

DATA PACKAGE

METALS

PROJECT NAME : NJ WASTE WATER PT

ALLIANCE TECHNICAL GROUP, LLC - NEWARK

284 Sheffiled Stree

Suite 1

Mountainside, NJ - 07092

Phone No: 908-789-8900

ORDER ID : Q1504

ATTENTION : Mohammad Ahmed



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q1504

Project ID : NJ Waste Water PT

Client : Alliance Technical Group, LLC - Newark

Lab Sample Number

Q1504-01
Q1504-02
Q1504-03
Q1504-04
Q1504-05
Q1504-06
Q1504-07

Client Sample Number

PT-TM1-WP
PT-TM1-WP
PT-SNTI-WP
PT-SNTI-WP
PT-MIN2-WP
PT-MIN2-WP
PT-HG-WP

I certify that the 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 hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 1:56 pm, Apr 17, 2025

Date: 4/17/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

Alliance Technical Group, LLC - Newark

Project Name: NJ Waste Water PT

Project # N/A

Chemtech Project # Q1504

Test Name: Metals Group3, Metals Group4, Metals Group5

A. Number of Samples and Date of Receipt:

7 Water samples were received on 03/05/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Mercury, Metals Group3, Metals Group4 and Metals Group5. This data package contains results for Metals Group3, Metals Group4, Metals Group5.

C. Analytical Techniques:

The analysis of Metals Group3, Metals Group4, Metals Group5 was based on method 6010D, digestion based on method 3010 (waters). The analysis of Metals Group3, Metals Group4, Metals Group5 was based on method 6020B.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

Sample PT-TM1-WP was diluted due to high concentrations for Vanadium

& Sample PT-SNTI-WP was diluted due to high concentrations for Tin

The Blank Spike met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

E. Additional Comments:

Internal Standard 45Sc(1) was out side of qc limit for sample Q1504-06, so for this sample affected parameters were reported from 5X dilution.

Collision cell is being used to remove potential interferences. The analytes Na, Mg, Al, K, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As are being analyzed with collision cell and analytes Be, B, Ca, Ti, Se, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U are being analyzed with Non-Collision Cell. Helium gas is used for the Collision Cell analysis.

I certify that the 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. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 1:58 pm, Apr 17, 2025

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DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following “ Results Qualifiers” are used:

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.
ND	Indicates the analyte was analyzed for, but not detected
E	Indicates the reported value is estimated because of the presence of interference
M	Indicates Duplicate injection precision not met.
N	Indicates the spiked sample recovery is not within control limits.
S	Indicates the reported value was determined by the Method of Standard Addition (MSA).
*	Indicates that the duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for the MSA is less than 0.995.
D	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
M	Method qualifiers “P” for ICP instrument “PM” for ICP when Microwave Digestion is used “CV” for Manual Cold Vapor AA “AV” for automated Cold Vapor AA “CA” for MIDI-Distillation Spectrophotometric “AS” for Semi -Automated Spectrophotometric “C” for Manual Spectrophotometric “T” for Titrimetric “NR” for analyte not required to be analyzed
OR	Indicates the analyte’s concentration exceeds the calibrated range of the instrument for that specific analysis.
Q	Indicates the LCS did not meet the control limits requirements
H	Sample Analysis Out Of Hold Time

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1504

MATRIX: Water

METHOD: 6020B

	NA	NO	YES
1. Calibration Summary met criteria.			✓
2. ICP Interference Check Sample Results Summary Submitted.			✓
3. Serial Dilution Summary (if applicable) Submitted.			✓
4. Laboratory Control Sample Summary (if applicable) Submitted.			✓
5. Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
6. Digestion Holding Time Met			✓
If not met, list number of days exceeded for each sample:			
7. Analysis Holding Time Met			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			

ADDITIONAL COMMENTS: Internal Standard 45Sc(1) was out side of qc limit for sample Q1504-06, so for this sample affected parameters were reported from 5X dilution.

Collision cell is being used to remove potential interferences. The analytes Na, Mg, Al, K, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As are being analyzed with collision cell and analytes Be, B, Ca, Ti, Se, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U are being analyzed with Non-Collision Cell. Helium gas is used for the Collision Cell analysis.

REVIEWED

QA REVIEW

By Sohil Jodhani, QA/QC Director at 1:01 pm, Apr 17, 2025

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1504

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 04/17/2025

LAB CHRONICLE

OrderID:	Q1504	OrderDate:	3/6/2025 10:18:11 AM
Client:	Alliance Technical Group, LLC - Newark	Project:	NJ Waste Water PT
Contact:	Mohammad Ahmed	Location:	QA Office

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1504-01	PT-TM1-WP	Water	Metals Group3	6010D	03/03/25	03/21/25	04/07/25	03/05/25
Q1504-02	PT-TM1-WP	Water	Metals Group3	6020B	03/03/25	03/31/25	04/01/25	03/05/25
Q1504-03	PT-SNTI-WP	Water	Metals Group4	6010D	03/03/25	03/21/25	04/07/25	03/05/25
Q1504-04	PT-SNTI-WP	Water	Metals Group4	6020B	03/03/25	03/31/25	04/01/25	03/05/25
Q1504-05	PT-MIN2-WP	Water	Metals Group5	6010D	03/03/25	03/21/25	04/07/25	03/05/25
Q1504-06	PT-MIN2-WP	Water	Metals Group5	6020B	03/03/25	03/31/25	04/01/25	03/05/25
Q1504-07	PT-HG-WP	Water	Mercury	7470A	03/03/25	04/03/25	04/03/25	03/05/25

Hit Summary Sheet SW-846

SDG No.: Q1504 **Order ID:** Q1504
Client: Alliance Technical Group, LLC - Newark **Project ID:** NJ Waste Water PT

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : PT-TM1-WP								
Q1504-02	PT-TM1-WP	Water	Aluminum	2710		1.94	20.0	ug/L
Q1504-02	PT-TM1-WP	Water	Antimony	290		0.11	2.00	ug/L
Q1504-02	PT-TM1-WP	Water	Arsenic	599		0.089	1.00	ug/L
Q1504-02	PT-TM1-WP	Water	Barium	696		0.21	10.0	ug/L
Q1504-02	PT-TM1-WP	Water	Beryllium	357		0.32	1.00	ug/L
Q1504-02	PT-TM1-WP	Water	Cadmium	731		0.34	1.00	ug/L
Q1504-02	PT-TM1-WP	Water	Chromium	235		0.21	2.00	ug/L
Q1504-02	PT-TM1-WP	Water	Cobalt	690		0.070	1.00	ug/L
Q1504-02	PT-TM1-WP	Water	Copper	682		0.30	2.00	ug/L
Q1504-02	PT-TM1-WP	Water	Iron	3710		7.81	50.0	ug/L
Q1504-02	PT-TM1-WP	Water	Lead	1030		0.21	1.00	ug/L
Q1504-02	PT-TM1-WP	Water	Manganese	1630		0.43	1.00	ug/L
Q1504-02	PT-TM1-WP	Water	Nickel	578		0.27	1.00	ug/L
Q1504-02	PT-TM1-WP	Water	Molybdenum	500		0.93	5.00	ug/L
Q1504-02	PT-TM1-WP	Water	Selenium	905		2.90	5.00	ug/L
Q1504-02	PT-TM1-WP	Water	Silver	858		0.060	1.00	ug/L
Q1504-02	PT-TM1-WP	Water	Thallium	225		0.060	1.00	ug/L
Q1504-02	PT-TM1-WP	Water	Vanadium	1510	D	0.15	10.0	ug/L
Q1504-02	PT-TM1-WP	Water	Zinc	1070		1.25	5.00	ug/L
Q1504-02	PT-TM1-WP	Water	Strontium	292		0.084	1.00	ug/L
Client ID : PT-SNTI-WP								
Q1504-04	PT-SNTI-WP	Water	Tin	1730	D	0.62	10.0	ug/L
Q1504-04	PT-SNTI-WP	Water	Titanium	240		0.20	5.00	ug/L
Client ID : PT-MIN2-WP								
Q1504-06	PT-MIN2-WP	Water	Calcium	54900	D	229	2500	ug/L
Q1504-06	PT-MIN2-WP	Water	Magnesium	19800		19.5	500	ug/L
Q1504-06	PT-MIN2-WP	Water	Potassium	23200		36.4	500	ug/L
Q1504-06	PT-MIN2-WP	Water	Sodium	59800		128	500	ug/L



SAMPLE DATA

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Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	03/03/25
Project:	NJ Waste Water PT	Date Received:	03/05/25
Client Sample ID:	PT-TM1-WP	SDG No.:	Q1504
Lab Sample ID:	Q1504-02	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	2710		1	1.94	20.0	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-36-0	Antimony	290		1	0.11	2.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-38-2	Arsenic	599		1	0.089	1.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-39-3	Barium	696		1	0.21	10.0	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-41-7	Beryllium	357		1	0.32	1.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-43-9	Cadmium	731		1	0.34	1.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-47-3	Chromium	235		1	0.21	2.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-48-4	Cobalt	690		1	0.070	1.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-50-8	Copper	682		1	0.30	2.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7439-89-6	Iron	3710		1	7.81	50.0	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7439-92-1	Lead	1030		1	0.21	1.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7439-96-5	Manganese	1630		1	0.43	1.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7439-98-7	Molybdenum	500		1	0.93	5.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-02-0	Nickel	578		1	0.27	1.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7782-49-2	Selenium	905		1	2.90	5.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-22-4	Silver	858		1	0.060	1.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-24-6	Strontium	292		1	0.084	1.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-28-0	Thallium	225		1	0.060	1.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A
7440-62-2	Vanadium	1510	D	2	0.15	10.0	ug/L	03/31/25 08:35	04/01/25 14:31	SW6020	3010A
7440-66-6	Zinc	1070		1	1.25	5.00	ug/L	03/31/25 08:35	04/01/25 13:56	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group3			

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 D = Dilution
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 * = indicates the duplicate analysis is not within control limits.
 E = Indicates the reported value is estimated because of the presence of interference.
 OR = Over Range
 N = Spiked sample recovery not within control limits

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	03/03/25
Project:	NJ Waste Water PT	Date Received:	03/05/25
Client Sample ID:	PT-SNTI-WP	SDG No.:	Q1504
Lab Sample ID:	Q1504-04	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-31-5	Tin	1730	D	2	0.62	10.0	ug/L	03/31/25 08:35	04/01/25 14:34	SW6020	3010A
7440-32-6	Titanium	240		1	0.20	5.00	ug/L	03/31/25 08:35	04/01/25 13:59	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group4			

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 D = Dilution
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 * = indicates the duplicate analysis is not within control limits.
 E = Indicates the reported value is estimated because of the presence of interference.
 OR = Over Range
 N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Alliance Technical Group, LLC - Newark	Date Collected:	03/03/25
Project:	NJ Waste Water PT	Date Received:	03/05/25
Client Sample ID:	PT-MIN2-WP	SDG No.:	Q1504
Lab Sample ID:	Q1504-06	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-70-2	Calcium	54900	D	5	229	2500	ug/L	03/31/25 08:35	04/01/25 14:38	SW6020	3010A
7439-95-4	Magnesium	19800		1	19.5	500	ug/L	03/31/25 08:35	04/01/25 14:02	SW6020	3010A
7440-09-7	Potassium	23200		1	36.4	500	ug/L	03/31/25 08:35	04/01/25 14:02	SW6020	3010A
7440-23-5	Sodium	59800		1	128	500	ug/L	03/31/25 08:35	04/01/25 14:02	SW6020	3010A

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	Metals Group5			

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 D = Dilution
 Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 * = indicates the duplicate analysis is not within control limits.
 E = Indicates the reported value is estimated because of the presence of interference.
 OR = Over Range
 N =Spiked sample recovery not within control limits



METAL CALIBRATION DATA

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark SDG No.: Q1504
Contract: ALLI03 Lab Code: CHEM Case No.: Q1504 SAS No.: Q1504
Initial Calibration Source: EPA
Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Aluminum	491	500	98	90 - 110	P	04/01/2025	13:05	LB135261
	Antimony	200	200	100	90 - 110	P	04/01/2025	13:05	LB135261
	Arsenic	198	200	99	90 - 110	P	04/01/2025	13:05	LB135261
	Barium	103	100	103	90 - 110	P	04/01/2025	13:05	LB135261
	Beryllium	104	100	104	90 - 110	P	04/01/2025	13:05	LB135261
	Cadmium	108	100	108	90 - 110	P	04/01/2025	13:05	LB135261
	Calcium	2140	2000	107	90 - 110	P	04/01/2025	13:05	LB135261
	Chromium	99.7	100	100	90 - 110	P	04/01/2025	13:05	LB135261
	Cobalt	106	100	106	90 - 110	P	04/01/2025	13:05	LB135261
	Copper	94.2	100	94	90 - 110	P	04/01/2025	13:05	LB135261
	Iron	1980	2000	99	90 - 110	P	04/01/2025	13:05	LB135261
	Lead	200	200	100	90 - 110	P	04/01/2025	13:05	LB135261
	Magnesium	1180	1200	98	90 - 110	P	04/01/2025	13:05	LB135261
	Manganese	93.9	100	94	90 - 110	P	04/01/2025	13:05	LB135261
	Molybdenum	5000	5000	100	90 - 110	P	04/01/2025	13:05	LB135261
	Nickel	99.9	110	91	90 - 110	P	04/01/2025	13:05	LB135261
	Potassium	1870	2000	93	90 - 110	P	04/01/2025	13:05	LB135261
	Selenium	204	200	102	90 - 110	P	04/01/2025	13:05	LB135261
	Silver	53.5	50.0	107	90 - 110	P	04/01/2025	13:05	LB135261
	Sodium	2070	2000	104	90 - 110	P	04/01/2025	13:05	LB135261
	Strontium	496	500	99	90 - 110	P	04/01/2025	13:05	LB135261
	Thallium	196	210	94	90 - 110	P	04/01/2025	13:05	LB135261
	Tin	514	500	103	90 - 110	P	04/01/2025	13:05	LB135261
	Titanium	4820	5000	96	90 - 110	P	04/01/2025	13:05	LB135261
	Vanadium	96.5	100	96	90 - 110	P	04/01/2025	13:05	LB135261
	Zinc	182	200	91	90 - 110	P	04/01/2025	13:05	LB135261

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark SDG No.: Q1504
 Contract: ALLI03 Lab Code: CHEM Case No.: Q1504 SAS No.: Q1504
 Initial Calibration Source: EPA
 Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV	Aluminum	21.3	20.0	107	80 - 120	P	04/01/2025	13:10	LB135261
	Antimony	2.09	2.0	104	80 - 120	P	04/01/2025	13:10	LB135261
	Arsenic	1.07	1.0	107	80 - 120	P	04/01/2025	13:10	LB135261
	Barium	10.4	10.0	104	80 - 120	P	04/01/2025	13:10	LB135261
	Beryllium	1.17	1.0	117	80 - 120	P	04/01/2025	13:10	LB135261
	Cadmium	1.05	1.0	105	80 - 120	P	04/01/2025	13:10	LB135261
	Calcium	546	500	109	80 - 120	P	04/01/2025	13:10	LB135261
	Chromium	2.08	2.0	104	80 - 120	P	04/01/2025	13:10	LB135261
	Cobalt	1.10	1.0	110	80 - 120	P	04/01/2025	13:10	LB135261
	Copper	1.95	2.0	98	80 - 120	P	04/01/2025	13:10	LB135261
	Iron	52.5	50.0	105	80 - 120	P	04/01/2025	13:10	LB135261
	Lead	0.98	1.0	98	80 - 120	P	04/01/2025	13:10	LB135261
	Magnesium	550	500	110	80 - 120	P	04/01/2025	13:10	LB135261
	Manganese	1.06	1.0	106	80 - 120	P	04/01/2025	13:10	LB135261
	Molybdenum	5.23	5.0	105	80 - 120	P	04/01/2025	13:10	LB135261
	Nickel	0.98	1.0	98	80 - 120	P	04/01/2025	13:10	LB135261
	Potassium	514	500	103	80 - 120	P	04/01/2025	13:10	LB135261
	Selenium	5.39	5.0	108	80 - 120	P	04/01/2025	13:10	LB135261
	Silver	1.05	1.0	105	80 - 120	P	04/01/2025	13:10	LB135261
	Sodium	561	500	112	80 - 120	P	04/01/2025	13:10	LB135261
	Strontium	1.07	1.0	107	80 - 120	P	04/01/2025	13:10	LB135261
	Thallium	0.98	1.0	98	80 - 120	P	04/01/2025	13:10	LB135261
	Tin	5.27	5.0	105	80 - 120	P	04/01/2025	13:10	LB135261
	Titanium	5.51	5.0	110	80 - 120	P	04/01/2025	13:10	LB135261
	Vanadium	5.20	5.0	104	80 - 120	P	04/01/2025	13:10	LB135261
	Zinc	4.71	5.0	94	80 - 120	P	04/01/2025	13:10	LB135261

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark SDG No.: Q1504
Contract: ALLI03 Lab Code: CHEM Case No.: Q1504 SAS No.: Q1504
Initial Calibration Source: EPA
Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Aluminum	49700	50000	99	90 - 110	P	04/01/2025	13:24	LB135261
	Antimony	476	500	95	90 - 110	P	04/01/2025	13:24	LB135261
	Arsenic	475	500	95	90 - 110	P	04/01/2025	13:24	LB135261
	Barium	2440	2500	98	90 - 110	P	04/01/2025	13:24	LB135261
	Beryllium	502	500	100	90 - 110	P	04/01/2025	13:24	LB135261
	Cadmium	478	500	96	90 - 110	P	04/01/2025	13:24	LB135261
	Calcium	245000	250000	98	90 - 110	P	04/01/2025	13:24	LB135261
	Chromium	487	500	97	90 - 110	P	04/01/2025	13:24	LB135261
	Cobalt	472	500	94	90 - 110	P	04/01/2025	13:24	LB135261
	Copper	4570	5000	91	90 - 110	P	04/01/2025	13:24	LB135261
	Iron	120000	125000	96	90 - 110	P	04/01/2025	13:24	LB135261
	Lead	2440	2500	98	90 - 110	P	04/01/2025	13:24	LB135261
	Magnesium	237000	250000	95	90 - 110	P	04/01/2025	13:24	LB135261
	Manganese	4890	5000	98	90 - 110	P	04/01/2025	13:24	LB135261
	Molybdenum	4950	5000	99	90 - 110	P	04/01/2025	13:24	LB135261
	Nickel	469	500	94	90 - 110	P	04/01/2025	13:24	LB135261
	Potassium	122000	125000	98	90 - 110	P	04/01/2025	13:24	LB135261
	Selenium	502	500	100	90 - 110	P	04/01/2025	13:24	LB135261
	Silver	461	500	92	90 - 110	P	04/01/2025	13:24	LB135261
	Sodium	249000	250000	100	90 - 110	P	04/01/2025	13:24	LB135261
	Strontium	487	500	98	90 - 110	P	04/01/2025	13:24	LB135261
	Thallium	492	500	98	90 - 110	P	04/01/2025	13:24	LB135261
	Tin	482	500	96	90 - 110	P	04/01/2025	13:24	LB135261
	Titanium	4920	5000	98	90 - 110	P	04/01/2025	13:24	LB135261
	Vanadium	498	500	100	90 - 110	P	04/01/2025	13:24	LB135261
	Zinc	4650	5000	93	90 - 110	P	04/01/2025	13:24	LB135261
CCV02	Aluminum	51100	50000	102	90 - 110	P	04/01/2025	14:20	LB135261
	Antimony	497	500	99	90 - 110	P	04/01/2025	14:20	LB135261
	Arsenic	488	500	98	90 - 110	P	04/01/2025	14:20	LB135261
	Barium	2530	2500	101	90 - 110	P	04/01/2025	14:20	LB135261
	Beryllium	524	500	105	90 - 110	P	04/01/2025	14:20	LB135261
	Cadmium	492	500	98	90 - 110	P	04/01/2025	14:20	LB135261
	Calcium	250000	250000	100	90 - 110	P	04/01/2025	14:20	LB135261
	Chromium	501	500	100	90 - 110	P	04/01/2025	14:20	LB135261

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark SDG No.: Q1504
Contract: ALLI03 Lab Code: CHEM Case No.: Q1504 SAS No.: Q1504
Initial Calibration Source: EPA
Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV02	Cobalt	480	500	96	90 - 110	P	04/01/2025	14:20	LB135261
	Copper	4850	5000	97	90 - 110	P	04/01/2025	14:20	LB135261
	Iron	122000	125000	98	90 - 110	P	04/01/2025	14:20	LB135261
	Lead	2520	2500	101	90 - 110	P	04/01/2025	14:20	LB135261
	Magnesium	249000	250000	100	90 - 110	P	04/01/2025	14:20	LB135261
	Manganese	5080	5000	102	90 - 110	P	04/01/2025	14:20	LB135261
	Molybdenum	5010	5000	100	90 - 110	P	04/01/2025	14:20	LB135261
	Nickel	477	500	95	90 - 110	P	04/01/2025	14:20	LB135261
	Potassium	125000	125000	100	90 - 110	P	04/01/2025	14:20	LB135261
	Selenium	482	500	96	90 - 110	P	04/01/2025	14:20	LB135261
	Silver	487	500	97	90 - 110	P	04/01/2025	14:20	LB135261
	Sodium	248000	250000	99	90 - 110	P	04/01/2025	14:20	LB135261
	Strontium	503	500	101	90 - 110	P	04/01/2025	14:20	LB135261
	Thallium	504	500	101	90 - 110	P	04/01/2025	14:20	LB135261
	Tin	498	500	100	90 - 110	P	04/01/2025	14:20	LB135261
	Titanium	5020	5000	100	90 - 110	P	04/01/2025	14:20	LB135261
	Vanadium	510	500	102	90 - 110	P	04/01/2025	14:20	LB135261
CCV03	Zinc	4990	5000	100	90 - 110	P	04/01/2025	14:20	LB135261
	Aluminum	51200	50000	102	90 - 110	P	04/01/2025	14:54	LB135261
	Antimony	497	500	99	90 - 110	P	04/01/2025	14:54	LB135261
	Arsenic	484	500	97	90 - 110	P	04/01/2025	14:54	LB135261
	Barium	2530	2500	101	90 - 110	P	04/01/2025	14:54	LB135261
	Beryllium	521	500	104	90 - 110	P	04/01/2025	14:54	LB135261
	Cadmium	494	500	99	90 - 110	P	04/01/2025	14:54	LB135261
	Calcium	250000	250000	100	90 - 110	P	04/01/2025	14:54	LB135261
	Chromium	499	500	100	90 - 110	P	04/01/2025	14:54	LB135261
	Cobalt	483	500	97	90 - 110	P	04/01/2025	14:54	LB135261
	Copper	4850	5000	97	90 - 110	P	04/01/2025	14:54	LB135261
	Iron	123000	125000	98	90 - 110	P	04/01/2025	14:54	LB135261
	Lead	2510	2500	101	90 - 110	P	04/01/2025	14:54	LB135261
	Magnesium	248000	250000	99	90 - 110	P	04/01/2025	14:54	LB135261
	Manganese	5040	5000	101	90 - 110	P	04/01/2025	14:54	LB135261
	Molybdenum	5010	5000	100	90 - 110	P	04/01/2025	14:54	LB135261
	Nickel	477	500	95	90 - 110	P	04/01/2025	14:54	LB135261

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark SDG No.: Q1504
Contract: ALLI03 Lab Code: CHEM Case No.: Q1504 SAS No.: Q1504
Initial Calibration Source: EPA
Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV03	Potassium	124000	125000	99	90 - 110	P	04/01/2025	14:54	LB135261
	Selenium	481	500	96	90 - 110	P	04/01/2025	14:54	LB135261
	Silver	485	500	97	90 - 110	P	04/01/2025	14:54	LB135261
	Sodium	246000	250000	98	90 - 110	P	04/01/2025	14:54	LB135261
	Strontium	503	500	101	90 - 110	P	04/01/2025	14:54	LB135261
	Thallium	500	500	100	90 - 110	P	04/01/2025	14:54	LB135261
	Tin	495	500	99	90 - 110	P	04/01/2025	14:54	LB135261
	Titanium	4950	5000	99	90 - 110	P	04/01/2025	14:54	LB135261
	Vanadium	510	500	102	90 - 110	P	04/01/2025	14:54	LB135261
	Zinc	4930	5000	99	90 - 110	P	04/01/2025	14:54	LB135261
CCV04	Aluminum	51500	50000	103	90 - 110	P	04/01/2025	15:53	LB135261
	Antimony	489	500	98	90 - 110	P	04/01/2025	15:53	LB135261
	Arsenic	486	500	97	90 - 110	P	04/01/2025	15:53	LB135261
	Barium	2490	2500	100	90 - 110	P	04/01/2025	15:53	LB135261
	Beryllium	527	500	105	90 - 110	P	04/01/2025	15:53	LB135261
	Cadmium	485	500	97	90 - 110	P	04/01/2025	15:53	LB135261
	Calcium	247000	250000	99	90 - 110	P	04/01/2025	15:53	LB135261
	Chromium	500	500	100	90 - 110	P	04/01/2025	15:53	LB135261
	Cobalt	476	500	95	90 - 110	P	04/01/2025	15:53	LB135261
	Copper	4810	5000	96	90 - 110	P	04/01/2025	15:53	LB135261
	Iron	122000	125000	97	90 - 110	P	04/01/2025	15:53	LB135261
	Lead	2510	2500	100	90 - 110	P	04/01/2025	15:53	LB135261
	Magnesium	250000	250000	100	90 - 110	P	04/01/2025	15:53	LB135261
	Manganese	5020	5000	100	90 - 110	P	04/01/2025	15:53	LB135261
	Molybdenum	5000	5000	100	90 - 110	P	04/01/2025	15:53	LB135261
	Nickel	471	500	94	90 - 110	P	04/01/2025	15:53	LB135261
	Potassium	125000	125000	100	90 - 110	P	04/01/2025	15:53	LB135261
	Selenium	474	500	95	90 - 110	P	04/01/2025	15:53	LB135261
	Silver	474	500	95	90 - 110	P	04/01/2025	15:53	LB135261
	Sodium	248000	250000	99	90 - 110	P	04/01/2025	15:53	LB135261
	Strontium	499	500	100	90 - 110	P	04/01/2025	15:53	LB135261
	Thallium	500	500	100	90 - 110	P	04/01/2025	15:53	LB135261
	Tin	490	500	98	90 - 110	P	04/01/2025	15:53	LB135261
	Titanium	4940	5000	99	90 - 110	P	04/01/2025	15:53	LB135261

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark SDG No.: Q1504
Contract: ALLI03 Lab Code: CHEM Case No.: Q1504 SAS No.: Q1504
Initial Calibration Source: EPA
Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV04	Vanadium	510	500	102	90 - 110	P	04/01/2025	15:53	LB135261
	Zinc	4940	5000	99	90 - 110	P	04/01/2025	15:53	LB135261
CCV05	Aluminum	52100	50000	104	90 - 110	P	04/01/2025	16:40	LB135261
	Antimony	492	500	98	90 - 110	P	04/01/2025	16:40	LB135261
	Arsenic	487	500	98	90 - 110	P	04/01/2025	16:40	LB135261
	Barium	2480	2500	99	90 - 110	P	04/01/2025	16:40	LB135261
	Beryllium	539	500	108	90 - 110	P	04/01/2025	16:40	LB135261
	Cadmium	487	500	97	90 - 110	P	04/01/2025	16:40	LB135261
	Calcium	250000	250000	100	90 - 110	P	04/01/2025	16:40	LB135261
	Chromium	511	500	102	90 - 110	P	04/01/2025	16:40	LB135261
	Cobalt	488	500	98	90 - 110	P	04/01/2025	16:40	LB135261
	Copper	4990	5000	100	90 - 110	P	04/01/2025	16:40	LB135261
	Iron	125000	125000	100	90 - 110	P	04/01/2025	16:40	LB135261
	Lead	2490	2500	100	90 - 110	P	04/01/2025	16:40	LB135261
	Magnesium	255000	250000	102	90 - 110	P	04/01/2025	16:40	LB135261
	Manganese	5180	5000	104	90 - 110	P	04/01/2025	16:40	LB135261
	Molybdenum	5020	5000	100	90 - 110	P	04/01/2025	16:40	LB135261
	Nickel	486	500	97	90 - 110	P	04/01/2025	16:40	LB135261
	Potassium	126000	125000	101	90 - 110	P	04/01/2025	16:40	LB135261
	Selenium	472	500	94	90 - 110	P	04/01/2025	16:40	LB135261
	Silver	484	500	97	90 - 110	P	04/01/2025	16:40	LB135261
	Sodium	250000	250000	100	90 - 110	P	04/01/2025	16:40	LB135261
	Strontium	501	500	100	90 - 110	P	04/01/2025	16:40	LB135261
	Thallium	505	500	101	90 - 110	P	04/01/2025	16:40	LB135261
	Tin	492	500	98	90 - 110	P	04/01/2025	16:40	LB135261
	Titanium	5030	5000	100	90 - 110	P	04/01/2025	16:40	LB135261
	Vanadium	518	500	104	90 - 110	P	04/01/2025	16:40	LB135261
	Zinc	5060	5000	101	90 - 110	P	04/01/2025	16:40	LB135261
CCV06	Aluminum	52300	50000	105	90 - 110	P	04/01/2025	17:08	LB135261
	Antimony	502	500	100	90 - 110	P	04/01/2025	17:08	LB135261
	Arsenic	492	500	98	90 - 110	P	04/01/2025	17:08	LB135261
	Barium	2560	2500	102	90 - 110	P	04/01/2025	17:08	LB135261
	Beryllium	514	500	103	90 - 110	P	04/01/2025	17:08	LB135261
	Cadmium	499	500	100	90 - 110	P	04/01/2025	17:08	LB135261

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Alliance Technical Group, LLC - Newark SDG No.: Q1504
Contract: ALLI03 Lab Code: CHEM Case No.: Q1504 SAS No.: Q1504
Initial Calibration Source: EPA
Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV06	Calcium	251000	250000	100	90 - 110	P	04/01/2025	17:08	LB135261
	Chromium	510	500	102	90 - 110	P	04/01/2025	17:08	LB135261
	Cobalt	489	500	98	90 - 110	P	04/01/2025	17:08	LB135261
	Copper	5010	5000	100	90 - 110	P	04/01/2025	17:08	LB135261
	Iron	126000	125000	100	90 - 110	P	04/01/2025	17:08	LB135261
	Lead	2520	2500	101	90 - 110	P	04/01/2025	17:08	LB135261
	Magnesium	256000	250000	103	90 - 110	P	04/01/2025	17:08	LB135261
	Manganese	5160	5000	103	90 - 110	P	04/01/2025	17:08	LB135261
	Molybdenum	5110	5000	102	90 - 110	P	04/01/2025	17:08	LB135261
	Nickel	490	500	98	90 - 110	P	04/01/2025	17:08	LB135261
	Potassium	129000	125000	103	90 - 110	P	04/01/2025	17:08	LB135261
	Selenium	477	500	95	90 - 110	P	04/01/2025	17:08	LB135261
	Silver	488	500	98	90 - 110	P	04/01/2025	17:08	LB135261
	Sodium	254000	250000	102	90 - 110	P	04/01/2025	17:08	LB135261
	Strontium	503	500	101	90 - 110	P	04/01/2025	17:08	LB135261
	Thallium	512	500	102	90 - 110	P	04/01/2025	17:08	LB135261
	Tin	505	500	101	90 - 110	P	04/01/2025	17:08	LB135261
	Titanium	5050	5000	101	90 - 110	P	04/01/2025	17:08	LB135261
	Vanadium	528	500	106	90 - 110	P	04/01/2025	17:08	LB135261
	Zinc	5110	5000	102	90 - 110	P	04/01/2025	17:08	LB135261

Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1504
Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1504 **SAS No.:** Q1504
Initial Calibration Source: _____
Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRI	Aluminum	22.9	20.0	114	70 - 130	P	04/01/2025	13:33	LB135261
	Antimony	2.12	2.0	106	70 - 130	P	04/01/2025	13:33	LB135261
	Arsenic	1.05	1.0	105	70 - 130	P	04/01/2025	13:33	LB135261
	Barium	10.5	10.0	105	70 - 130	P	04/01/2025	13:33	LB135261
	Beryllium	1.14	1.0	114	70 - 130	P	04/01/2025	13:33	LB135261
	Cadmium	1.06	1.0	106	70 - 130	P	04/01/2025	13:33	LB135261
	Calcium	545	500	109	70 - 130	P	04/01/2025	13:33	LB135261
	Chromium	2.08	2.0	104	70 - 130	P	04/01/2025	13:33	LB135261
	Cobalt	1.11	1.0	111	50 - 150	P	04/01/2025	13:33	LB135261
	Copper	1.99	2.0	100	70 - 130	P	04/01/2025	13:33	LB135261
	Iron	55.1	50.0	110	70 - 130	P	04/01/2025	13:33	LB135261
	Lead	1.02	1.0	102	70 - 130	P	04/01/2025	13:33	LB135261
	Magnesium	562	500	112	70 - 130	P	04/01/2025	13:33	LB135261
	Manganese	1.11	1.0	111	50 - 150	P	04/01/2025	13:33	LB135261
	Molybdenum	5.22	5.0	104	70 - 130	P	04/01/2025	13:33	LB135261
	Nickel	0.98	1.0	98	70 - 130	P	04/01/2025	13:33	LB135261
	Potassium	542	500	108	70 - 130	P	04/01/2025	13:33	LB135261
	Selenium	5.43	5.0	109	70 - 130	P	04/01/2025	13:33	LB135261
	Silver	1.06	1.0	106	70 - 130	P	04/01/2025	13:33	LB135261
	Sodium	592	500	118	70 - 130	P	04/01/2025	13:33	LB135261
	Strontium	1.08	1.0	108	70 - 130	P	04/01/2025	13:33	LB135261
	Thallium	1.01	1.0	101	70 - 130	P	04/01/2025	13:33	LB135261
	Tin	5.46	5.0	109	70 - 130	P	04/01/2025	13:33	LB135261
	Titanium	5.44	5.0	109	70 - 130	P	04/01/2025	13:33	LB135261
	Vanadium	5.31	5.0	106	70 - 130	P	04/01/2025	13:33	LB135261
	Zinc	4.77	5.0	95	50 - 150	P	04/01/2025	13:33	LB135261



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark

SDG No.: Q1504

Contract: ALLI03

Lab Code: CHEM

Case No.: Q1504

SAS No.: Q1504

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	20.0	+/-20.0	U	20.0	P	04/01/2025	13:13	LB135261
	Antimony	2.00	+/-2.00	U	2.00	P	04/01/2025	13:13	LB135261
	Arsenic	1.00	+/-1.00	U	1.00	P	04/01/2025	13:13	LB135261
	Barium	10.0	+/-10.0	U	10.0	P	04/01/2025	13:13	LB135261
	Beryllium	1.00	+/-1.00	U	1.00	P	04/01/2025	13:13	LB135261
	Cadmium	1.00	+/-1.00	U	1.00	P	04/01/2025	13:13	LB135261
	Calcium	500	+/-500	U	500	P	04/01/2025	13:13	LB135261
	Chromium	2.00	+/-2.00	U	2.00	P	04/01/2025	13:13	LB135261
	Cobalt	1.00	+/-1.00	U	1.00	P	04/01/2025	13:13	LB135261
	Copper	2.00	+/-2.00	U	2.00	P	04/01/2025	13:13	LB135261
	Iron	50.0	+/-50.0	U	50.0	P	04/01/2025	13:13	LB135261
	Lead	1.00	+/-1.00	U	1.00	P	04/01/2025	13:13	LB135261
	Magnesium	500	+/-500	U	500	P	04/01/2025	13:13	LB135261
	Manganese	1.00	+/-1.00	U	1.00	P	04/01/2025	13:13	LB135261
	Nickel	1.00	+/-1.00	U	1.00	P	04/01/2025	13:13	LB135261
	Potassium	500	+/-500	U	500	P	04/01/2025	13:13	LB135261
	Tin	0.51	+/-5.00	J	5.00	P	04/01/2025	13:13	LB135261
	Molybdenum	5.00	+/-5.00	U	5.00	P	04/01/2025	13:13	LB135261
	Selenium	5.00	+/-5.00	U	5.00	P	04/01/2025	13:13	LB135261
	Silver	1.00	+/-1.00	U	1.00	P	04/01/2025	13:13	LB135261
	Sodium	500	+/-500	U	500	P	04/01/2025	13:13	LB135261
	Thallium	1.00	+/-1.00	U	1.00	P	04/01/2025	13:13	LB135261
	Vanadium	5.00	+/-5.00	U	5.00	P	04/01/2025	13:13	LB135261
	Zinc	5.00	+/-5.00	U	5.00	P	04/01/2025	13:13	LB135261
	Strontium	1.00	+/-1.00	U	1.00	P	04/01/2025	13:13	LB135261
	Titanium	5.00	+/-5.00	U	5.00	P	04/01/2025	13:13	LB135261

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark		SDG No.: Q1504							
Contract: ALLI03	Lab Code: CHEM	Case No.: Q1504	SAS No.: Q1504						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	20.0	+/-20.0	U	20.0	P	04/01/2025	13:30	LB135261
	Antimony	2.00	+/-2.00	U	2.00	P	04/01/2025	13:30	LB135261
	Arsenic	1.00	+/-1.00	U	1.00	P	04/01/2025	13:30	LB135261
	Barium	10.0	+/-10.0	U	10.0	P	04/01/2025	13:30	LB135261
	Beryllium	1.00	+/-1.00	U	1.00	P	04/01/2025	13:30	LB135261
	Cadmium	1.00	+/-1.00	U	1.00	P	04/01/2025	13:30	LB135261
	Calcium	500	+/-500	U	500	P	04/01/2025	13:30	LB135261
	Chromium	2.00	+/-2.00	U	2.00	P	04/01/2025	13:30	LB135261
	Cobalt	1.00	+/-1.00	U	1.00	P	04/01/2025	13:30	LB135261
	Copper	2.00	+/-2.00	U	2.00	P	04/01/2025	13:30	LB135261
	Iron	50.0	+/-50.0	U	50.0	P	04/01/2025	13:30	LB135261
	Lead	1.00	+/-1.00	U	1.00	P	04/01/2025	13:30	LB135261
	Magnesium	500	+/-500	U	500	P	04/01/2025	13:30	LB135261
	Manganese	1.00	+/-1.00	U	1.00	P	04/01/2025	13:30	LB135261
	Nickel	1.00	+/-1.00	U	1.00	P	04/01/2025	13:30	LB135261
	Potassium	500	+/-500	U	500	P	04/01/2025	13:30	LB135261
	Selenium	5.00	+/-5.00	U	5.00	P	04/01/2025	13:30	LB135261
	Molybdenum	5.00	+/-5.00	U	5.00	P	04/01/2025	13:30	LB135261
	Tin	0.42	+/-5.00	J	5.00	P	04/01/2025	13:30	LB135261
	Silver	1.00	+/-1.00	U	1.00	P	04/01/2025	13:30	LB135261
	Sodium	500	+/-500	U	500	P	04/01/2025	13:30	LB135261
	Thallium	1.00	+/-1.00	U	1.00	P	04/01/2025	13:30	LB135261
	Vanadium	5.00	+/-5.00	U	5.00	P	04/01/2025	13:30	LB135261
	Zinc	5.00	+/-5.00	U	5.00	P	04/01/2025	13:30	LB135261
	Strontium	1.00	+/-1.00	U	1.00	P	04/01/2025	13:30	LB135261
	Titanium	5.00	+/-5.00	U	5.00	P	04/01/2025	13:30	LB135261
CCB02	Aluminum	20.0	+/-20.0	U	20.0	P	04/01/2025	14:28	LB135261
	Antimony	2.00	+/-2.00	U	2.00	P	04/01/2025	14:28	LB135261
	Arsenic	1.00	+/-1.00	U	1.00	P	04/01/2025	14:28	LB135261
	Barium	10.0	+/-10.0	U	10.0	P	04/01/2025	14:28	LB135261
	Beryllium	1.00	+/-1.00	U	1.00	P	04/01/2025	14:28	LB135261
	Cadmium	1.00	+/-1.00	U	1.00	P	04/01/2025	14:28	LB135261
	Calcium	500	+/-500	U	500	P	04/01/2025	14:28	LB135261
	Chromium	2.00	+/-2.00	U	2.00	P	04/01/2025	14:28	LB135261
	Cobalt	1.00	+/-1.00	U	1.00	P	04/01/2025	14:28	LB135261
	Copper	2.00	+/-2.00	U	2.00	P	04/01/2025	14:28	LB135261
	Iron	50.0	+/-50.0	U	50.0	P	04/01/2025	14:28	LB135261
	Lead	1.00	+/-1.00	U	1.00	P	04/01/2025	14:28	LB135261
	Magnesium	500	+/-500	U	500	P	04/01/2025	14:28	LB135261

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark		SDG No.: Q1504							
Contract: ALLI03	Lab Code: CHEM	Case No.: Q1504	SAS No.: Q1504						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Manganese	1.00	+/-1.00	U	1.00	P	04/01/2025	14:28	LB135261
	Nickel	1.00	+/-1.00	U	1.00	P	04/01/2025	14:28	LB135261
	Potassium	500	+/-500	U	500	P	04/01/2025	14:28	LB135261
	Tin	5.00	+/-5.00	U	5.00	P	04/01/2025	14:28	LB135261
	Molybdenum	5.00	+/-5.00	U	5.00	P	04/01/2025	14:28	LB135261
	Selenium	5.00	+/-5.00	U	5.00	P	04/01/2025	14:28	LB135261
	Silver	1.00	+/-1.00	U	1.00	P	04/01/2025	14:28	LB135261
	Sodium	500	+/-500	U	500	P	04/01/2025	14:28	LB135261
	Thallium	1.00	+/-1.00	U	1.00	P	04/01/2025	14:28	LB135261
	Vanadium	5.00	+/-5.00	U	5.00	P	04/01/2025	14:28	LB135261
	Zinc	5.00	+/-5.00	U	5.00	P	04/01/2025	14:28	LB135261
	Strontium	1.00	+/-1.00	U	1.00	P	04/01/2025	14:28	LB135261
	Titanium	5.00	+/-5.00	U	5.00	P	04/01/2025	14:28	LB135261
CCB03	Aluminum	20.0	+/-20.0	U	20.0	P	04/01/2025	14:58	LB135261
	Antimony	2.00	+/-2.00	U	2.00	P	04/01/2025	14:58	LB135261
	Arsenic	1.00	+/-1.00	U	1.00	P	04/01/2025	14:58	LB135261
	Barium	10.0	+/-10.0	U	10.0	P	04/01/2025	14:58	LB135261
	Beryllium	1.00	+/-1.00	U	1.00	P	04/01/2025	14:58	LB135261
	Cadmium	1.00	+/-1.00	U	1.00	P	04/01/2025	14:58	LB135261
	Calcium	500	+/-500	U	500	P	04/01/2025	14:58	LB135261
	Chromium	2.00	+/-2.00	U	2.00	P	04/01/2025	14:58	LB135261
	Cobalt	1.00	+/-1.00	U	1.00	P	04/01/2025	14:58	LB135261
	Copper	2.00	+/-2.00	U	2.00	P	04/01/2025	14:58	LB135261
	Iron	50.0	+/-50.0	U	50.0	P	04/01/2025	14:58	LB135261
	Lead	1.00	+/-1.00	U	1.00	P	04/01/2025	14:58	LB135261
	Magnesium	500	+/-500	U	500	P	04/01/2025	14:58	LB135261
	Manganese	1.00	+/-1.00	U	1.00	P	04/01/2025	14:58	LB135261
	Nickel	1.00	+/-1.00	U	1.00	P	04/01/2025	14:58	LB135261
	Potassium	500	+/-500	U	500	P	04/01/2025	14:58	LB135261
	Tin	5.00	+/-5.00	U	5.00	P	04/01/2025	14:58	LB135261
	Selenium	5.00	+/-5.00	U	5.00	P	04/01/2025	14:58	LB135261
	Molybdenum	5.00	+/-5.00	U	5.00	P	04/01/2025	14:58	LB135261
	Silver	1.00	+/-1.00	U	1.00	P	04/01/2025	14:58	LB135261
	Sodium	500	+/-500	U	500	P	04/01/2025	14:58	LB135261
	Thallium	1.00	+/-1.00	U	1.00	P	04/01/2025	14:58	LB135261
	Vanadium	5.00	+/-5.00	U	5.00	P	04/01/2025	14:58	LB135261
	Zinc	5.00	+/-5.00	U	5.00	P	04/01/2025	14:58	LB135261
	Strontium	1.00	+/-1.00	U	1.00	P	04/01/2025	14:58	LB135261
	Titanium	5.00	+/-5.00	U	5.00	P	04/01/2025	14:58	LB135261

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark		SDG No.: Q1504							
Contract: ALLI03	Lab Code: CHEM	Case No.: Q1504	SAS No.: Q1504						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Aluminum	20.0	+/-20.0	U	20.0	P	04/01/2025	16:01	LB135261
	Antimony	2.00	+/-2.00	U	2.00	P	04/01/2025	16:01	LB135261
	Arsenic	1.00	+/-1.00	U	1.00	P	04/01/2025	16:01	LB135261
	Barium	10.0	+/-10.0	U	10.0	P	04/01/2025	16:01	LB135261
	Beryllium	1.00	+/-1.00	U	1.00	P	04/01/2025	16:01	LB135261
	Cadmium	1.00	+/-1.00	U	1.00	P	04/01/2025	16:01	LB135261
	Calcium	500	+/-500	U	500	P	04/01/2025	16:01	LB135261
	Chromium	2.00	+/-2.00	U	2.00	P	04/01/2025	16:01	LB135261
	Cobalt	1.00	+/-1.00	U	1.00	P	04/01/2025	16:01	LB135261
	Copper	2.00	+/-2.00	U	2.00	P	04/01/2025	16:01	LB135261
	Iron	50.0	+/-50.0	U	50.0	P	04/01/2025	16:01	LB135261
	Lead	1.00	+/-1.00	U	1.00	P	04/01/2025	16:01	LB135261
	Magnesium	500	+/-500	U	500	P	04/01/2025	16:01	LB135261
	Manganese	1.00	+/-1.00	U	1.00	P	04/01/2025	16:01	LB135261
	Nickel	1.00	+/-1.00	U	1.00	P	04/01/2025	16:01	LB135261
	Potassium	500	+/-500	U	500	P	04/01/2025	16:01	LB135261
	Tin	5.00	+/-5.00	U	5.00	P	04/01/2025	16:01	LB135261
	Selenium	5.00	+/-5.00	U	5.00	P	04/01/2025	16:01	LB135261
	Molybdenum	5.00	+/-5.00	U	5.00	P	04/01/2025	16:01	LB135261
	Silver	1.00	+/-1.00	U	1.00	P	04/01/2025	16:01	LB135261
	Sodium	500	+/-500	U	500	P	04/01/2025	16:01	LB135261
	Thallium	1.00	+/-1.00	U	1.00	P	04/01/2025	16:01	LB135261
	Vanadium	5.00	+/-5.00	U	5.00	P	04/01/2025	16:01	LB135261
	Zinc	5.00	+/-5.00	U	5.00	P	04/01/2025	16:01	LB135261
	Strontium	1.00	+/-1.00	U	1.00	P	04/01/2025	16:01	LB135261
	Titanium	5.00	+/-5.00	U	5.00	P	04/01/2025	16:01	LB135261
CCB05	Aluminum	20.0	+/-20.0	U	20.0	P	04/01/2025	16:47	LB135261
	Antimony	2.00	+/-2.00	U	2.00	P	04/01/2025	16:47	LB135261
	Arsenic	1.00	+/-1.00	U	1.00	P	04/01/2025	16:47	LB135261
	Barium	10.0	+/-10.0	U	10.0	P	04/01/2025	16:47	LB135261
	Beryllium	1.00	+/-1.00	U	1.00	P	04/01/2025	16:47	LB135261
	Cadmium	1.00	+/-1.00	U	1.00	P	04/01/2025	16:47	LB135261
	Calcium	500	+/-500	U	500	P	04/01/2025	16:47	LB135261
	Chromium	2.00	+/-2.00	U	2.00	P	04/01/2025	16:47	LB135261
	Cobalt	1.00	+/-1.00	U	1.00	P	04/01/2025	16:47	LB135261
	Copper	2.00	+/-2.00	U	2.00	P	04/01/2025	16:47	LB135261
	Iron	50.0	+/-50.0	U	50.0	P	04/01/2025	16:47	LB135261
	Lead	1.00	+/-1.00	U	1.00	P	04/01/2025	16:47	LB135261
	Magnesium	500	+/-500	U	500	P	04/01/2025	16:47	LB135261

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark		SDG No.: Q1504							
Contract: ALLI03	Lab Code: CHEM	Case No.: Q1504	SAS No.: Q1504						
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB05	Manganese	1.00	+/-1.00	U	1.00	P	04/01/2025	16:47	LB135261
	Nickel	1.00	+/-1.00	U	1.00	P	04/01/2025	16:47	LB135261
	Potassium	500	+/-500	U	500	P	04/01/2025	16:47	LB135261
	Tin	5.00	+/-5.00	U	5.00	P	04/01/2025	16:47	LB135261
	Selenium	5.00	+/-5.00	U	5.00	P	04/01/2025	16:47	LB135261
	Molybdenum	5.00	+/-5.00	U	5.00	P	04/01/2025	16:47	LB135261
	Silver	1.00	+/-1.00	U	1.00	P	04/01/2025	16:47	LB135261
	Sodium	500	+/-500	U	500	P	04/01/2025	16:47	LB135261
	Thallium	1.00	+/-1.00	U	1.00	P	04/01/2025	16:47	LB135261
	Vanadium	5.00	+/-5.00	U	5.00	P	04/01/2025	16:47	LB135261
	Zinc	5.00	+/-5.00	U	5.00	P	04/01/2025	16:47	LB135261
	Strontium	1.00	+/-1.00	U	1.00	P	04/01/2025	16:47	LB135261
	Titanium	5.00	+/-5.00	U	5.00	P	04/01/2025	16:47	LB135261
CCB06	Aluminum	20.0	+/-20.0	U	20.0	P	04/01/2025	17:11	LB135261
	Antimony	2.00	+/-2.00	U	2.00	P	04/01/2025	17:11	LB135261
	Arsenic	1.00	+/-1.00	U	1.00	P	04/01/2025	17:11	LB135261
	Barium	10.0	+/-10.0	U	10.0	P	04/01/2025	17:11	LB135261
	Beryllium	1.00	+/-1.00	U	1.00	P	04/01/2025	17:11	LB135261
	Cadmium	1.00	+/-1.00	U	1.00	P	04/01/2025	17:11	LB135261
	Calcium	500	+/-500	U	500	P	04/01/2025	17:11	LB135261
	Chromium	2.00	+/-2.00	U	2.00	P	04/01/2025	17:11	LB135261
	Cobalt	1.00	+/-1.00	U	1.00	P	04/01/2025	17:11	LB135261
	Copper	2.00	+/-2.00	U	2.00	P	04/01/2025	17:11	LB135261
	Iron	50.0	+/-50.0	U	50.0	P	04/01/2025	17:11	LB135261
	Lead	1.00	+/-1.00	U	1.00	P	04/01/2025	17:11	LB135261
	Magnesium	500	+/-500	U	500	P	04/01/2025	17:11	LB135261
	Manganese	1.00	+/-1.00	U	1.00	P	04/01/2025	17:11	LB135261
	Nickel	1.00	+/-1.00	U	1.00	P	04/01/2025	17:11	LB135261
	Potassium	500	+/-500	U	500	P	04/01/2025	17:11	LB135261
	Tin	5.00	+/-5.00	U	5.00	P	04/01/2025	17:11	LB135261
	Selenium	5.00	+/-5.00	U	5.00	P	04/01/2025	17:11	LB135261
	Molybdenum	5.00	+/-5.00	U	5.00	P	04/01/2025	17:11	LB135261
	Silver	1.00	+/-1.00	U	1.00	P	04/01/2025	17:11	LB135261
	Sodium	500	+/-500	U	500	P	04/01/2025	17:11	LB135261
	Thallium	1.00	+/-1.00	U	1.00	P	04/01/2025	17:11	LB135261
	Vanadium	5.00	+/-5.00	U	5.00	P	04/01/2025	17:11	LB135261
	Zinc	5.00	+/-5.00	U	5.00	P	04/01/2025	17:11	LB135261
	Strontium	1.00	+/-1.00	U	1.00	P	04/01/2025	17:11	LB135261
	Titanium	5.00	+/-5.00	U	5.00	P	04/01/2025	17:11	LB135261

Metals
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PREPARATION BLANK SUMMARY

Client: Alliance Technical Group, LLC - Newark

SDG No.: Q1504

Instrument: P8

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB167399BL	WATER			Batch Number:	PB167399		Prep Date:	03/31/2025	
	Aluminum	20.0	<20.0	U	20.0	P	04/01/2025	14:45	LB135261
	Antimony	2.00	<2.00	U	2.00	P	04/01/2025	14:45	LB135261
	Arsenic	1.00	<1.00	U	1.00	P	04/01/2025	14:45	LB135261
	Barium	10.0	<10.0	U	10.0	P	04/01/2025	14:45	LB135261
	Beryllium	1.00	<1.00	U	1.00	P	04/01/2025	14:45	LB135261
	Cadmium	1.00	<1.00	U	1.00	P	04/01/2025	14:45	LB135261
	Calcium	500	<500	U	500	P	04/01/2025	14:45	LB135261
	Chromium	2.00	<2.00	U	2.00	P	04/01/2025	14:45	LB135261
	Cobalt	1.00	<1.00	U	1.00	P	04/01/2025	14:45	LB135261
	Copper	2.00	<2.00	U	2.00	P	04/01/2025	14:45	LB135261
	Iron	50.0	<50.0	U	50.0	P	04/01/2025	14:45	LB135261
	Lead	1.00	<1.00	U	1.00	P	04/01/2025	14:45	LB135261
	Magnesium	500	<500	U	500	P	04/01/2025	14:45	LB135261
	Manganese	1.00	<1.00	U	1.00	P	04/01/2025	14:45	LB135261
	Nickel	1.00	<1.00	U	1.00	P	04/01/2025	14:45	LB135261
	Potassium	500	<500	U	500	P	04/01/2025	14:45	LB135261
	Tin	5.00	<5.00	U	5.00	P	04/01/2025	14:45	LB135261
	Molybdenum	5.00	<5.00	U	5.00	P	04/01/2025	14:45	LB135261
	Selenium	5.00	<5.00	U	5.00	P	04/01/2025	14:45	LB135261
	Silver	1.00	<1.00	U	1.00	P	04/01/2025	14:45	LB135261
	Sodium	500	<500	U	500	P	04/01/2025	14:45	LB135261
	Thallium	1.00	<1.00	U	1.00	P	04/01/2025	14:45	LB135261
	Vanadium	5.00	<5.00	U	5.00	P	04/01/2025	14:45	LB135261
	Zinc	5.00	<5.00	U	5.00	P	04/01/2025	14:45	LB135261
	Strontium	1.00	<1.00	U	1.00	P	04/01/2025	14:45	LB135261
	Titanium	5.00	<5.00	U	5.00	P	04/01/2025	14:45	LB135261

Metals
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INTERFERENCE CHECK SAMPLE

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1504
Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1504 **SAS No.:** Q1504
ICS Source: EPA **Instrument ID:** P8

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Aluminum	91800	100000	92	0	0	04/01/2025	13:17	LB135261
	Antimony	1.05	1.5	70	-2.5	5.5	04/01/2025	13:17	LB135261
	Arsenic	0.32	0.1	320	-1.9	2.1	04/01/2025	13:17	LB135261
	Barium	1.37	1.2	114	-18.8	21.2	04/01/2025	13:17	LB135261
	Beryllium	0.32			-2	2	04/01/2025	13:17	LB135261
	Cadmium	0.45	0.7	64	-1.3	2.7	04/01/2025	13:17	LB135261
	Calcium	97600	100000	98	0	0	04/01/2025	13:17	LB135261
	Chromium	19.3	21.0	92	17	25	04/01/2025	13:17	LB135261
	Cobalt	1.11	1.0	111	-1	3	04/01/2025	13:17	LB135261
	Copper	6.65	8.0	83	4	12	04/01/2025	13:17	LB135261
	Iron	101000	100000	101	0	0	04/01/2025	13:17	LB135261
	Lead	4.24	4.0	106	2	6	04/01/2025	13:17	LB135261
	Magnesium	96900	100000	97	0	0	04/01/2025	13:17	LB135261
	Manganese	6.81	7.0	97	5	9	04/01/2025	13:17	LB135261
	Nickel	4.92	6.0	82	4	8	04/01/2025	13:17	LB135261
	Potassium	98600	100000	99	0	0	04/01/2025	13:17	LB135261
	Tin	0.56			0	0	04/01/2025	13:17	LB135261
	Selenium	0.12	0.3	40	-9.7	10	04/01/2025	13:17	LB135261
	Molybdenum	1920	2000	96	1600	2400	04/01/2025	13:17	LB135261
	Silver	0.040			-2	2	04/01/2025	13:17	LB135261
	Sodium	105000	100000	105	0	0	04/01/2025	13:17	LB135261
	Thallium	0.080			-2	2	04/01/2025	13:17	LB135261
	Vanadium	0.14	0.5	28	-9.5	10.5	04/01/2025	13:17	LB135261
	Zinc	9.54	11.0	87	1	21	04/01/2025	13:17	LB135261
	Strontium	33.8			0	0	04/01/2025	13:17	LB135261
	Titanium	2010	2000	100	1600	2400	04/01/2025	13:17	LB135261
ICSAB01	Aluminum	92400	100000	92	0	0	04/01/2025	13:20	LB135261
	Antimony	21.3	22.0	97	18	26	04/01/2025	13:20	LB135261
	Arsenic	20.6	19.0	108	16.2	21.9	04/01/2025	13:20	LB135261
	Barium	21.6	22.0	98	2	42	04/01/2025	13:20	LB135261
	Beryllium	21.9	19.0	115	16.2	21.9	04/01/2025	13:20	LB135261
	Cadmium	20.4	20.0	102	17	23	04/01/2025	13:20	LB135261
	Calcium	102000	100000	102	0	0	04/01/2025	13:20	LB135261
	Chromium	39.2	40.0	98	34	46	04/01/2025	13:20	LB135261
	Cobalt	20.8	20.0	104	17	23	04/01/2025	13:20	LB135261
	Copper	24.5	25.0	98	21	29	04/01/2025	13:20	LB135261
	Iron	101000	100000	101	0	0	04/01/2025	13:20	LB135261
	Lead	23.8	25.0	95	21.3	28.8	04/01/2025	13:20	LB135261
	Magnesium	97400	100000	97	0	0	04/01/2025	13:20	LB135261
	Manganese	24.6	27.0	91	23	31.1	04/01/2025	13:20	LB135261
	Nickel	23.6	24.0	98	20.4	27.6	04/01/2025	13:20	LB135261
	Potassium	99600	100000	100	0	0	04/01/2025	13:20	LB135261

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INTERFERENCE CHECK SAMPLE

Client: Alliance Technical Group, LLC - Newark **SDG No.:** Q1504
Contract: ALLI03 **Lab Code:** CHEM **Case No.:** Q1504 **SAS No.:** Q1504
ICS Source: EPA **Instrument ID:** P8

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Tin	51.3			0	0	04/01/2025	13:20	LB135261
	Molybdenum	2010	2000	100	1600	2400	04/01/2025	13:20	LB135261
	Selenium	20.8	19.0	110	9	29	04/01/2025	13:20	LB135261
	Silver	18.6	18.0	103	15.3	20.7	04/01/2025	13:20	LB135261
	Sodium	106000	100000	106	0	0	04/01/2025	13:20	LB135261
	Thallium	20.2	21.0	96	17.9	24.2	04/01/2025	13:20	LB135261
	Vanadium	19.9	19.0	105	9	29	04/01/2025	13:20	LB135261
	Zinc	27.0	29.0	93	19	39	04/01/2025	13:20	LB135261
	Strontium	84.4			0	0	04/01/2025	13:20	LB135261
	Titanium	2110	2000	106	1600	2400	04/01/2025	13:20	LB135261



METAL QC DATA

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Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Alliance Technical Group, LLC - Newark

SDG No.: Q1504

Contract: ALLI03

Lab Code: CHEM

Case No.: Q1504

SAS No.: Q1504

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB167399BS							
Aluminum	ug/L	10000	10300		103	80 - 120	P
Antimony	ug/L	500	505		101	80 - 120	P
Arsenic	ug/L	500	487		97	80 - 120	P
Barium	ug/L	2500	2540		102	80 - 120	P
Beryllium	ug/L	500	518		104	80 - 120	P
Cadmium	ug/L	500	518		104	80 - 120	P
Calcium	ug/L	50000	51000		102	80 - 120	P
Chromium	ug/L	500	510		102	80 - 120	P
Cobalt	ug/L	500	507		101	80 - 120	P
Copper	ug/L	5000	5060		101	80 - 120	P
Iron	ug/L	25000	26100		104	80 - 120	P
Lead	ug/L	2500	2500		100	80 - 120	P
Magnesium	ug/L	50000	52800		106	80 - 120	P
Manganese	ug/L	5000	5160		103	80 - 120	P
Nickel	ug/L	500	516		103	80 - 120	P
Potassium	ug/L	25000	25700		103	80 - 120	P
Tin	ug/L	500	506		101	80 - 120	P
Molybdenum	ug/L	5000	4960		99	80 - 120	P
Selenium	ug/L	500	491		98	80 - 120	P
Silver	ug/L	500	517		103	80 - 120	P
Sodium	ug/L	50000	53300		107	80 - 120	P
Thallium	ug/L	500	498		100	80 - 120	P
Vanadium	ug/L	500	512		102	80 - 120	P
Zinc	ug/L	5000	5090		102	80 - 120	P
Strontium	ug/L	500	503		101	80 - 120	P
Titanium	ug/L	5000	4990		100	80 - 120	P

