		Expires: 11/7/2025
MFG Lot:	Lab Lot: LAB 109		Usable: Yes
Part ID:			

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - HNO3

HNO3			Description - Concentrated Nitric Acid
Standard: 28470	**Created By:** C. Hansen		**Amount:** 2.5 L
MFG: JT Baker	**Create Date:** 6/22/2015		**Expires:** 6/22/2025
MFG Lot: 0000104736	**Lab Lot:** HNO3 (104736)		**Usable:** Yes
Part ID:			

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

ALS Reagent Report

ID Number:	29	Description:	5% Potassium Permanganate
Analyst:	Christopher Hansen		
Date Created:	06/17/2015	Expiration Date:	06/17/2016
Pipettes Used:			
Balanced Used:	102887		

Materials Used, Manufacturer, Lots, Amounts, Final Concentrations if applicable

Crystalline potassium permanganate, low in mercury, ACS 99.0% min.
Alfa Aesar LOT: K15Z046.
100g potassium permanganate crystals were dissolved into 2L ASTM type II water.
Four 2L bottles (8L) were prepared.

: 00282

Batch Worklist

Batch: EHG/ 5903 Created: 7/1/2015 13:51 Instrument: HBN: 151594

Rule: ISM Mercury Soil Analysis Analyst: C. Hansen Status: WP

Workorder: 1516424 SDG: MF9K02 Case: 45299

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Dust Weight	Type	Mx	Container	Procedure	Mgr	Expire Date	Due Date	Run Date
1	453414	S0	.5 grams	100 mL		STB	4		ISMHGS...4	6180	7/21/2015	7/3/2015	
2	453415	S0.2	.5 grams	100 mL		STC	4		ISMHGS...4	6180	7/21/2015	7/3/2015	
3	453416	S0.5	.5 grams	100 mL		STD	4		ISMHGS...4	6180	7/21/2015	7/3/2015	
4	453417	S1.0	.5 grams	100 mL		STD	4		ISMHGS...4	6180	7/21/2015	7/3/2015	
5	453418	S5.0	.5 grams	100 mL		STD	4		ISMHGS...4	6180	7/21/2015	7/3/2015	
6	453419	S10	.5 grams	100 mL		STD	4		ISMHGS...4	6180	7/21/2015	7/3/2015	
7	453420	ICV	.5 grams	100 mL		ICV	4		ISMHGS...4	6180	7/21/2015	7/3/2015	
8	453421	ICB	.5 grams	100 mL		ICB	4		ISMHGS...4	6180	7/21/2015	7/3/2015	
9	453422	CCV	.5 grams	100 mL		CCV	4		ISMHGS...4	6180	7/21/2015	7/3/2015	
10	453423	CCB	.5 grams	100 mL		CCB	4		ISMHGS...4	6180	7/21/2015	7/3/2015	
11	453424	PBS1	.5 grams	100 mL		PBS	4		ISMHGS...4	6180	7/21/2015	7/3/2015	
12	1516424001	MF9K02	.5574 grams	100 mL		SAMPLE	4	1516424001-A	I13HGS...4	5936	7/9/2015	7/3/2015	
13	1516424002	MF9K03	.5659 grams	100 mL		SAMPLE	4	1516424002-A	I13HGS...4	5936	7/9/2015	7/3/2015	
14	1516424003	MF9K04	.5673 grams	100 mL		SAMPLE	4	1516424003-A	I13HGS...4	5936	7/9/2015	7/3/2015	
15	1516424004	MF9K05	.56 grams	100 mL		SAMPLE	4	1516424004-A	I13HGS...4	5936	7/9/2015	7/3/2015	
16	1516424005	MF9K06	.5705 grams	100 mL		SAMPLE	4	1516424005-A	I13HGS...4	5936	7/9/2015	7/3/2015	
17	1516424006	MF9K07	.5079 grams	100 mL		SAMPLE	4	1516424006-A	I13HGS...4	5936	7/9/2015	7/3/2015	
18	1516424007	MF9K07S	.5075 grams	100 mL		MS	4	1516424007-A	I13HGS...4	5936	7/9/2015	7/3/2015	
19	1516424008	MF9K07D	.5059 grams	100 mL		MD	4	1516424008-A	I13HGS...4	5936	7/9/2015	7/3/2015	
20	1516424009	MF9K08	.5198 grams	100 mL		SAMPLE	4	1516424009-A	I13HGS...4	5936	7/9/2015	7/3/2015	
21	1516424010	MF9K09	.5354 grams	100 mL		SAMPLE	4	1516424010-A	I13HGS...4	5936	7/9/2015	7/3/2015	
22	1516424011	MF9K10	.5798 grams	100 mL		SAMPLE	4	1516424011-A	I13HGS...4	5936	7/9/2015	7/3/2015	
23	1516424012	MF9K11	.5249 grams	100 mL		SAMPLE	4	1516424012-A	I13HGS...4	5936	7/9/2015	7/3/2015	
24	1516424013	MF9K12	.5659 grams	100 mL		SAMPLE	4	1516424013-A	I13HGS...4	5936	7/9/2015	7/3/2015	
25	1516424014	MF9K13	.5081 grams	100 mL		SAMPLE	4	1516424014-A	I13HGS...4	5936	7/9/2015	7/3/2015	
26	1516424015	MF9K14	.5832 grams	100 mL		SAMPLE	4	1516424015-A	I13HGS...4	5936	7/9/2015	7/3/2015	

File #: k15126

WorkOrder#	Sample #'s	Analytes/Matrix	Prep Batch HBN	Prep Date/Time	Prep Method
1516424	MF9K02-K14	See Below/Soil	150705	06/18/2015 06:10	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	ICP-15-040	4535/55
SA	28502	Horizon
SB	27475	Horizon
SC	27476	Horizon
SD	28122	Horizon
SE/CCV	28501	Horizon
SF	28123	Horizon
S500000	27551	Horizon
ICV	27550	Horizon
ICSA	27474	Horizon
ICSAB	28265	Horizon
Bubbler Rinse	ICP-15-030	4535/54
Internal Standard	ICP-15-041	4535/55
Rinse	ICP-15-047	4535/55

SDG # MF9K02
CASE # 45299
Account # 8201
Analysis Method: ISM01.3
Analysis Date: 06/30/2015
Instrument ID: ICP08
HBN # 151519
Analyst: Neil Edwards

ANALYSIS PARAMETERS:
Pump Rate = 27 rpm
RF Power = 1200 W
Auxiliary Gas = 0.5 L/min
Nebulizer Flow = 0.50 L/min
Coolant Gas Flow = 16 L/min
ASXpress Plus = 3.5 mL Loop

Dilutions: No dilutions were required.

Pipettes: ICP-10

Comments: No problems during analysis.

A Serial Dilution was done by combining 2 mL of MF9K07 with 8 mL of ICP-15-040 (4535/55) in a 15 mL tube.

Project No. N/A

TITLE ALS ENVIRONMENTAL - ICP OES INSTRUMENT ANALYSIS RUN LOGBOOK

Book No. 4699

From Page No. 58

DATE	TIME ON	TIME OFF	TOTAL TIME	METHOD	MATRIX	HBN # (S)	COMMENTS	LOW SC IS / HIGH SC IS	# OF SAMPLES	RUN#	INIT.
05/15/2015	13:14	15:06	112 MIN	6010C	TCLP	148786	N/A	3838 / 488040	6	K15094	NE
05/16/2015	09:34	11:25	111 MIN	6010C	TCLP WATER	148815	N/A	3848 / 483930	9	K15095	NE
05/18/2015	15:39	17:26	107 MIN	6010C	DS	148916	N/A	3884 / 491020	11	K15096	NE
05/19/2015	15:04	16:58	114 MIN	6010C	TCLP WATER	148970	N/A	4301 / 507620	6	K15097	NE
05/20/2015	10:46	12:06	80 MIN	6010C	WATER	148816	N/A	4106 / 491950	4	K15098	NE
05/20/2015	14:02	15:33	91 MIN	6010C	DS	149056	N/A	4141 / 495600	7	K15099	NE
05/22/2015	09:38	11:18	100 MIN	6010C	DS WATER	149179, 149181	N/A	4094 / 436930	8	K15100	NE
05/22/2015	11:37	13:36	119 MIN	6010C	WATER	149182	N/A	4064 / 456270	2	K15101	NE
05/26/2015	15:53	16:43	50 MIN	6010C	DS	149346	N/A	4113 / 450450	1	K15102	NE
05/27/2015	14:02	15:17	75 MIN	6010C	DS	149412	N/A	4281 / 509130	6	K15103	NE
05/28/2015	18:45	20:06	81 MIN	6010C	DS	149518	N/A	4270 / 501360	5	K15104	NE
05/29/2015	11:42	13:24	102 MIN	6010C	TCLP WATER	149522	N/A	4351 / 505230	6	K15105	NE
06/01/2015	14:07	15:04	57 MIN	6010C	DS	149606	N/A	4097 / 492880	3	K15106	NE
06/04/2015	12:37	16:20	223 MIN	6010C	WATER TCLP DS	149860, 149830, 149822	N/A	3928 / 515300	21	K15107	NE
06/05/2015	12:26	14:00	94 min.	ISM01.3 2015	Soil	1514325	MF9L76	4240 / 638090	12	K15108	gcs
06/08/2015	10:52	12:37	105 min.	ISM01.3 2015	Soil	1514325	MF9L76	4293 / 650040	12	K15109	gcs
06/10/2015	06:53	08:17	84 min.	ISM01.3 2015	Water	1514838 Mod 1999.4	MC0BJ2	3862 / 561000	5	K15110	gcs
06/10/2015	08:45	11:06	141 min.	ISM01.3 2015	Soil	1515388	MF9L98	3928 / 555700	20	K15111	gcs
06/11/2015	13:11	14:43	92 MIN	6010C	WATER	150345	N/A	3789 / 489460	3	K15112	NE
06/12/2015	10:59	12:58	119 min.	ISM01.3 2015	Soil	gcs 6/12/15 ~~1515559~~ 1515559	MF9M21	3434 / 461170	20	K15113	gcs
06/14/2015	09:16	11:12	116 min.	ISM01.3 2015	Soil	1515388	MF9L98	3563 / 478120	20	K15114	gcs
06/14/2015	11:26	12:38	72 min.	ISM01.3 2015	Soil	1515562	MF9M36	3562 / 497700	5	K15115	gcs
06/16/2015	09:59	11:14	75 MIN	6010C	DS	150582	N/A	3625 / 421520	4	K15116	NE
06/17/2015	15:02	16:23	81 MIN	6010C	DS	150719	N/A	3716 / 421100	9	K15117	NE
06/19/2015	10:45	12:21	96 MIN	6010C	DS TCLP	150881, 150895	N/A	3522 / 415840	6	K15118	NE
06/19/2015	12:38	14:21	103 min.	ISM01.3 2015	Soil	1515392, 1515633	MF9M15	3517 / 483610	13	K15119	gcs
06/22/2015	12:19	14:15	116 min.	ISM01.3 2015	Soil	1515632	MF9M48	3562 / 460330	20	K15120	gcs
06/22/2015	15:59	17:53	114 min.	ISM01.3 2015	Soil	1515745	MF9K00	3432 / 467590	19	K15121	gcs
06/26/2015	13:10	15:09	119 min.	ISM01.3 2015	Water	1516259	MC0AP6	3962 / 517140	15	K15122	gcs
06/26/2015	15:20	17:34	134 min.	ISM01.3 2015	Soil	1516249	MC0AX0	4006 / 514920	19	K15123	gcs
06/29/2015	16:33	18:05	92 MIN	6010C	DS	151442	N/A	3723 / 440580	12	K15124	NE
06/30/2015	11:19	12:25	66 MIN	ISM01.3 2015	SOIL	1516213 - 151490	MC0B35	3669 / 478510	2	K15125	NE
06/30/2015	12:43	14:17	94 MIN	ISM01.3 2015	SOIL	1516424 - 151519	MF9K02	3678 / 483330	14	K15126	NE

To Page No. ____

Witnessed & Understood by me, | Date | Invented by: | Date

Recorded by:

Project No. NA

TITLE ALS Environmental ICP Solutions/Reagents Logbook

Book No. 4535

From Page No. 53

Date	ICP Solution #	Solution Type	Primary Solution Horizon ID #	Acid Lots	Expiration Date	Recipe Page	Initials	Comments
01/26/2015	ICP-15-004	Rinse 2% HNO_3	NA	HNO_3-0000088969	07/26/2015	1	gcs	2L made
01/27/2015	ICP-15-005	2% HNO_3	NA	HNO_3-0000088969	07/27/2015	1	gcs	1L made
02/09/2015	ICP-15-006	Rinse 5%/5%	N/A	HNO_3-0000088969 HCl-54169	08/09/2015	1	NE	2L MADE
02/17/2015	ICP-15-007	5%/5%	N/A	HNO_3-0000088969 HCl-54169	08/17/2015	1	NE	2L SPLIT INTO TWO 1L BOTTLES FOR SO, DILUTENT..
02/23/2015	ICP-15-008	5%/5%	N/A	HNO_3-0000088969 HCl-54169	08/23/2015	1	NE	2L SPLIT INTO TWO 1L BOTTLES FOR SO, DILUTENT
02/23/2015	ICP-15-009	Rinse 5%/5%	N/A	HNO_3-0000088969 HCl-54169	08/23/2015	1	NE	2L BUBBLER RINSE
↓	ICP-15-010	↓	↓	↓	↓	↓	↓	↓
02/23/2015	ICP-15-011	ScYIS	Sc-27176, Y-26858	HNO_3-0000088969 HCl-54169	08/23/2015	1	NE	2L MADE
↓	ICP-15-012	↓	↓	↓	↓	↓	↓	↓
↓	ICP-15-013	↓	↓	↓	↓	↓	↓	↓
02/23/2015	ICP-15-014	Rinse 5%/5%	N/A	HNO_3-0000088969 HCl-54169	08/23/2015	1	NE	10L MADE
02/23/2015	ICP-15-015	Rinse 5%/5%	N/A	HNO_3-0000088969 HCl-54169	08/23/2015	1	NE	10L MADE
03/05/2015	ICP-15-016	Rinse 5%/5%	NA	HNO_3-0000088969 HCl-54169	09/05/2015	1	gcs	2L made
03/05/2015	ICP-15-017	Rinse 5%/5%	NA	HNO_3-0000088969 HCl-54169	09/05/2015	1	gcs	2L made
03/05/2015	ICP-15-018	ScYIS	Sc-27176, Y-26858	HNO_3-0000088969 HCl-54169	09/05/2015	1	gcs	2L made
03/05/2015	ICP-15-019	ScYIS	Sc-27176, Y-26858	HNO_3-0000088969 HCl-54169	09/05/2015	1	gcs	2L made
03/05/2015	ICP-15-020	ScYIS	Sc-27176, Y-26858	HNO_3-0000088969 HCl-54169	09/05/2015	1	gcs	2L made
03/05/2015	ICP-15-021	2% ScYIS	Sc-27176, Y-26858	HNO_3-0000088969	09/05/2015	1	gcs	2L made
03/05/2015	ICP-15-022	Rinse 2% HNO_3	NA	HNO_3-0000088969	09/05/2015	1	gcs	2L made
03/05/2015	ICP-15-023	5%/5%	NA	HNO_3-0000088969 HCl-54169	09/05/2015	1	gcs	2L split into 2-1L bottles for SO, Diluent
03/10/2015	ICP-15-024	200.7 Diluent	NA	HNO_3-0000099263 HCl-54169	09/10/2015	1	gcs	500mL made
03/13/2015	ICP-15-025	NE 03/13/2015 ~~ISTD~~ TAS	Zn-26859	HNO_3-0000099263 MeOH-DL599	09/13/2015	1	NE	2L MADE
03/24/2015	ICP-15-026	2% HNO_3	NA	HNO_3-0000088969	09/24/2015	1	gcs	500mL made
08/25/2015	ICP-15-027	5%/5%	N/A	HNO_3-0000099263 HCl-54169	09/25/2015	1	NE	2L SPLIT INTO 2-1L BOTTLE FOR SO, DILUTENT, ETC...
04/06/2015	ICP-15-028	Rinse 2% HNO_3	NA	HNO_3-0000099263	10/06/2015	1	gcs	1L made
04/10/2015	ICP-15-029	Rinse 5%/5%	NA	HNO_3-0000099263 HCl-54169	10/10/2015	1	gcs	2L made
04/10/2015	ICP-15-030	Rinse 5%/5%	NA	HNO_3-0000099263 HCl-54169	10/10/2015	1	gcs	2L made
04/10/2015	ICP-15-031	Rinse 5%/5%	NA	HNO_3-0000099263 HCl-54169, 54310	10/10/2015	1	gcs	2L made
04/10/2015	ICP-15-032	ScYIS	Sc-27176, Y-26858	HNO_3-0000099263 HCl-54310	10/10/2015	1	gcs	2L made
04/10/2015	ICP-15-033	ScYIS	Sc-27176, Y-26858	HNO_3-0000099263 HCl-54310	10/10/2015	1	gcs	2L made
04/10/2015	ICP-15-034	Rinse 5%/5%	NA HCl-54028 541699 54310	HNO_3-0000088969 0000089288 0000084117	10/10/2015	1	gcs	10L made
04/10/2015	ICP-15-035	Rinse 5%/5%	NA	HNO_3-0000088969 HCl-54378 0000084117	10/10/2015	1	gcs	10L made
04/10/2015	ICP-15-036	Rinse 2% HNO_3	NA	HNO_3-0000088969	10/10/2015	1	gcs	10L made
04/23/2015	ICP-15-037	2% HNO_3	NA	HNO_3-0000099263	10/23/2015	1	gcs	500mL made
05/05/2015	ICP-15-038	5%/5%	N/A	HNO_3-0000099263 HCl-54310	11/05/2015	1	NE	2L SPLIT INTO 2-1L BOTTLES FOR SO, DILUTENT, ETC...

To Page No. ____

Witnessed & Understood by me: Joanna C Sandoval — Date 05/08/2015

Invented by: — Date 05/05/2015

Recorded by:

Project No. NA

TITLE ALS Environmental ICP Solutions/Reagents Logbook

Book No. 4535

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Date	ICP Solution #	Solution Type	Primary Solution Horizon ID #	Acid Lots	Expiration Date	Recipe Page	Initials	Comments
05/21/2015	ICP-15-039	5%/5%	NA	HNO_3-000008896 9 HCl-54310	11/21/2015	1	gcs	2L split into 2-1L Bottles For SO, Dilutent, etc.
05/21/2015	ICP-15-040	5%/5%	NA	HNO_3-000008896 9 HCl-54310	11/21/2015	1	gcs	2L split into 2-1L Bottles For SO, Dilutent, etc.
05/21/2015	ICP-15-041	ScYIS	Sc-27176, Y-26858	HNO_3-000008896 9 HCl-54310	11/21/2015	1	gcs	2L made
05/21/2015	ICP-15-042	ScYIS	Sc-27176, Y-26858	HNO_3-000008896 9 HCl-54310	11/21/2015	1	gcs	2L made
05/21/2015	ICP-15-043	ScYIS	Sc-27176, Y-26858	HNO_3-000008896 9 HCl-54310	11/21/2015	1	gcs	2L made
05/21/2015	ICP-15-044	Rinse 5%/5%	NA	HNO_3-000008896 9 HCl-54310	11/21/2015	1	gcs	2L made
05/21/2015	ICP-15-045	Rinse 5%/5%	NA	HNO_3-000008896 9 HCl-54310	11/21/2015	1	gcs	2L made
05/21/2015	ICP-15-046	Rinse 5%/5%	NA	HNO_3-000009926 3 HCl-54310	11/21/2015	1	gcs	10L made
05/21/2015	ICP-15-047	Rinse 5%/5%	NA	HNO_3-000008896 9 HCl-54310	11/21/2015	1	gcs	10L made
05/21/2015	ICP-15-048	Rinse 5%/5%	NA	HNO_3-000008896 9 HCl-54310	11/21/2015	1	gcs	10L made
05/21/2015	ICP-15-049	Rinse 2% HNO_3	NA	HNO_3-000008896 9	11/21/2015	1	gcs	10L made
06/29/2015	ICP-15-050	2% HNO_3	NA	HNO_3-000008896 9	12/29/2015	1	KE	1L MADE

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Witnessed & Understood by me, | Date | Invented by: | Date

Recorded by:

TITLE ALS Environmental ~~DATACHEM LABORATORIES~~ ICP SOLUTION / REAGENTS LOGBOOK
JJS 7/25/12

Project No. N14
Book No. 4535

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RECIPES

7.5% HNO_3 = TRANSFERRED SOME ASTM TYPE II H_2O TO A 2L FLASK. ADD 150mL OF HNO_3 TO THE FLASK. BRING TO VOLUME WITH MORE ASTM TYPE II H_2O. STOPPER FLASK, SHAKE TO MIX. USE FOR SO, ICB, CCB AND DILUTANT.

Sc IS = ADDED SOME WATER TO A 2L FLASK. ADD ~~75~~ 100 mL OF HNO_3 AND ~~50~~ 100 mL OF HCl. ADD 1.2mL OF A 10,000 µg/mL Sc STAND. BRING TO VOLUME WITH MORE ASTM TYPE II H_2O. STOPPER FLASK AND SHAKE WELL.
RB 02/26/07
RE 11/3/06

7.5%/1% RINSE = ADD SOME ASTM TYPE II H_2O TO A 2L FLASK. ADD 150mL OF HNO_3 + 20mL OF HCl. BRING TO VOLUME WITH MORE ASTM TYPE II H_2O. STOPPER FLASK AND SHAKE WELL.

2ppm Zn. = ADD SOME ASTM TYPE II H_2O TO A 200mL VOLUMETERIC FLASK. ADD 2mL OF HNO_3. SPIKE IN 40µl OF 10,000 µg/mL Zn. BRING TO VOLUME WITH MORE ASTM TYPE II H_2O. STOPPER AND SHAKE WELL. USE FOR TORCH ALIGNMENT.

5%/5% RINSE = ADD SOME ASTM TYPE II H_2O TO A 2L FLASK. ADD 100mL OF HNO_3 AND 100mL OF HCl TO THE FLASK. BRING TO VOLUME WITH MORE ASTM TYPE II H_2O. STOPPER FLASK AND SHAKE WELL.

Thermo Torch Alignment Solution = Add some ASTM Type II H_2O to a 250 mL flask. Add 2.5 mL of HNO_3, 7.5 µL of MeOH and 50 µL of 10,000 µg/mL Zn. Bring to volume with ASTM Type II H_2O, Stopper and shake to mix. 0.03 mL/L MeOH, 2 mg/L Zn in 1% HNO_3.

ScYIS = ADD SOME WATER TO A 2L FLASK, THEN ADD 100mL OF HNO_3 AND 100mL OF HCl TO THE FLASK. SPIKE IN 1.2mL OF Sc STANDARD (10,000 µg/mL) AND 0.5mL OF Y STANDARD (10,000 µg/mL). BRING TO VOLUME WITH MORE ASTM TYPE II H_2O. STOPPER AND SHAKE FLASK.

2% HNO_3 = Add some ASTM Type II H_2O to a 2L flask. Add 40mL of HNO_3 to the flask. Bring to volume with more ASTM Type II H_2O. Stopper flask and shake well. Use for SO, ICB, CCB and Serial Dilutions or use for Rinse.

2% ScYIS = Add some ASTM Type II H_2O to a 2L flask. Add 40mL of HNO_3 to the flask. Spike in 1.2mL of 10,000 µg/mL Sc standard and 0.5mL of 10,000 µg/mL Y standard. Bring to volume with more ASTM Type II H_2O. Stopper flask and shake well.

1% HNO_3/0.5% HCl (200.7 Dilutent) = Add some ASTM Type II H_2O to a 500 mL flask. Add 5.0 mL of HNO_3 and 2.5 mL of HCl to the flask. Bring to volume with more ASTM Type II water. Stopper flask and shake well. Use for diluting 200.7 Samples.

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Witnessed & Understood by me,	Date	Invented by:	Date
		Recorded by:	

STANDARD REPORT

Working Standard - ISM01.3 SA

ISM01.3 SA — **Description - ISM01.3 SA**

Standard: 28502 **Created By:** J. Sanchez **Amount:** 200 mL
MFG: JCS **Create Date:** 06/26/2015 **Expires:** 09/01/2015
MFG Lot: **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID: ICP-10, ICP-1

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	7439-98-7	Molybdenum	10 ug/L
24	7440-32-6	Titanium	25 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	177.93 mL	11/07/2025
26531	HNO3	Concentrated Nitric Acid	HNO3 (88969)	10 mL	12/22/2019
27274	10x of Mo	10x of Mo stock	ICP-CLP	0.02 mL	09/01/2015
27275	100x of Ti	100x of Ti stock	ICP-CLP	0.05 mL	09/01/2015
27708	ICP-CLP-CRQL	ISM CRQL Solution	ICP-CLP	2 mL	04/10/2016
28120	HCl	concentrated hydrochloric acid	HCl (54310)	10 mL	01/23/2025

STANDARD REPORT

Working Standard - ISM01.3 SB

ISM01.3 SB	Description - ISM01.3 Standard B

Standard: 27475 **Created By:** N. Edwards **Amount:** 1000 mL
MFG: NAE **Create Date:** 03/21/2015 **Expires:** 07/01/2015
MFG Lot: **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID: ICP-10, ICP-2, ICP-1

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	1000 ug/L
2	7440-36-0	Antimony	200 ug/L
3	7440-38-2	Arsenic	80 ug/L
4	7440-39-3	Barium	255 ug/L
5	7440-41-7	Beryllium	80 ug/L
6	7440-43-9	Cadmium	80 ug/L
7	7440-70-2	Calcium	25000 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	1000 ug/L
12	7439-92-1	Lead	200 ug/L
13	7439-95-4	Magnesium	25000 ug/L
14	7439-96-5	Manganese	200 ug/L
15	7439-98-7	Molybdenum	80 ug/L
16	7440-02-0	Nickel	200 ug/L
17	7440-09-7	Potassium	25000 ug/L
18	7782-49-2	Selenium	80 ug/L
19	7440-22-4	Silver	125 ug/L
20	7440-23-5	Sodium	25000 ug/L
21	7440-28-0	Thallium	80 ug/L
22	7440-32-6	Titanium	80 ug/L
23	7440-62-2	Vanadium	200 ug/L
24	7440-66-6	Zinc	200 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	897.16 mL	11/07/2025
24656	STD-2A	ISM01.3 Standard Mix	ICP-CLP	0.04 mL	07/01/2015
24657	STD-2B	ISM01.3 Standard Mix	ICP-CLP	0.04 mL	07/01/2015
24658	STD-2C	ISM01.3 Standard Mix	ICP-CLP	0.04 mL	07/01/2015
25303	STD-1	ISM01.3 Standard	ICP-CLP	0.04 mL	10/01/2015
25304	IV-STOCK-2	ISM01.3 Standard	ICP-CLP	2.5 mL	10/01/2015
25320	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	0.125 mL	08/30/2015
26531	HNO3	Concentrated Nitric Acid	HNO3 (88969)	50 mL	12/22/2019
26903	HCl	concentrated hydrochloric acid	HCl(54169)	50 mL	02/02/2016
27191	Ba Low Stock	1,000 ug/mL Ba Stock	SPEX Ba 1,000 ug/mL	0.055 mL	08/23/2015

STANDARD REPORT

Working Standard - ISM01.3 SC

ISM01.3 SC	Description - ISM01.3 Standard C

Standard: 27476 **Created By:** N. Edwards **Amount:** 1000 mL
MFG: NAE **Create Date:** 03/21/2015 **Expires:** 07/01/2015
MFG Lot: **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID: ICP-2