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Alliance Technical Group, LLC -

Contract: ALLI03

Lab Code: CHEM Case no.: Q1504

Sas No.: Q1504 SDG No.: Q1504

Instrument ID: P8

Start Date : 04/01/2025

Run Number: LB135261

End Date : 04/01/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 6Li	Q	Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q
S0	S0	1112	100		100		100		100		100	
S2	S2	1119	101		101		101		100		102	
S3	S3	1123	103		99		101		100		103	
S4	S4	1126	101		99		100		98		103	
S5	S5	1128	98		96		98		95		101	
S6	S6	1131	95		96		99		94		102	
S7	S7	1134	94		96		99		91		101	
S8	S8	1137	85		88		89		78		90	
ICV01	ICV01	1305	101		106		106		104		105	
LLICV	LLICV	1310	99		106		106		105		107	
ICB01	ICB01	1313	100		106		106		106		107	
ICSA01	ICSA01	1317	91		103		103		94		102	
ICSAB01	ICSAB01	1320	93		102		103		94		103	
CCV01	CCV01	1324	89		98		98		88		99	
CCB01	CCB01	1330	102		106		106		106		106	
CRI	CRI	1333	101		106		105		105		107	
ZZZZZZ	ZZZZZZ	1346										
ZZZZZZ	ZZZZZZ	1349										
ZZZZZZ	ZZZZZZ	1352										
Q1504-02	PT-TM1-WP	1356	104		108		109		107		109	
Q1504-04	PT-SNTI-WP	1359	99		110		109		109		108	
Q1504-06	PT-MIN2-WP	1402	121		132	*	133	*	126		131	*
ZZZZZZ	ZZZZZZ	1405										
ZZZZZZ	ZZZZZZ	1408										
ZZZZZZ	ZZZZZZ	1411										
CCV02	CCV02	1420	93		103		101		90		100	
CCB02	CCB02	1428	106		109		110		109		109	
Q1504-02	PT-TM1-WP	1431	105		111		110		109		111	
Q1504-04	PT-SNTI-WP	1434	105		113		112		109		112	
Q1504-06	PT-MIN2-WP	1438	106		115		113		111		112	
ZZZZZZ	ZZZZZZ	1442										
PB167399BL	PB167399BL	1445	106		112		113		110		111	
ZZZZZZ	ZZZZZZ	1449										
PB167399BS	PB167399BS	1451	101		111		111		102		109	
CCV03	CCV03	1454	93		105		103		92		102	
CCB03	CCB03	1458	108		113		113		112		112	

Internal Standard %RI Limit: 70 - 130

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Alliance Technical Group, LLC -

Contract: ALLI03

Lab Code: CHEM Case no.: Q1504

Sas No.: Q1504 SDG No.: Q1504

Instrument ID: P8

Start Date : 04/01/2025

Run Number: LB135261

End Date : 04/01/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 45Sc	Q	Element 89Y	Q	Element 103Rh	Q	Element 159Tb	Q	Element 165Ho	Q
S0	S0	1112	100		100		100		100		100	
S2	S2	1119	99		101		99		101		102	
S3	S3	1123	97		100		100		103		102	
S4	S4	1126	96		98		98		102		101	
S5	S5	1128	93		96		93		99		99	
S6	S6	1131	95		96		93		100		100	
S7	S7	1134	98		96		91		102		101	
S8	S8	1137	95		98		82		96		95	
ICV01	ICV01	1305	106		105		104		105		105	
LLICV	LLICV	1310	107		107		107		107		107	
ICB01	ICB01	1313	106		107		106		107		107	
ICSA01	ICSA01	1317	103		102		93		101		101	
ICSAB01	ICSAB01	1320	104		103		95		102		102	
CCV01	CCV01	1324	100		99		88		100		100	
CCB01	CCB01	1330	103		105		107		108		106	
CRI	CRI	1333	104		106		106		106		106	
ZZZZZZ	ZZZZZZ	1346										
ZZZZZZ	ZZZZZZ	1349										
ZZZZZZ	ZZZZZZ	1352										
Q1504-02	PT-TM1-WP	1356	107		108		108		109		109	
Q1504-04	PT-SNTI-WP	1359	109		108		109		108		108	
Q1504-06	PT-MIN2-WP	1402	130		138	*	122		127		128	
ZZZZZZ	ZZZZZZ	1405										
ZZZZZZ	ZZZZZZ	1408										
ZZZZZZ	ZZZZZZ	1411										
CCV02	CCV02	1420	108		105		93		105		105	
CCB02	CCB02	1428	106		109		111		111		112	
Q1504-02	PT-TM1-WP	1431	108		113		111		113		110	
Q1504-04	PT-SNTI-WP	1434	110		118		113		112		112	
Q1504-06	PT-MIN2-WP	1438	113		122		111		114		114	
ZZZZZZ	ZZZZZZ	1442										
PB167399BL	PB167399BL	1445	111		118		112		112		112	
ZZZZZZ	ZZZZZZ	1449										
PB167399BS	PB167399BS	1451	111		111		104		110		110	
CCV03	CCV03	1454	110		107		96		107		106	
CCB03	CCB03	1458	109		122		114		114		115	

Internal Standard %RI Limit: 70 - 130

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: Alliance Technical Group, LLC -

Contract: ALLI03

Lab Code: CHEM Case no.: Q1504

Sas No.: Q1504 SDG No.: Q1504

Instrument ID: P8

Start Date : 04/01/2025

Run Number: LB135261

End Date : 04/01/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
S0	S0	1112	100		100							
S2	S2	1119	100		101							
S3	S3	1123	101		102							
S4	S4	1126	102		100							
S5	S5	1128	100		98							
S6	S6	1131	100		96							
S7	S7	1134	101		93							
S8	S8	1137	90		78							
ICV01	ICV01	1305	105		103							
LLICV	LLICV	1310	104		105							
ICB01	ICB01	1313	104		104							
ICSA01	ICSA01	1317	100		93							
ICSAB01	ICSAB01	1320	102		94							
CCV01	CCV01	1324	98		88							
CCB01	CCB01	1330	106		104							
CRI	CRI	1333	104		105							
ZZZZZZ	ZZZZZZ	1346										
ZZZZZZ	ZZZZZZ	1349										
ZZZZZZ	ZZZZZZ	1352										
Q1504-02	PT-TM1-WP	1356	107		106							
Q1504-04	PT-SNTI-WP	1359	108		106							
Q1504-06	PT-MIN2-WP	1402	128		123							
ZZZZZZ	ZZZZZZ	1405										
ZZZZZZ	ZZZZZZ	1408										
ZZZZZZ	ZZZZZZ	1411										
CCV02	CCV02	1420	99		89							
CCB02	CCB02	1428	109		106							
Q1504-02	PT-TM1-WP	1431	108		107							
Q1504-04	PT-SNTI-WP	1434	108		108							
Q1504-06	PT-MIN2-WP	1438	111		108							
ZZZZZZ	ZZZZZZ	1442										
PB167399BL	PB167399BL	1445	108		109							
ZZZZZZ	ZZZZZZ	1449										
PB167399BS	PB167399BS	1451	108		101							

Internal Standard %RI Limit: 70 -130

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: Alliance Technical Group, LLC -

Contract: ALLI03

Lab Code: CHEM Case no.: Q1504

Sas No.: Q1504 SDG No.: Q1504

Instrument ID: P8

Start Date : 04/01/2025

Run Number: LB135261

End Date : 04/01/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
CCV03	CCV03	1454	102		90							
CCB03	CCB03	1458	110		110							

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: Alliance Technical Group, LLC -

Contract: ALLI03

Lab Code: CHEM Case no.: Q1504

Sas No.: Q1504 SDG No.: Q1504

Instrument ID: P8

Start Date : 04/01/2025

Run Number: LB135261

End Date : 04/01/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
S0	S0	1112	100									
S2	S2	1119	102									
S3	S3	1123	101									
S4	S4	1126	100									
S5	S5	1128	96									
S6	S6	1131	96									
S7	S7	1134	95									
S8	S8	1137	83									
ICV01	ICV01	1305	104									
LLICV	LLICV	1310	107									
ICB01	ICB01	1313	107									
ICSA01	ICSA01	1317	94									
ICSAB01	ICSAB01	1320	95									
CCV01	CCV01	1324	89									
CCB01	CCB01	1330	106									
CRI	CRI	1333	106									
ZZZZZZ	ZZZZZZ	1346										
ZZZZZZ	ZZZZZZ	1349										
ZZZZZZ	ZZZZZZ	1352										
Q1504-02	PT-TM1-WP	1356	108									
Q1504-04	PT-SNTI-WP	1359	108									
Q1504-06	PT-MIN2-WP	1402	123									
ZZZZZZ	ZZZZZZ	1405										
ZZZZZZ	ZZZZZZ	1408										
ZZZZZZ	ZZZZZZ	1411										
CCV02	CCV02	1420	93									
CCB02	CCB02	1428	111									
Q1504-02	PT-TM1-WP	1431	109									
Q1504-04	PT-SNTI-WP	1434	111									
Q1504-06	PT-MIN2-WP	1438	112									
ZZZZZZ	ZZZZZZ	1442										
PB167399BL	PB167399BL	1445	112									
ZZZZZZ	ZZZZZZ	1449										
PB167399BS	PB167399BS	1451	104									

Internal Standard %RI Limit: 70 -130

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: Alliance Technical Group, LLC -

Contract: ALLI03

Lab Code: CHEM Case no.: Q1504

Sas No.: Q1504 SDG No.: Q1504

Instrument ID: P8

Start Date : 04/01/2025

Run Number: LB135261

End Date : 04/01/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
CCV03	CCV03	1454	95									
CCB03	CCB03	1458	115									



METAL PREPARATION & INSTRUMENT DATA

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METAL PREPARATION & ANALYICAL SUMMARY

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SAMPLE PREPARATION SUMMARY

Client:	<u>Alliance Technical Group, LLC - Newark</u>	SDG No.:	<u>Q1504</u>
Contract:	<u>ALLI03</u>	Lab Code:	<u>CHEM</u>
		Method:	<u></u>
		Case No.:	<u>Q1504</u>
		SAS No.:	<u>Q1504</u>

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB167399							
PB167399BL	PB167399BL	MB	WATER	03/31/2025	50.0	50.0	
PB167399BS	PB167399BS	LCS	WATER	03/31/2025	50.0	50.0	
Q1504-02	PT-TM1-WP	SAM	WATER	03/31/2025	50.0	50.0	
Q1504-04	PT-SNTI-WP	SAM	WATER	03/31/2025	50.0	50.0	
Q1504-06	PT-MIN2-WP	SAM	WATER	03/31/2025	50.0	50.0	

metals
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ANALYSIS RUN LOG

Client: Alliance Technical Group, LLC - Newark

Contract: ALLI03

Lab code: CHEM

Case no.: Q1504

Sas no.: Q1504

Sdg no.: Q1504

Instrument id number:

Method:

Run number: LB135261

Start date: 04/01/2025

End date: 04/01/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1112	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
S2	S2	1	1119	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
S3	S3	1	1123	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
S4	S4	1	1126	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
S5	S5	1	1128	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
S6	S6	1	1131	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
S7	S7	1	1134	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
S8	S8	1	1137	Al,Fe,Ca,K,Mg,Na
ICV01	ICV01	1	1305	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
LLICV	LLICV	1	1310	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
ICB01	ICB01	1	1313	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
ICSA01	ICSA01	1	1317	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
ICSAB01	ICSAB01	1	1320	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
CCV01	CCV01	1	1324	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
CCB01	CCB01	1	1330	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
CRI	CRI	1	1333	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
Q1504-02	PT-TM1-WP	1	1356	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,Zn
Q1504-04	PT-SNTI-WP	1	1359	Ti
Q1504-06	PT-MIN2-WP	1	1402	K,Mg,Na
CCV02	CCV02	1	1420	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
CCB02	CCB02	1	1428	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
Q1504-02	PT-TM1-WP	2	1431	V
Q1504-04	PT-SNTI-WP	2	1434	Sn
Q1504-06	PT-MIN2-WP	5	1438	Ca
PB167399BL	PB167399BL	1	1445	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V
PB167399BS	PB167399BS	1	1451	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Na,Ni,Pb,Sb,Se,Sn,Sr,Ti,Tl,V
CCV03	CCV03	1	1454	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
CCB03	CCB03	1	1458	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
CCV04	CCV04	1	1553	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
CCB04	CCB04	1	1601	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
CCV05	CCV05	1	1640	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
CCB05	CCB05	1	1647	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
CCV06	CCV06	1	1708	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg
CCB06	CCB06	1	1711	Ag,Al,As,Ba,Be,Cd,Co,Cr,Cu,Fe,Mn,Mo,Ni,Pb,Sb,Se,Sr,Tl,V,Zn,Sn,Ti,Ca,K,Mg



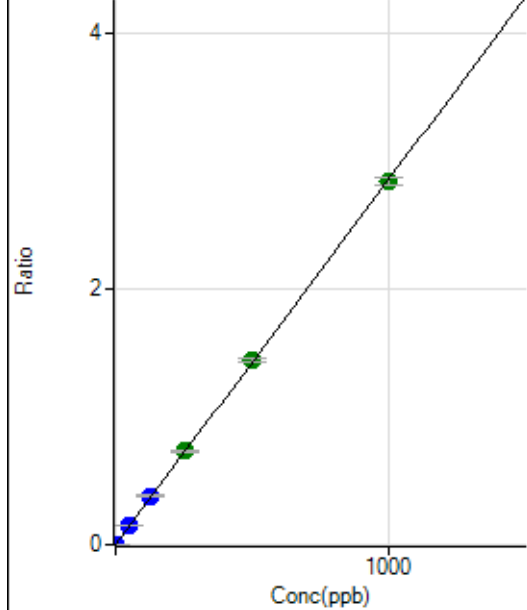
METAL RAW DATA

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Batch Folder: D:\Agilent\ICPMH\1\DATA\P8040125-MS.b\
Analysis File: P8040125-MS.batch.bin
DA Date-Time: 2025-04-01 17:41:25
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2025-04-01 11:12:58
2	006CALS.d	S02	2025-04-01 11:19:44
3	007CALB.d	S03	2025-04-01 11:23:06
4	008CALS.d	S04	2025-04-01 11:26:06
5	009CALS.d	S05	2025-04-01 11:28:57
6	010CALS.d	S06	2025-04-01 11:31:45
7	011CALS.d	S07	2025-04-01 11:34:30
8	012CALS.d	S08	2025-04-01 11:37:21

9 Be [No Gas] ISTD:6 Li [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	37.85	0.0000	P	11.1
2	☐	1.000	1.066	7410.40	0.0031	P	3.0
3	☐	50.000	54.405	382759.03	0.1552	P	1.6
4	☐	125.000	133.761	917595.86	0.3816	P	1.2
5	☐	250.000	256.075	1709417.86	0.7305	A	1.6
6	☐	500.000	506.135	3279407.85	1.4437	A	1.6
7	☐	1000.000	994.098	6348310.57	2.8356	A	2.1
8	☐			423.74	0.0002	P	16.3

$$y = 0.0029 * x + 1.5828E-005$$

$$R = 0.9999$$

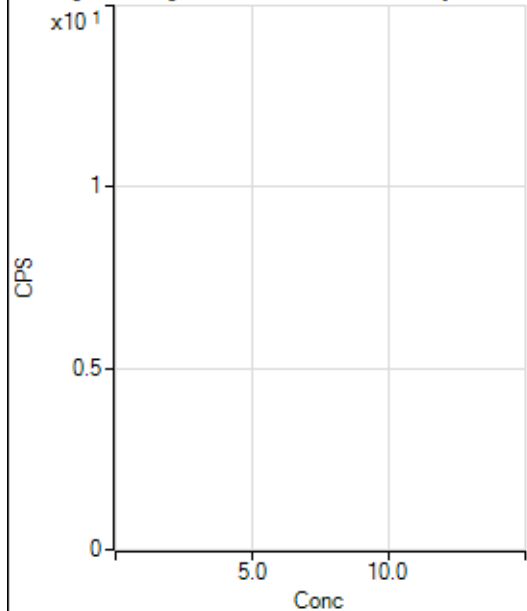
$$DL = 0.00184$$

$$BEC = 0.005549$$

Weight: <None>

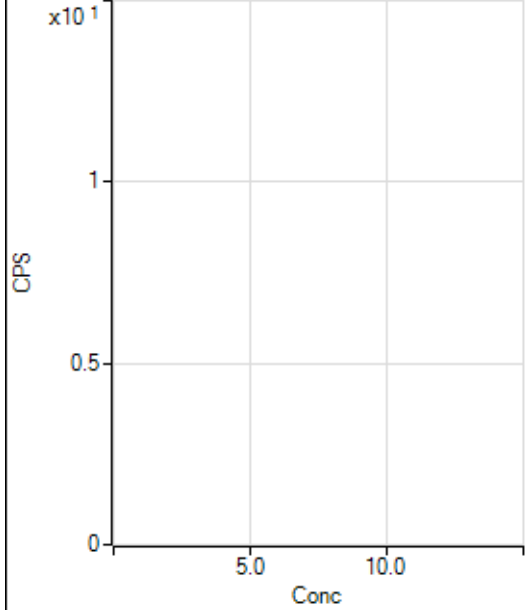
Min Conc: 0

12 C [No Gas] No available calibration points



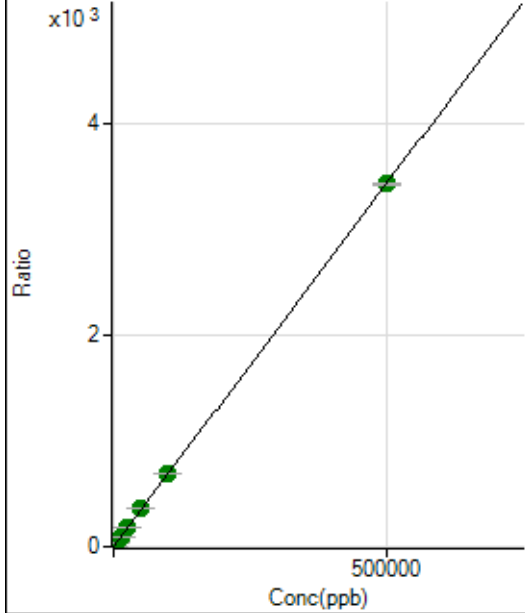
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			4827372.81		A	2.9
2	☐			4840229.96		A	2.1
3	☐			4811297.22		A	1.6
4	☐			4771349.20		A	1.4
5	☐			4829757.08		A	0.3
6	☐			5066860.17		A	0.5
7	☐			5600537.21		A	0.4
8	☐			4709392.50		A	2.1

12 C [He] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			34356.80		P	1.0
2	☐			34853.47		P	0.8
3	☐			34121.77		P	0.8
4	☐			34913.62		P	0.4
5	☐			35969.48		P	0.5
6	☐			38726.48		P	0.3
7	☐			44812.50		P	1.1
8	☐			46962.45		P	0.7

23 Na [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	59197.13	0.4830	P	1.0
2	☐	500.000	470.854	448808.48	3.7093	P	7.4
3	☐	5000.000	5415.081	4484065.94	37.5871	A	1.1
4	☐	12500.000	13394.596	10798701.50	92.2627	A	0.4
5	☐	25000.000	26417.774	20746525.39	181.4973	A	0.8
6	☐	50000.000	51922.471	41618877.71	356.2552	A	0.9
7	☐	100000.00	100032.04	82666827.65	685.9014	A	0.3
8	☐	500000.00	499703.96	399008011.83	3,424.4483	A	0.6

$$y = 0.0069 * x + 0.4830$$

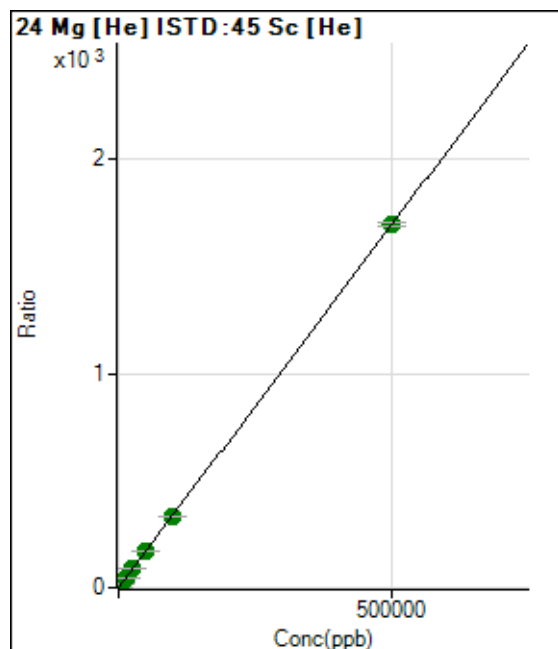
$$R = 1.0000$$

$$DL = 2.017$$

$$BEC = 70.5$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	370.01	0.0030	P	17.1
2	☐	500.000	454.005	186525.69	1.5416	P	13.3
3	☐	5000.000	5438.956	2199377.62	18.4346	A	1.5
4	☐	12500.000	13271.593	5264229.09	44.9780	A	0.7
5	☐	25000.000	26348.846	10206865.47	89.2943	A	1.1
6	☐	50000.000	51182.806	20263202.47	173.4520	A	1.2
7	☐	100000.00	98377.446	40180581.35	333.3858	A	1.0
8	☐	500000.00	500115.15	197472057.06	1,694.8000	A	1.2

$$y = 0.0034 * x + 0.0030$$

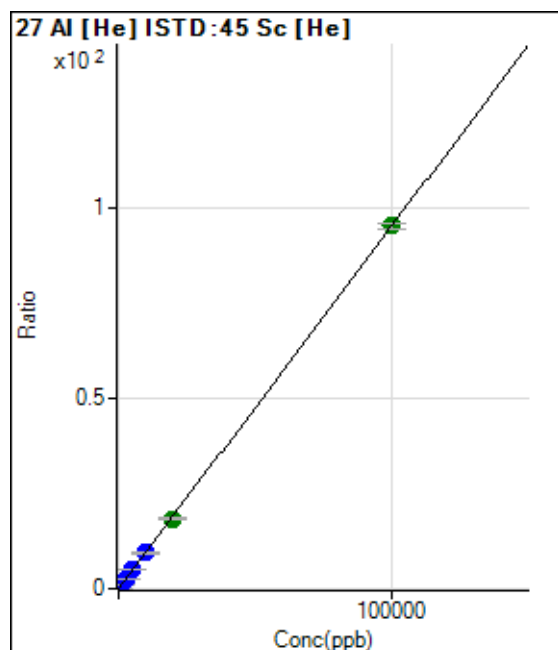
$$R = 1.0000$$

$$DL = 0.4574$$

$$BEC = 0.8908$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	273.34	0.0022	P	8.2
2	☐	20.000	17.592	2296.88	0.0190	P	12.7
3	☐	1000.000	1033.739	117716.99	0.9866	P	1.6
4	☐	2500.000	2569.388	286639.87	2.4490	P	0.3
5	☐	5000.000	5106.738	556135.61	4.8653	P	0.7
6	☐	10000.000	9884.230	1099853.71	9.4148	P	1.6
7	☐	20000.000	19332.693	2219107.86	18.4123	A	0.9
8	☐	100000.00	100137.63	11111016.36	95.3610	A	1.9

$$y = 9.5228E-004 * x + 0.0022$$

$$R = 1.0000$$

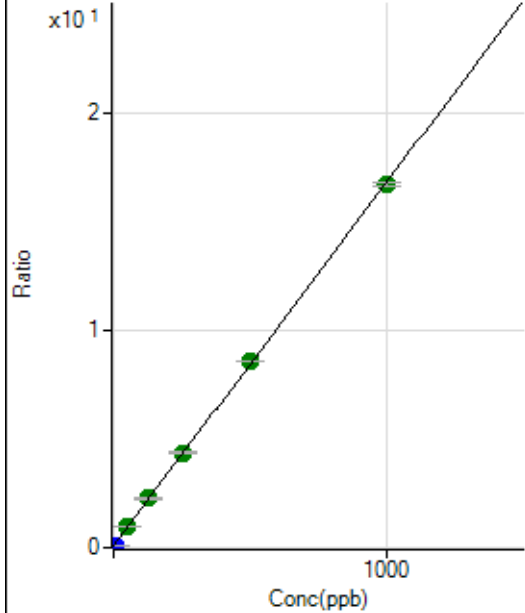
$$DL = 0.5764$$

$$BEC = 2.342$$

Weight: <None>

Min Conc: 0

28 Si [No Gas] ISTD :45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	506738.96	0.0906	P	2.0
2	☐	10.000	1.924	697200.02	0.1228	P	1.2
3	☐	50.000	53.233	5463851.72	0.9821	A	1.3
4	☐	125.000	129.639	12564812.18	2.2618	A	0.2
5	☐	250.000	255.261	23503084.65	4.3657	A	1.7
6	☐	500.000	509.642	46386924.31	8.6260	A	0.4
7	☐	1000.000	993.203	90166996.43	16.7246	A	1.2
8	☐			977490.92	0.1985	M	8.6

$$y = 0.0167 * x + 0.0906$$

$$R = 0.9998$$

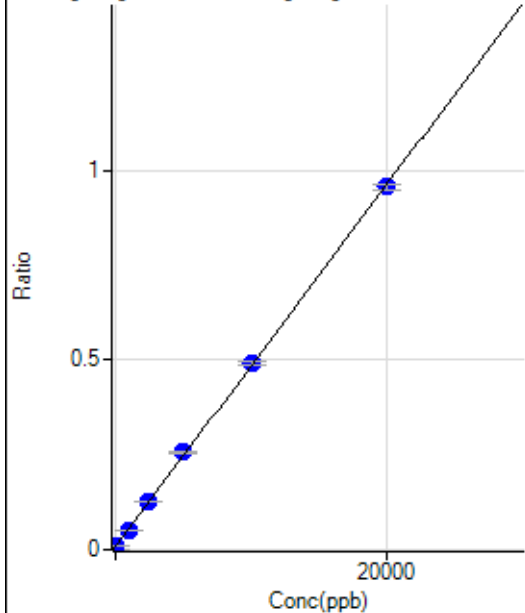
$$DL = 0.3317$$

$$BEC = 5.411$$

Weight: <None>

Min Conc: 0

31 P [He] ISTD :45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-108.280	108.89	0.0009	P	1.7
2	☐	0.000	108.280	1361.19	0.0113	P	12.7
3	☐	1000.000	948.427	6140.25	0.0515	P	5.5
4	☐	2500.000	2554.383	15016.76	0.1283	P	0.7
5	☐	5000.000	5243.757	29376.40	0.2570	P	1.2
6	☐	10000.000	10163.271	57523.41	0.4924	P	1.5
7	☐	20000.000	19853.206	115231.56	0.9561	P	1.4
8	☐			130.00	0.0011	P	17.9

$$y = 4.7853E-005 * x + 0.0061$$

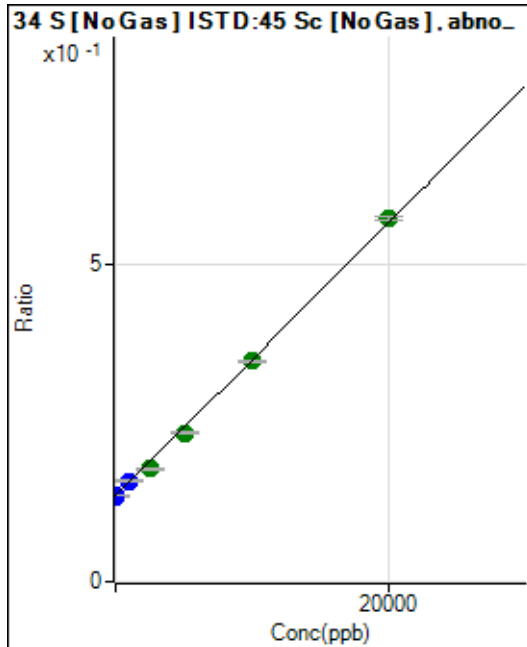
$$R = 0.9998$$

$$DL = 45.11$$

$$BEC = 126.8$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-25.921	752781.27	0.1346	P	1.5
2	☐	0.000	25.921	770327.90	0.1357	P	0.7
3	☐	1000.000	1104.171	884709.89	0.1590	P	0.8
4	☐	2500.000	1970.621	987402.29	0.1777	A	1.1
5	☐	5000.000	4584.676	1261094.69	0.2342	A	1.1
6	☐	10000.000	9837.717	1869783.60	0.3477	A	0.4
7	☐	20000.000	20245.936	3086767.63	0.5726	A	1.0
8	☐			568663.62	0.1154	P	0.8

$$y = 2.1603E-005 * x + 0.1352$$

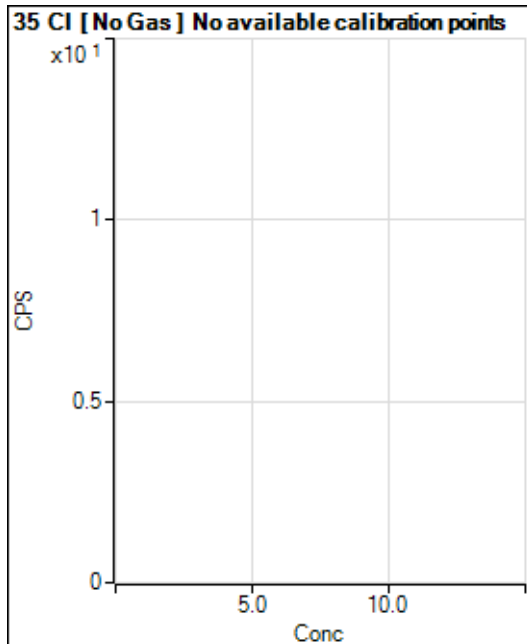
R = 0.9994

DL = 204.8

BEC = 6257

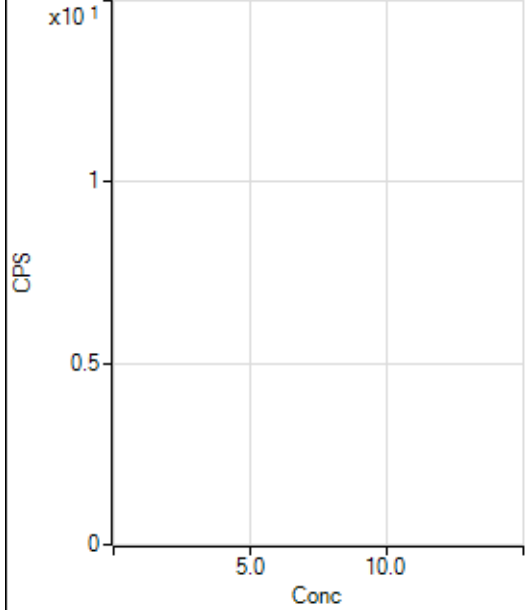
Weight: <None>

Min Conc: 0



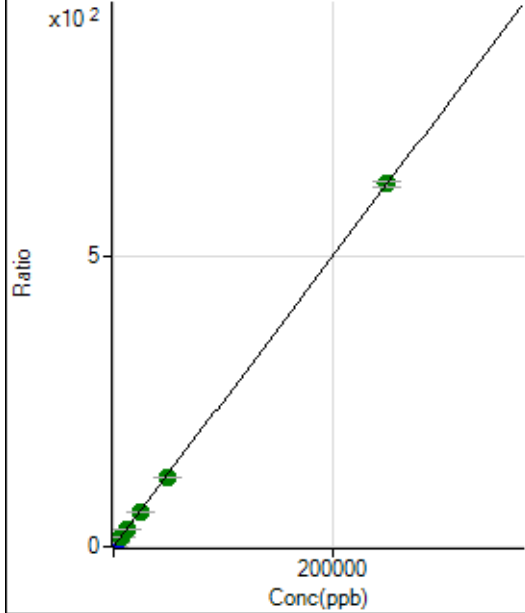
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			221203.67		P	0.1
2	☐			259733.95		P	0.9
3	☐			258215.33		P	0.9
4	☐			256392.47		P	0.6
5	☐			259950.29		P	1.1
6	☐			285161.97		P	1.3
7	☐			316346.64		P	1.7
8	☐			235409.83		P	0.1