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	5000 ug/L
2	7440-36-0	Antimony	2000 ug/L
3	7440-38-2	Arsenic	800 ug/L
4	7440-39-3	Barium	2000 ug/L
5	7440-41-7	Beryllium	800 ug/L
6	7440-43-9	Cadmium	800 ug/L
7	7440-47-3	Chromium	2000 ug/L
8	7440-48-4	Cobalt	2000 ug/L
9	7440-50-8	Copper	2000 ug/L
10	7439-89-6	Iron	5000 ug/L
11	7439-92-1	Lead	2000 ug/L
12	7439-96-5	Manganese	2000 ug/L
13	7439-98-7	Molybdenum	800 ug/L
14	7440-02-0	Nickel	2000 ug/L
15	7782-49-2	Selenium	800 ug/L
16	7440-22-4	Silver	250 ug/L
17	7440-28-0	Thallium	800 ug/L
18	7440-32-6	Titanium	800 ug/L
19	7440-62-2	Vanadium	2000 ug/L
20	7440-66-6	Zinc	2000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	898.35 mL	11/07/2025
24656	STD-2A	ISM01.3 Standard Mix	ICP-CLP	0.4 mL	07/01/2015
24657	STD-2B	ISM01.3 Standard Mix	ICP-CLP	0.4 mL	07/01/2015
24658	STD-2C	ISM01.3 Standard Mix	ICP-CLP	0.4 mL	07/01/2015
25303	STD-1	ISM01.3 Standard	ICP-CLP	0.2 mL	10/01/2015
25320	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	0.25 mL	08/30/2015
26531	HNO3	Concentrated Nitric Acid	HNO3 (88969)	50 mL	12/22/2019
26903	HCl	concentrated hydrochloric acid	HCl(54169)	50 mL	02/02/2016

STANDARD REPORT

Working Standard - ISM01.3 SD

ISM01.3 SD — **Description - ISM01.3 Standard D**

Standard: 28122 **Created By:** J. Sanchez **Amount:** 500 mL
MFG: JCS **Create Date:** 05/21/2015 **Expires:** 07/01/2015
MFG Lot: **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID: ICP-10, ICP-2

Pos.	Analyte	Name	Concentration
1	7440-36-0	Antimony	5000 ug/L
2	7440-38-2	Arsenic	2000 ug/L
3	7439-98-7	Molybdenum	2000 ug/L
4	7782-49-2	Selenium	2000 ug/L
5	7440-32-6	Titanium	2000 ug/L
6	7440-39-3	Barium	5000 ug/L
7	7440-62-2	Vanadium	5000 ug/L
8	7440-41-7	Beryllium	2000 ug/L
9	7440-43-9	Cadmium	2000 ug/L
10	7440-48-4	Cobalt	5000 ug/L
11	7440-47-3	Chromium	5000 ug/L
12	7440-50-8	Copper	5000 ug/L
13	7439-96-5	Manganese	5000 ug/L
14	7440-02-0	Nickel	5000 ug/L
15	7439-92-1	Lead	5000 ug/L
16	7440-66-6	Zinc	5000 ug/L
17	7440-28-0	Thallium	2000 ug/L
18	7429-90-5	Aluminum	50000 ug/L
19	7439-89-6	Iron	50000 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	441 mL	11/07/2025
24656	STD-2A	ISM01.3 Standard Mix	ICP-CLP	0.5 mL	07/01/2015
24657	STD-2B	ISM01.3 Standard Mix	ICP-CLP	0.5 mL	07/01/2015
24658	STD-2C	ISM01.3 Standard Mix	ICP-CLP	0.5 mL	07/01/2015
25303	STD-1	ISM01.3 Standard	ICP-CLP	1 mL	10/01/2015
25304	IV-STOCK-2	ISM01.3 Standard	ICP-CLP	6.25 mL	10/01/2015
25320	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	0.25 mL	08/30/2015
27803	HNO3	Concentrated Nitric Acid	HNO3 (104117)	25 mL	04/20/2020
28120	HCl	concentrated hydrochloric acid	HCl (54310)	25 mL	01/23/2025

STANDARD REPORT

Working Standard - ISM01.3 SE

ISM01.3 SE — **Description - ISM01.3 STD E/CCV**

Standard: 28501 **Created By:** J. Sanchez **Amount:** 200 mL
MFG: JCS **Create Date:** 06/25/2015 **Expires:** 07/01/2015
MFG Lot: **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID: ICP-10, ICP-2

Pos.	Analyte	Name	Concentration
1	7440-36-0	Antimony	25000 ug/L
2	7440-38-2	Arsenic	10000 ug/L
3	7439-98-7	Molybdenum	10000 ug/L
4	7782-49-2	Selenium	10000 ug/L
5	7440-32-6	Titanium	10000 ug/L
6	7440-39-3	Barium	25000 ug/L
7	7440-62-2	Vanadium	25000 ug/L
8	7440-41-7	Beryllium	10000 ug/L
9	7440-43-9	Cadmium	10000 ug/L
10	7440-48-4	Cobalt	25000 ug/L
11	7440-47-3	Chromium	25000 ug/L
12	7440-50-8	Copper	25000 ug/L
13	7439-96-5	Manganese	25000 ug/L
14	7440-02-0	Nickel	25000 ug/L
15	7439-92-1	Lead	25000 ug/L
16	7440-66-6	Zinc	25000 ug/L
17	7440-28-0	Thallium	10000 ug/L
18	7429-90-5	Aluminum	250000 ug/L
19	7439-89-6	Iron	250000 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	169.8 mL	11/07/2025
24656	STD-2A	ISM01.3 Standard Mix	ICP-CLP	1 mL	07/01/2015
24657	STD-2B	ISM01.3 Standard Mix	ICP-CLP	1 mL	07/01/2015
24658	STD-2C	ISM01.3 Standard Mix	ICP-CLP	1 mL	07/01/2015
25303	STD-1	ISM01.3 Standard	ICP-CLP	2 mL	10/01/2015
25304	IV-STOCK-2	ISM01.3 Standard	ICP-CLP	5 mL	10/01/2015
25320	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	0.2 mL	08/30/2015
26531	HNO3	Concentrated Nitric Acid	HNO3 (88969)	10 mL	12/22/2019
28120	HCl	concentrated hydrochloric acid	HCl (54310)	10 mL	01/23/2025

STANDARD REPORT

Working Standard - ISM01.3 SF

ISM01.3 SF	Description - ISM01.3 Standard F

Standard: 28123 **Created By:** J. Sanchez **Amount:** 500 mL
MFG: JCS **Create Date:** 05/21/2015 **Expires:** 07/01/2015
MFG Lot: **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID: ICP-10, ICP-2

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	434 mL	11/07/2025
24656	STD-2A	ISM01.3 Standard Mix	ICP-CLP	5 mL	07/01/2015
24657	STD-2B	ISM01.3 Standard Mix	ICP-CLP	5 mL	07/01/2015
24658	STD-2C	ISM01.3 Standard Mix	ICP-CLP	5 mL	07/01/2015
25320	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	1 mL	08/30/2015
27803	HNO3	Concentrated Nitric Acid	HNO3 (104117)	25 mL	04/20/2020
28120	HCl	concentrated hydrochloric acid	HCl (54310)	25 mL	01/23/2025

STANDARD REPORT

Working Standard - S500000

S500000	Description - ISM01.3 Standard 500000

Standard: 27551 **Created By:** N. Edwards **Amount:** 1000 mL
MFG: NAE **Create Date:** 03/29/2015 **Expires:** 09/29/2015
MFG Lot: **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID:

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	830 mL	11/07/2025
25303	STD-1	ISM01.3 Standard	ICP-CLP	20 mL	10/01/2015
25304	IV-STOCK-2	ISM01.3 Standard	ICP-CLP	50 mL	10/01/2015
26903	HCl	concentrated hydrochloric acid	HCl(54169)	50 mL	02/02/2016
27078	HNO3	Concentrated Nitric Acid	HNO3 (99263)	50 mL	02/16/2020

STANDARD REPORT

Working Standard - ISM ICP ICV

ISM ICP ICV			Description - ISM01.3 ICP ICV
Standard: 27550	**Created By:** N. Edwards		**Amount:** 500 mL
MFG: NAE	**Create Date:** 03/29/2015		**Expires:** 09/29/2015
MFG Lot: ICV-1(0307)	**Lab Lot:** ICV ICP-CLP		**Usable:** Yes
Part ID: ICP-10			

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	400 mL	11/07/2025
25735	CLPICP-ICV1	CLP-ICP/ICPMS-ICV-1	ICP-CLP	50 mL	10/21/2024
26903	HCl	concentrated hydrochloric acid	HCl(54169)	25 mL	02/02/2016
27078	HNO3	Concentrated Nitric Acid	HNO3 (99263)	25 mL	02/16/2020

STANDARD REPORT

Working Standard - ISM01.3 ICSA

ISM01.3 ICSA		Description - ISM01.3 ICP ICSA
Standard: 27474	**Created By:** N. Edwards	**Amount:** 1000 mL
MFG: NAE	**Create Date:** 03/21/2015	**Expires:** 09/21/2015
MFG Lot: ICSA(1211)	**Lab Lot:** ICP-CLP	**Usable:** Yes
Part ID: Grad Cylinder		

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	800 mL	11/07/2025
21455	CLPICP-ICS-A	CLP-ICP-ICS-Part A	ICP-CLP	100 mL	11/27/2023
26531	HNO3	Concentrated Nitric Acid	HNO3 (88969)	50 mL	12/22/2019
26903	HCl	concentrated hydrochloric acid	HCl(54169)	50 mL	02/02/2016

STANDARD REPORT

Working Standard - ISM ICSAB

ISM ICSAB — **Description - ISM01.3 ICSAB**

Standard:	28265	**Created By:**	J. Sanchez	**Amount:**	200 mL
MFG:	JCS	**Create Date:**	06/05/2015	**Expires:**	12/05/2015
MFG Lot:	ICSAB-(1211/0710)	**Lab Lot:**	ICP-CLP	**Usable:**	Yes
Part ID:	ICP-10				

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	140 mL	11/07/2025
21455	CLPICP-ICS-A	CLP-ICP-ICS-Part A	ICP-CLP	20 mL	11/27/2023
21456	CLPICP-ICS-B	CLP-ICP-ICS-Part B	ICP-CLP	20 mL	11/27/2023
26531	HNO3	Concentrated Nitric Acid	HNO3 (88969)	10 mL	12/22/2019
28120	HCl	concentrated hydrochloric acid	HCl (54310)	10 mL	01/23/2025

STANDARD REPORT

Stock Standard - Y Stock

Y Stock	Description - 10,000 ug/mL Y Stock

Standard:	26858	**Created By:**	P. Foote	**Amount:**	125 mL
MFG:	SPEX CertiPrep	**Create Date:**	1/26/2015	**Expires:**	1/30/2016
MFG Lot:	AI15-90YY	**Lab Lot:**	SPEX Y 10,000 ug/mL	**Usable:**	Yes
Part ID:	PLY2-3Y				

Pos.	Analyte	Name	Concentration
1	7440-65-5	Yttrium	10000 ug/mL

STANDARD REPORT

Stock Standard - Sc Stock

Sc Stock	Description - 10,000 ug/mL Sc Stock

Standard:	27176	**Created By:**	P. Foote	**Amount:**	125 mL
MFG:	Inorganic Ventures	**Create Date:**	2/20/2015	**Expires:**	2/23/2016
MFG Lot:	G2-SC02113	**Lab Lot:**	IV Sc 10,000 ug/mL	**Usable:**	Yes
Part ID:	CGSC10-1				

Pos.	Analyte	Name	Concentration
1	7440-20-2	Scandium	10000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - CLPICP-ICS-A

CLPICP-ICS-A		Description - CLP-ICP-ICS-Part A
Standard: 21455	**Created By:** J. Sanchez	**Amount:** 100 mL
MFG: QATS Laboratory	**Create Date:** 11/27/2013	**Expires:** 11/27/2023
MFG Lot: ICSA-1211	**Lab Lot:** ICP-CLP	**Usable:** Yes
Part ID:		

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

STANDARD REPORT

Constituent

Stock Standard - CLPICP-ICS-B

CLPICP-ICS-B		Description - CLP-ICP-ICS-Part B
Standard: 21456	**Created By:** J. Sanchez	**Amount:** 100 mL
MFG: QATS Laboratory	**Create Date:** 11/27/2013	**Expires:** 11/27/2023
MFG Lot: ICSB-0710	**Lab Lot:** ICP-CLP	**Usable:** Yes
Part ID:		

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 - STD-2A

STD-2A	Description - ISM01.3 Standard Mix

Standard:	24656	**Created By:**	N. Edwards	**Amount:**	250 mL
MFG:	Inorganic Ventures	**Create Date:**	6/17/2014	**Expires:**	7/1/2015
MFG Lot:	G2-MEB487014	**Lab Lot:**	ICP-CLP	**Usable:**	Yes
Part ID:	ALSUT-STD-2A				

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 - ISM01.3 Standard Mix

Standard:	24657	**Created By:**	N. Edwards	**Amount:**	250 mL
MFG:	Inorganic Ventures	**Create Date:**	6/17/2014	**Expires:**	7/1/2015
MFG Lot:	H2-MEB529087	**Lab Lot:**	ICP-CLP	**Usable:**	Yes
Part ID:	ALSUT-STD-2B				

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 - ISM01.3 Standard Mix

Standard: 24658 **Created By:** N. Edwards **Amount:** 250 mL
MFG: Inorganic Ventures **Create Date:** 6/17/2014 **Expires:** 7/1/2015
MFG Lot: H2-MEB529088 **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID: ALSUT-STD-2C

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 - STD-1

STD-1	Description - ISM01.3 Standard

Standard:	25303	**Created By:**	J. Sanchez	**Amount:**	250 mL
MFG:	Inorganic Ventures	**Create Date:**	9/22/2014	**Expires:**	10/1/2015
MFG Lot:	H2-MEB542124	**Lab Lot:**	ICP-CLP	**Usable:**	Yes
Part ID:	ALSUT-STD-1				