35 Cl [He] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			1116.72		P	3.0
2	☐			1245.62		P	0.4
3	☐			1214.51		P	4.4
4	☐			1196.73		P	10.9
5	☐			1222.29		P	5.7
6	☐			1348.96		P	3.6
7	☐			1562.32		P	6.1
8	☐			1321.19		P	11.2

39 K [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	17333.83	0.1414	P	0.9
2	☐	500.000	424.754	145250.46	1.2005	P	5.8
3	☐	2500.000	2505.472	762168.50	6.3884	P	0.6
4	☐	6250.000	6298.767	1854718.25	15.8462	A	0.6
5	☐	12500.000	12432.790	3559502.73	31.1403	A	1.3
6	☐	25000.000	24286.238	7090428.02	60.6946	A	1.4
7	☐	50000.000	47593.303	14318883.26	118.8064	A	0.5
8	☐	250000.00	250554.95	72806325.58	624.8531	A	1.3

$$y = 0.0025 * x + 0.1414$$

$$R = 0.9999$$

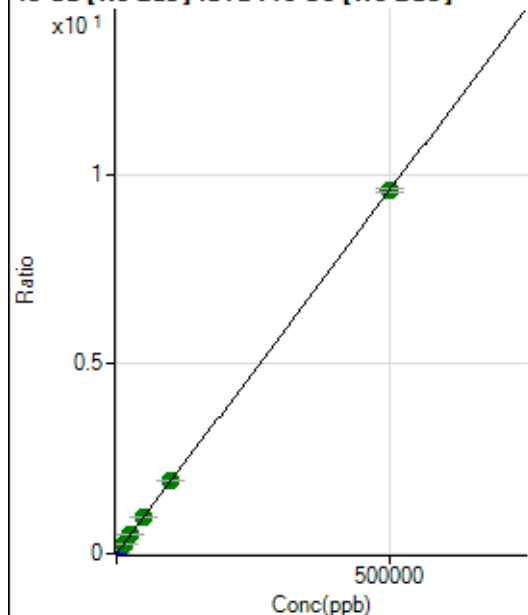
$$DL = 1.448$$

$$BEC = 56.73$$

Weight: <None>

Min Conc: 0

43 Ca [No Gas] ISTD:45 Sc [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2235.75	0.0004	P	4.2
2	☐	500.000	474.110	53815.73	0.0095	P	0.4
3	☐	5000.000	5299.023	566947.73	0.1019	P	1.0
4	☐	12500.000	12927.640	1377899.39	0.2480	A	1.0
5	☐	25000.000	25445.609	2626341.66	0.4878	A	1.7
6	☐	50000.000	51228.294	5279200.03	0.9817	A	1.5
7	☐	100000.00	101423.88	10476950.47	1.9433	A	0.8
8	☐	500000.00	499556.45	47154830.96	9.5700	A	1.1

$$y = 1.9156E-005 * x + 3.9971E-004$$

R = 1.0000

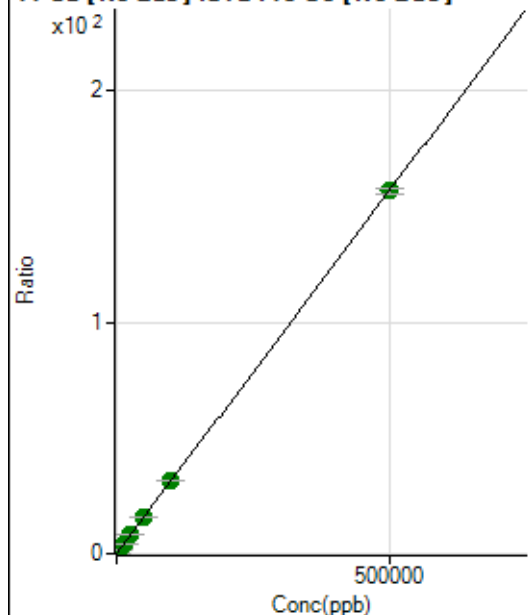
DL = 2.627

BEC = 20.87

Weight: <None>

Min Conc: 0

44 Ca [No Gas] ISTD:45 Sc [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	58600.93	0.0105	P	1.6
2	☐	500.000	473.216	902487.74	0.1590	P	1.1
3	☐	5000.000	5112.731	8987184.38	1.6154	A	0.7
4	☐	12500.000	12660.472	22134858.00	3.9846	A	0.7
5	☐	25000.000	25384.918	42959894.36	7.9788	A	1.2
6	☐	50000.000	50880.941	85943767.61	15.9819	A	0.8
7	☐	100000.00	101365.53	171603174.11	31.8289	A	0.9
8	☐	500000.00	499614.44	772789090.71	156.8384	A	1.3

$$y = 3.1390E-004 * x + 0.0105$$

R = 1.0000

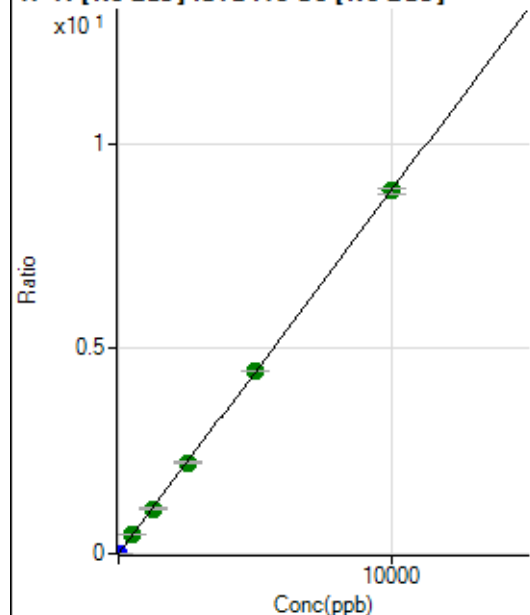
DL = 1.588

BEC = 33.38

Weight: <None>

Min Conc: 0

47 Ti [No Gas] ISTD :45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	374.45	0.0001	P	10.7
2	☐	5.000	4.907	25049.68	0.0044	P	0.9
3	☐	500.000	509.669	2512385.90	0.4516	A	1.3
4	☐	1250.000	1240.989	6107525.95	1.0994	A	1.0
5	☐	2500.000	2503.531	11942478.99	2.2179	A	1.3
6	☐	5000.000	5031.783	23971840.75	4.4577	A	0.8
7	☐	10000.000	9983.869	47682568.18	8.8446	A	1.5
8	☐			3719.41	0.0008	P	3.7

$$y = 8.8589E-004 * x + 6.6889E-005$$

$$R = 1.0000$$

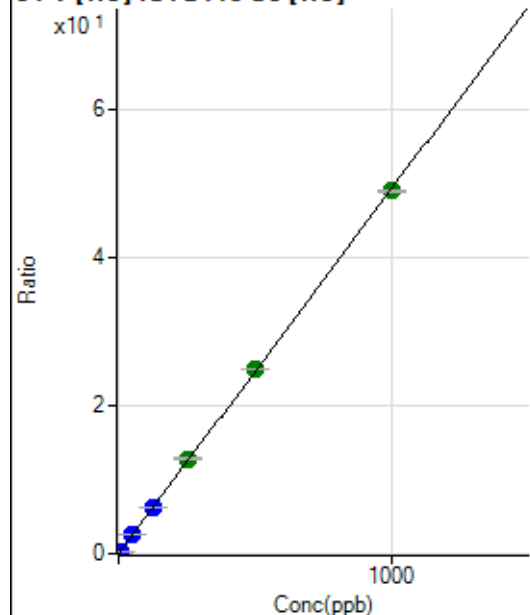
$$DL = 0.02418$$

$$BEC = 0.07551$$

Weight: <None>

Min Conc: 0

51 V [He] ISTD :45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	27.78	0.0002	P	42.5
2	☐	5.000	4.156	24785.15	0.2048	P	13.3
3	☐	50.000	51.069	300047.36	2.5148	P	2.2
4	☐	125.000	128.528	740709.75	6.3287	P	0.8
5	☐	250.000	260.048	1463648.54	12.8045	A	1.2
6	☐	500.000	504.742	2903408.22	24.8527	A	0.5
7	☐	1000.000	994.627	5902445.47	48.9736	A	0.8
8	☐			1525.65	0.0131	P	6.6

$$y = 0.0492 * x + 2.2697E-004$$

$$R = 0.9999$$

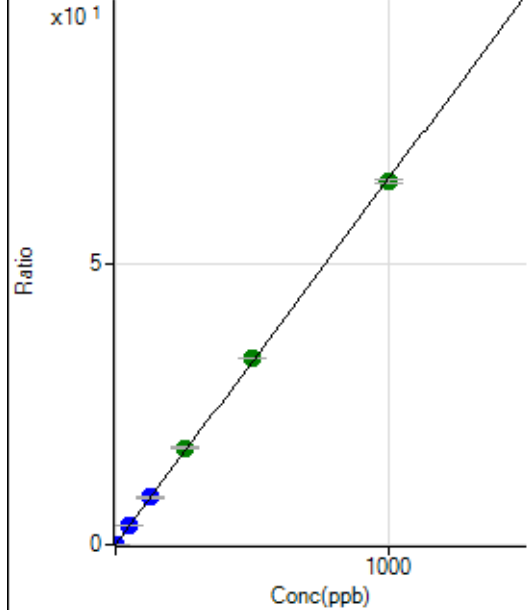
$$DL = 0.005881$$

$$BEC = 0.00461$$

Weight: <None>

Min Conc: 0

52 Cr [He] ISTD:45 Sc [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2019.06	0.0165	P	7.7
2	☐	2.000	1.654	15002.45	0.1240	P	10.1
3	☐	50.000	51.266	399625.86	3.3493	P	2.5
4	☐	125.000	128.543	980022.01	8.3732	P	0.3
5	☐	250.000	262.903	1955503.22	17.1080	A	2.2
6	☐	500.000	509.572	3871971.19	33.1442	A	0.8
7	☐	1000.000	991.483	7770553.01	64.4736	A	1.2
8	☐			46772.90	0.4014	P	2.6

$$y = 0.0650 * x + 0.0165$$

$$R = 0.9998$$

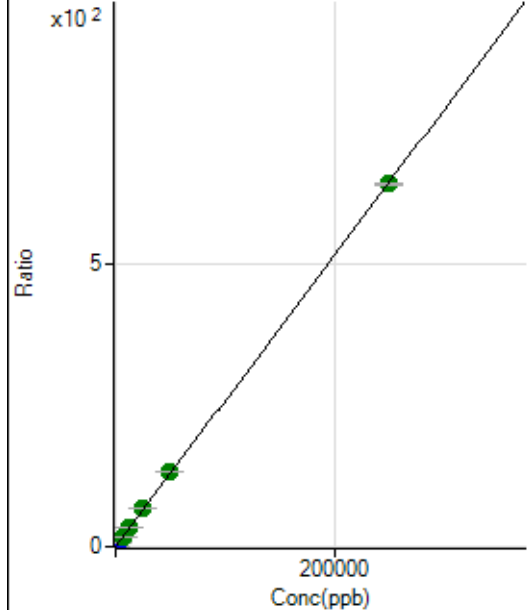
$$DL = 0.05846$$

$$BEC = 0.2534$$

Weight: <None>

Min Conc: 0

54 Fe [He] ISTD:45 Sc [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1042.27	0.0085	P	7.5
2	☐	50.000	45.780	15247.23	0.1260	P	13.1
3	☐	2500.000	2677.248	820966.80	6.8808	P	2.1
4	☐	6250.000	6914.404	2078375.52	17.7572	A	1.3
5	☐	12500.000	13598.527	3991028.83	34.9148	A	0.7
6	☐	25000.000	26116.964	7833381.34	67.0486	A	0.8
7	☐	50000.000	51603.747	15965800.46	132.4711	A	0.5
8	☐	250000.00	249494.24	74622252.22	640.4400	A	0.2

$$y = 0.0026 * x + 0.0085$$

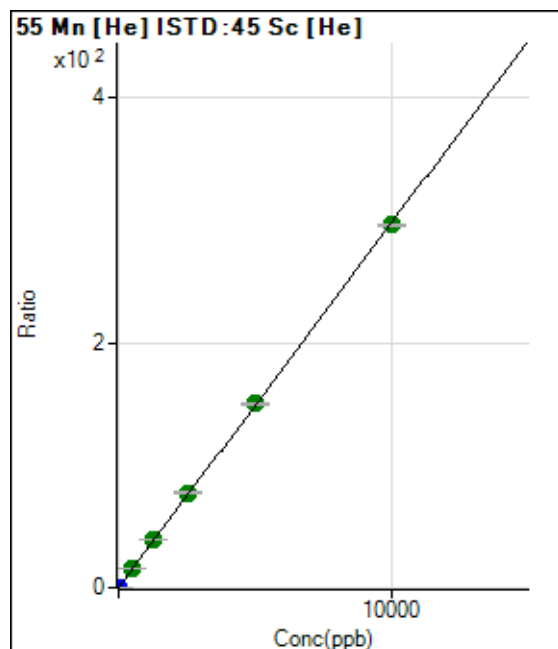
$$R = 1.0000$$

$$DL = 0.7443$$

$$BEC = 3.313$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	3447.11	0.0281	P	3.0
2	☐	1.000	0.989	6966.21	0.0576	P	11.4
3	☐	500.000	528.025	1879876.13	15.7549	A	3.1
4	☐	1250.000	1318.893	4600967.29	39.3102	A	0.8
5	☐	2500.000	2600.700	8857321.46	77.4877	A	1.0
6	☐	5000.000	5037.177	17530376.82	150.0560	A	0.6
7	☐	10000.000	9946.224	35707054.19	296.2677	A	0.3
8	☐			19208.57	0.1649	P	3.4

$$y = 0.0298 * x + 0.0281$$

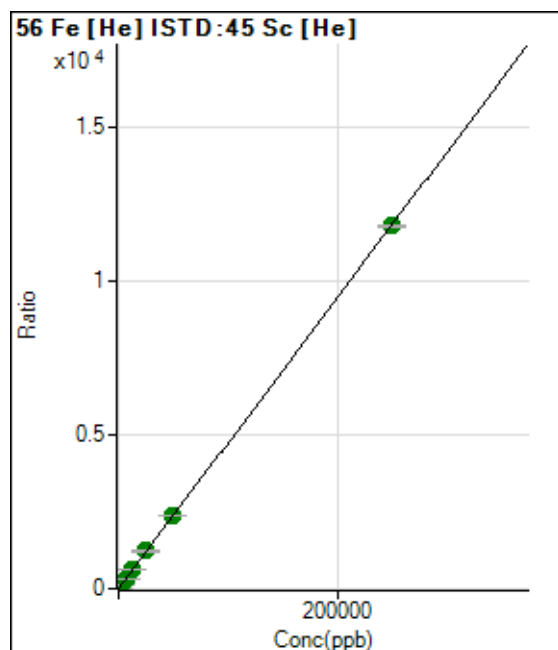
$$R = 0.9999$$

$$DL = 0.0842$$

$$BEC = 0.9445$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	12801.45	0.1044	P	10.2
2	☐	50.000	45.170	271018.78	2.2399	P	13.2
3	☐	2500.000	2699.596	15240577.00	127.7323	A	2.5
4	☐	6250.000	6782.893	37543991.66	320.7768	A	0.6
5	☐	12500.000	13375.833	72295465.59	632.4688	A	1.0
6	☐	25000.000	25938.819	143270435.64	1,226.4045	A	1.0
7	☐	50000.000	50551.160	288048549.04	2,389.9931	A	1.0
8	☐	250000.00	249736.77	1375692192.8	11,806.818	A	0.7

$$y = 0.0473 * x + 0.1044$$

$$R = 1.0000$$

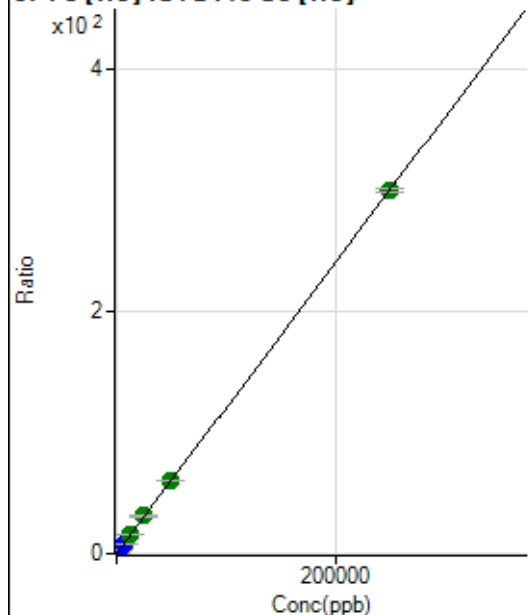
$$DL = 0.6738$$

$$BEC = 2.209$$

Weight: <None>

Min Conc: 0

57 Fe [He] ISTD:45 Sc [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	312.23	0.0025	P	26.5
2	☐	50.000	45.218	6862.85	0.0567	P	11.5
3	☐	2500.000	2648.853	378971.02	3.1763	P	1.7
4	☐	6250.000	6619.810	928613.08	7.9342	P	0.9
5	☐	12500.000	13580.301	1860241.22	16.2740	A	0.7
6	☐	25000.000	25939.432	3631072.41	31.0823	A	1.1
7	☐	50000.000	50787.296	7334319.68	60.8542	A	0.2
8	☐	250000.00	249683.85	34857806.15	299.1652	A	1.0

$$y = 0.0012 * x + 0.0025$$

R = 1.0000

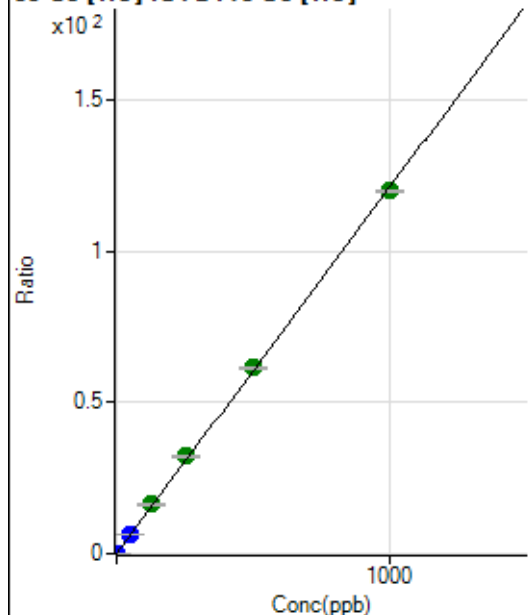
DL = 1.693

BEC = 2.126

Weight: <None>

Min Conc: 0

59 Co [He] ISTD:45 Sc [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	132.23	0.0011	P	30.3
2	☐	1.000	0.889	13148.48	0.1087	P	12.1
3	☐	50.000	52.398	756667.95	6.3419	P	1.7
4	☐	125.000	134.543	1905810.02	16.2826	A	1.3
5	☐	250.000	265.488	3672709.46	32.1288	A	0.3
6	☐	500.000	507.927	7180841.00	61.4672	A	0.6
7	☐	1000.000	990.852	14451652.14	119.9078	A	0.6
8	☐			29054.13	0.2494	P	0.5

$$y = 0.1210 * x + 0.0011$$

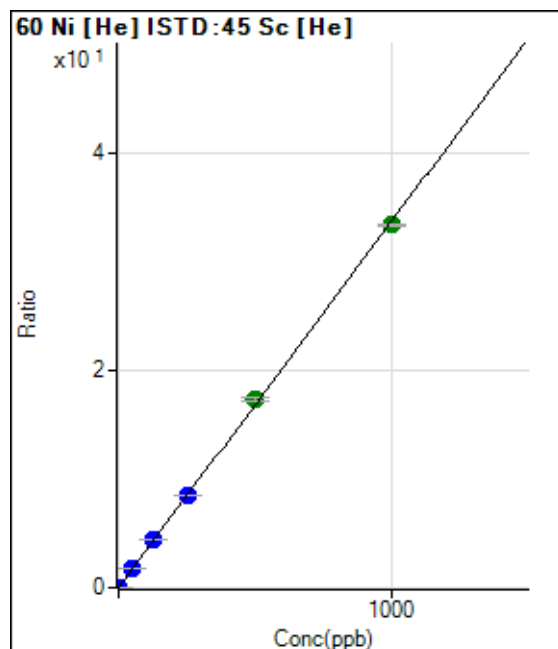
R = 0.9998

DL = 0.0081

BEC = 0.008907

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1104.50	0.0090	P	4.8
2	☐	1.000	0.704	3963.93	0.0328	P	3.4
3	☐	50.000	52.109	210713.36	1.7661	P	1.5
4	☐	125.000	129.377	511646.70	4.3715	P	0.4
5	☐	250.000	254.009	980088.16	8.5740	P	0.3
6	☐	500.000	515.076	2029997.73	17.3770	A	1.3
7	☐	1000.000	990.808	4027675.04	33.4183	A	0.5
8	☐			13393.05	0.1149	P	0.6

$$y = 0.0337 * x + 0.0090$$

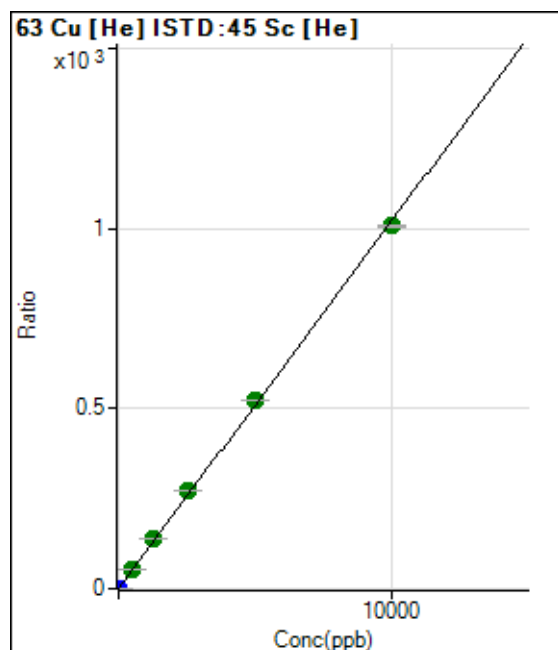
$$R = 0.9998$$

$$DL = 0.03868$$

$$BEC = 0.2672$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2876.99	0.0235	P	17.4
2	☐	2.000	1.663	23360.49	0.1931	P	8.9
3	☐	500.000	543.594	6618343.58	55.4715	A	1.5
4	☐	1250.000	1355.966	16191165.59	138.3357	A	0.2
5	☐	2500.000	2679.784	31247764.54	273.3686	A	1.0
6	☐	5000.000	5135.584	61199954.09	523.8669	A	0.7
7	☐	10000.000	9871.836	121363910.42	1,006.9774	A	0.8
8	☐			23834.49	0.2046	P	0.9

$$y = 0.1020 * x + 0.0235$$

$$R = 0.9997$$

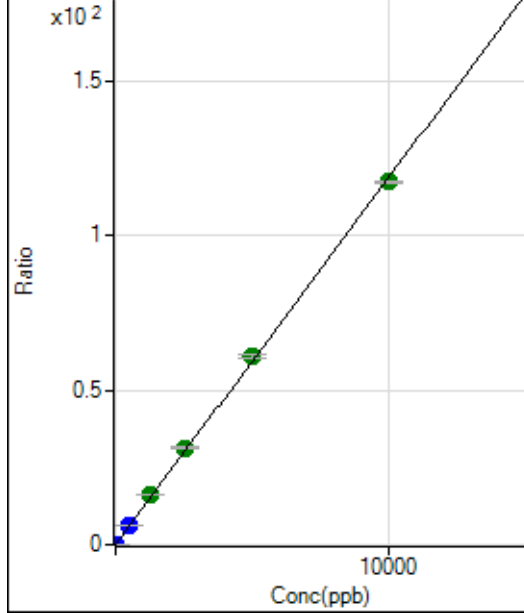
$$DL = 0.1199$$

$$BEC = 0.2301$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2029.05	0.0166	P	8.0
2	☐	2.000	4.057	7828.90	0.0647	P	5.7
3	☐	500.000	519.329	737531.03	6.1815	P	1.7
4	☐	1250.000	1350.870	1878821.21	16.0528	A	0.8
5	☐	2500.000	2638.789	3582565.22	31.3418	A	0.9
6	☐	5000.000	5121.635	7104380.73	60.8158	A	1.6
7	☐	10000.000	9890.910	14153249.51	117.4321	A	0.5
8	☐			27536.74	0.2363	P	0.4

$$y = 0.0119 * x + 0.0166$$

$$R = 0.9998$$

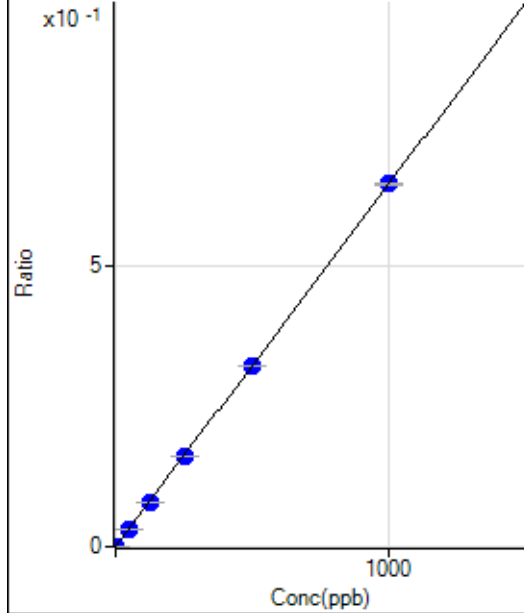
$$DL = 0.3364$$

$$BEC = 1.394$$

Weight: <None>

Min Conc: 0

75 As [He] ISTD:89 Y [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	13.33	0.0000	P	24.9
2	☐	1.000	0.874	714.47	0.0006	P	9.1
3	☐	50.000	49.204	39114.27	0.0317	P	3.5
4	☐	125.000	123.799	96746.78	0.0797	P	0.6
5	☐	250.000	249.178	189572.11	0.1604	P	0.7
6	☐	500.000	497.847	379852.86	0.3204	P	0.3
7	☐	1000.000	1001.472	763509.06	0.6445	P	0.7
8	☐			435.57	0.0004	P	12.3

$$y = 6.4356E-004 * x + 1.0800E-005$$

$$R = 1.0000$$

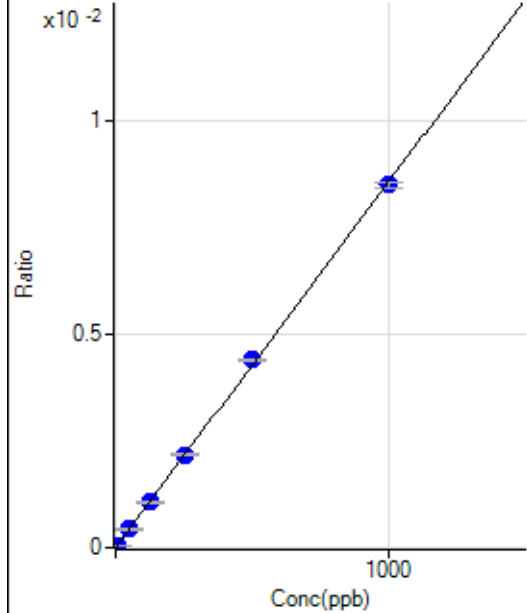
$$DL = 0.01252$$

$$BEC = 0.01678$$

Weight: <None>

Min Conc: 0

77 Se [He] ISTD:89 Y [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	3.446	36.67	0.0000	P	27.7
3	☐	50.000	50.513	533.35	0.0004	P	7.1
4	☐	125.000	124.008	1287.85	0.0011	P	5.0
5	☐	250.000	254.350	2571.37	0.0022	P	1.6
6	☐	500.000	512.987	5201.01	0.0044	P	1.6
7	☐	1000.000	992.525	10054.79	0.0085	P	1.7
8	☐			6.67	0.0000	P	50.3

$$y = 8.5521\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9999$$

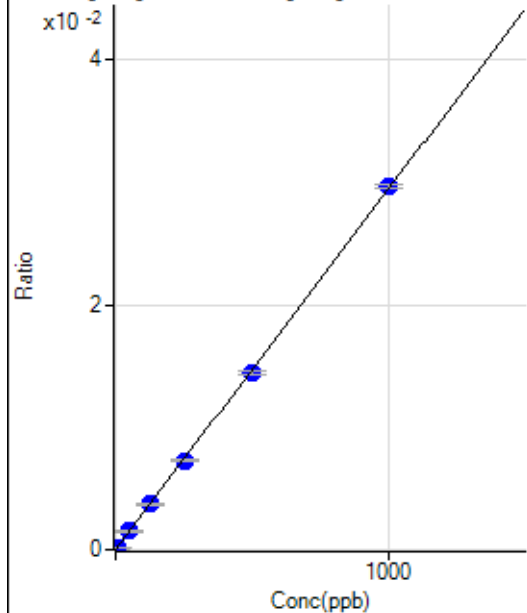
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