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 - IV-STOCK-2

IV-STOCK-2		**Description - ISM01.3 Standard**
Standard: 25304	**Created By:** J. Sanchez	**Amount:** 500 mL
MFG: Inorganic Ventures	**Create Date:** 9/22/2014	**Expires:** 10/1/2015
MFG Lot: G2-MEB506019	**Lab Lot:** ICP-CLP	**Usable:** Yes
Part ID: P1081H		

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

Stock Standard - Ag Stock

Ag Stock	Description - 1,000 ug/mL Ag Stock

Standard:	25320	**Created By:**	P. Foote	**Amount:**	125 mL
MFG:	Spex CertiPrep	**Create Date:**	9/2/2014	**Expires:**	8/30/2015
MFG Lot:	19-13AGY	**Lab Lot:**	Ag 1,000 ug/mL	**Usable:**	Yes
Part ID:	PLAG2-2Y				

Pos.	Analyte	Name	Concentration
1	7440-22-4	Silver	1000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - CLPICP-ICV1

CLPICP-ICV1	Description - CLP-ICP/ICPMS-ICV-1

Standard: 25735 **Created By:** J. Sanchez **Amount:** 100 mL
MFG: QATS Laboratory **Create Date:** 10/21/2014 **Expires:** 10/21/2024
MFG Lot: ICV1-0307 **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID:

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 - Ti Stock

Ti Stock		**Description - 10,000 ug/mL Ti Stock**
Standard: 26855	**Created By:** P. Foote	**Amount:** 125 mL
MFG: SPEX CertiPrep	**Create Date:** 1/26/2015	**Expires:** 1/30/2016
MFG Lot: AN15-189TIY	**Lab Lot:** SPEX Ti 10,000 ug/mL	**Usable:** Yes
Part ID: PLTI9-3Y		

Pos.	Analyte	Name	Concentration
1	7440-32-6	Titanium	10000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Ba Low Stock

Ba Low Stock		Description - 1,000 ug/mL Ba Stock
Standard: 27191	**Created By:** P. Foote	**Amount:** 30 mL
MFG: SPEX CertiPrep	**Create Date:** 2/23/2015	**Expires:** 8/23/2015
MFG Lot: 20-183BAM	**Lab Lot:** SPEX Ba 1,000 ug/mL	**Usable:** Yes
Part ID: PLBA2-2M		

Pos.	Analyte	Name	Concentration
1	7440-39-3	Barium	1000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Mo Low Stock

Mo Low Stock	Description - 1,000 ug/mL Mo Stock

Standard:	27204	**Created By:**	P. Foote	**Amount:**	30 mL
MFG:	SPEX CertiPrep	**Create Date:**	2/23/2015	**Expires:**	2/28/2016
MFG Lot:	20-92MOM	**Lab Lot:**	SPEX Mo 1,000 ug/mL	**Usable:**	Yes
Part ID:	PLMO9-2M				

Pos.	Analyte	Name	Concentration
1	7439-98-7	Molybdenum	1000 ug/mL

STANDARD REPORT

Constituent

Working Standard - 10x of Mo

10x of Mo	Description - 10x of Mo stock

Standard: 27274 **Created By:** J. Sanchez **Amount:** 10 mL
MFG: JCS **Create Date:** 03/01/2015 **Expires:** 09/01/2015
MFG Lot: **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID: ICP-10, ICP-2

Pos.	Analyte	Name	Concentration
1	7439-98-7	Molybdenum	100000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	8.8 mL	11/07/2025
26531	HNO3	Concentrated Nitric Acid	HNO3 (88969)	0.2 mL	12/22/2019
27204	Mo Low Stock	1,000 ug/mL Mo Stock	SPEX Mo 1,000 ug/mL	1 mL	02/28/2016

STANDARD REPORT

Constituent

Working Standard - 100x of Ti

100x of Ti		Description - 100x of Ti stock
Standard: 27275	**Created By:** J. Sanchez	**Amount:** 10 mL
MFG: JCS	**Create Date:** 03/01/2015	**Expires:** 09/01/2015
MFG Lot:	**Lab Lot:** ICP-CLP	**Usable:** Yes
Part ID: ICP-10, ICP-1		

Pos.	Analyte	Name	Concentration
1	7440-32-6	Titanium	100000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
109	ASTM H2O	ASTM Type II Water	LAB 109	9.7 mL	11/07/2025
26531	HNO3	Concentrated Nitric Acid	HNO3 (88969)	0.2 mL	12/22/2019
26855	Ti Stock	10,000 ug/mL Ti Stock	SPEX Ti 10,000 ug/mL	0.1 mL	01/30/2016

STANDARD REPORT

Constituent

Stock Standard - ICP-CLP-CRQL

ICP-CLP-CRQL	Description - ISM CRQL Solution

Standard: 27708 **Created By:** S. Stewart **Amount:** 125 mL
MFG: Inorganic Ventures **Create Date:** 4/10/2015 **Expires:** 4/10/2016
MFG Lot: J2-MEB563030 **Lab Lot:** ICP-CLP **Usable:** Yes
Part ID: CLP-AES-CRQL-2

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

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:** 10/6/2005		**Expires:** 11/7/2025
MFG Lot:	**Lab Lot:** LAB 109		**Usable:** Yes
Part ID:			

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - HNO3

HNO3			Description - Concentrated Nitric Acid
Standard: 26531	**Created By:** C. Hansen		**Amount:** 2 L
MFG: JT Baker	**Create Date:** 12/22/2014		**Expires:** 12/22/2019
MFG Lot: 0000088969	**Lab Lot:** HNO3 (88969)		**Usable:** Yes
Part ID:			

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - HCl

HCl			Description - concentrated hydrochloric acid
Standard: 26903	**Created By:** S. Stewart		**Amount:** 2 L
MFG: EMD	**Create Date:** 2/2/2015		**Expires:** 2/2/2016
MFG Lot: 54169	**Lab Lot:** HCl(54169)		**Usable:** Yes
Part ID:			

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - HNO3

HNO3			Description - Concentrated Nitric Acid
Standard: 27078	**Created By:** C. Hansen		**Amount:** 2 L
MFG: JT Baker	**Create Date:** 2/16/2015		**Expires:** 2/16/2020
MFG Lot: 0000099263	**Lab Lot:** HNO3 (99263)		**Usable:** Yes
Part ID:			

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - HNO3

HNO3			Description - Concentrated Nitric Acid
Standard: 27803	**Created By:** C. Hansen		**Amount:** 2 L
MFG: JT Baker	**Create Date:** 4/20/2015		**Expires:** 4/20/2020
MFG Lot: 0000104117	**Lab Lot:** HNO3 (104117)		**Usable:** Yes
Part ID:			

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - HCl

HCl		Description - concentrated hydrochloric acid
Standard: 28120	**Created By:** J. Sanchez	**Amount:** 2 L
MFG: EMD	**Create Date:** 1/23/2015	**Expires:** 1/23/2025
MFG Lot: 54310	**Lab Lot:** HCl (54310)	**Usable:** Yes
Part ID:		

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

ICP-MS ISM01.3 Soil **Run # MS215065**

Workorder ID	Sample #'s	Analytes	Prep Batch/HBN #	Prep Date/Time	Analysis Batch/HBN #	Account #
1516423	MF9K15-17, 19-23, 25-29	See Below #1 (Soil)	EMS/4155 151207	06/26/2015 10:30	EMS/4171 151526	8201
1516424	MF9K02-14	See Below #1 (Soil)	EMS/4156 151208	06/26/2015 10:30	EMS/4172 151527	8201

#1 = 9Be, 51V, 52Cr, 59Co, 60Ni, 63Cu, 66Zn, 75As, 82Se, 107Ag, 111Cd, 121Sb, 137Ba, 205Tl, 208Pb

Soil Conversion Factor : (ug/L)(0.1 L/1.0 g or sample wt.)(5x dil.)= 0.5 ug/g sample weight

CALIBRATION AND QC STANDARDS UTILIZED:

	ID #	Book/Page
S0 ICB/CCB (1% HNO_3)	MS-15-120	4184/98
S	1000X of 23704	Horizon
S10	5X of 28396	Horizon
S50	28396	Horizon
S200	28397	Horizon
S500	28398	Horizon
S2500	28399	Horizon
S5000	28400	Horizon
S50000	2X of 28401	Horizon
S100000	28401	Horizon
ICV	28402	Horizon
ICSA	28403	Horizon
ICSAB	28404	Horizon
CCV	28405	Horizon
Internal Standards	MS-15-067 (#24864)	4184/96
Rinse	MS-15-121	4184/98

SDG: MF9K15
SDG: MF9K02
CASE: 45299
Prep Method: 3050B
Analysis Method: ISM01.3
Analysis Date: 06/29/2015
Instrument ID: ICPM02
Results File: MS215065
Analyst: John Kershisnik

Scanning Mode: Peak Jumping
Sweeps: 40
Channels per Mass: 1
Acquisition Duration: 36287
Channel Spacing: 0.02
Replicates: 5

Instrument Parameters:

Major		Minor		Global	
Extraction:	-149	Lens 2:	-27.5	Standard Resolution:	125
Lens 1:	4.7	Lens 3:	-115.3	High Resolution:	125
Focus:	26.9	Forward Power:	1404	Analogue Detector:	1951
D1:	-32.9	Horizontal:	79	PC Detector:	3225
Pole Bias:	0.0	Vertical:	467		
Hexapole Bias:	-5.0	D2:	-160		
Nebuliser:	0.80	DA:	-80.0		
Sample Depth:	130	Cool:	13.0		
		Auxiliary:	0.90		

Comments: S was prepared by taking 50 µL of 23704 (Horizon) and adding 0.5 mL conc. HNO3 and bringing to 50 mL final volume with ASTM Type II water.
S10 was prepared by taking 8.0 mL of S0, MS-15-120 (4184/98) and adding 2.0 mL of S03, **28396** (Horizon), and mixing in a 14 mL Falcon tube.
S50000 was prepared by taking 4.0 mL of S0, MS-15-120 (4184/98) and adding 4.0 mL of S09, **28401** (Horizon), and mixing in a 14 mL Falcon tube.

A Cross Calibration was performed using solution MS-15-028 (4184/95), (Horizon #**25397**), before the performance report.
A Performance report was done to tune the instrument using "CLP" and solution MS-15-027 (4184/95), (Horizon #**25851**), before calibration.

Dilutions: Soils samples were diluted 5x prior to analysis to bring acid concentration down by mixing 2 mL of sample with 8 mL of S0, MS-15-120 (4184/98).
Serial dilution done by pipetting 2 mL of sample MF9K26 into 8 mL of MS-15-120 (4184/98) into a polypropylene tube, capping and shaking to mix.
Serial dilution done by pipetting 2 mL of sample MF9K07 into 8 mL of MS-15-120 (4184/98) into a polypropylene tube, capping and shaking to mix.

Post digestion spike for Sb: spiked 10 mL of sample MF9K26 with 100 µl of 2 µg/mL Sb, (Horizon #**23704**), for a target of 20 µg/L.
Post digestion spike for Sb: spiked 10 mL of sample MF9K07 with 100 µl of 2 µg/mL Sb, (Horizon #**23704**), for a target of 20 µg/L.

Project No. NA

TITLE ALS Laboratory - ICPMO2 Instrument Log Book

Book No. 4183

From Page No. 67

DATE	Time ON	Time OFF	TOTAL Time	Method	Matrix	Acct.#	W.O. IDs / Comments	Run#	# of Samples	Init.
05/11/2015	13:50 15:22	Tune 17:38	— 136 min	ISM02.2	SOIL WATER	8201	CLP Tune Passed MX1R04, MX1R08	MS215043	2	JK
↓	15:22 09:21	18:31 Tune	189 min —	6020	SOLID Bulk	8001	1511734 SALT 6020 Tune Passed	↓	2	JK
05/15/2015	10:45 10:09	13:33 Tune	188 min —	6020	Liquid	1101	1513185, 8, 9, 90, 1, 2, 3, 168, 176, 1513432 6020 Tune Passed	MS215044	11	KB
05/18/2015	12:07 11:09	14:31 Tune	144 min —	6020	Bulk	1101	1513469, 72, 73, 74 1513527, 806 6020 Tune Passed	MS215045	7	KB
05/19/2015	11:44	14:52	188 min	6020	Bulk	1101	1513439, 1513268, 73, 74, 75, 76, 77, 78, 79, 80, 81, 83	MS215046	20	KB
↓	↓ 10:04	↓ Tune	↓ —	↓	↓ Bulk	↓	1513428, 29, 30, 31, 33, 36, 37, 38	↓	↓	↓
05/20/2015	10:41	14:18	217 min	6020	Liquid	1101	1513549, 57, 59, 60, 61, 64, 69, 71, 74, 75, 933, 24, 7, 8, 9,	MS215047	18	KB
↓	↓ 08:34	↓ Tune	↓ —	↓	↓	↓	1513869, 1514021, 27 CLP Tune Passed	↓	↓	↓
05/22/2015	09:07 13:00	13:52 Tune	291 min —	ISM01.3	SOIL	8201	ISM01.3 SOIL MDL's 6020 Tune Passed	MS215048	28	JK
05/27/2015	13:28 16:06	15:26 Tune	118 min —	6020	WATER SOIL	8001	(Cd .25) 1513204 CLP Tune Passed	MS215049	4	JK
05/27/2015	17:23	19:39	136 min	ISM02.2	WATER	8201	MX1549, MX1553	MS215050	2	JK
↓	17:23 11:40	20:14 Tune	171 min —	ISM01.3	WATER	8201	(Bridge) 1513993 6020 Tune Passed	↓	1	JK
05/28/2015				6020	SOIL	8001		MS215051	20	JK
↓	12:14 12:17	15:37 Tune	203 min —	↓	↓	↓	(LVL4) 1513332	↓	↓	↓
05/29/2015	13:13 09:39	18:36 Tune	323 min —	6020	SOIL	8001	6020 Tune Passed (LVL4) 1513462 6020 Tune Passed	MS215052	29	JK
06/03/2015	10:49 09:41	13:50 Tune	181 min —	6020	Water	8001	1514502, 1515220, 1513947	MS215053	8	KB
06/05/2015	10:54 09:28	13:56 Tune	182 min —	6020	DS Bulk	1101	1515020, 1, 2, 45, 1515413, 5, 9, 20, 3, 5, 31, 2, 40, 51, 53, 54	MS215054	17	KB & PAF
06/09/2015	10:01	16:15	374 min	ISM01.3 200.8	Soil Water	8201 8001	WO 1514325 MF9L76	MS215055 ~~MS210055~~ KB 6/11/2015	12	KB
06/09/2015	10:01 09:11	16:15 Tune	" —	6020	Bulk Bulk	1101	1515412, 1515676, 1515525 6020 Tune Passed	MS215055	6	KB
06/11/2015	09:25 12:33	13:48 Tune	263 min —	6020	GW	7001	1514650, 1516001 CLP Tune Passed	MS215056	20	KB
06/16/2015	13:25	18:03	278 min	ISM01.3	SOIL	8201	W.O. 1515388 MF9L98	MS215057	25	JK
↓	↓ 14:02	↓ Tune	↓ —	↓	↓	↓	W.O. 1515562 MF9M36 CLP Tune Passed	↓	↓	↓
06/19/2015	14:32	19:32	300 min	ISM01.3	SOIL	8201	W.O. 1515559 MF9M21	MS215058	20	JK
↓	↓ 16:48	↓ Tune	↓ —	↓	↓	↓	W.O. 1515392, 1515633 MF9M15 CLP Tune Passed	↓	13	JK
06/18/2015	17:13 Tune	18:06 16:28	53 min —	ISM01.3	SOIL	8201	W.O. 1515388 (ser dil. - Zn) MF9L98 CLP Tune Passed	MS215059	1	JK
06/22/2015	20:40 Tune	23:56 10:46	196 min —	ISM01.3	SOIL	8201	W.O. 1515632 MF9M48 6020 Tune Passed	MS215060	20	JK
06/23/2015	13:28 17:40	15:27 Tune	120 min —	6020	Water	8001	1516018 CLP Tune Passed	MS215061	1	KB
06/23/2015	20:07 09:43	23:27 Tune	200 min —	ISM01.3	SOIL	8201	W.O. 1515745 MF9K00 CLP Tune Passed	MS215062	19	JK
06/26/2015	10:10 16:35	13:40 Tune	210 min —	ISM02.2	WATER	8201	W.O. 1516037 MH0AA0 CLP Tune Passed	MS215063	7	JK
06/28/2015	17:24 14:25	19:28 Tune	124 min —	ISM02.2	WATER	8201	W.O. 1517713 MC0G32 CLP Tune Passed	MS215064	4	JK
06/29/2015	14:50	19:07	257 min	ISM01.3	SOIL	8201	W.O. 1516424 MF9K02	MS215065	13	JK
↓	↓	↓	↓	↓	↓	↓	W.O. 1516423 MF9K15	↓	13	JK

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ALS Laboratory
TITLE ~~DATACHEM LABORATORIES~~ - ICP-MS SOLUTIONS LOGBOOK.
KB 02/03/11

Project No. N/A
Book No. 4184

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RECIPES.

CLP ~~5.3~~CRI 2/23/11 = USE "CLP-MS-CRQL-2" PRIMARY CONTAINING 10 ug/mL Ba; 5 ug/mL Se; 2 ug/mL Sb, Cr, Cu, Zn; 1 ug/mL Ag, As, Be, Cd, Co, Mn, Pb, Ni, Tl, V. SPIKE 0.05 mL TO A 50 mL TEFLON CLASS A FLASK, CONTAINING SOME ASTM TYPE II H_2O WITH 0.5 mL OF HNO_3. BRING TO VOLUME WITH ASTM TYPE II H_2O. SEAL + SHAKE FLASK.
FINAL TARGETS: 10 ug/L Ba, 5 ug/L Se; 2 ug/L Sb, Cr, Cu, Zn; 1 ug/L Ag, As, Be, Cd, Co, Mn, Pb, Ni, Tl, V in 1% HNO_3

VARIAN TUNE = SPIKE 0.5 mL OF "VAR-TS-MS" PRIMARY CONTAINING 10 ug/mL Ba, Be, Ce, Co, In, Pb, Mg, Tl, Th AND 0.5 mL OF HNO_3 TO A 50 mL FLASK CONTAINING SOME ASTM TYPE II H_2O. BRING TO VOLUME WITH ASTM TYPE II H_2O. SEAL + SHAKE.
FINAL TARGETS: 100 ug/L Ba, Be, Ce, Co, In, Pb, Mg, Tl, Th in 1% HNO_3.

6020 TUNE = SPIKE 0.5 mL OF "6020TS" PRIMARY CONTAINING 10 ug/mL Co, In, Li, Tl AND 0.5 mL OF HNO_3 TO A 50 mL FLASK CONTAINING SOME ASTM TYPE II H_2O. BRING TO VOLUME WITH ASTM TYPE II H_2O. SEAL + SHAKE.
FINAL TARGETS: 100 ug/L Co, In, Li, Tl in 1% HNO_3.

TUNE A = SPIKE ~~0.5~~ 0.05 mL OF "TUNE A" PRIMARY, CONTAINING 10 ug/mL OF Li, Be, Co, Ni, In, Ba, Ce, Pb, U + 100 ug/mL OF As, Se, AND 0.5 mL OF HNO_3 TO A 50 mL CONTAINING SOME ASTM TYPE II H_2O. BRING TO VOLUME WITH ASTM TYPE II H_2O. SEAL + SHAKE. KE 4/13/04
FINAL TARGETS: 10 ug/L Li, Be, Co, Ni, In, Ba, Be, Ce, Pb, U; 100 ug/L As, Se.

TUNE B = SPIKE 0.5 mL OF "TUNE B" PRIMARY, CONTAINING 100 ug/mL Be; 50 ug/mL Li; 25 ug/mL Mg, Se; 20 ug/mL Co; 10 ug/mL Y, In, Ce, Tl; 5 ug/mL Tb, U, AND 0.5 mL OF HNO_3 TO A 50 mL FLASK. BRING TO VOLUME. SEAL + SHAKE.
FINAL TARGETS: 1000 ug/L Be; 500 ug/L Li; 250 ug/L Mg, Sc; 200 ug/L Co; 100 ug/L Y, In, Ce, Tl; 50 ug/L Tb, U in 1% HNO_3.

VAR IS = SPIKE 40 mL OF "6020ISS" PRIMARY, CONTAINING 10 ug/mL Bi, Ho, In, ^{6}Li, Rh, Sc, Tb, Y AND 20 mL OF HNO_3 TO A 2L CONTAINER CONTAINING SOME ASTM TYPE II H_2O. BRING TO VOLUME. SEAL + SHAKE.
FINAL TARGETS: 200 ug/L Bi, Ho, In, ^{6}Li, Rh, Sc, Tb, Y in 1% HNO_3.

THERMO IS = SPIKE 4 mL OF "THERMO IS MIX" PRIMARY, CONTAINING 100 mg/L ^{6}Li, Sc; 20 mg/L Ga, Y, In, Tb, Bi AND 20 mL OF HNO_3 TO A 2L CONTAINER CONTAINING SOM ASTM TYPE II H_2O. BRING TO VOLUME. SEAL + SHAKE.
FINAL TARGETS: 200 ug/L ^{6}Li, Sc; 40 ug/L Ga, Y, In, Tb, Bi in 1% HNO_3.

2%/0.05% RINSE = ADD ~~20~~ 40 mL OF HNO_3 AND 1 mL OF HCl or 2 mL OF 1:1 HCl TO A 2L CONTAINER. BRING TO VOLUME, SEAL + SHAKE. KE 4/13/04
FINAL TARGETS: 2% HNO_3/0.05% HCl

5%/1% = ADD 100 mL OF HNO_3 AND 20 mL OF HCl TO A 2L CONTAINER. BRING TO VOLUME. SEAL + SHAKE.
FINAL TARGETS: 5% HNO_3/1% HCl.

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Witnessed & Understood by me,	Date	Invented by	Date
Kristie Bettini	01/24/05	Recorded by [signature]	01/24/05

TITLE ALS Laboratory ~~DATACHEM LABORATORIES~~ - ICP-MS SOLUTIONS LOGBOOK. KB 02/03/11

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RECIPES

THERMO 6020 ICSA = ADD 1mL OF ICSA PRIMARY TO 9mL OF 1% HNO_3 + mix.

THERMO 6020 ICSAB = ADD 1mL OF ICSA PRIMARY, 0.1mL OF ICSAB PRIMARY TO 8.9 mL OF 1% HNO_3 + mix.

X-CAL = SPIKE 1.25 mL OF "X-CAL" PRIMARY CONSISTING OF Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cs, Cu, Fe, Ga, In, K, Li, Mg, Mn, Na, Ni, Pb, Rb, Se, Sr, Tl, U, V, Zn AT 10 mg/L AND 0.5 mL OF HNO_3 TO A 50 mL FLASK CONTAINING SOME ASTM TYPE II H_2O. BRING TO VOLUME, STOPPER + SHAKE. ALL MASSES AT 250 mg/L AT FINAL.

1% HNO_3 = ADD 10 mL OF HNO_3 TO A 1L FLASK CONTAINING SOME ASTM TYPE II H_2O. BRING TO VOLUME WITH MORE ASTM TYPE II H_2O. SEAL + SHAKE. USED FOR LO, ICB, CCB + DILUTIONS.

1:4 HCl = Add 200 mL HCl to 1 L container with some ASTM Type II H_2O. Bring to volume with more ASTM Type II H_2O. Seal & Shake. Used for sample preparation, soils.

1:1 HCl = Add 500 mL ASTM Type II H_2O to 1L container. Add 500 mL Hcl to container, cap and mix by shaking. Used for sample preparation.

1:1 HNO_3 = Add 500 mL ASTM Type II H_2O to 1 L container. Add 500 mL HNO_3 to container, seal and shake to mix. Used for sample preparation.

KB 2/16/06
2% HNO_3 with Au Add 20 mL of HNO_3 to 1L container with some ASTM Type II H_2O in it. Add 1mL of 1:1 HCl and 10 mL of 100 µg/mL Au. Bring to 1L volume, cap & shake. Use for Hg analysis

LO-Urine = To a 500 mL volumetric flask containing ~250 mL of ASTM Type II Water add 50 mL of Uri-Sub and 5 mL of concentrated nitric acid. Dilute to volume with ASTM Type II water, stopper and mix, transfer to teflon bottles for storage.

CLP KB 2/23/11
~~5.4~~ CRI: Use "CLP-MS-CRQL-3" primary containing 10 µg/mL Ba; 5 µg/mL Se, V; 2 µg/mL Cr3, Cu, Sb, Zn; 1 µg/mL Ag, As, Be, Cd, Co, Mn, Ni, Pb, Tl. Spike 0.05 mL to a 50 mL Teflon class A flask, containing some ASTM Type II H_2O with 0.5 mL of HNO_3. Bring to volume with ASTM Type II H_2O, Seal & shake. Final Targets: 10 µg/L B; 5 µg/L Se, V; 2 µg/L Cr3, Cu, Sb, Zn; 1 µg/L Ag, As, Be, Cd, Co, Mn, Ni, Pb, Tl.

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Date	ICP-MS Solution #	Solution Type	Primary Solution ID # (Horizon)	Recipe Page	Expiration Date	Acid Lots	Comments	Init.
12/29/2014	MS-14-218	1% HNO_3 NO In	NA	2	06/29/2015	HNO_3-1213120	NA	KB
12/29/2014	MS-14-219	Agilent ISS	22947	NA	04/01/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
01/02/2015	MS-15-001	1:4 HCl	NA	2	07/02/2015	HCl-4013050	NA	KB
01/05/2015	MS-15-002	Agilent Tune	25850	NA	07/05/2015	HNO_3-1213120	1/5/15 KB 250 mL 25mL/50mL in 1% HNO_3	KB
01/05/2015	MS-15-003	6020 Tune	25852	1	07/05/2015	HNO_3-1213120	NA	KB
01/05/2015	MS-15-004	Rinse 1%-0.5%	NA	NA	07/05/2015	HNO_3-1213120 HCl-4213110	10mL HNO_3/5mL HCl to 1L	KB
01/06/2015	MS-15-005	Agilent ISS	24864	NA	07/06/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
01/12/2015	MS-15-006	1% HNO_3	NA	2	07/12/2015	HNO_3-1213120	NA	KB
01/14/2015	MS-15-007	Agilent ISS	24864	NA	07/14/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
01/16/2015	MS-15-008	Rinse 1%-0.5%	NA	NA	07/16/2015	HNO_3-1213120 HCl-4213110	10mL HNO_3/5mL HCl to 1L	KB
01/19/2015	MS-15-009	Rinse 2%-0.05%	NA	1	07/19/2015	HNO_3-1213120 HCl-4213110	4L	JK
01/19/2015	MS-15-010	1% HNO_3	NA	2	07/19/2015	HNO_3-1213120	NA	JK
01/20/2015	MS-15-011	Agilent ISS	24864	NA	07/20/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
01/22/2015	MS-15-012	1% HNO_3	NA	2	07/22/2015	HNO_3-1213120	NA	KB
01/22/2015	MS-15-013	Agilent ISS	24864	NA	07/22/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
01/27/2015	MS-15-014 KB 1/27/15	Rinse ~~2%-0.1%~~ 0.5%	NA	NA	07/27/2015	HNO_3-1213120 HCl-4213110	10mL HNO_3/5mL HCl to 1L	KB
01/27/2015	MS-15-015	Agilent ISS	24864	NA	07/27/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
01/27/2015	MS-15-016	1% HNO_3	NA	2	07/27/2015	HNO_3-1213120	NA	KB
01/28/2015	MS-15-017	1:1 HNO_3	NA	2	07/28/2015	HNO_3-1213120	NA	KB
01/30/2015	MS-15-018	6020 Tune	25852	1	07/30/2015	HNO_3-1213120	NA	KB
02/02/2015	MS-15-019	1:4 HCl	NA	2	08/02/2015	HCl-4213110	NA	KB
02/02/2015	MS-15-020	Agilent ISS	24864	NA	08/02/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
02/04/2015	MS-15-021	1:19 HNO_3	NA	NA	08/04/2015	HNO_3-1213120	50mL HNO_3/1L	KB
02/05/2015	MS-15-022	1% HNO_3	NA	2	08/05/2015	HNO_3-1213120	NA	KB
02/06/2015	MS-15-023	Rinse 1%-0.5%	NA	NA	08/06/2015	HNO_3-1213120 HCl-4213110	10mL HNO_3/5mL HCl to 1L	KB
02/06/2015	MS-15-024	Agilent ISS	24864	NA	08/06/2015	HNO_3-1213120 ~~HCl-4213110~~	4mL/50mL in 1% HNO_3	KB
02/08/2015	MS-15-025	1% HNO_3	NA	2	08/08/2015	HNO_3-1213120	JK 02/08/15 NA	JK
02/08/2015	MS-15-026	Rinse 2%-0.05%	NA	1	08/08/2015	HCl-4213110 HNO_3-1213120	4L	JK
02/08/2015	MS-15-027	Var Tune	25851	1	08/08/2015	HNO_3-1213120	250 mL	JK
02/08/2015	MS-15-028	X-Cal	25397	1	08/08/2015	HNO_3-1213120	200 mL	JK
02/09/2015	MS-15-029	1:1 HNO_3	NA	2	08/09/2015	HNO_3-1213120	NA	JK
02/10/2015	MS-15-030	Agilent ISS	24864	NA	08/10/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
02/12/2015	MS-15-031	Agilent ISS	KB 2/12/15 NA 24864	NA	08/12/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
02/12/2015	MS-15-032	1% HNO_3	NA	2	08/12/2015	HNO_3-1213120	NA	KB
02/16/2015	MS-15-033	Agilent ISS	24864	NA	08/16/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
02/16/2015	MS-15-034	Rinse 1%-0.5%	NA	NA	08/16/2015	HNO_3-1213120 HCl-4213110	10mL HNO_3/5mL HCl to 1L	KB