78 Se [He] ISTD:89 Y [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	32.22	0.0000	P	58.7
2	☐	5.000	4.022	180.00	0.0001	P	15.8
3	☐	50.000	50.184	1856.81	0.0015	P	2.4
4	☐	125.000	125.734	4527.44	0.0037	P	4.0
5	☐	250.000	245.717	8584.90	0.0073	P	3.0
6	☐	500.000	490.618	17158.34	0.0145	P	1.7
7	☐	1000.000	1005.666	35111.54	0.0296	P	1.1
8	☐			53.33	0.0000	P	16.0

$$y = 2.9447\text{E-}005 * x + 2.6105\text{E-}005$$

$$R = 0.9999$$

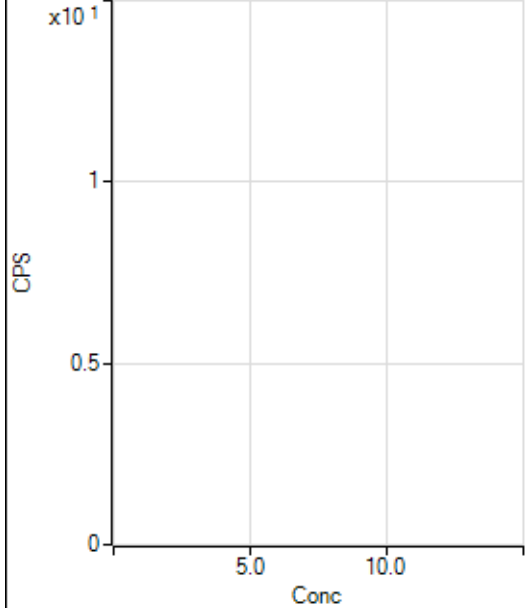
$$DL = 1.562$$

$$BEC = 0.8865$$

Weight: <None>

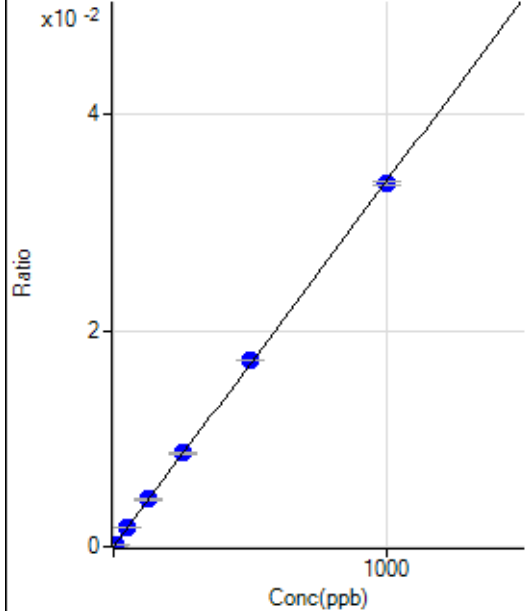
Min Conc: 0

81 Br [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			18184.12		P	0.3
2	☐			18047.24		P	0.6
3	☐			17763.58		P	2.5
4	☐			17801.46		P	2.4
5	☐			18811.60		P	0.8
6	☐			19055.24		P	1.4
7	☐			19199.90		P	1.7
8	☐			18999.63		P	2.6

82 Se [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	-15.56	0.0000	P	-378.
2	☐	5.000	4.738	2654.81	0.0002	P	1.1
3	☐	50.000	52.461	29559.81	0.0018	P	1.0
4	☐	125.000	128.972	71965.71	0.0044	P	1.7
5	☐	250.000	255.710	139766.74	0.0087	P	0.8
6	☐	500.000	510.102	281741.18	0.0173	P	0.3
7	☐	1000.000	992.903	550981.89	0.0336	P	1.2
8	☐			306.68	0.0000	P	15.1

$$y = 3.3854E-005 * x - 9.5268E-007$$

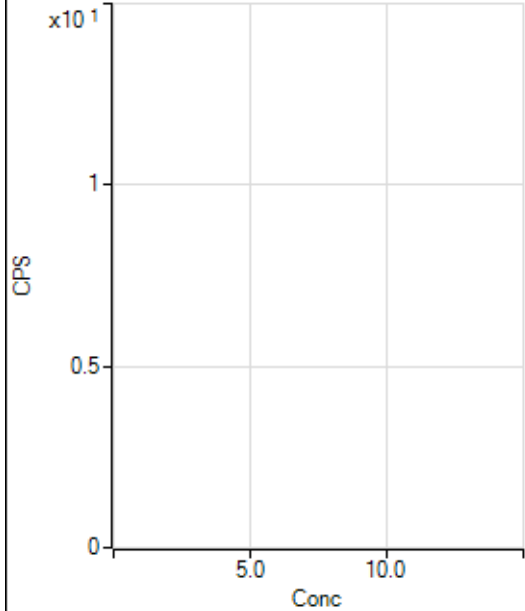
$$R = 0.9999$$

$$DL = 0.3199$$

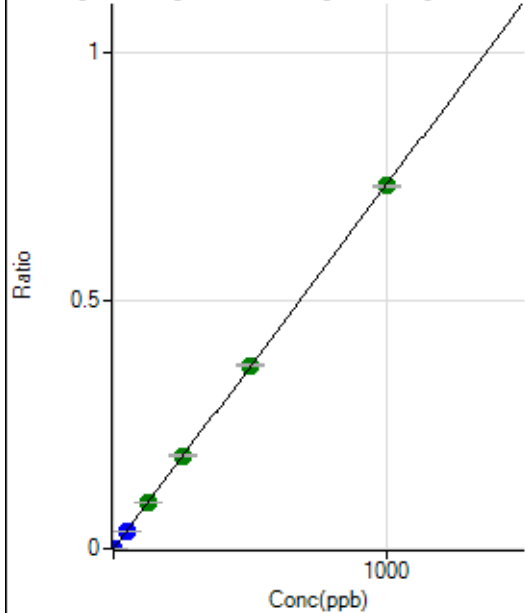
$$BEC = -0.02814$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			421.12		P	8.1
2	☐			425.57		P	8.3
3	☐			420.01		P	6.8
4	☐			436.68		P	6.5
5	☐			447.79		P	5.1
6	☐			435.57		P	14.2
7	☐			500.02		P	5.0
8	☐			510.02		P	7.9

86 Sr [No Gas] ISTD : 89 Y [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	716.70	0.0000	P	10.2
2	☐	1.000	0.941	12233.23	0.0007	P	0.9
3	☐	50.000	49.094	601243.94	0.0361	P	0.1
4	☐	125.000	126.105	1527847.93	0.0927	A	1.7
5	☐	250.000	255.456	3030618.88	0.1877	A	1.1
6	☐	500.000	503.473	6034626.72	0.3699	A	1.2
7	☐	1000.000	996.806	12003592.18	0.7323	A	0.5
8	☐			34773.14	0.0024	P	0.3

$$y = 7.3457E-004 * x + 4.3456E-005$$

$$R = 1.0000$$

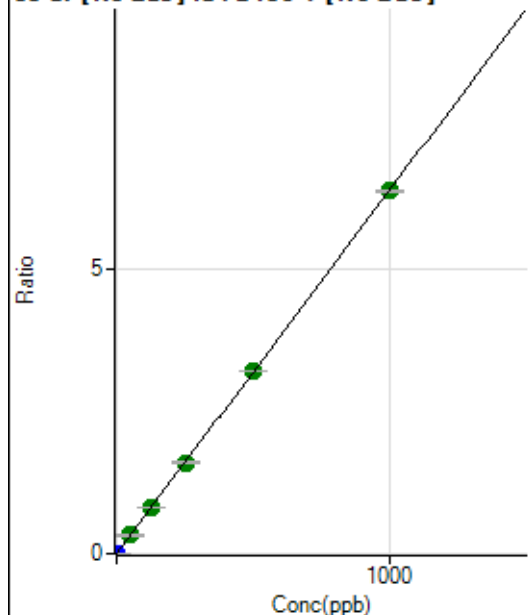
$$DL = 0.01804$$

$$BEC = 0.05916$$

Weight: <None>

Min Conc: 0

88 Sr [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	716.69	0.0000	P	5.7
2	☐	1.000	0.942	100536.35	0.0060	P	1.0
3	☐	50.000	50.600	5366482.73	0.3223	A	1.5
4	☐	125.000	125.846	13213148.83	0.8014	A	0.8
5	☐	250.000	251.224	25830087.67	1.5998	A	1.4
6	☐	500.000	502.332	52191875.89	3.1989	A	0.6
7	☐	1000.000	998.392	104223992.89	6.3578	A	0.6
8	☐			299461.56	0.0203	P	0.3

$$y = 0.0064 * x + 4.3442E-005$$

$$R = 1.0000$$

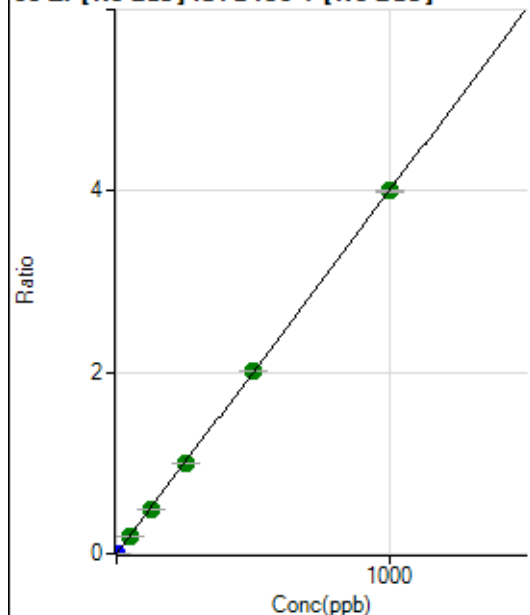
$$DL = 0.001168$$

$$BEC = 0.006822$$

Weight: <None>

Min Conc: 0

90 Zr [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	923.38	0.0001	P	15.8
2	☐	1.000	0.961	65000.48	0.0039	P	1.2
3	☐	50.000	49.886	3327467.31	0.1998	A	1.3
4	☐	125.000	123.561	8158532.31	0.4949	A	1.2
5	☐	250.000	249.655	16143575.87	0.9998	A	0.7
6	☐	500.000	502.170	32811928.12	2.0111	A	0.2
7	☐	1000.000	999.187	65594660.14	4.0014	A	0.7
8	☐			27658.57	0.0019	P	1.2

$$y = 0.0040 * x + 5.5931E-005$$

$$R = 1.0000$$

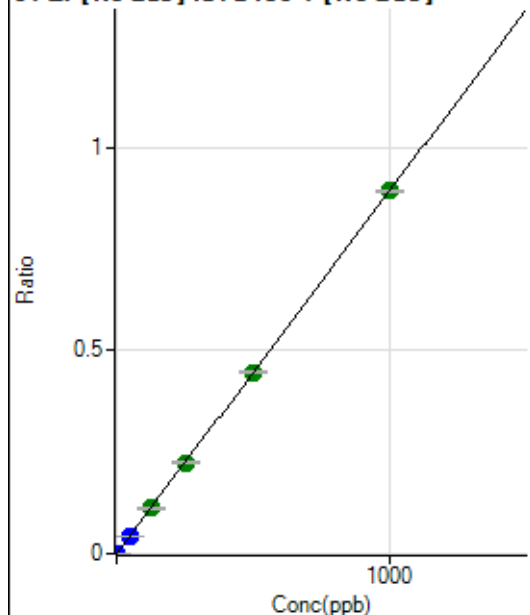
$$DL = 0.006631$$

$$BEC = 0.01397$$

Weight: <None>

Min Conc: 0

91 Zr [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	212.23	0.0000	P	4.1
2	☐	1.000	0.961	14488.73	0.0009	P	0.3
3	☐	50.000	48.620	722474.73	0.0434	P	1.1
4	☐	125.000	125.191	1841575.01	0.1117	A	1.6
5	☐	250.000	250.331	3605981.27	0.2233	A	1.9
6	☐	500.000	499.320	7267947.46	0.4455	A	1.0
7	☐	1000.000	1000.303	14628729.64	0.8924	A	0.6
8	☐			6120.29	0.0004	P	2.5

$$y = 8.9214\text{E-}004 * x + 1.2862\text{E-}005$$

$$R = 1.0000$$

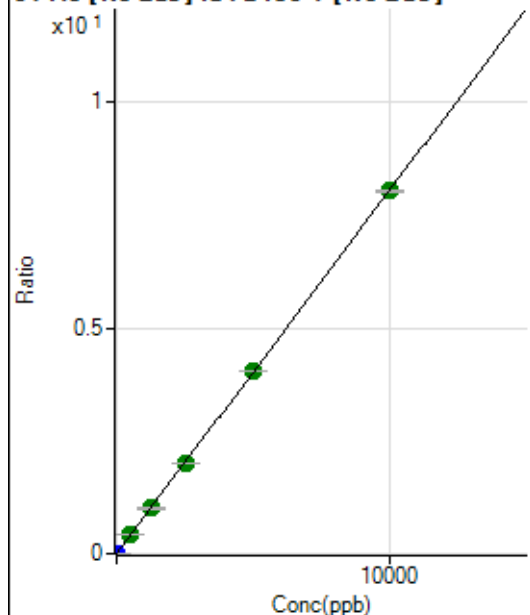
$$DL = 0.001783$$

$$BEC = 0.01442$$

Weight: <None>

Min Conc: 0

94 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	477.79	0.0000	P	4.5
2	☐	5.000	5.531	74511.36	0.0045	P	0.6
3	☐	500.000	506.952	6786798.65	0.4076	A	0.1
4	☐	1250.000	1254.593	16627631.00	1.0086	A	2.0
5	☐	2500.000	2497.756	32421391.18	2.0080	A	0.5
6	☐	5000.000	5021.238	65860437.35	4.0366	A	0.1
7	☐	10000.000	9989.020	131635755.81	8.0302	A	0.3
8	☐			22928.97	0.0016	P	2.9

$$y = 8.0390\text{E-}004 * x + 2.8965\text{E-}005$$

$$R = 1.0000$$

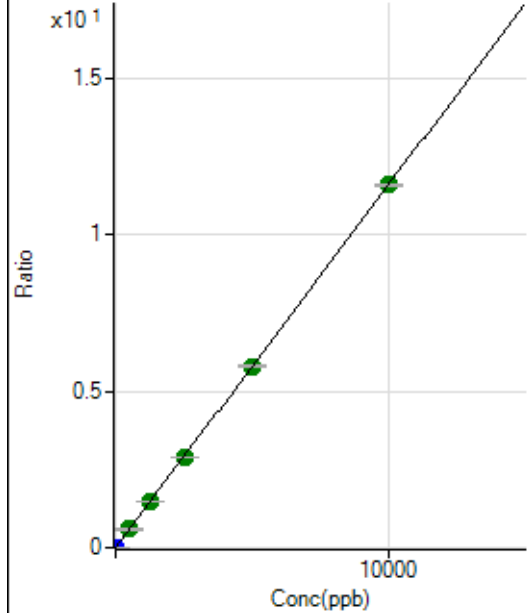
$$DL = 0.004887$$

$$BEC = 0.03603$$

Weight: <None>

Min Conc: 0

95 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	252.23	0.0000	P	3.1
2	☐	5.000	4.650	90079.35	0.0054	P	1.2
3	☐	500.000	504.819	9754767.29	0.5858	A	1.0
4	☐	1250.000	1253.021	23973370.48	1.4541	A	1.2
5	☐	2500.000	2495.697	46761744.86	2.8962	A	0.7
6	☐	5000.000	5005.931	94778069.70	5.8092	A	0.7
7	☐	10000.000	9997.492	190175270.50	11.6017	A	0.8
8	☐			23883.92	0.0016	P	1.2

$$y = 0.0012 * x + 1.5290E-005$$

R = 1.0000

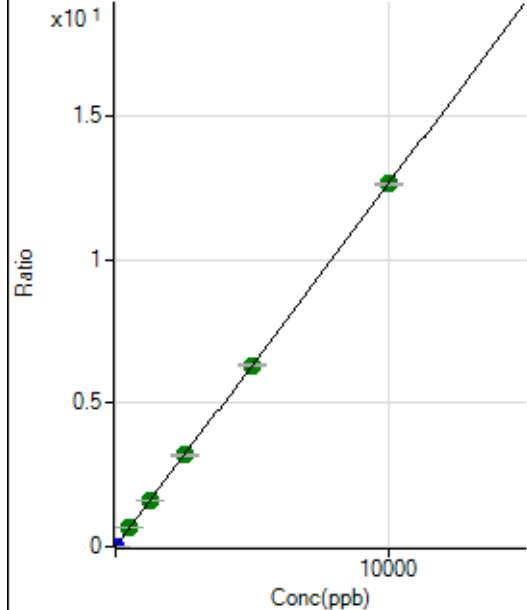
DL = 0.001234

BEC = 0.01318

Weight: <None>

Min Conc: 0

96 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	291.12	0.0000	P	9.1
2	☐	5.000	4.660	98517.27	0.0059	P	0.6
3	☐	500.000	509.566	10742219.70	0.6451	A	1.1
4	☐	1250.000	1256.053	26217487.94	1.5902	A	0.7
5	☐	2500.000	2517.318	51457485.34	3.1870	A	0.5
6	☐	5000.000	4994.837	103169089.57	6.3236	A	1.0
7	☐	10000.000	9997.017	207475399.13	12.6564	A	0.5
8	☐			34406.99	0.0023	P	1.7

$$y = 0.0013 * x + 1.7653E-005$$

R = 1.0000

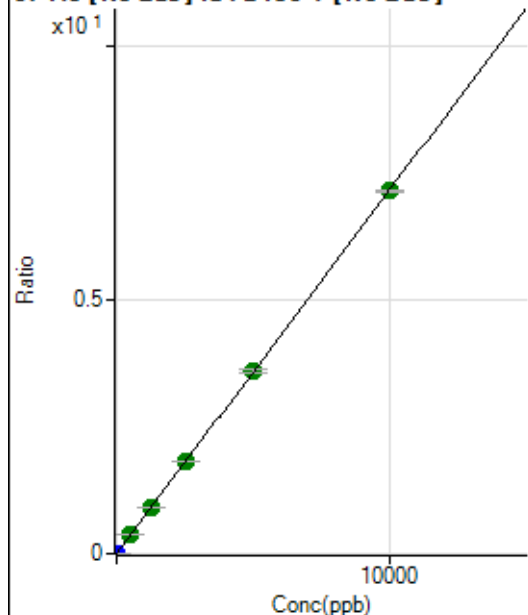
DL = 0.003798

BEC = 0.01394

Weight: <None>

Min Conc: 0

97 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	140.00	0.0000	P	13.0
2	☐	5.000	4.608	55123.30	0.0033	P	1.3
3	☐	500.000	509.960	6086586.02	0.3655	A	0.5
4	☐	1250.000	1261.977	14913202.83	0.9045	A	0.6
5	☐	2500.000	2529.955	29281125.40	1.8134	A	0.7
6	☐	5000.000	5023.522	58747336.34	3.6007	A	1.3
7	☐	10000.000	9978.755	117243151.59	7.1524	A	0.5
8	☐			13506.66	0.0009	P	4.0

$$y = 7.1676E-004 * x + 8.4892E-006$$

$$R = 1.0000$$

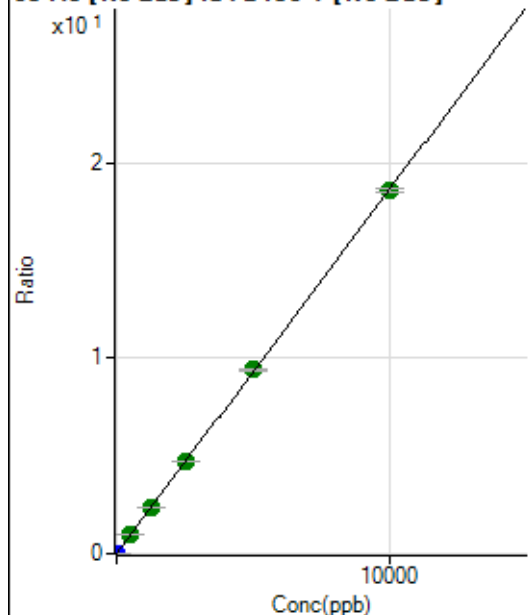
$$DL = 0.004628$$

$$BEC = 0.01184$$

Weight: <None>

Min Conc: 0

98 Mo [No Gas] ISTD:89 Y [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	325.56	0.0000	P	11.5
2	☐	5.000	4.599	142836.35	0.0086	P	0.6
3	☐	500.000	509.099	15779493.65	0.9476	A	1.0
4	☐	1250.000	1274.966	39124876.36	2.3732	A	1.4
5	☐	2500.000	2541.684	76391328.86	4.7309	A	0.7
6	☐	5000.000	5045.136	153212711.05	9.3907	A	1.1
7	☐	10000.000	9963.435	303988835.47	18.5453	A	1.2
8	☐			33855.77	0.0023	P	2.8

$$y = 0.0019 * x + 1.9734E-005$$

$$R = 1.0000$$

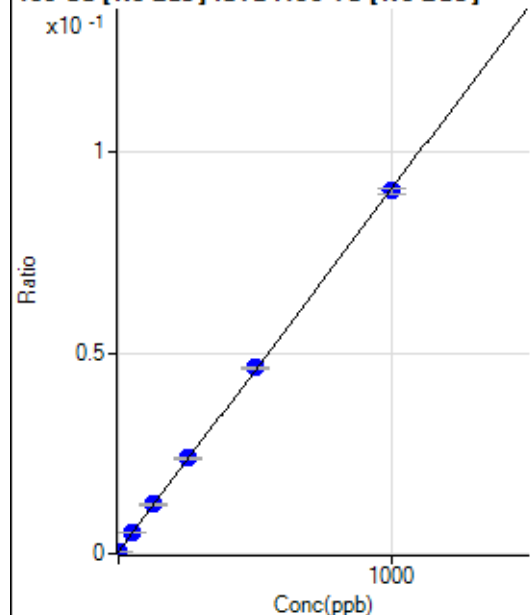
$$DL = 0.003664$$

$$BEC = 0.0106$$

Weight: <None>

Min Conc: 0

106 Cd [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	7117.46	0.0006	P	5.0
2	☐	1.000	0.775	8091.34	0.0007	P	3.6
3	☐	50.000	52.004	63497.41	0.0053	P	0.9
4	☐	125.000	129.143	145888.12	0.0123	P	1.1
5	☐	250.000	256.172	277854.62	0.0237	P	1.6
6	☐	500.000	506.512	545314.93	0.0463	P	1.4
7	☐	1000.000	994.583	1058561.71	0.0903	P	1.3
8	☐			6347.08	0.0006	P	1.6

$$y = 9.0198\text{E-}005 * x + 6.1394\text{E-}004$$

R = 0.9999

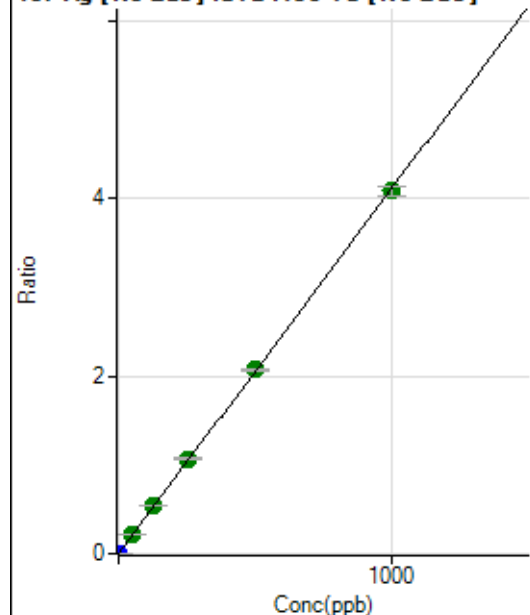
DL = 1.011

BEC = 6.807

Weight: <None>

Min Conc: 0

107 Ag [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	142.23	0.0000	P	5.1
2	☐	1.000	1.005	49034.58	0.0041	P	1.7
3	☐	50.000	53.699	2642103.59	0.2207	A	0.5
4	☐	125.000	131.058	6408435.88	0.5387	A	1.8
5	☐	250.000	259.562	12496282.45	1.0669	A	2.2
6	☐	500.000	504.252	24410899.36	2.0726	A	1.0
7	☐	1000.000	994.541	47900474.28	4.0877	A	2.4
8	☐			4151.79	0.0004	P	9.4

$$y = 0.0041 * x + 1.2268\text{E-}005$$

R = 0.9999

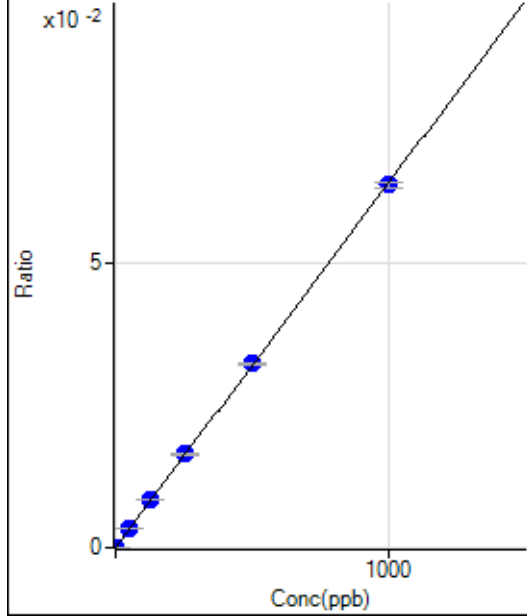
DL = 0.0004572

BEC = 0.002985

Weight: <None>

Min Conc: 0

108 Cd [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	25.56	0.0000	P	8.1
2	☐	1.000	0.915	722.25	0.0001	P	11.5
3	☐	50.000	52.284	40253.14	0.0034	P	2.4
4	☐	125.000	130.872	100100.31	0.0084	P	1.5
5	☐	250.000	256.709	193286.78	0.0165	P	2.5
6	☐	500.000	505.060	382383.43	0.0325	P	0.9
7	☐	1000.000	994.945	749453.44	0.0640	P	1.8
8	☐			236.67	0.0000	P	8.1

$$y = 6.4276E-005 * x + 2.2042E-006$$

$$R = 0.9999$$

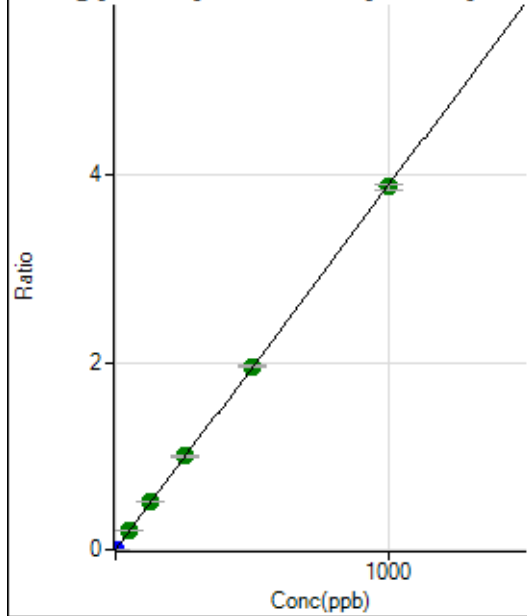
$$DL = 0.008341$$

$$BEC = 0.03429$$

Weight: <None>

Min Conc: 0

109 Ag [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	76.67	0.0000	P	8.1
2	☐	1.000	1.015	46840.40	0.0040	P	0.7
3	☐	50.000	54.725	2552137.27	0.2132	A	1.7
4	☐	125.000	132.127	6123880.33	0.5147	A	1.1
5	☐	250.000	256.849	11720880.80	1.0006	A	2.0
6	☐	500.000	502.644	23063599.66	1.9582	A	1.0
7	☐	1000.000	995.839	45465069.88	3.8795	A	1.5
8	☐			3679.42	0.0004	P	11.7

$$y = 0.0039 * x + 6.6122E-006$$

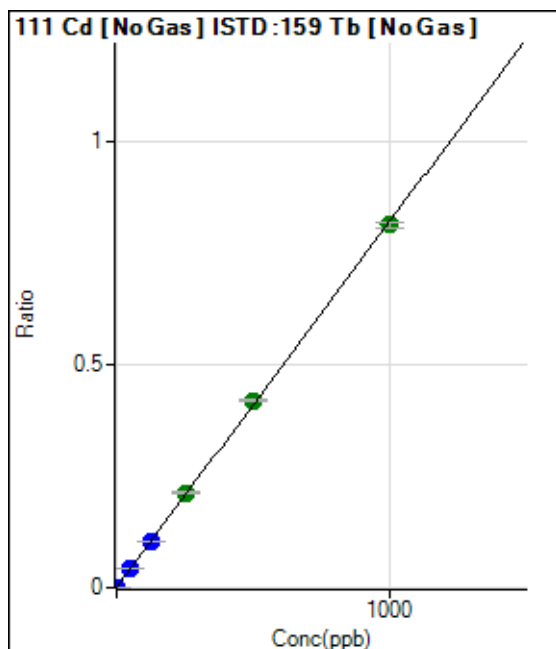
$$R = 1.0000$$

$$DL = 0.0004121$$

$$BEC = 0.001697$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	4989.89	0.0004	P	4.9
2	☐	1.000	0.865	13489.85	0.0011	P	0.3
3	☐	50.000	51.259	508819.64	0.0425	P	0.6
4	☐	125.000	127.334	1248685.04	0.1050	P	0.8
5	☐	250.000	259.362	2499112.19	0.2133	A	1.4
6	☐	500.000	511.677	4951828.34	0.4204	A	1.6
7	☐	1000.000	991.466	9542924.33	0.8143	A	1.5
8	☐			5418.45	0.0005	P	2.2

$$y = 8.2086E-004 * x + 4.3042E-004$$

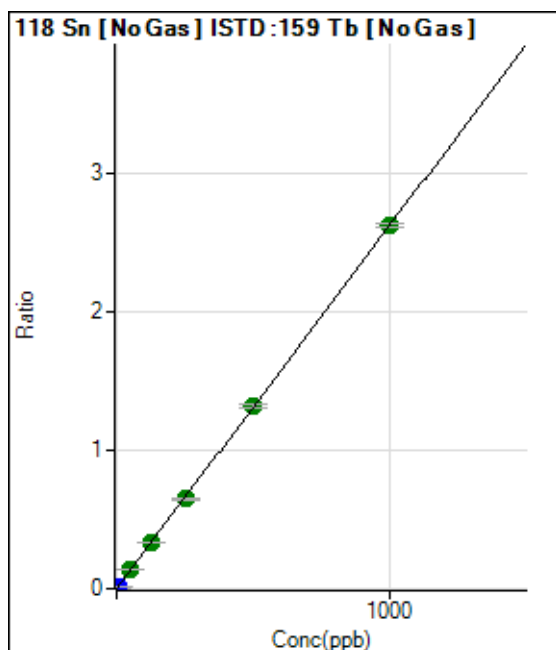
R = 0.9998

DL = 0.07695

BEC = 0.5243

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	6921.85	0.0006	P	3.1
2	☐	5.000	5.259	170134.78	0.0144	P	0.4
3	☐	50.000	51.231	1614431.45	0.1349	A	2.0
4	☐	125.000	127.291	3976088.38	0.3342	A	1.4
5	☐	250.000	246.508	7575304.89	0.6467	A	1.3
6	☐	500.000	502.187	15508030.88	1.3168	A	2.2
7	☐	1000.000	999.430	30707741.49	2.6200	A	1.1
8	☐			9538.96	0.0009	P	3.7