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Date	ICP-MS Solution#	Solution Type	Primary Solution ID# (Horizon)	Recipe Page	Expiration Date	Acid Lot	Comments	Init.
02/19/2015	MS-15-035	1:4 HCl	NA	2	08/19/2015	HCl-4213110	NA	KB
02/19/2015	MS-15-036	Agilent ISS	24864	NA	08/19/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
02/19/2015	MS-15-037	1% HNO_3	NA	2	08/19/2015	HNO_3-1213120 KB 2/19/15	NA	KB
02/23/2015	MS-15-038	Rinse 1%-0.5%	NA	NA	08/23/2015	HNO_3-1213120 HCl-4213110	10mL HNO_3/5mL HCl to 1L	KB
02/23/2015	MS-15-039	Agilent ISS	24864	NA	08/23/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
02/25/2015	MS-15-040	1:1 HNO_3	NA	2	08/25/2015	HNO_3-1213120	NA	JK
02/25/2015	MS-15-041	VAR ISS	24864	1	08/25/2015	HNO_3-1213120	4L	JK
02/25/2015	MS-15-042 1% HNO_3	1% HNO_3	NA	2	08/25/2015	HNO_3-1213120	NA	JK
02/25/2015	MS-15-043	Agilent Tune	25850	NA	08/25/2015	HNO_3-1213120	25µL/250mL in 1% HNO_3	KB
02/25/2015	MS-15-044	6020 Tune	25852	1	08/25/2015	HNO_3-1213120	NA	KB
02/27/2015	MS-15-045	1:1 HNO_3	N/A	2	08/27/2015	HNO_3-1214040	N/A	KB
03/02/2015	MS-15-046	Agilent ISS	24864	NA	09/02/2015	HNO_3-1214040	4mL/50mL in 1% HNO_3	KB
03/02/2015	MS-15-047	0.1% NH_4OH	NH_4OH BDH Aristar Lot 2011 03472	NA	09/02/2015	NA	1mL NH_4OH/1L H_2O	KB
03/04/2015	MS-15-048	1% HNO_3	NA	2	09/04/2015	HNO_3-1214040	NA	KB
03/06/2015	MS-15-049	Agilent ISS	24864	NA	09/06/2015	HNO_3-1214040	4mL/50mL in 1% HNO_3	KB
03/09/2015	MS-15-050	1%-0.5% Rinse	NA	NA	09/09/2015	HNO_3-1214040 HCl-4213110	10mL HNO_3/5mL HCl to 1L	KB
03/09/2015	MS-15-051	P/A Tune	25287, 25288	NA	09/09/2015	HNO_3-1214040	500µL of each to 50mL in 1% HNO_3	KB
03/13/2015	MS-15-052	1% HNO_3	NA	2	09/13/2015	HNO_3-1214040	NA	KB
03/17/2015	MS-15-053	Agilent ISS	24864	NA	09/17/2015	HNO_3-1214040	4mL/50mL in 1% HNO_3	KB
03/17/2015	MS-15-054	1% HNO_3	NA	2	09/17/2015	HNO_3-1214040	NA	JK
03/18/2015	MS-15-055	1:4 HCl	NA	2	09/18/2015	HCl-4213110	NA	JK
03/24/2015	MS-15-056	Rinse 1%-0.5%	NA	NA	09/24/2015	HNO_3-1214040 HCl-4213110	10mL HNO_3/5mL HCl to 1L	KB
03/24/2015	MS-15-057	6020 Tune	25852	1	09/24/2015	HNO_3-1214040	NA	KB
03/24/2015	MS-15-058	Agilent ISS	24864	NA	09/24/2015	HNO_3-1214040	4mL/50mL in 1% HNO_3	KB
03/25/2015	MS-15-059	1% HNO_3	NA	2	09/25/2015	HNO_3-1214040	NA	KB
03/26/2015	MS-15-060	Agilent ISS	24864	NA	09/26/2015	HNO_3-1214040 HNO_3-1214040 KB 3/26/15	4mL/50mL in 1% HNO_3	KB
03/27/2015	MS-15-061	1:1 HNO_3	NA	2	09/27/2015	HNO_3-1214040	NA	KB
04/01/2015	MS-15-062	1% HNO_3	NA	2	10/01/2015	HNO_3-1214040	NA	KB
04/02/2015	MS-15-063	Agilent ISS	24864	NA	10/01/2015	HNO_3-1214040	4mL/50mL in 1% HNO_3	KB
04/03/2015	MS-15-064	0.1% NH_4OH	NH_4OH BDH Aristar Lot 2011 03472	NA	10/03/2015	NA	1mL NH_4OH/1L H_2O	KB
04/10/2015	MS-15-065	Rinse 1%-0.5%	NA	NA	10/10/2015	HNO_3-1214040 HCl-4213110	10mL HNO_3/5mL HCl in 1L	KB
04/10/2015	MS-15-066	Agilent ISS	24864	NA	10/10/2015	HNO_3-1214040	4mL/50mL in 1% HNO_3	KB
04/10/2015	MS-15-067	VAR ISS	24864	1	10/10/2015	HNO_3-1214040	4L	JK
04/10/2015	MS-15-068	Rinse 2%-0.05%	NA	1	10/10/2015	HCl-4213110 HNO_3-1214040	4L	JK
04/14/2015	MS-15-069	1% HNO_3	NA	2	10/14/2015	HNO_3-1214040	NA	KB
04/14/2015	MS-15-070	Agilent ISS	24864	NA	10/14/2015	HNO_3-1214040	4mL/50mL in 1% HNO_3	KB

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Date	ICP-ms Solution #	Solution Type	Primary Solution ID # (Horizon)	Recipe Page	Expiration Date	Acid Lots	Comments	Init.
04/14/2015	MS-15-071	1:4 HCl	NA	2	10/14/2015	HCl-4213110 HNO3-1214040	NA	KB
04/17/2015	MS-15-072	Rinse 1%-0.5%	NA	NA	10/17/2015	HCl-4213110	10mL HNO3/5mL HCl to 1L	KB
04/17/2015	MS-15-073	0.1% NH4OH	NH4OH BDH Aristar Lot 20110347 2	NA	10/17/2015	NA	1mL NH4OH/1L H2O	KB
04/20/2015	MS-15-074	1% HNO3	NA	2	10/20/2015	HNO3-1214040	NA	KB
04/20/2015	MS-15-075	6020 Tune	25852	NA	10/20/2015	HNO3-1214040	KB 4/20/15 NA ~~4mL/50mL in 1% HNO3~~	KB
04/20/2015	MS-15-076	Agilent ISS	24864	NA	10/20/2015	HNO3-1214040	4mL/50mL in 1% HNO3	KB
04/21/2015	MS-15-077	1% HNO3	NA	2	10/21/2015	HNO3-1214040	NA	JK
04/24/2015	MS-15-078	Agilent Tune	25850	NA	10/24/2015	HNO3 1214040	25mL/250mL 1% HNO3	KB
~~04/27/2015~~	~~MS-15-079~~	~~6020 Tune~~	KB 4/27/2015					
04/27/2015	MS-15-080	Agilent ISS No In	24864	NA	10/27/2015	HNO3-1214040	4mL/50mL in 1% HNO3	KB
28-Apr-2015	MS-15-081	Agilent ISS	27582	NA	28-Oct-2015	HNO3-1214040	4mL/50mL in 1% HNO3	PAJ
1-May-2015	MS-15-082	Rinse 1%/0.5%	NA	NA	1-Nov-2015	HNO3-1214040 HCl-4213110	10mL HNO3/5mL HCl to 1L	PAJ
1-May-2015	MS-15-083	1% HNO3	NA	2	1-Nov-2015	HNO3-1214040	NA	PAJ
05/04/2015	MS-15-084	0.1% NH4OH	NH4OH BDH Aristar Lot 20110347 2	NA	11/04/2015	NA	1mL NH4OH/1L H2O	KB
6-May-2015	MS-15-085	Agilent ISS	24864	NA	6-Nov-2015	HNO3-1214040	4mL/50mL in 1% HNO3	PAJ
05/07/2015	MS-15-086	1:1 HNO3	NA	2	11/07/2015	HNO3-1214040	NA	JK
05/08/2015	MS-15-087	1% HNO3	NA	2	11/08/2015	HNO3-1214040	NA	KB
05/11/2015	MS-15-088	Agilent ISS	24864	NA	11/11/2015	HNO3-1214040	4mL/50mL in 1% HNO3	KB
05/19/2015	MS-15-089	1% HNO3 Rinse	NA	2	11/19/2015	HNO3-1214040 HNO3-1214040	NA	KB
05/19/2015	MS-15-090	2%/0.05%	NA	1	11/19/2015	HCl-4213110	2L	KB
20-May-2015	MS-15-091	Rinse 1%/0.5%	NA	NA	20-Nov-2015	HNO3-1214040 HCl-4213110	10mL HNO3/5mL HCl to 1L	PAJ
20-May-2015	MS-15-092	Iodine Agilent ISS	24864	NA	20-Nov-2015	0.1% NH4OH	4mL/50mL in 0.1% NH4OH	PAJ
20-May-2015	MS-15-093	Agilent ISS	24864	NA	20-Nov-2015	HNO3-1214040	4mL/50mL in 1% HNO3	PAJ
05/21/2015	MS-15-094	6020 Tune	25850	~~NA~~ 1 KB 6/21/15	11/1/2015	HNO3-1214040	NA	KB
05/22/2015	MS-15-095	1% HNO3	NA	2	11/22/2015	HNO3-1214040	NA	KB
05/22/2015	MS-15-096	1:4 HCl	NA	2	11/22/2015	HCl-4213110	NA	KB
26-May-2015	MS-15-097	1:1 HNO3	NA	2	26-May-2015	Nov 26-May-2015 PAJ HNO3-1214040	NA	PAJ
05/27/2015	MS-15-098	1% HNO3	NA	2	11/27/2015	HNO3-1214040	NA	JK
05/27/2015	MS-15-099	Rinse 2%-0.05%	NA	1	11/27/2015	HCl-4213110 HNO3-1214040	4L	JK
05/27/2015	MS-15-~~090~~ 100	28-May-2015 PAJ Agilent Tune	25850	NA	11/27/2015	HNO3-1214040	25mL/250mL in 1% HNO3	KB
28-May-2015	MS-15-101	0.1% NH4OH	NH4OH BDH Aristar lot 20110347 2	NA	28-Nov-2015	NA	1mL NH4OH/1L H2O	PAJ
05/28/2015	MS-15-102	Agilent ISS No In	27582	NA	11/28/2015	HNO3-1214040	4mL/50mL in 1% HNO3	KB
05/28/2015	MS-15-103	6020 Tune	~~24137~~ 25852 JK 05-28-2015	1	~~07~~ 11/01/2015 JK 05-28-2015	HNO3-1214040	250mL	JK
06/03/2015	MS-15-104	1% HNO3	NA	2	12/03/2015	HNO3-1214040	NA	KB
4-Jun-2015	MS-15-105	Rinse 1%/0.5%	NA	NA	4-Dec-2015	HNO3-1214040 HCl-4213110	10mL HNO3/5mL HCl to 1L 4-Jun-2015 PAJ	PAJ
4-Jun-2015	MS-15-106	Agilent ISS	24864	NA	4-Dec-2015	HNO3-1214040	4mL/50mL in 0.1% HNO3	PAJ

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TITLE ALS-SLC ICP-MS Solution Logbook

Project No.