$$y = 0.0026 * x + 5.9685E-004$$

R = 1.0000

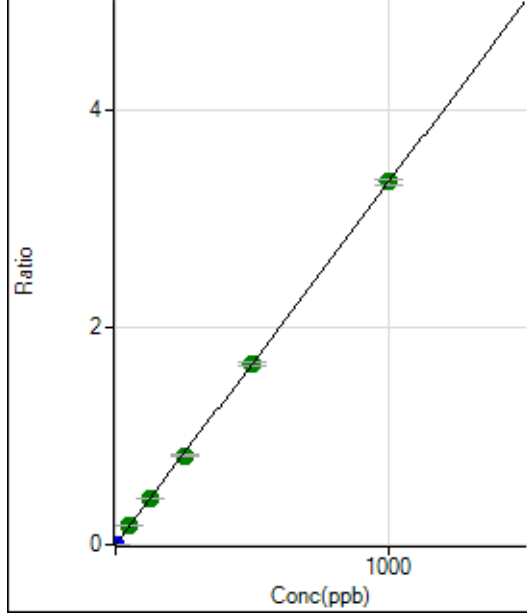
DL = 0.02143

BEC = 0.2277

Weight: <None>

Min Conc: 0

121 Sb [No Gas] ISTD :159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	102.22	0.0000	P	27.2
2	☐	2.000	1.899	75116.94	0.0063	P	0.3
3	☐	50.000	51.074	2041380.07	0.1705	A	1.4
4	☐	125.000	126.047	5007511.59	0.4209	A	0.4
5	☐	250.000	246.668	9648274.23	0.8236	A	1.5
6	☐	500.000	498.489	19602712.76	1.6645	A	2.1
7	☐	1000.000	1001.404	39186143.30	3.3437	A	1.6
8	☐			15408.77	0.0015	P	3.6

$$y = 0.0033 * x + 8.8083E-006$$

$$R = 1.0000$$

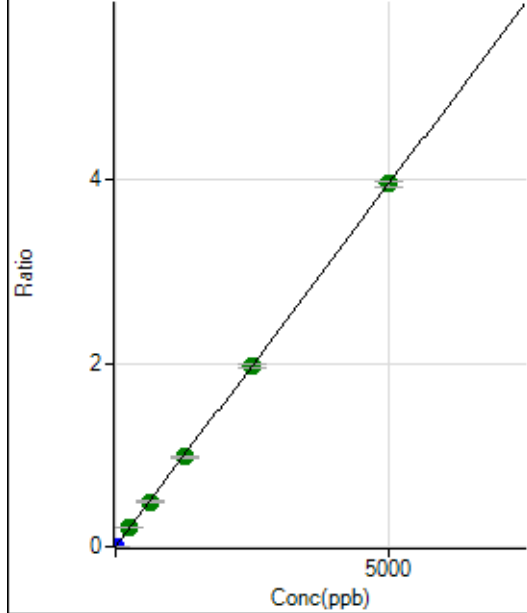
$$DL = 0.002151$$

$$BEC = 0.002638$$

Weight: <None>

Min Conc: 0

135 Ba [No Gas] ISTD :159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	202.22	0.0000	P	16.3
2	☐	10.000	9.118	85407.96	0.0072	P	1.0
3	☐	250.000	253.692	2398361.20	0.2004	A	1.2
4	☐	625.000	622.179	5845323.73	0.4914	A	2.4
5	☐	1250.000	1241.641	11486442.33	0.9806	A	1.5
6	☐	2500.000	2494.043	23198070.21	1.9696	A	1.1
7	☐	5000.000	5005.238	46321777.09	3.9528	A	1.8
8	☐			15872.71	0.0015	P	1.0

$$y = 7.8972E-004 * x + 1.7458E-005$$

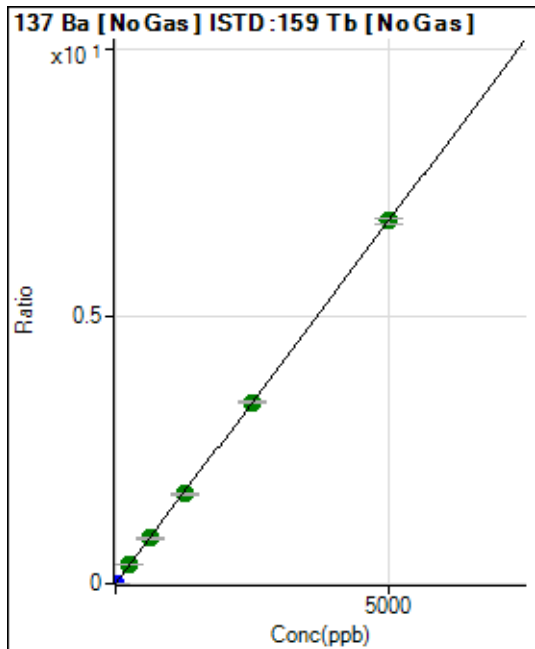
$$R = 1.0000$$

$$DL = 0.01082$$

$$BEC = 0.02211$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	365.57	0.0000	P	11.9
2	☐	10.000	9.232	148381.82	0.0125	P	1.3
3	☐	250.000	253.845	4117503.55	0.3440	A	1.3
4	☐	625.000	626.858	10104740.55	0.8494	A	3.0
5	☐	1250.000	1238.818	19661419.85	1.6786	A	2.5
6	☐	2500.000	2500.556	39907402.18	3.3883	A	1.2
7	☐	5000.000	5002.094	79428005.48	6.7779	A	1.8
8	☐			28079.14	0.0027	P	0.8

$y = 0.0014 * x + 3.1557E-005$

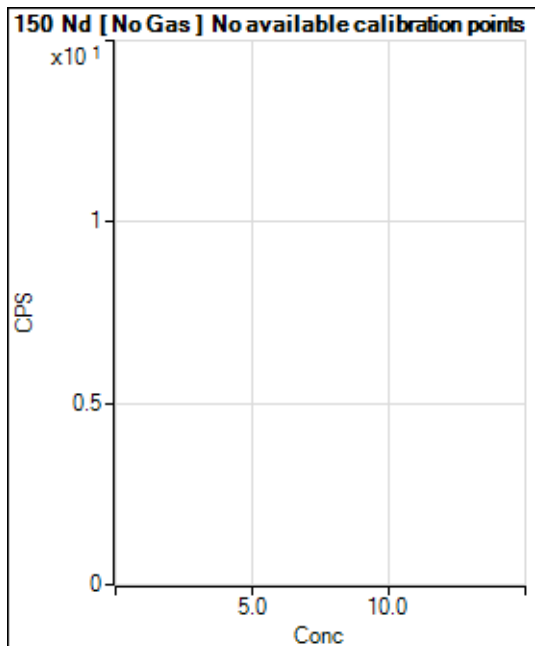
$R = 1.0000$

$DL = 0.008337$

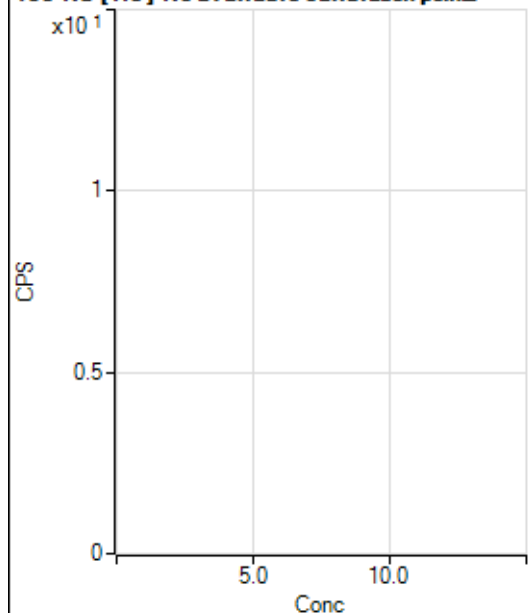
$BEC = 0.02329$

Weight: <None>

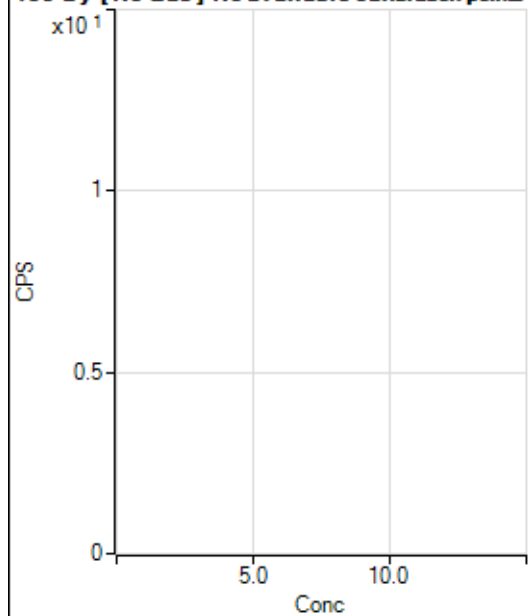
Min Conc: 0



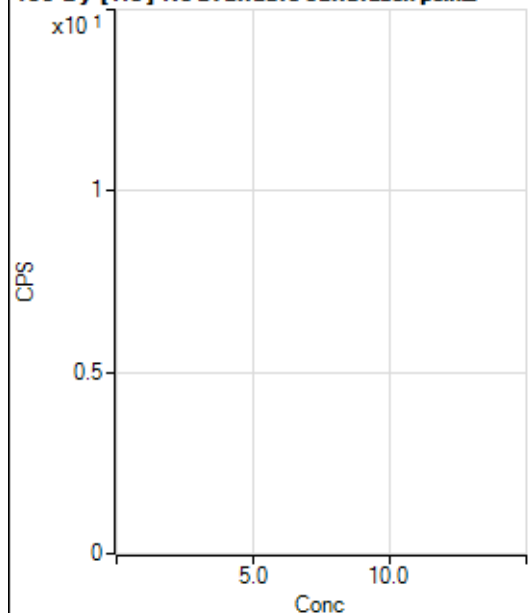
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			12.22		P	15.7
2	☐			18.89		P	56.7
3	☐			135.56		P	28.5
4	☐			365.57		P	3.8
5	☐			656.69		P	2.3
6	☐			1316.75		P	2.0
7	☐			2406.90		P	4.6
8	☐			618.91		P	7.4

150 Nd [He] No available calibration points

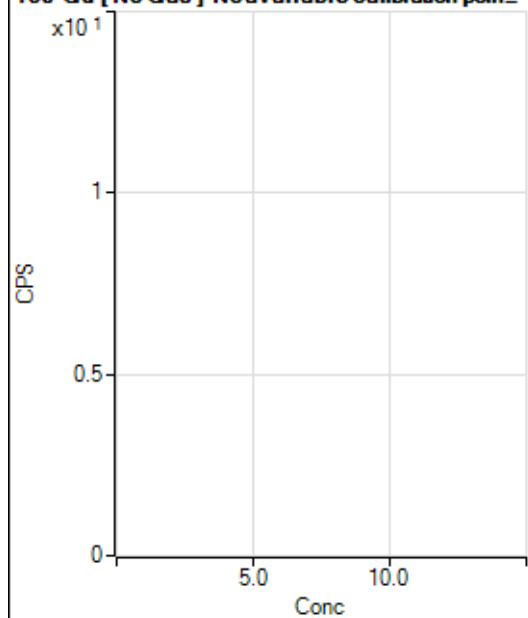
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			2.22		P	86.6
2	☐			6.67		P	50.0
3	☐			8.89		P	78.1
4	☐			13.33		P	25.0
5	☐			27.78		P	30.2
6	☐			68.89		P	7.4
7	☐			148.89		P	5.2
8	☐			165.56		P	6.5

156 Dy [No Gas] No available calibration points

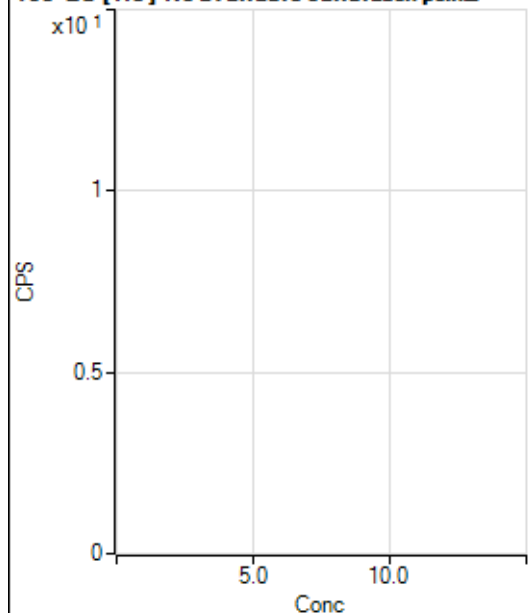
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			11.11		P	45.8
2	☐			18.89		P	62.0
3	☐			70.00		P	23.8
4	☐			112.23		P	19.3
5	☐			226.67		P	14.7
6	☐			397.79		P	8.1
7	☐			871.15		P	7.4
8	☐			1237.85		P	7.5

156 Dy [He] No available calibration points

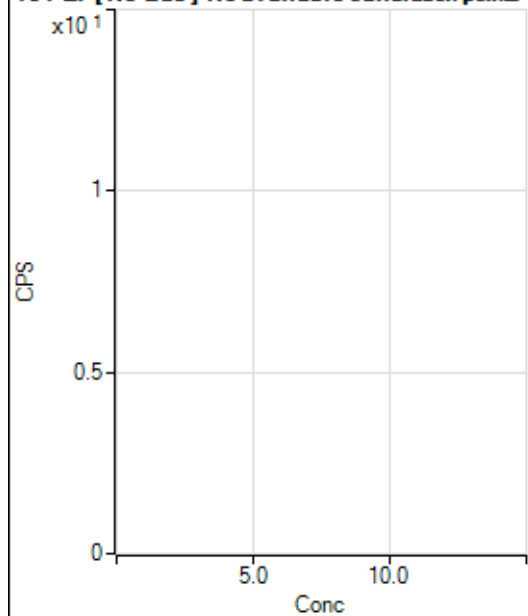
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t.	RSD
1	☐			0.00		P	
2	☐			4.44		P	114.6
3	☐			10.00		P	57.8
4	☐			23.33		P	14.3
5	☐			38.89		P	9.9
6	☐			83.33		P	14.4
7	☐			152.22		P	16.7
8	☐			398.90		P	9.2

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t.	RSD
1	☐			110.00		P	32.8
2	☐			132.23		P	11.4
3	☐			137.78		P	12.4
4	☐			204.45		P	12.2
5	☐			217.78		P	19.4
6	☐			323.34		P	7.1
7	☐			554.46		P	9.0
8	☐			1117.84		P	6.6

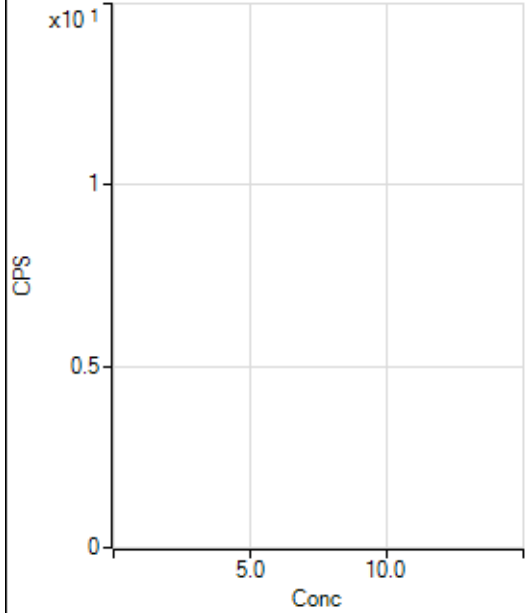
160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			37.78		P	36.7
2	☐			21.11		P	50.8
3	☐			30.00		P	40.1
4	☐			38.89		P	13.1
5	☐			58.89		P	3.3
6	☐			92.22		P	30.1
7	☐			176.67		P	8.6
8	☐			472.24		P	10.6

164 Er [No Gas] No available calibration points

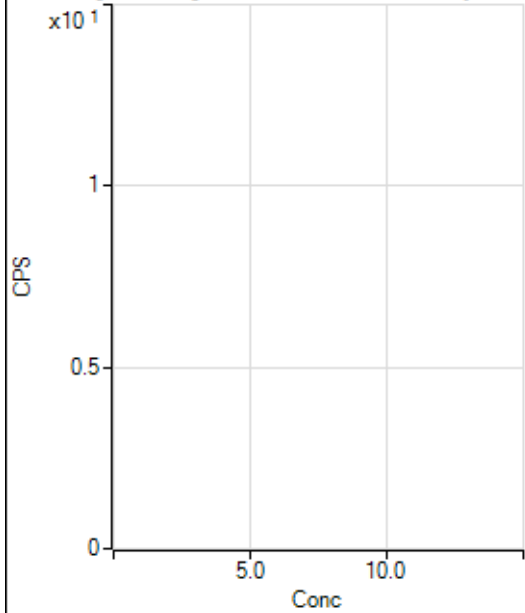
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			80.00		P	25.0
2	☐			96.67		P	9.1
3	☐			113.34		P	5.1
4	☐			163.34		P	4.1
5	☐			221.11		P	10.7
6	☐			344.46		P	3.1
7	☐			651.14		P	1.9
8	☐			1434.54		P	2.1

164 Er [He] No available calibration points

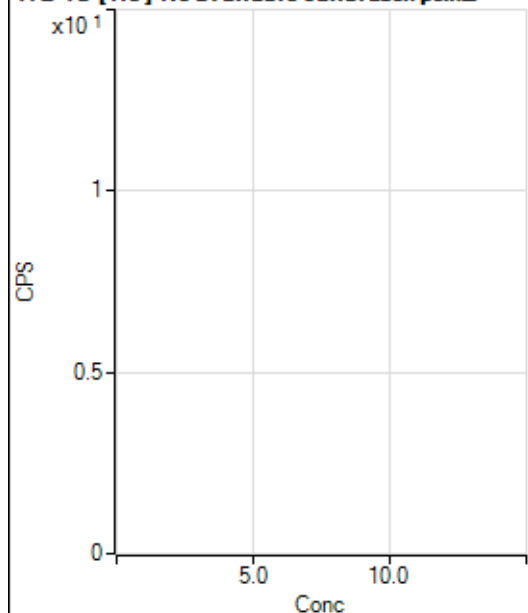


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			21.11		P	24.1
2	☐			30.00		P	11.1
3	☐			44.44		P	11.5
4	☐			42.22		P	47.6
5	☐			68.89		P	14.8
6	☐			121.11		P	21.0
7	☐			186.67		P	4.7
8	☐			488.90		P	8.7

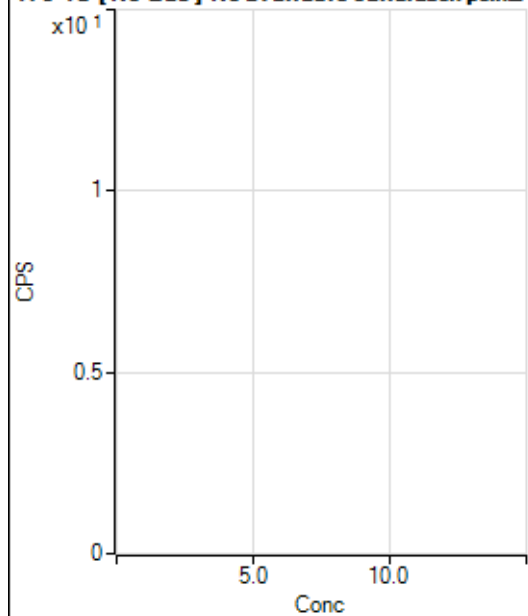
172 Yb [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			76.66		P	30.1
2	☐			68.89		P	22.9
3	☐			111.11		P	16.5
4	☐			148.89		P	5.6
5	☐			217.78		P	19.7
6	☐			397.79		P	8.4
7	☐			713.36		P	4.9
8	☐			2189.09		P	7.7

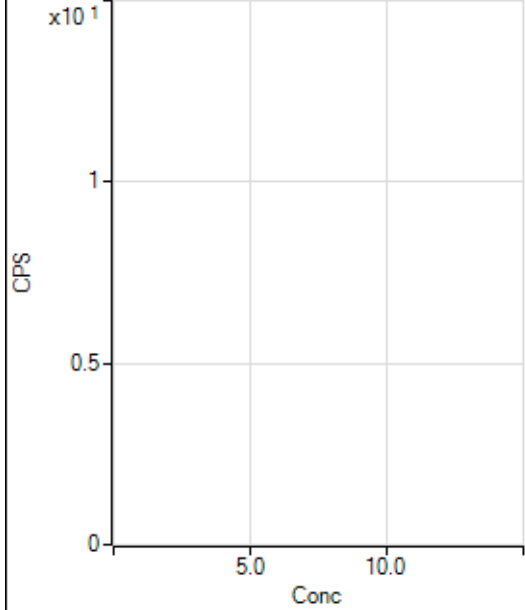
172 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			26.67		P	43.3
2	☐			35.56		P	35.5
3	☐			51.11		P	26.4
4	☐			55.55		P	42.1
5	☐			102.22		P	3.8
6	☐			132.23		P	23.4
7	☐			326.67		P	16.2
8	☐			988.94		P	4.9

176 Yb [No Gas] No available calibration points

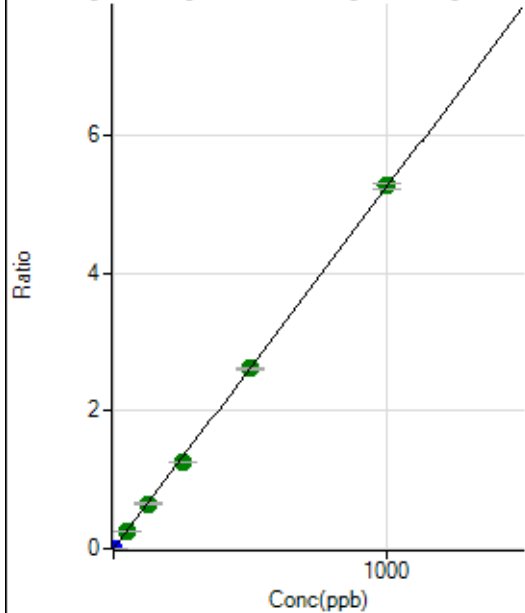
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			1859.04		P	4.6
2	☐			2019.07		P	4.5
3	☐			10143.98		P	3.1
4	☐			22679.60		P	0.7
5	☐			42234.07		P	1.7
6	☐			84750.54		P	0.4
7	☐			168452.36		P	0.7
8	☐			2957.03		P	3.5

176 Yb [He] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			407.79		P	4.5
2	☐			384.45		P	6.7
3	☐			3294.89		P	2.2
4	☐			7372.12		P	1.7
5	☐			14461.33		P	2.8
6	☐			28754.65		P	0.7
7	☐			57695.30		P	1.8
8	☐			938.93		P	6.5

203 Tl [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	130.00	0.0000	P	10.9
2	☐	1.000	0.884	32911.68	0.0047	P	0.6
3	☐	50.000	48.728	1826510.67	0.2559	A	2.7
4	☐	125.000	123.765	4560964.55	0.6500	A	2.4
5	☐	250.000	240.195	8641275.15	1.2614	A	0.6
6	☐	500.000	497.533	17579101.13	2.6128	A	1.1
7	☐	1000.000	1003.903	34363073.38	5.2720	A	1.4
8	☐			2212.44	0.0004	P	15.7

$$y = 0.0053 * x + 1.8595E-005$$

$$R = 0.9999$$

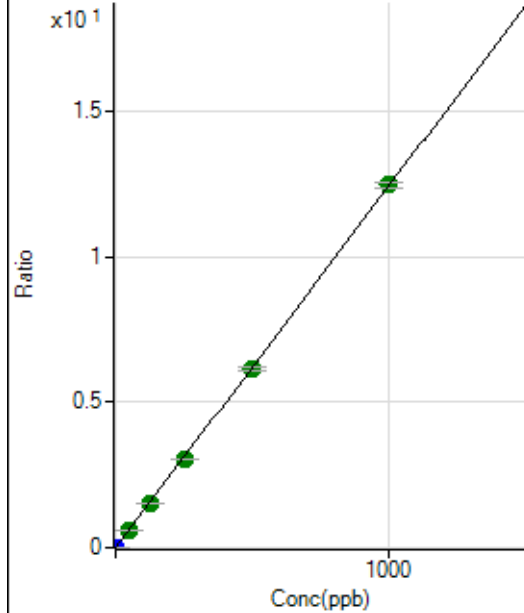
$$DL = 0.001161$$

$$BEC = 0.003541$$

Weight: <None>

Min Conc: 0

205 Tl [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	354.45	0.0001	P	12.5
2	☐	1.000	0.891	78411.66	0.0111	P	0.1
3	☐	50.000	49.204	4361015.53	0.6110	A	2.3
4	☐	125.000	121.481	10585006.09	1.5084	A	1.6
5	☐	250.000	243.211	20686738.72	3.0198	A	0.7
6	☐	500.000	495.000	41350547.44	6.1460	A	1.4
7	☐	1000.000	1004.677	81306304.34	12.4743	A	1.3
8	☐			4894.31	0.0009	P	11.6

$$y = 0.0124 * x + 5.0758E-005$$

$$R = 1.0000$$

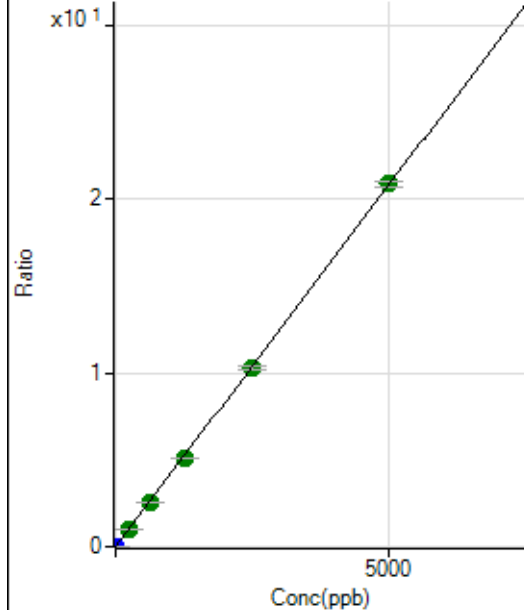
$$DL = 0.001527$$

$$BEC = 0.004088$$

Weight: <None>

Min Conc: 0

206 [Pb] [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1620.12	0.0002	P	4.8
2	☐	1.000	0.774	24366.33	0.0035	P	1.0
3	☐	250.000	244.530	7267769.20	1.0182	A	1.2
4	☐	625.000	615.671	17987187.51	2.5631	A	1.0
5	☐	1250.000	1222.881	34874923.65	5.0908	A	1.2
6	☐	2500.000	2475.059	69320305.63	10.3033	A	1.5
7	☐	5000.000	5020.690	136226081.30	20.9002	A	1.3
8	☐			58068.14	0.0107	P	0.7

$$y = 0.0042 * x + 2.3191E-004$$

$$R = 1.0000$$

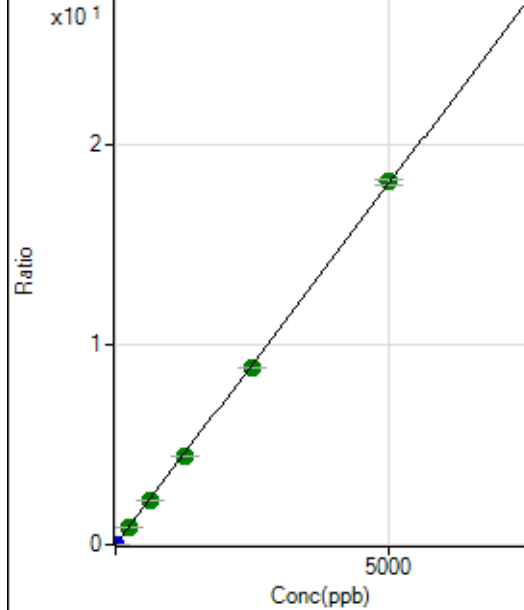
$$DL = 0.008055$$

$$BEC = 0.05571$$

Weight: <None>

Min Conc: 0

207 [Pb] [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1442.31	0.0002	P	7.9
2	☐	1.000	0.765	20903.62	0.0030	P	1.1
3	☐	250.000	245.904	6320275.88	0.8855	A	2.0
4	☐	625.000	611.959	15461903.38	2.2033	A	1.4
5	☐	1250.000	1226.775	30256706.22	4.4167	A	1.0
6	☐	2500.000	2453.789	59436154.12	8.8340	A	1.0
7	☐	5000.000	5030.747	118049054.91	18.1113	A	1.4
8	☐			50071.86	0.0092	P	0.7

$$y = 0.0036 * x + 2.0640E-004$$

$$R = 0.9999$$

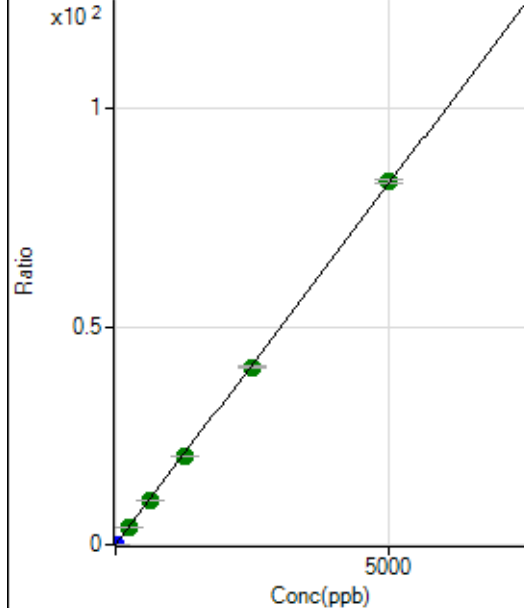
$$DL = 0.01363$$

$$BEC = 0.05733$$

Weight: <None>

Min Conc: 0

208 Pb [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	6508.49	0.0009	P	2.0
2	☐	1.000	0.765	96053.49	0.0136	P	0.4
3	☐	250.000	244.268	28887408.46	4.0471	A	1.5
4	☐	625.000	612.483	71201880.05	10.1463	A	1.4
5	☐	1250.000	1226.169	139145091.54	20.3115	A	0.6
6	☐	2500.000	2458.720	274019319.81	40.7279	A	1.1
7	☐	5000.000	5028.449	542899316.36	83.2936	A	1.0
8	☐			230257.17	0.0424	P	0.7

$$y = 0.0166 * x + 9.3143E-004$$

$$R = 0.9999$$

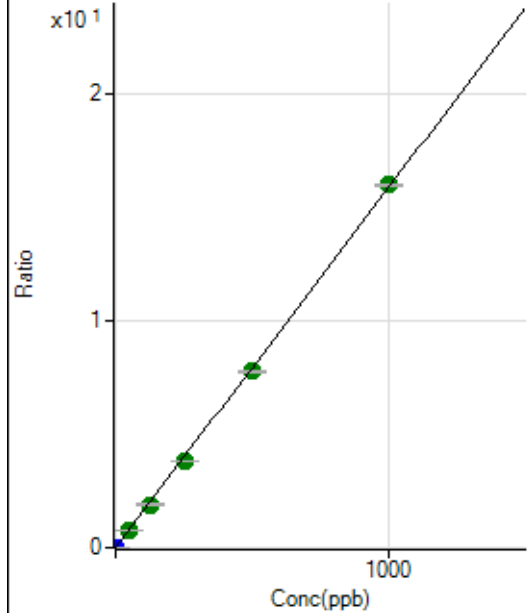
$$DL = 0.00338$$

$$BEC = 0.05623$$

Weight: <None>

Min Conc: 0

238 U [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	270.01	0.0000	P	6.1
2	☐	1.000	0.872	97797.92	0.0139	P	0.5
3	☐	50.000	47.913	5417214.05	0.7590	A	2.1
4	☐	125.000	120.098	13350135.92	1.9024	A	1.5
5	☐	250.000	242.757	26342927.66	3.8453	A	0.2
6	☐	500.000	489.501	52168500.33	7.7537	A	0.6
7	☐	1000.000	1007.777	104041460.67	15.9632	A	0.7
8	☐			3933.99	0.0007	P	11.5

$$y = 0.0158 * x + 3.8630E-005$$

$$R = 0.9999$$

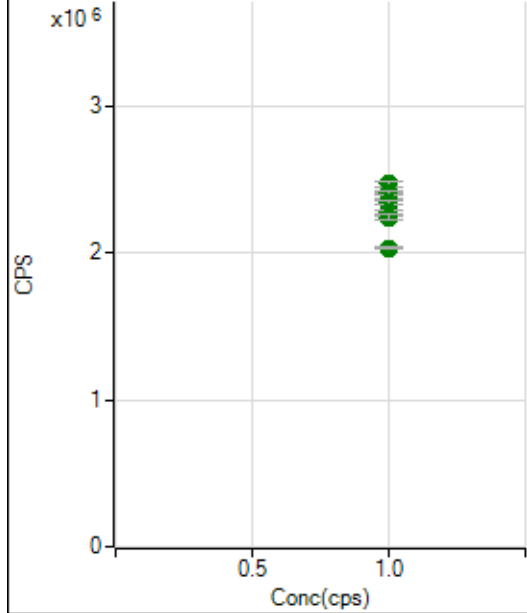
$$DL = 0.0004451$$

$$BEC = 0.002439$$

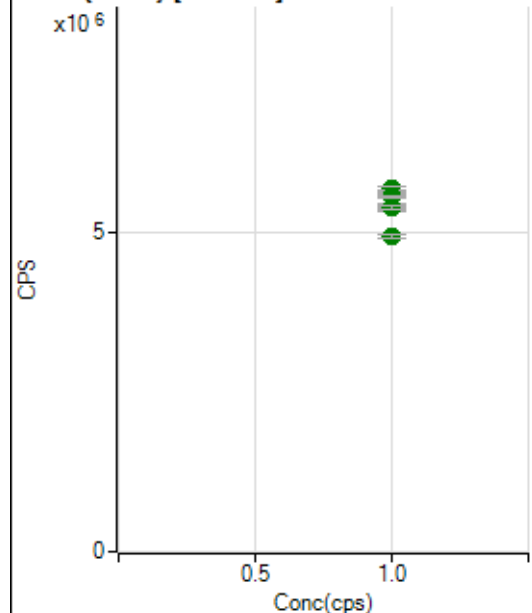
Weight: <None>

Min Conc: 0

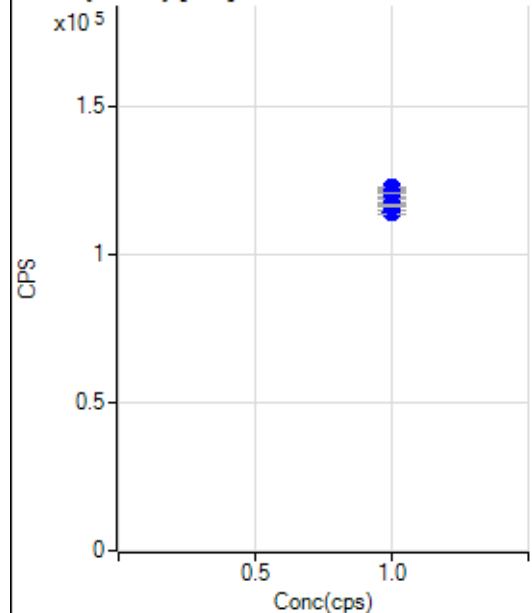
6 Li (ISTD) [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		2389202.00		A	1.9
2	☐	1.000		2424700.09		A	1.5
3	☐	1.000		2466607.85		A	1.6
4	☐	1.000		2405050.44		A	1.1
5	☐	1.000		2340505.62		A	1.2
6	☐	1.000		2271850.03		A	1.7
7	☐	1.000		2239370.66		A	2.0
8	☐	1.000		2030110.36		A	0.6

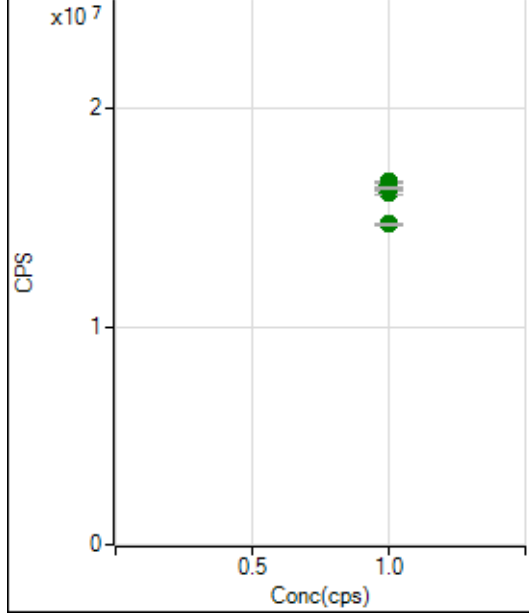
45 Sc (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		5593084.85		A	1.4
2	☐	1.000		5675688.46		A	0.9
3	☐	1.000		5563537.14		A	0.8
4	☐	1.000		5555228.46		A	0.5
5	☐	1.000		5384720.93		A	2.0
6	☐	1.000		5377586.66		A	0.5
7	☐	1.000		5391551.20		A	0.8
8	☐	1.000		4927708.60		A	1.0

45 Sc (ISTD) [He]

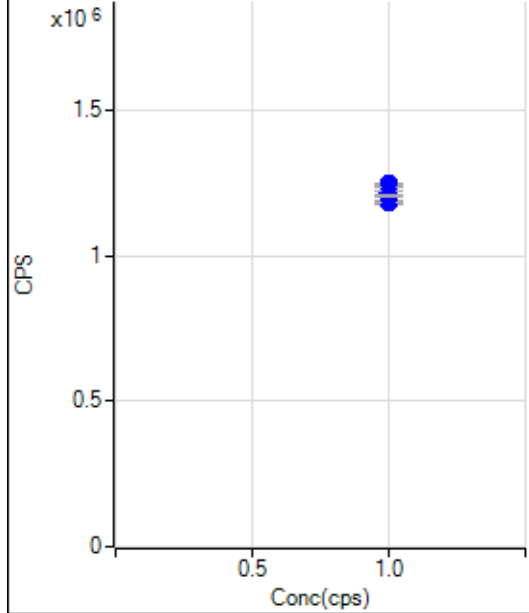
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		122552.16		P	0.5
2	☐	1.000		120983.91		P	0.5
3	☐	1.000		119301.97		P	0.7
4	☐	1.000		117042.71		P	0.4
5	☐	1.000		114310.85		P	0.7
6	☐	1.000		116826.78		P	0.7
7	☐	1.000		120522.90		P	0.0
8	☐	1.000		116517.38		P	0.2

89 Y (ISTD) [No Gas]

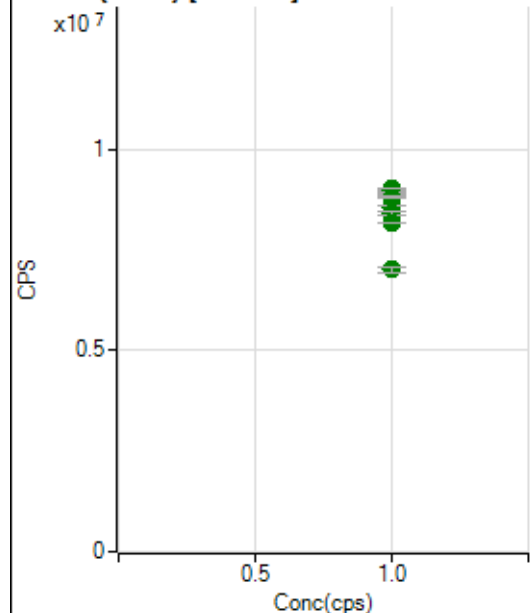


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		16497634.20		A	0.7
2	☐	1.000		16648311.14		A	0.7
3	☐	1.000		16651874.33		A	0.7
4	☐	1.000		16487750.03		A	1.2
5	☐	1.000		16146693.79		A	0.9
6	☐	1.000		16315845.59		A	0.8
7	☐	1.000		16392631.28		A	0.7
8	☐	1.000		14731757.00		A	0.6

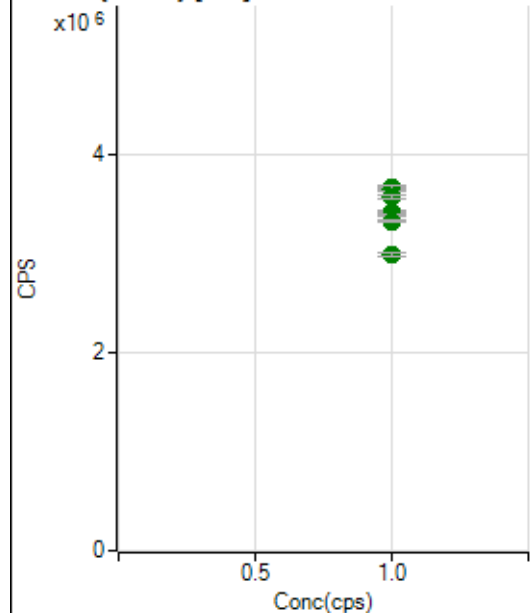
89 Y (ISTD) [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		1234377.71		P	0.4
2	☐	1.000		1245551.91		P	0.5
3	☐	1.000		1234725.01		P	0.2
4	☐	1.000		1214118.54		P	0.8
5	☐	1.000		1182099.20		P	0.8
6	☐	1.000		1185538.53		P	0.3
7	☐	1.000		1184643.87		P	0.6
8	☐	1.000		1204677.01		P	0.5

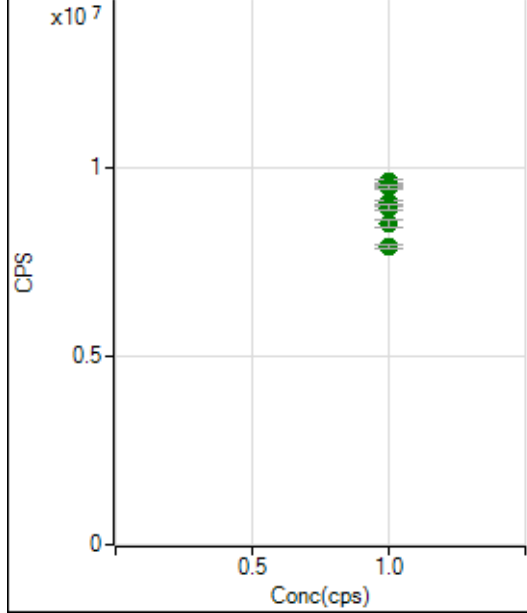
103 Rh (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		8970779.87		A	1.7
2	☐	1.000		9012420.14		A	0.3
3	☐	1.000		8973363.62		A	0.7
4	☐	1.000		8793362.92		A	0.5
5	☐	1.000		8527231.61		A	1.6
6	☐	1.000		8405045.22		A	1.5
7	☐	1.000		8162300.43		A	0.2
8	☐	1.000		7005283.72		A	1.9

103 Rh (ISTD) [He]

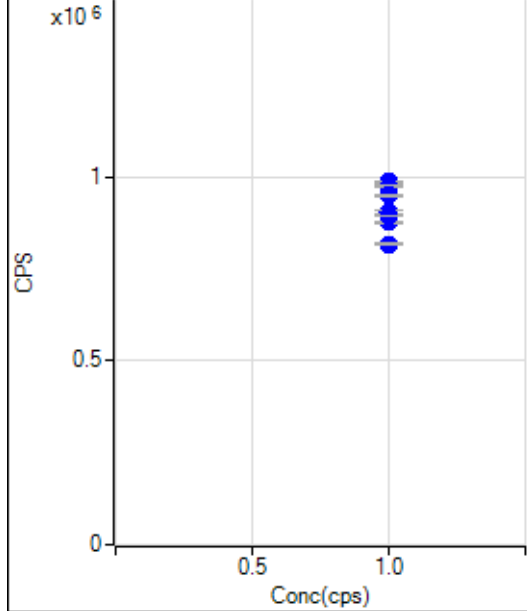
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3660554.18		A	0.4
2	☐	1.000		3638623.18		A	0.9
3	☐	1.000		3651125.99		A	1.4
4	☐	1.000		3569592.07		A	0.9
5	☐	1.000		3418805.40		A	0.8
6	☐	1.000		3388496.45		A	0.6
7	☐	1.000		3320614.71		A	0.6
8	☐	1.000		2991865.34		A	1.0

115 In (ISTD) [No Gas]

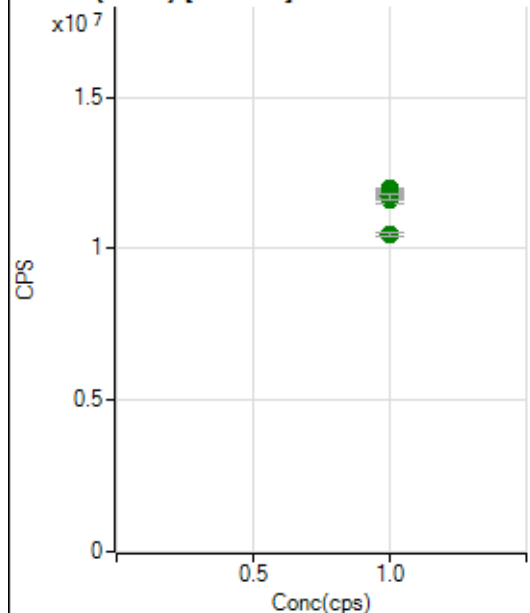


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		9476207.02		A	0.2
2	☐	1.000		9613511.38		A	1.1
3	☐	1.000		9501736.34		A	0.7
4	☐	1.000		9461973.82		A	0.9
5	☐	1.000		9068838.11		A	1.7
6	☐	1.000		8942063.13		A	1.2
7	☐	1.000		8510599.63		A	2.0
8	☐	1.000		7905586.88		A	0.9

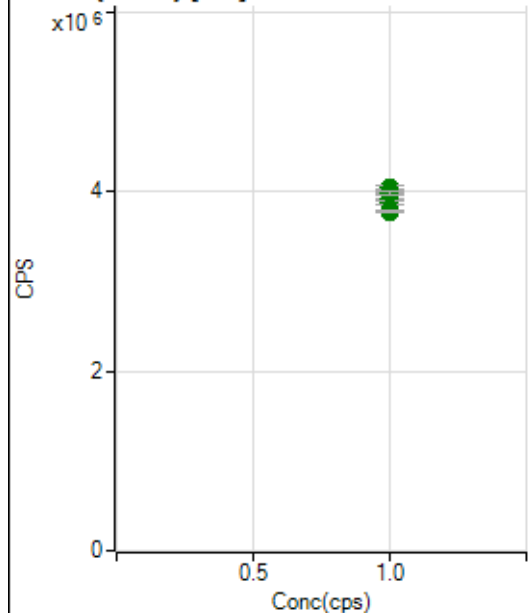
115 In (ISTD) [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		979352.26		P	0.4
2	☐	1.000		985266.06		P	0.6
3	☐	1.000		973452.77		P	0.6
4	☐	1.000		948569.89		P	0.4
5	☐	1.000		903554.31		P	0.7
6	☐	1.000		876938.26		P	0.6
7	☐	1.000		816692.93		P	0.4
8	☐	1.000		891945.07		P	0.1

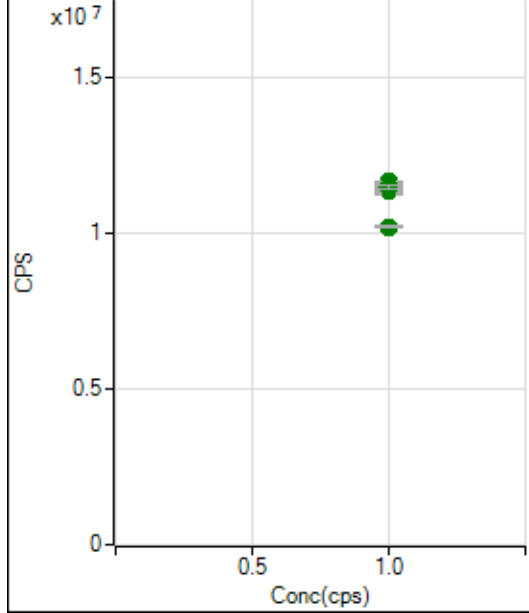
159 Tb (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		11599236.22		A	1.6
2	☐	1.000		11831881.77		A	0.1
3	☐	1.000		11970443.99		A	0.7
4	☐	1.000		11897871.77		A	1.0
5	☐	1.000		11716021.49		A	1.7
6	☐	1.000		11778904.69		A	1.1
7	☐	1.000		11721164.83		A	1.7
8	☐	1.000		10474588.04		A	1.7

159 Tb (ISTD) [He]

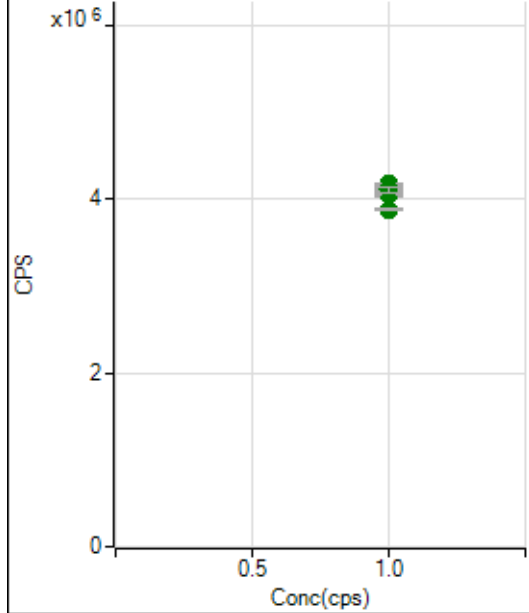
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3914505.29		A	0.3
2	☐	1.000		3969999.18		A	0.9
3	☐	1.000		4036436.12		A	0.9
4	☐	1.000		3991495.98		A	0.6
5	☐	1.000		3873220.98		A	0.6
6	☐	1.000		3921378.93		A	1.4
7	☐	1.000		3975145.32		A	1.4
8	☐	1.000		3774088.66		A	0.9

165 Ho (ISTD) [No Gas]

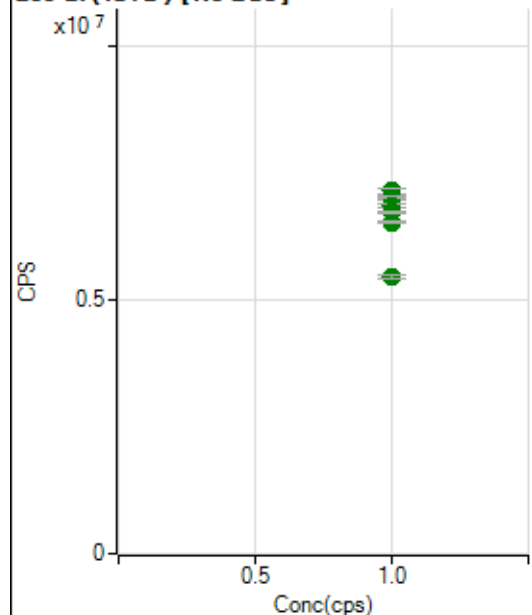


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		11421543.86		A	1.4
2	☐	1.000		11376100.11		A	1.7
3	☐	1.000		11588963.02		A	1.6
4	☐	1.000		11664955.66		A	0.6
5	☐	1.000		11414491.36		A	0.8
6	☐	1.000		11414932.05		A	1.7
7	☐	1.000		11491929.00		A	0.9
8	☐	1.000		10228819.78		A	0.3

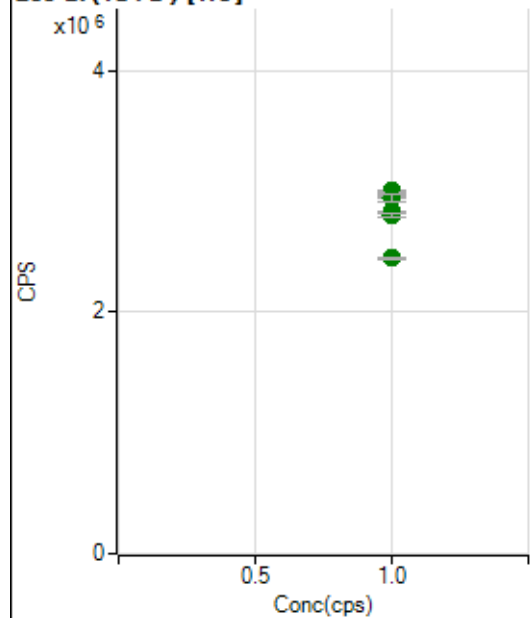
165 Ho (ISTD) [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		4079226.99		A	0.9
2	☐	1.000		4146833.03		A	1.3
3	☐	1.000		4178727.37		A	0.7
4	☐	1.000		4100413.90		A	0.4
5	☐	1.000		4055293.86		A	1.2
6	☐	1.000		4066167.51		A	0.2
7	☐	1.000		4111613.83		A	1.5
8	☐	1.000		3885521.36		A	0.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		6987400.24		A	0.8
2	☐	1.000		7058014.89		A	0.2
3	☐	1.000		7138734.06		A	1.3
4	☐	1.000		7017922.33		A	0.7
5	☐	1.000		6850607.47		A	0.7
6	☐	1.000		6728362.40		A	0.6
7	☐	1.000		6517730.11		A	0.5
8	☐	1.000		5436372.49		A	1.2

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		2948882.73		A	0.5
2	☐	1.000		3001505.54		A	0.5
3	☐	1.000		2991787.84		A	0.4
4	☐	1.000		2942745.89		A	2.1
5	☐	1.000		2831284.58		A	0.2
6	☐	1.000		2827434.30		A	0.2
7	☐	1.000		2796395.41		A	0.9
8	☐	1.000		2446450.61		A	0.7

US EPA Tune Check Report

Reviewed By:moh
On:4/4/2025 3:37:
PM
Inst Id :P8
LB :LB135261

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8040125-MS.b
Acq. Date-Time 2025-04-01 10:03:51
Report Comment ---
Instrument Name G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		63991	639913.81			1.811	5.000
24		214313	2143131.85			1.964	5.000
25		29313	293130.36			1.630	5.000
26		33581	335813.82			1.514	5.000
59		308521	3085207.72			1.243	5.000
113		40060	400597.98			0.487	5.000
115		490073	4900726.07			1.248	5.000
206		108041	1080406.79			0.366	5.000
207		88338	883378.04			0.812	5.000
208		223079	2230788.94			1.150	5.000
220		1	8.70			17.049	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	65599	64783	63410	63374	62791
24	217131	219897	213834	210075	210629
25	29745	29895	29046	28803	29076
26	34021	34234	33305	33128	33218
59	311555	312585	307645	307959	302860
113	40081	40369	40050	39949	39850
115	486547	500450	488296	484934	490136
206	108267	108245	107341	108238	108112
207	88783	88708	87147	88184	88867
208	226509	224392	220739	220378	223377

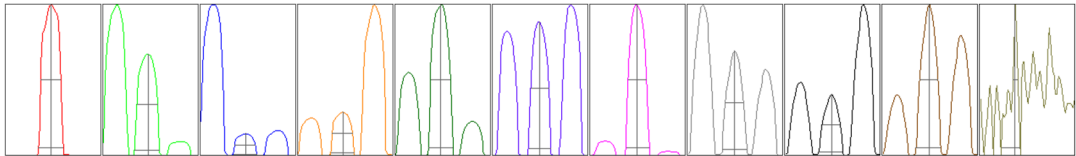
US EPA Tune Check Report

Reviewed By:moh
On:4/4/2025 3:37:
PM
Inst Id :P8
LB :LB135261

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	1	1	1	1	1

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	106808.01	8.95	8.90 - 9.10	
24	339512.90	23.95	23.90 - 24.10	
25	47368.41	24.95	24.90 - 25.10	
26	55122.92	25.95	25.90 - 26.10	
59	518342.23	58.95	58.90 - 59.10	
113	74598.22	113.00	112.90 - 113.10	
115	897563.28	115.00	114.90 - 115.10	
206	202125.74	206.00	205.90 - 206.10	
207	166859.17	207.00	206.90 - 207.10	
208	416503.98	208.00	207.90 - 208.10	
220	1.60	219.65	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.63	0.780	0.900	
24	0.67	0.789	0.900	
25	0.66	0.742	0.900	
26	0.65	0.742	0.900	
59	0.62	0.782	0.900	
113	0.56	0.692	0.900	
115	0.57	0.732	0.900	
206	0.57	0.780	0.900	
207	0.57	0.774	0.900	
208	0.57	0.778	0.900	
220	0.17	0.584		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.72 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

Reviewed By:moh
On:4/4/2025 3:37:
PM
Inst Id :P8
LB :LB135261

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.5 V	Deflect	13.0 V
Extract 2	-250.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-95 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	170 V		

QP Parameters

Mass Gain	105	Axis Gain	0.9965	QP Bias	-4.0 V
Mass Offset	126	Axis Offset	0.03		

Hardware Settings

Torch

Torch H	0.5 mm	Torch V	-0.2 mm
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EM

Discriminator	4.5 mV	Analog HV	2225 V	Pulse HV	928 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		67964	679638.73			1.348	
89		58602	586023.99			0.734	
205		74812	748119.12			1.074	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	66379	67990	68634	68423	68393
89	57921	58548	58893	58614	59036
205	73411	74946	75372	75023	75307

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.72 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.5 V	Deflect	2.4 V
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US EPA Tune Check Report

Reviewed By:moh
On:4/4/2025 3:37:
PM
Inst Id :P8
LB :LB135261

Extract 2	-250.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-95 V	Cell Exit	-70 V		
Cell Parameters					
Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		
QP Parameters					
Mass Gain	105	Axis Gain	0.9965	QP Bias	-13.0 V
Mass Offset	126	Axis Offset	0.03		
Hardware Settings					
Torch					
Torch H	0.5 mm	Torch V	-0.2 mm		
EM					
Discriminator	4.5 mV	Analog HV	2225 V	Pulse HV	928 V