Book No. 4184

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Date	ICP-MS Solution #	Solution Type	Primary Solution ID# (Horizon)	Recipe page	Expiration Date	Acid Lots	Comments	Initials
4-Jun-2015	MS-15-107	Agilent ISS	24864	NA	4-Dec-2015	HNO_3-1214040	4mL/50mL in 1% HNO_3	PAJ
5-Jun-2015	MS-15-108	1% HNO_3	NA	2	5-Dec-2015	HNO_3-1214040	NA	PAJ
06/05/2015	MS-15-109	Rinse 2%-0.5%	NA	1	12/05/2015	HNO_3-1214040 HCl-4213110	KB 6/5/15 4 L	KB
06/10/2015	MS-15-110	1:1 HNO_3	NA	2	12/10/2015	HNO_3-1213120	NA	KB
10-Jun-2015	MS-15-111	1% HNO_3	NA	2	10-Dec-2015	HNO_3 1213120	NA	PAJ
06/15/2015	MS-15-112	1:4 HCl	NA	2	12/15/2015	HCl-4213110	NA	KB
06/17/2015	MS-15-113	1:1 HNO_3	NA	2	12/17/2015	HNO_3-1213120	NA	JK
06/18/2015	MS-15-114	Rinse 1%-0.5%	NA	NA	12/18/2015	HNO_3-1213120 HCl-4213110	10mL HNO_3/5mL HCl to 1L	KB
06/18/2015	MS-15-115	Agilent ISS	24864	NA	09/01/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	KB
22-Jun-2015	MS-15-116	0.1% NH_4OH	NH_4OH BDH Aristar lot 20110347Z	NA	22-Dec-2015	NA	1mL/5L 1L H_2O 22-Jun-2015 PAJ	PAJ
22-Jun-2015	MS-15-117	Iodine Agilent ISS	24864	NA	01-Sep-2015	0.1% NH_4OH	4mL/50mL 0.1% NH_4OH	PAJ
22-Jun-2015	MS-15-118	Agilent ISS	24864	NA	01-Sep-2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	PAJ
22-Jun-2015	MS-15-119	1% HNO_3	NA	2	22-Dec-2015	HNO_3-1213120	NA	PAJ
06/22/2015	MS-15-120	1% HNO_3	NA	2	12/22/2015	HNO_3-1213120 HCl-4213110	NA	JK
06/22/2015	MS-15-121	Rinse 2%-0.5%	NA	1	12/22/2015	HNO_3-1213120	4L	JK
24-Jun-2015	MS-15-122	PA Tune	25287, 25288	NA	24-Dec-2015	HNO_3-1213120	500µL of each in 50mL 1% HNO_3 final volume	PAJ
06/25/2015	MS-15-123	Agilent ISS	24864	NA	01-Sep-2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	PAJ
06/25/2015	MS-15-124	Agilent ISS	24864	NA	09/01/2015	HNO_3-1213120	4mL/50mL in 1% HNO_3	PAJ
06/25/2015	MS-15-125	1% HNO_3	NA	2	12/25/2015	HNO_3-1213120	NA	PAJ
06/25/2015	MS-15-126	Rinse 1%-0.5%	NA	NA	12/25/2015	HNO_3-1213120 HCl-4213110	10mL HNO_3/5mL HCl to 1L	KB
06/26/2015	MS-15-127	6020 Tune	25852	1	11/01/2015	HNO_3-1213120	NA	PAJ
06/28/2015	MS-15-128	Var ISS.	24864	1	12/28/2015	HNO_3-1213120	4L	JK

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STANDARD REPORT

Working Standard - ICP-MS S50

ICP-MS S50	Description - ICP-MS S50 ISM01.3

Standard: 28396 **Created By:** J. Kershisnik **Amount:** 200 mL
MFG: JTK **Create Date:** 06/16/2015 **Expires:** 06/30/2015
MFG Lot: **Lab Lot:** 06/16/15 JTK **Usable:** Yes
Part ID:

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
26205	6020Cal1	ICPMS EPA 6020 Cal#1	IP-PS-14-051	0.5 mL	12/01/2015
28295	Ultra-HNO3	Ultra Nitric Acid	06/10/15 kb	2 mL	01/14/2017

STANDARD REPORT

Working Standard - ICP-MS S200

ICP-MS S200	Description - ICP-MS S200 ISM01.3

Standard: 28397 **Created By:** J. Kershisnik **Amount:** 100 mL
MFG: JTK **Create Date:** 06/16/2015 **Expires:** 06/30/2015
MFG Lot: **Lab Lot:** 06/16/15 JTK **Usable:** Yes
Part ID:

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
26205	6020Cal1	ICPMS EPA 6020 Cal#1	IP-PS-14-051	1 mL	12/01/2015
28295	Ultra-HNO3	Ultra Nitric Acid	06/10/15 kb	1 mL	01/14/2017

STANDARD REPORT

Working Standard - ICP-MS S500

ICP-MS S500 — **Description - ICP-MS S500 ISM01.3**

Standard: 28398 **Created By:** J. Kershisnik **Amount:** 100 mL
MFG: JTK **Create Date:** 06/16/2015 **Expires:** 06/30/2015
MFG Lot: **Lab Lot:** 06/16/15 JTK **Usable:** Yes
Part ID:

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
26205	6020Cal1	ICPMS EPA 6020 Cal#1	IP-PS-14-051	2.5 mL	12/01/2015
28295	Ultra-HNO3	Ultra Nitric Acid	06/10/15 kb	1 mL	01/14/2017

STANDARD REPORT

Working Standard - MS ISM S2500

MS ISM S2500 — **Description - ISM01.3 ICP-MS S2500**

Standard: 28399 **Created By:** J. Kershisnik **Amount:** 50 mL
MFG: JTK **Create Date:** 06/16/2015 **Expires:** 06/30/2015
MFG Lot: **Lab Lot:** 06/16/15 JTK **Usable:** Yes
Part ID:

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
27946	DATACHEM-1	ICPMS 20 ppm (No Ag or Se)	IP-PS-15-013	6.25 mL	06/01/2016
28295	Ultra-HNO3	Ultra Nitric Acid	06/10/15 kb	0.5 mL	01/14/2017

STANDARD REPORT

Working Standard - MS ISM S5000

MS ISM S5000	Description - ISM01.3 ICP-MS S5000

Standard: 28400 **Created By:** J. Kershisnik **Amount:** 50 mL
MFG: JTK **Create Date:** 06/16/2015 **Expires:** 06/30/2015
MFG Lot: **Lab Lot:** 06/16/15 JTK **Usable:** Yes
Part ID:

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
27946	DATACHEM-1	ICPMS 20 ppm (No Ag or Se)	IP-PS-15-013	12.5 mL	06/01/2016
28295	Ultra-HNO3	Ultra Nitric Acid	06/10/15 kb	0.5 mL	01/14/2017

STANDARD REPORT

Working Standard - ISM MS100000

ISM MS100000	Description - ICP-MS ISM01.3 S100,000 ug/L

Standard: 28401 **Created By:** J. Kershisnik **Amount:** 100 mL
MFG: JTK **Create Date:** 06/16/2015 **Expires:** 06/30/2015
MFG Lot: **Lab Lot:** 06/16/15 JTK **Usable:** Yes
Part ID: ICP-MS ISM S100000

Pos.	Analyte	Name	Concentration
1	7440-70-2	Calcium	100000 ug/L
2	7440-09-7	Potassium	100000 ug/L
3	7439-95-4	Magnesium	100000 ug/L
4	7440-23-5	Sodium	100000 ug/L
5	7429-90-5	Aluminum	100000 ug/L
6	7439-89-6	Iron	100000 ug/L

Composition

Standard	Standard ID	Description	Lab Lot ID	Volume	Expires
4304	ASTMType2Wat	ASTM Type 2 Deionized Water	ASTMType2Water	96 mL	12/31/2025
25304	IV-STOCK-2	ISM01.3 Standard	ICP-CLP	1 mL	10/01/2015
26849	Al stock	10,000 ug/mL Al Stock	SPEX Al 10,000 ug/mL	1 mL	01/30/2016
26850	Fe Stock	10,000 ug/mL Fe Stock	SPEX Fe 10,000 ug/mL	1 mL	01/30/2016
28295	Ultra-HNO3	Ultra Nitric Acid	06/10/15 kb	1 mL	01/14/2017

STANDARD REPORT

Working Standard - ICPMS CLPICV

ICPMS CLPICV		Description - ICP-MS ICV ISM01.3
Standard: 28402	**Created By:** J. Kershisnik	**Amount:** 100 mL
MFG: JTK	**Create Date:** 06/16/2015	**Expires:** 06/30/2015
MFG Lot:	**Lab Lot:** 06/16/15 JTK	**Usable:** Yes
Part ID:		

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
28295	Ultra-HNO3	Ultra Nitric Acid	06/10/15 kb	1 mL	01/14/2017

STANDARD REPORT

Working Standard - ICP-MS ICSA

ICP-MS ICSA		Description - ICP-MS ICSA ISM01.3
Standard: 28403	**Created By:** J. Kershisnik	**Amount:** 100 mL
MFG: JTK	**Create Date:** 06/16/2015	**Expires:** 06/30/2015
MFG Lot:	**Lab Lot:** 06/16/15 JTK	**Usable:** Yes
Part ID:		

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
16485	CLPMS-ICS-A	CLP-ICP-MS-ICS-Part A (0803)	IP-PS-12-036	10 mL	08/12/2020
28295	Ultra-HNO3	Ultra Nitric Acid	06/10/15 kb	1 mL	01/14/2017

STANDARD REPORT

Working Standard - ICP-MS ICSAB

ICP-MS ICSAB	Description - ICP-MS ICSAB ISM01.3

Standard: 28404 **Created By:** J. Kershisnik **Amount:** 100 mL
MFG: JTK **Create Date:** 06/16/2015 **Expires:** 06/30/2015
MFG Lot: JTK **Lab Lot:** 06/16/15 JTK **Usable:** Yes
Part ID:

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	7440-43-9	Cadmium	20 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	40 ug/L
10	7440-48-4	Cobalt	20 ug/L
11	7440-50-8	Copper	25 ug/L
12	7439-89-6	Iron	100000 ug/L
13	7439-92-1	Lead	25 ug/L
14	7439-95-4	Magnesium	100000 ug/L
15	7439-96-5	Manganese	27 ug/L
16	7439-98-7	Molybdenum	2000 ug/L
17	7440-02-0	Nickel	24 ug/L
18	7723-14-0	Phosphorus	100000 ug/L
19	7440-09-7	Potassium	100000 ug/L
20	7782-49-2	Selenium	19 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	19 ug/L
25	7440-66-6	Zinc	29 ug/L
26	7440-41-7	Beryllium	19 ug/L
27	7440-22-4	Silver	18 ug/L
28	7440-28-0	Thallium	21 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
16485	CLPMS-ICS-A	CLP-ICP-MS-ICS-Part A (0803)	IP-PS-12-036	10 mL	08/12/2020
16486	CLPMS-ICS-B	CLP-ICP-MS-ICS-Part B (0803)	IP-PS-12-037	10 mL	08/12/2020
28295	Ultra-HNO3	Ultra Nitric Acid	06/10/15 kb	1 mL	01/14/2017

STANDARD REPORT

Working Standard - ISM MS CCV

ISM MS CCV — **Description - ICP-MS ISM01.3 CCV**

Standard: 28405 **Created By:** J. Kershisnik **Amount:** 100 mL
MFG: JTK **Create Date:** 06/16/2015 **Expires:** 06/30/2015
MFG Lot: **Lab Lot:** 06/16/15 JTK **Usable:** Yes
Part ID: ICP-MS ISM CCV

Pos.	Analyte	Name	Concentration
1	7440-70-2	Calcium	50000 ug/L
2	7440-09-7	Potassium	50000 ug/L
3	7439-95-4	Magnesium	50000 ug/L
4	7440-23-5	Sodium	50000 ug/L
5	7440-22-4	Silver	250 ug/L
6	7429-90-5	Aluminum	50000 ug/L
7	7439-89-6	Iron	50000 ug/L
8	7782-49-2	Selenium	250 ug/L
9	7440-36-0	Antimony	2500 ug/L
10	7440-38-2	Arsenic	2500 ug/L
11	7440-39-3	Barium	2500 ug/L
12	7440-41-7	Beryllium	2500 ug/L
13	7440-43-9	Cadmium	2500 ug/L
14	7440-47-3	Chromium	2500 ug/L
15	7440-48-4	Cobalt	2500 ug/L
16	7440-50-8	Copper	2500 ug/L
17	7439-92-1	Lead	2500 ug/L
18	7439-96-5	Manganese	2500 ug/L
19	7440-02-0	Nickel	2500 ug/L
20	7440-28-0	Thallium	2500 ug/L
21	7440-62-2	Vanadium	2500 ug/L
22	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	85.525 mL	12/31/2025
25304	IV-STOCK-2	ISM01.3 Standard	ICP-CLP	0.475 mL	10/01/2015
25320	Ag Stock	1,000 ug/mL Ag Stock	Ag 1,000 ug/mL	0.025 mL	08/30/2015
26849	Al stock	10,000 ug/mL Al Stock	SPEX Al 10,000 ug/mL	0.475 mL	01/30/2016
26850	Fe Stock	10,000 ug/mL Fe Stock	SPEX Fe 10,000 ug/mL	0.475 mL	01/30/2016
27253	Se Stock Low	1,000 ug/mL Se Stock	SPEX Se 1,000 ug/mL	0.025 mL	02/28/2016
27946	DATACHEM-1	ICPMS 20 ppm (No Ag or Se)	IP-PS-15-013	12.5 mL	06/01/2016
28295	Ultra-HNO3	Ultra Nitric Acid	06/10/15 kb	0.5 mL	01/14/2017

STANDARD REPORT

Stock Standard - 6020ISS

6020ISS	Description - ICPMS EPA 6020 ISS

Standard: 24864
MFG: Inorganic Ventures
MFG Lot: G2-MEB464028
Part ID: 6020ISS

Created By: K. Bitner
Create Date: 8/12/2014
Lab Lot: IP-PS-14-022

Amount: 125 mL
Expires: 9/1/2015
Usable: Yes

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

Stock Standard - IMS MES2

IMS MES2	Description - Multi-element Solution #2

Standard: 25397 **Created By:** K. Bitner **Amount:** 125 mL
MFG: SPEX **Create Date:** 9/30/2014 **Expires:** 9/30/2015
MFG Lot: CL11-01YPY **Lab Lot:** IP-PS-14-027 **Usable:** Yes
Part ID: CLMS-2

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

Stock Standard - Var-Tune Std

Var-Tune Std	Description - Var Tune Std/CLP, 200.8 Tune

Standard: 25851 **Created By:** K. Bitner **Amount:** 125 mL
MFG: Inorganic Ventures **Create Date:** 10/29/2014 **Expires:** 11/1/2015
MFG Lot: G2-MEB478062 **Lab Lot:** IP-PS-14-043 **Usable:** Yes
Part ID: VAR-TS-MS

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 - CLPMS-ICS-A

CLPMS-ICS-A	Description - CLP-ICP-MS-ICS-Part A (0803)

Standard: 16485 **Created By:** J. Kershisnik **Amount:** 600 mL
MFG: QATS Laboratory **Create Date:** 9/26/2012 **Expires:** 8/12/2020
MFG Lot: ICSA-0803 **Lab Lot:** IP-PS-12-036 **Usable:** Yes
Part ID:

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 - CLPMS-ICS-B

CLPMS-ICS-B	Description - CLP-ICP-MS-ICS-Part B (0803)

Standard: 16486 **Created By:** J. Kershisnik **Amount:** 300 mL
MFG: QATS Laboratory **Create Date:** 9/26/2012 **Expires:** 8/12/2020
MFG Lot: ICSB-0803 **Lab Lot:** IP-PS-12-037 **Usable:** Yes
Part ID:

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 - IV-STOCK-2

IV-STOCK-2		**Description - ISM01.3 Standard**
Standard: 25304	**Created By:** J. Sanchez	**Amount:** 500 mL
MFG: Inorganic Ventures	**Create Date:** 9/22/2014	**Expires:** 10/1/2015
MFG Lot: G2-MEB506019	**Lab Lot:** ICP-CLP	**Usable:** Yes
Part ID: P1081H		

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

Stock Standard - Ag Stock

Ag Stock	Description - 1,000 ug/mL Ag Stock

Standard:	25320	**Created By:**	P. Foote	**Amount:**	125 mL
MFG:	Spex CertiPrep	**Create Date:**	9/2/2014	**Expires:**	8/30/2015
MFG Lot:	19-13AGY	**Lab Lot:**	Ag 1,000 ug/mL	**Usable:**	Yes
Part ID:	PLAG2-2Y				

Pos.	Analyte	Name	Concentration
1	7440-22-4	Silver	1000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - CLPICP-ICV1

CLPICP-ICV1	Description - CLP-ICP/ICPMS-ICV-1

Standard: 25667 **Created By:** J. Kershisnik **Amount:** 500 mL
MFG: QATS Laboratory **Create Date:** 10/16/2014 **Expires:** 8/12/2020
MFG Lot: ICV1-0307 **Lab Lot:** IP-PS-14-039 **Usable:** Yes
Part ID:

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 - 6020Cal1

6020Cal1	Description - ICPMS EPA 6020 Cal#1

Standard: 26205 **Created By:** K. Bitner **Amount:** 125 mL
MFG: Inorganic Ventures **Create Date:** 12/2/2014 **Expires:** 12/1/2015
MFG Lot: F2-MEB419032 **Lab Lot:** IP-PS-14-051 **Usable:** Yes
Part ID: 6020CAL-1

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 - Al stock

Al stock	Description - 10,000 ug/mL Al Stock

Standard:	26849	**Created By:**	P. Foote	**Amount:**	125 mL
MFG:	SPEX CertiPrep	**Create Date:**	1/26/2015	**Expires:**	1/30/2016
MFG Lot:	AG15-142ALY	**Lab Lot:**	SPEX Al 10,000 ug/mL	**Usable:**	Yes
Part ID:	PLAL2-3Y				

Pos.	Analyte	Name	Concentration
1	7429-90-5	Aluminum	10000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Fe Stock

Fe Stock	Description - 10,000 ug/mL Fe Stock

Standard:	26850	**Created By:**	P. Foote	**Amount:**	125 mL
MFG:	SPEX CertiPrep	**Create Date:**	1/26/2015	**Expires:**	1/30/2016
MFG Lot:	AL15-138FEY	**Lab Lot:**	SPEX Fe 10,000 ug/mL	**Usable:**	Yes
Part ID:	PLFE2-3Y				

Pos.	Analyte	Name	Concentration
1	7439-89-6	Iron	10000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - Se Stock Low

Se Stock Low			Description - 1,000 ug/mL Se Stock
Standard: 27253	**Created By:** P. Foote		**Amount:** 30 mL
MFG: SPEX CertiPrep	**Create Date:** 2/26/2015		**Expires:** 2/28/2016
MFG Lot: 20-79SEM	**Lab Lot:** SPEX Se 1,000 ug/mL		**Usable:** Yes
Part ID: PLSE2-2M			

Pos.	Analyte	Name	Concentration
1	7782-49-2	Selenium	1000 ug/mL

STANDARD REPORT

Constituent

Stock Standard - DATACHEM-1

DATACHEM-1	Description - ICPMS 20 ppm (No Ag or Se)

Standard: 27946 **Created By:** K. Bitner **Amount:** 250 mL
MFG: Inorganic Ventures **Create Date:** 5/4/2015 **Expires:** 6/1/2016
MFG Lot: G2-MEB452151 **Lab Lot:** IP-PS-15-013 **Usable:** Yes
Part ID: DATACHEM-1

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

Solvent Standard - ASTMType2Wat

ASTMType2Wat	Description - ASTM Type 2 Deionized Water

Standard:	4304	**Created By:**	R. Lemon	**Amount:**	1 L
MFG:		**Create Date:**	6/1/2009	**Expires:**	12/31/2025
MFG Lot:		**Lab Lot:**	ASTMType2Water	**Usable:**	Yes
Part ID:					

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

STANDARD REPORT

Constituent

Solvent Standard - Ultra-HNO3

Ultra-HNO3			Description - Ultra Nitric Acid
Standard: 28295	**Created By:** K. Bitner		**Amount:** 2000 mL
MFG: BDH Aristar Ultra	**Create Date:** 6/10/2015		**Expires:** 1/14/2017
MFG Lot: 1213120	**Lab Lot:** 06/10/15 kb		**Usable:** Yes
Part ID: 87003-658			

Pos.	Analyte	Name	Concentration
Solvent - Analyte(s) not applicable			

ISM01.3-7471B Mercury in Soil Analysis Electronic Log

Electronic Log Information

File Location: ALSltws013\AA_current\Mercury\Hg-EPA-CLP-DATA File Name: AN-HGS-MF9K02-151594

Sample & Case Information

ALS workorder ID	EPA Sample Names	Case	SDG	Account	No. of Samples
1516424	MF9K02 - MF9K14	45299	MF9K02	8201	13

Sample Preparation Information

1) Preparation Group ID: EHG/5894 (HBN:151194)
2) Preparation Log File Location:
   AlsItws013\DataReview; folder = 151594
3) Physical Description File Location:
   AlsItws013\AAcurrent\Mercury\Hg-EPA-CLP-DATA
4) Preparation Date/Time: 07/01/2015 05:00
5) Preparer: Shane Stewart

Analysis and Data Information

1) Analysis Group ID: EHG/5903 (HBN:151594)
2) Data Result File Name: CV2-15191
3) Analysis Date/Start-time: 07/01/2015 12:13
4) 12% $NH_2OH \bullet HCl$ Entry: AA_current/HgReagents/21
5) 10% SnCl2 Entry: AA_current/HgReagents/31
6) 5% HNO3 + 5% HCl Entry: AA_current/HgReagents/30
7) Analyst: Christopher R. Hansen

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_1 231.716
3) then $C = (A - n_1) / n_2$ n_2 19742.25
4) Calculated mercury concentrations (µg/L)

Stds.	µAbs	Result	Target	% Difference
S0	46.845	-0.0094	0.0	NA
S0.2	4030.1	0.1924	0.2	3.8%
S0.5	9833.6	0.4864	0.5	2.7%
S1.0	20320	1.0175	1.0	-1.8%
S5.0	99496	5.0280	5.0	-0.6%
S10	197360	9.9851	10.0	0.1%

Sample Preparation Comments

None were required.

Sample Analysis Comments

None were required.

Sample ID	Dilution	Reason	Pipettes used

No sample dilutions were required.

Method Information

1) Method/SOP: ISM01.3 7471B Mercury in Soil: SOP (IT-EP-ISM-HG)
2) Method Detection Limit (MDL) = 0.001457 mg/kg [Hg]; Effective 01/15/2015 - 01/15/2016
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

TITLE ALS Salt Lake – EPA CLP Mercury Run Log

Project No. NA

Book No. 4723

From Page No. X

Workorder (s)	SDG	Analysis HBN	Raw Data File Name	Analysis Date	Start Time	End Time	Matrix Type	No. of samples	Initials	Comments
1508351	MX1M86	146837	CV2-15099	04/07/2015	10:55	11:34	Water	1	CH	PE
1508355	MX1M90	146838	CV2-15105	04/08/2015	11:50	12:07	Soil	1	CH	PE
1508355	MX1M90	146839	CV2-15099	04/07/2015	10:55	11:34	TCLP	1	CH	PE
1510008	MH0AF8	147114	CV2-15110	04/14/2015	16:15	16:42	Water	10	CH	None
1509906	MX1P28	147244	CV2-15115	04/15/2015	15:44	16:01	Water	1	CH	ISM02.2 PE
1509910	MX1P32	147555	CV2-15119	04/17/2015	13:40	13:57	Soil	1	CH	ISM02.2 PE
1509910	MX1P32	147784	CV2-15127	04/27/2015	1454	1519	Soil	1	CH	ISM02.2 PE
1510625	MX1P80	148140	CV2-15130	04/30/2015	17:06	17:23	Soil	1	CH	ISM01.3 PE
1510622	MX1P76	148221	CV2-15133	05/~~04~~/05/2015 CH 05/05/2015	10:15	10:32	Water	1	CH	ISM01.3 PE
1512055	MX1R04	148226	CV2-15134	05/05/2015	10:36	10:53	Water	1	CH	ISM02.2 PE
1512056	MX1R08	148491	CV2-15138	05/07/2015	15:09	15:38	Soil	1	CH	ISM02.2 PE Reanalyzed once for MS
1513418	MX1S53	149204	CV2-15151	05/20/2015	15:25	16:07	Soil	1	CH	ISM02.2 PE Dilution Required
1513993	51915	149546	CV2-15156a	05/27/2015	12:38	12:55	Water	1	CH	NA
1513412	MX1S49	149554	CV2-15155	05/27/2015	11:33	12:17	Water	1	CH	~~NA~~ ISM02.2 PE CH 06/01/2015
1513445	MX1S57	149548	CV2-15155	05/27/2015	11:33	12:17	TCLP	1	CH	ISM02.2 PE / 48x dilution
1514325	MF9L76	149911	CV2-15161	06/04/2015	11:18	11:47	Soil	12	CH	None
1515757	MH2TR0	150219	CV2-15166	06/09/2015	10:50	11:07	Soil	1	CH	None
1515388	MF9L98	150397	CV2-15167	06/11/2015	10:08	10:48	Soil	20	CH	None
1515559	MF9M21	150398	CV2-15168	06/11/2015	10:51	11:32	Soil	20	CH	None
1515392, 1515833	MF9M15	150465	CV2-15170a	06/12/2015	12:57	13:27	Soil	13	CH	None
1516259	MC0AP6	150982	CV2-15171a	06/16/2015	10:20	10:57	Water	15	CH	None
1515562	MF9M38	150995	CV2-15174	06/18/2015	11:11	11:32	Soil	5	CH	None
1515632	MF9M48	150996	CV2-15175a	06/18/2015	12:25	13:05	Soil	20	CH	None
1515745	MF9K00	151166	CV2-15181	06/23/2015	13:42	14:22	Soil	19	CH	None
1516249	MC0AX0	151400	CV2-15186	06/23/2015	10:29	11:09	Soil	19	CH	None
1516213	MC0B35	151401	CV2-15185	06/23/2015	10:05	10:23	Soil	2	CH	None
1516424	MF9K02	151594	CV2-15191	07/01/2015	12:13	12:43	Soil	13	CH	None
1516423	MF9K15	151598	CV2-15192	07/01/2015	12:48	13:19	Soil	13	CH	None

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Witnessed & Understood by me, | Date | Invented by: | Date

Recorded by:

ALS Reagent Report

ID Number: 21 Description: 12% Hydroxylamine Hydrochloride

Analyst: Christopher Hansen

Date Created: 03/27/2015 Expiration Date: 03/27/2016

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 8L (4 x 2L) was prepared.
Hydroxylamine Hydrochloride, Crystal: J.T. Baker batch #0000079919.

: 00357

ALS Reagent Report

ID Number: 31 Description: 10% Stannous Chloride in 7% Hydrochloric Acid

Analyst: Shane Stewart

Date Created: 06/24/2015 Expiration Date: 06/24/2016

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: T22A037.
Hydrochloric acid - EMD OmniTrace - Lot: 54310.
5 x 2L bottles (10L) prepared.

: 00358

ALS Reagent Report

ID Number: 30 Description: M-7500 CVAA Rinse Solution

Analyst: Christopher Hansen

Date Created: 06/18/2015 Expiration Date: 06/18/2016

Pipettes Used: Acid Dispenser | Grad. Flask

Balanced Used:

Materials Used, Manufacturer, Lots, Amounts, Final Concentrations if applicable

100mL of concentrated nitric acid and 100mL of concentrated hydrochloric acid was diluted to 2L with ASTM type II water. 12L (6 x 2L-bottles) was prepared. Nitric Acid - J.T. Baker Lot 104736. Hydrochloric Acid - EMD Lot 54310.

: 00359