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P8
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:12:58 DataFile Name : 004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.20	0.01	0.19	0.00	N/A	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	N/A	ppb
Arsenic	75-2	0.00	0.00	0.00	0.00	N/A	ppb
Barium	135-1	0.00	0.00	0.00	0.00	N/A	ppb
Barium	137-1	0.00	0.00	0.00	0.00	N/A	ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	N/A	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.00	0.00	0.00	N/A	ppb
Cadmium	106-1	-0.29	-0.08	0.37	0.00	N/A	ppb
Cadmium	111-1	-0.02	-0.01	0.03	0.00	N/A	ppb
Calcium	43-1	1.01	-0.50	-0.51	0.00	N/A	ppb
Calcium	44-1	-0.04	-0.51	0.55	0.00	N/A	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.02	-0.01	0.02	0.00	N/A	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	N/A	ppb
Copper	63-2	-0.04	-0.01	0.04	0.00	N/A	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				100		%
Indium	115-2				100		%
Iron	54-2	-0.28	0.08	0.20	0.00	N/A	ppb
Iron	56-2	-0.21	-0.02	0.23	0.00	N/A	ppb
Iron	57-2	-0.65	0.27	0.38	0.00	N/A	ppb
Krypton	83-1						cps
Lead	206-1	0.00	0.00	0.00	0.00	N/A	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P8
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:12:58 DataFile Name : 004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.00	0.00	0.00	0.00	N/A	ppb
Lead	208-1	0.00	0.00	0.00	0.00	N/A	ppb
Lithium	6-1				100		%
Magnesium	24-2	-0.18	0.08	0.10	0.00	N/A	ppb
Manganese	55-2	0.01	0.02	-0.03	0.00	N/A	ppb
Molybdenum	94-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	N/A	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	N/A	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.01	0.00	0.01	0.00	N/A	ppb
Phosphorus	31-2	-108.64	-108.01	-108.19	-108.28		ppb
Potassium	39-2	0.52	-0.08	-0.44	0.00	N/A	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	0.05	-0.12	0.08	0.00	N/A	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.43	0.58	-0.15	0.00	N/A	ppb
Silicon	28-1	-0.01	-0.11	0.11	0.00	N/A	ppb
Silver	107-1	0.00	0.00	0.00	0.00	N/A	ppb
Silver	109-1	0.00	0.00	0.00	0.00	N/A	ppb
Sodium	23-2	-0.23	0.76	-0.53	0.00	N/A	ppb
Strontium	86-1	0.00	0.01	0.00	0.00	N/A	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	N/A	ppb
Sulfur	34-1	-32.84	-112.70	67.78	-25.92		ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.00	0.00	0.00	N/A	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	N/A	ppb
Tin	118-1	-0.01	0.01	0.00	0.00	N/A	ppb
Titanium	47-1	0.01	0.00	-0.01	0.00	N/A	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	N/A	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P8
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:12:58 DataFile Name : 004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	N/A	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	-0.11	0.00	0.11	0.00	N/A	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	N/A	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	N/A	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S2 Instrumnet Name : P8
Client Sample ID : S2 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:19:44 DataFile Name : 006CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19.99	17.84	14.94	17.59	14.41	ppb
Antimony	121-1	1.89	1.90	1.90	1.90	0.25	ppb
Arsenic	75-2	0.95	0.89	0.79	0.87	9.30	ppb
Barium	135-1	9.01	9.20	9.15	9.12	1.03	ppb
Barium	137-1	9.16	9.16	9.37	9.23	1.31	ppb
Beryllium	9-1	1.03	1.07	1.09	1.07	2.99	ppb
Bismuth	209-1				101		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	0.79	0.95	1.00	0.92	11.90	ppb
Cadmium	106-1	0.54	0.71	1.07	0.78	34.81	ppb
Cadmium	111-1	0.86	0.87	0.86	0.86	0.49	ppb
Calcium	43-1	471.61	474.88	475.84	474.11	0.47	ppb
Calcium	44-1	473.37	467.32	478.95	473.22	1.23	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.82	1.70	1.44	1.65	11.66	ppb
Cobalt	59-2	1.00	0.88	0.78	0.89	12.22	ppb
Copper	63-2	1.82	1.69	1.48	1.66	10.16	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				102		%
Indium	115-1				101		%
Indium	115-2				101		%
Iron	54-2	52.51	45.20	39.63	45.78	14.10	ppb
Iron	56-2	51.63	44.78	39.10	45.17	13.90	ppb
Iron	57-2	51.37	43.35	40.93	45.22	12.08	ppb
Krypton	83-1						cps
Lead	206-1	0.77	0.78	0.77	0.77	1.12	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S2 Instrumnet Name : P8
Client Sample ID : S2 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:19:44 DataFile Name : 006CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.76	0.78	0.76	0.77	1.15	ppb
Lead	208-1	0.76	0.77	0.77	0.77	0.44	ppb
Lithium	6-1				101		%
Magnesium	24-2	514.28	454.18	393.56	454.01	13.30	ppb
Manganese	55-2	1.24	0.92	0.81	0.99	22.29	ppb
Molybdenum	94-1	5.57	5.52	5.51	5.53	0.57	ppb
Molybdenum	95-1	4.67	4.58	4.70	4.65	1.24	ppb
Molybdenum	96-1	4.69	4.64	4.65	4.66	0.58	ppb
Molybdenum	97-1	4.62	4.54	4.66	4.61	1.29	ppb
Molybdenum	98-1	4.62	4.57	4.60	4.60	0.56	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.74	0.70	0.68	0.70	4.73	ppb
Phosphorus	31-2	142.37	94.87	87.59	108.28	27.47	ppb
Potassium	39-2	449.98	429.47	394.81	424.75	6.57	ppb
Rhodium	103-1				100		%
Rhodium	103-2				99		%
Scandium	45-1				101		%
Scandium	45-2				99		%
Selenium	82-1	4.70	4.79	4.72	4.74	1.05	ppb
Selenium	77-2	3.44	2.49	4.41	3.45	27.74	ppb
Selenium	78-2	4.83	3.28	3.96	4.02	19.33	ppb
Silicon	28-1	1.92	1.84	2.02	1.92	4.54	ppb
Silver	107-1	0.99	1.00	1.02	1.01	1.67	ppb
Silver	109-1	1.01	1.02	1.02	1.01	0.65	ppb
Sodium	23-2	508.47	475.38	428.71	470.85	8.51	ppb
Strontium	86-1	0.95	0.95	0.93	0.94	0.93	ppb
Strontium	88-1	0.95	0.93	0.94	0.94	1.01	ppb
Sulfur	34-1	10.63	-10.60	77.74	25.92	177.90	ppb
Terbium	159-1				102		%
Terbium	159-2				101		%
Thallium	203-1	0.88	0.89	0.89	0.88	0.65	ppb
Thallium	205-1	0.89	0.89	0.89	0.89	0.10	ppb
Tin	118-1	5.28	5.26	5.24	5.26	0.39	ppb
Titanium	47-1	4.85	4.92	4.95	4.91	0.95	ppb
Uranium	238-1	0.87	0.88	0.87	0.87	0.54	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S2 Instrumnet Name : P8
Client Sample ID : S2 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:19:44 DataFile Name : 006CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	4.70	4.17	3.59	4.16	13.32	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				101		%
Zinc	66-2	4.40	3.99	3.78	4.06	7.71	ppb
Zirconium	90-1	0.95	0.97	0.96	0.96	1.22	ppb
Zirconium	91-1	0.96	0.96	0.96	0.96	0.35	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S3 Instrumnet Name : P8
Client Sample ID : S3 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:23:06 DataFile Name : 007CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1044.36	1042.74	1014.11	1033.74	1.65	ppb
Antimony	121-1	51.26	51.67	50.29	51.07	1.39	ppb
Arsenic	75-2	50.48	49.86	47.27	49.20	3.46	ppb
Barium	135-1	257.11	252.54	251.43	253.69	1.19	ppb
Barium	137-1	254.50	256.86	250.17	253.84	1.34	ppb
Beryllium	9-1	54.06	53.74	55.42	54.41	1.63	ppb
Bismuth	209-1				102		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	51.13	53.62	52.10	52.28	2.40	ppb
Cadmium	106-1	51.64	52.58	51.80	52.00	0.97	ppb
Cadmium	111-1	51.56	51.24	50.97	51.26	0.58	ppb
Calcium	43-1	5240.45	5330.20	5326.42	5299.02	0.96	ppb
Calcium	44-1	5114.29	5147.51	5076.39	5112.73	0.70	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	52.05	51.96	49.79	51.27	2.50	ppb
Cobalt	59-2	53.06	52.77	51.36	52.40	1.73	ppb
Copper	63-2	548.56	548.08	534.14	543.59	1.51	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				102		%
Indium	115-1				100		%
Indium	115-2				99		%
Iron	54-2	2726.89	2687.18	2617.68	2677.25	2.06	ppb
Iron	56-2	2739.47	2738.21	2621.11	2699.60	2.52	ppb
Iron	57-2	2680.69	2668.16	2597.71	2648.85	1.69	ppb
Krypton	83-1						cps
Lead	206-1	241.19	246.54	245.86	244.53	1.19	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S3 Instrumnet Name : P8
Client Sample ID : S3 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:23:06 DataFile Name : 007CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	243.32	242.74	251.65	245.90	2.03	ppb
Lead	208-1	241.22	243.43	248.16	244.27	1.45	ppb
Lithium	6-1				103		%
Magnesium	24-2	5529.81	5403.74	5383.31	5438.96	1.46	ppb
Manganese	55-2	538.80	536.31	508.96	528.03	3.14	ppb
Molybdenum	94-1	506.52	506.59	507.75	506.95	0.14	ppb
Molybdenum	95-1	510.52	500.41	503.52	504.82	1.03	ppb
Molybdenum	96-1	516.16	507.16	505.38	509.57	1.13	ppb
Molybdenum	97-1	512.82	509.37	507.69	509.96	0.51	ppb
Molybdenum	98-1	508.04	504.70	514.56	509.10	0.98	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	52.46	52.66	51.20	52.11	1.51	ppb
Phosphorus	31-2	967.36	995.27	882.65	948.43	6.18	ppb
Potassium	39-2	2515.28	2514.75	2486.38	2505.47	0.66	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				99		%
Scandium	45-2				97		%
Selenium	82-1	51.97	53.01	52.41	52.46	1.00	ppb
Selenium	77-2	51.07	46.66	53.80	50.51	7.13	ppb
Selenium	78-2	49.47	49.48	51.60	50.18	2.45	ppb
Silicon	28-1	52.34	53.68	53.68	53.23	1.46	ppb
Silver	107-1	53.59	53.98	53.52	53.70	0.46	ppb
Silver	109-1	53.70	55.44	55.03	54.72	1.67	ppb
Sodium	23-2	5441.56	5346.84	5456.85	5415.08	1.10	ppb
Strontium	86-1	49.05	49.15	49.08	49.09	0.11	ppb
Strontium	88-1	49.97	50.41	51.42	50.60	1.47	ppb
Sulfur	34-1	1046.65	1158.76	1107.10	1104.17	5.08	ppb
Terbium	159-1				103		%
Terbium	159-2				103		%
Thallium	203-1	47.21	49.32	49.65	48.73	2.71	ppb
Thallium	205-1	47.94	50.04	49.63	49.20	2.26	ppb
Tin	118-1	50.15	52.25	51.30	51.23	2.05	ppb
Titanium	47-1	508.77	516.73	503.51	509.67	1.31	ppb
Uranium	238-1	46.81	48.10	48.83	47.91	2.13	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S3 Instrumnet Name : P8
Client Sample ID : S3 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:23:06 DataFile Name : 007CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	51.72	51.70	49.79	51.07	2.18	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				100		%
Zinc	66-2	525.48	523.55	508.96	519.33	1.74	ppb
Zirconium	90-1	50.52	49.87	49.26	49.89	1.26	ppb
Zirconium	91-1	49.25	48.40	48.22	48.62	1.13	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S4 Instrumnet Name : P8
Client Sample ID : S4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:26:06 DataFile Name : 008CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2576.07	2570.15	2561.94	2569.39	0.28	ppb
Antimony	121-1	125.66	126.55	125.93	126.05	0.36	ppb
Arsenic	75-2	124.17	124.32	122.91	123.80	0.63	ppb
Barium	135-1	618.58	638.76	609.20	622.18	2.43	ppb
Barium	137-1	607.51	644.47	628.59	626.86	2.96	ppb
Beryllium	9-1	134.02	135.16	132.09	133.76	1.16	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	129.23	133.03	130.36	130.87	1.49	ppb
Cadmium	106-1	129.34	130.54	127.55	129.14	1.17	ppb
Cadmium	111-1	126.31	128.25	127.44	127.33	0.76	ppb
Calcium	43-1	12940.97	13049.55	12792.40	12927.64	1.00	ppb
Calcium	44-1	12762.05	12642.49	12576.88	12660.47	0.74	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	128.92	128.09	128.62	128.54	0.33	ppb
Cobalt	59-2	136.54	133.19	133.89	134.54	1.31	ppb
Copper	63-2	1353.83	1358.33	1355.73	1355.97	0.17	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				101		%
Indium	115-1				100		%
Indium	115-2				97		%
Iron	54-2	7003.16	6820.41	6919.64	6914.40	1.32	ppb
Iron	56-2	6738.55	6793.93	6816.20	6782.89	0.59	ppb
Iron	57-2	6576.27	6594.89	6688.27	6619.81	0.91	ppb
Krypton	83-1						cps
Lead	206-1	610.54	613.62	622.85	615.67	1.04	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S4 Instrumnet Name : P8
Client Sample ID : S4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:26:06 DataFile Name : 008CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	604.21	620.74	610.92	611.96	1.36	ppb
Lead	208-1	603.79	620.57	613.09	612.48	1.37	ppb
Lithium	6-1				101		%
Magnesium	24-2	13199.66	13230.72	13384.40	13271.59	0.75	ppb
Manganese	55-2	1326.35	1307.10	1323.23	1318.89	0.78	ppb
Molybdenum	94-1	1251.62	1231.13	1281.03	1254.59	2.00	ppb
Molybdenum	95-1	1254.36	1237.76	1266.95	1253.02	1.17	ppb
Molybdenum	96-1	1246.75	1258.65	1262.76	1256.05	0.66	ppb
Molybdenum	97-1	1259.58	1255.54	1270.82	1261.98	0.63	ppb
Molybdenum	98-1	1273.06	1258.56	1293.28	1274.97	1.37	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	128.77	129.50	129.85	129.38	0.43	ppb
Phosphorus	31-2	2544.21	2543.53	2575.41	2554.38	0.71	ppb
Potassium	39-2	6338.31	6295.83	6262.16	6298.77	0.61	ppb
Rhodium	103-1				98		%
Rhodium	103-2				98		%
Scandium	45-1				99		%
Scandium	45-2				96		%
Selenium	82-1	126.50	129.87	130.54	128.97	1.68	ppb
Selenium	77-2	128.45	126.73	116.85	124.01	5.05	ppb
Selenium	78-2	128.31	128.93	119.96	125.73	3.98	ppb
Silicon	28-1	129.34	129.63	129.95	129.64	0.24	ppb
Silver	107-1	130.29	133.75	129.13	131.06	1.83	ppb
Silver	109-1	131.46	133.75	131.17	132.13	1.07	ppb
Sodium	23-2	13365.27	13458.01	13360.50	13394.60	0.41	ppb
Strontium	86-1	123.68	127.24	127.40	126.10	1.67	ppb
Strontium	88-1	124.64	126.38	126.51	125.85	0.83	ppb
Sulfur	34-1	2064.39	1879.79	1967.68	1970.62	4.69	ppb
Terbium	159-1				103		%
Terbium	159-2				102		%
Thallium	203-1	120.88	123.72	126.70	123.76	2.35	ppb
Thallium	205-1	119.65	121.24	123.55	121.48	1.62	ppb
Tin	118-1	126.11	129.35	126.42	127.29	1.40	ppb
Titanium	47-1	1233.27	1255.48	1234.21	1240.99	1.01	ppb
Uranium	238-1	118.34	121.91	120.05	120.10	1.49	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S4 Instrumnet Name : P8
Client Sample ID : S4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:26:06 DataFile Name : 008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	128.07	127.82	129.70	128.53	0.79	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				98		%
Zinc	66-2	1341.24	1349.54	1361.83	1350.87	0.77	ppb
Zirconium	90-1	122.53	122.91	125.24	123.56	1.19	ppb
Zirconium	91-1	125.53	123.04	127.01	125.19	1.60	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S5 Instrumnet Name : P8
Client Sample ID : S5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:28:57 DataFile Name : 009CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5065.94	5129.07	5125.20	5106.74	0.69	ppb
Antimony	121-1	242.88	247.07	250.05	246.67	1.46	ppb
Arsenic	75-2	247.75	251.04	248.74	249.18	0.68	ppb
Barium	135-1	1228.04	1234.58	1262.31	1241.64	1.47	ppb
Barium	137-1	1210.59	1234.12	1271.74	1238.82	2.49	ppb
Beryllium	9-1	257.53	251.47	259.23	256.07	1.59	ppb
Bismuth	209-1				98		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	251.01	255.32	263.79	256.71	2.53	ppb
Cadmium	106-1	252.70	254.98	260.83	256.17	1.64	ppb
Cadmium	111-1	259.15	255.91	263.03	259.36	1.37	ppb
Calcium	43-1	25006.10	25467.29	25863.44	25445.61	1.69	ppb
Calcium	44-1	25182.26	25746.69	25225.81	25384.92	1.24	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	258.89	260.19	269.64	262.90	2.23	ppb
Cobalt	59-2	266.26	265.51	264.70	265.49	0.29	ppb
Copper	63-2	2653.29	2680.16	2705.90	2679.78	0.98	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				99		%
Indium	115-1				96		%
Indium	115-2				92		%
Iron	54-2	13501.85	13596.31	13697.42	13598.53	0.72	ppb
Iron	56-2	13260.30	13348.51	13518.69	13375.83	0.98	ppb
Iron	57-2	13474.12	13647.32	13619.46	13580.30	0.68	ppb
Krypton	83-1						cps
Lead	206-1	1210.59	1239.22	1218.83	1222.88	1.21	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S5 Instrumnet Name : P8
Client Sample ID : S5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:28:57 DataFile Name : 009CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1215.95	1239.44	1224.94	1226.78	0.97	ppb
Lead	208-1	1218.71	1234.19	1225.61	1226.17	0.63	ppb
Lithium	6-1				98		%
Magnesium	24-2	26033.33	26557.57	26455.63	26348.85	1.05	ppb
Manganese	55-2	2573.90	2601.24	2626.95	2600.70	1.02	ppb
Molybdenum	94-1	2483.72	2503.38	2506.17	2497.76	0.49	ppb
Molybdenum	95-1	2482.13	2515.70	2489.25	2495.70	0.71	ppb
Molybdenum	96-1	2503.01	2530.49	2518.45	2517.32	0.55	ppb
Molybdenum	97-1	2546.37	2510.95	2532.55	2529.95	0.71	ppb
Molybdenum	98-1	2552.70	2519.84	2552.51	2541.68	0.74	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	253.05	254.31	254.67	254.01	0.33	ppb
Phosphorus	31-2	5190.33	5227.56	5313.39	5243.76	1.20	ppb
Potassium	39-2	12289.14	12409.10	12600.13	12432.79	1.26	ppb
Rhodium	103-1				95		%
Rhodium	103-2				93		%
Scandium	45-1				96		%
Scandium	45-2				93		%
Selenium	82-1	256.84	256.87	253.42	255.71	0.78	ppb
Selenium	77-2	249.62	256.08	257.35	254.35	1.63	ppb
Selenium	78-2	238.68	245.07	253.40	245.72	3.01	ppb
Silicon	28-1	250.77	255.53	259.48	255.26	1.71	ppb
Silver	107-1	254.12	259.23	265.34	259.56	2.16	ppb
Silver	109-1	251.28	257.91	261.36	256.85	2.00	ppb
Sodium	23-2	26202.56	26636.21	26414.55	26417.77	0.82	ppb
Strontium	86-1	254.60	253.19	258.58	255.46	1.09	ppb
Strontium	88-1	247.54	254.51	251.63	251.22	1.39	ppb
Sulfur	34-1	4531.35	4501.50	4721.18	4584.68	2.60	ppb
Terbium	159-1				101		%
Terbium	159-2				99		%
Thallium	203-1	240.65	238.54	241.40	240.20	0.62	ppb
Thallium	205-1	241.35	243.63	244.65	243.21	0.69	ppb
Tin	118-1	243.74	245.68	250.10	246.51	1.32	ppb
Titanium	47-1	2494.33	2538.45	2477.81	2503.53	1.25	ppb
Uranium	238-1	242.90	243.14	242.23	242.76	0.19	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S5 Instrumnet Name : P8
Client Sample ID : S5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:28:57 DataFile Name : 009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	258.56	257.82	263.76	260.05	1.25	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				96		%
Zinc	66-2	2611.90	2648.69	2655.78	2638.79	0.89	ppb
Zirconium	90-1	248.84	251.61	248.51	249.65	0.68	ppb
Zirconium	91-1	247.88	255.82	247.30	250.33	1.90	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S6 Instrumnet Name : P8
Client Sample ID : S6 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:31:45 DataFile Name : 010CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10063.73	9827.19	9761.76	9884.23	1.61	ppb
Antimony	121-1	508.46	499.77	487.24	498.49	2.14	ppb
Arsenic	75-2	498.85	498.71	495.98	497.85	0.33	ppb
Barium	135-1	2510.69	2509.35	2462.08	2494.04	1.11	ppb
Barium	137-1	2512.32	2521.76	2467.59	2500.56	1.16	ppb
Beryllium	9-1	497.77	514.21	506.43	506.14	1.62	ppb
Bismuth	209-1				96		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	507.08	508.25	499.85	505.06	0.90	ppb
Cadmium	106-1	510.34	510.77	498.43	506.51	1.38	ppb
Cadmium	111-1	518.05	514.74	502.25	511.68	1.63	ppb
Calcium	43-1	50611.59	51006.42	52066.87	51228.29	1.47	ppb
Calcium	44-1	50431.45	51073.34	51138.03	50880.94	0.77	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	512.73	504.90	511.08	509.57	0.81	ppb
Cobalt	59-2	508.62	504.77	510.38	507.93	0.56	ppb
Copper	63-2	5139.73	5098.32	5168.70	5135.58	0.69	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				100		%
Indium	115-1				94		%
Indium	115-2				90		%
Iron	54-2	25923.38	26338.08	26089.44	26116.96	0.80	ppb
Iron	56-2	26220.85	25698.45	25897.17	25938.82	1.02	ppb
Iron	57-2	26256.20	25692.81	25869.29	25939.43	1.11	ppb
Krypton	83-1						cps
Lead	206-1	2441.69	2468.95	2514.54	2475.06	1.49	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S6 Instrumnet Name : P8
Client Sample ID : S6 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:31:45 DataFile Name : 010CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2426.97	2459.34	2475.06	2453.79	1.00	ppb
Lead	208-1	2433.71	2455.87	2486.57	2458.72	1.08	ppb
Lithium	6-1				95		%
Magnesium	24-2	51908.79	50931.38	50708.26	51182.81	1.25	ppb
Manganese	55-2	5068.60	5030.39	5012.54	5037.18	0.57	ppb
Molybdenum	94-1	5028.78	5017.27	5017.67	5021.24	0.13	ppb
Molybdenum	95-1	5047.80	4981.22	4988.77	5005.93	0.73	ppb
Molybdenum	96-1	5036.84	4940.84	5006.83	4994.84	0.98	ppb
Molybdenum	97-1	5002.62	4969.61	5098.33	5023.52	1.33	ppb
Molybdenum	98-1	5052.96	4985.43	5097.02	5045.14	1.11	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	523.02	510.24	511.97	515.08	1.35	ppb
Phosphorus	31-2	10341.70	10055.08	10093.04	10163.27	1.53	ppb
Potassium	39-2	24678.60	24082.91	24097.21	24286.24	1.40	ppb
Rhodium	103-1				94		%
Rhodium	103-2				93		%
Scandium	45-1				96		%
Scandium	45-2				95		%
Selenium	82-1	511.89	508.69	509.73	510.10	0.32	ppb
Selenium	77-2	522.32	508.65	507.99	512.99	1.58	ppb
Selenium	78-2	500.23	487.17	484.46	490.62	1.72	ppb
Silicon	28-1	507.43	510.49	511.00	509.64	0.38	ppb
Silver	107-1	507.49	506.83	498.43	504.25	1.00	ppb
Silver	109-1	505.35	505.53	497.05	502.64	0.96	ppb
Sodium	23-2	52472.93	51636.88	51657.60	51922.47	0.92	ppb
Strontium	86-1	505.76	496.45	508.21	503.47	1.23	ppb
Strontium	88-1	503.46	498.94	504.60	502.33	0.60	ppb
Sulfur	34-1	9761.39	9891.12	9860.64	9837.72	0.69	ppb
Terbium	159-1				102		%
Terbium	159-2				100		%
Thallium	203-1	492.46	496.61	503.53	497.53	1.12	ppb
Thallium	205-1	490.52	491.76	502.72	495.00	1.36	ppb
Tin	118-1	506.38	510.78	489.40	502.19	2.25	ppb
Titanium	47-1	4995.25	5078.58	5021.52	5031.78	0.85	ppb
Uranium	238-1	486.93	488.61	492.96	489.50	0.64	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S6 Instrumnet Name : P8
Client Sample ID : S6 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:31:45 DataFile Name : 010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	504.50	502.41	507.32	504.74	0.49	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				96		%
Zinc	66-2	5207.67	5041.40	5115.83	5121.64	1.63	ppb
Zirconium	90-1	502.85	501.01	502.65	502.17	0.20	ppb
Zirconium	91-1	504.14	494.20	499.62	499.32	1.00	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S7 Instrumnet Name : P8
Client Sample ID : S7 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:34:30 DataFile Name : 011CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19195.26	19284.80	19518.02	19332.69	0.86	ppb
Antimony	121-1	1009.64	982.88	1011.69	1001.40	1.61	ppb
Arsenic	75-2	993.47	1003.94	1007.01	1001.47	0.71	ppb
Barium	135-1	5068.05	4901.37	5046.30	5005.24	1.81	ppb
Barium	137-1	5091.78	4907.61	5006.90	5002.09	1.84	ppb
Beryllium	9-1	1005.33	1007.28	969.69	994.10	2.13	ppb
Bismuth	209-1				93		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Cadmium	108-1	1011.87	976.76	996.20	994.94	1.77	ppb
Cadmium	106-1	999.64	979.27	1004.84	994.58	1.36	ppb
Cadmium	111-1	1000.34	974.23	999.83	991.47	1.51	ppb
Calcium	43-1	102360.75	100775.69	101135.22	101423.89	0.82	ppb
Calcium	44-1	101192.41	100516.86	102387.32	101365.53	0.93	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	990.47	980.07	1003.91	991.48	1.21	ppb
Cobalt	59-2	984.36	994.85	993.35	990.85	0.57	ppb
Copper	63-2	9845.53	9813.60	9956.38	9871.84	0.76	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				101		%
Indium	115-1				90		%
Indium	115-2				83		%
Iron	54-2	51839.42	51360.95	51610.87	51603.75	0.46	ppb
Iron	56-2	51040.29	50560.09	50053.11	50551.16	0.98	ppb
Iron	57-2	50707.52	50912.81	50741.57	50787.30	0.22	ppb
Krypton	83-1						cps
Lead	206-1	4953.26	5081.88	5026.93	5020.69	1.29	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S7 Instrumnet Name : P8
Client Sample ID : S7 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:34:30 DataFile Name : 011CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	4950.81	5081.04	5060.38	5030.75	1.39	ppb
Lead	208-1	4973.47	5066.06	5045.82	5028.45	0.97	ppb
Lithium	6-1				94		%
Magnesium	24-2	99480.51	97697.56	97954.26	98377.45	0.98	ppb
Manganese	55-2	9930.32	9930.32	9978.03	9946.22	0.28	ppb
Molybdenum	94-1	9987.42	9962.87	10016.77	9989.02	0.27	ppb
Molybdenum	95-1	10030.92	9901.55	10060.00	9997.49	0.84	ppb
Molybdenum	96-1	9938.49	10026.86	10025.71	9997.02	0.51	ppb
Molybdenum	97-1	10031.31	9928.86	9976.09	9978.76	0.51	ppb
Molybdenum	98-1	10064.70	9834.45	9991.16	9963.44	1.18	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	993.47	985.62	993.34	990.81	0.45	ppb
Phosphorus	31-2	20168.39	19688.49	19702.74	19853.21	1.38	ppb
Potassium	39-2	47822.09	47588.87	47368.95	47593.30	0.48	ppb
Rhodium	103-1				91		%
Rhodium	103-2				91		%
Scandium	45-1				96		%
Scandium	45-2				98		%
Selenium	82-1	997.79	979.33	1001.58	992.90	1.20	ppb
Selenium	77-2	973.56	998.59	1005.43	992.52	1.69	ppb
Selenium	78-2	993.53	1016.26	1007.20	1005.67	1.14	ppb
Silicon	28-1	1007.07	987.53	985.00	993.20	1.22	ppb
Silver	107-1	1010.91	966.57	1006.14	994.54	2.45	ppb
Silver	109-1	1007.66	979.39	1000.47	995.84	1.48	ppb
Sodium	23-2	100102.02	99719.54	100274.59	100032.05	0.28	ppb
Strontium	86-1	995.94	991.84	1002.64	996.81	0.55	ppb
Strontium	88-1	991.75	1002.12	1001.31	998.39	0.58	ppb
Sulfur	34-1	20464.87	19934.74	20338.20	20245.94	1.37	ppb
Terbium	159-1				101		%
Terbium	159-2				102		%
Thallium	203-1	987.17	1011.86	1012.69	1003.90	1.44	ppb
Thallium	205-1	990.88	1017.20	1005.95	1004.68	1.31	ppb
Tin	118-1	997.90	988.89	1011.50	999.43	1.14	ppb
Titanium	47-1	10151.99	9860.22	9939.40	9983.87	1.51	ppb
Uranium	238-1	1016.00	1005.68	1001.65	1007.78	0.73	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S7 Instrumnet Name : P8
Client Sample ID : S7 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:34:30 DataFile Name : 011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	985.26	997.25	1001.37	994.63	0.84	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				96		%
Zinc	66-2	9941.50	9879.60	9851.63	9890.91	0.46	ppb
Zirconium	90-1	1002.57	1004.35	990.64	999.19	0.75	ppb
Zirconium	91-1	1006.48	993.90	1000.53	1000.30	0.63	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S8 Instrumnet Name : P8
Client Sample ID : S8 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:37:21 DataFile Name : 012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	102057.84	98258.84	100096.21	100137.63	1.90	ppb
Antimony	121-1	0.46	0.43	0.43	0.44	3.63	ppb
Arsenic	75-2	0.62	0.51	0.50	0.55	12.66	ppb
Barium	135-1	1.89	1.88	1.92	1.90	1.03	ppb
Barium	137-1	1.95	1.94	1.97	1.96	0.77	ppb
Beryllium	9-1	0.08	0.06	0.06	0.07	17.66	ppb
Bismuth	209-1				78		%
Bismuth	209-2				83		%
Bromine	81-1						cps
Cadmium	108-1	0.31	0.29	0.35	0.32	9.01	ppb
Cadmium	106-1	-0.11	-0.18	0.03	-0.09		ppb
Cadmium	111-1	0.11	0.09	0.12	0.11	12.92	ppb
Calcium	43-1	493253.95	503990.57	501424.85	499556.46	1.12	ppb
Calcium	44-1	492375.60	503563.93	502903.79	499614.44	1.26	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	5.94	6.07	5.75	5.92	2.74	ppb
Cobalt	59-2	2.06	2.04	2.05	2.05	0.53	ppb
Copper	63-2	1.79	1.76	1.78	1.78	1.04	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				90		%
Holmium	165-2				95		%
Indium	115-1				83		%
Indium	115-2				91		%
Iron	54-2	250015.70	249041.90	249425.14	249494.25	0.20	ppb
Iron	56-2	251434.54	249737.61	248038.18	249736.78	0.68	ppb
Iron	57-2	251190.76	250939.24	246921.55	249683.85	0.96	ppb
Krypton	83-1						cps
Lead	206-1	2.51	2.49	2.53	2.51	0.75	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S8 Instrumnet Name : P8
Client Sample ID : S8 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:37:21 DataFile Name : 012CAL.S.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2.51	2.51	2.48	2.50	0.72	ppb
Lead	208-1	2.52	2.50	2.48	2.50	0.73	ppb
Lithium	6-1				85		%
Magnesium	24-2	505428.75	501023.15	493893.57	500115.15	1.16	ppb
Manganese	55-2	4.79	4.58	4.41	4.59	4.10	ppb
Molybdenum	94-1	1.95	1.92	1.84	1.90	2.97	ppb
Molybdenum	95-1	1.38	1.37	1.40	1.38	1.21	ppb
Molybdenum	96-1	1.85	1.85	1.79	1.83	1.73	ppb
Molybdenum	97-1	1.32	1.22	1.25	1.27	4.06	ppb
Molybdenum	98-1	1.26	1.20	1.21	1.22	2.81	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	3.16	3.15	3.12	3.14	0.66	ppb
Phosphorus	31-2	-105.29	-106.54	-98.77	-103.53		ppb
Potassium	39-2	250820.60	253652.36	247191.89	250554.95	1.29	ppb
Rhodium	103-1				78		%
Rhodium	103-2				82		%
Scandium	45-1				88		%
Scandium	45-2				95		%
Selenium	82-1	0.63	0.56	0.74	0.64	14.45	ppb
Selenium	77-2	0.32	0.97	0.64	0.65	50.30	ppb
Selenium	78-2	0.43	0.53	0.89	0.62	39.09	ppb
Silicon	28-1	5.33	7.32	6.67	6.44	15.75	ppb
Silver	107-1	0.10	0.09	0.09	0.09	9.65	ppb
Silver	109-1	0.10	0.09	0.08	0.09	11.93	ppb
Sodium	23-2	499819.89	502490.52	496801.50	499703.97	0.57	ppb
Strontium	86-1	3.14	3.16	3.16	3.15	0.33	ppb
Strontium	88-1	3.19	3.19	3.18	3.19	0.27	ppb
Sulfur	34-1	-964.72	-890.74	-888.89	-914.78		ppb
Terbium	159-1				90		%
Terbium	159-2				96		%
Thallium	203-1	0.09	0.07	0.06	0.07	16.44	ppb
Thallium	205-1	0.08	0.07	0.06	0.07	12.31	ppb
Tin	118-1	0.13	0.11	0.12	0.12	10.80	ppb
Titanium	47-1	0.80	0.74	0.78	0.78	4.05	ppb
Uranium	238-1	0.05	0.04	0.04	0.04	12.19	ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :S8Instrumnet Name :P8

Client Sample ID :S8Dilution Factor :1

Date & Time Acquired :2025-04-01 11:37:21DataFile Name :012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.25	0.28	0.25	0.26	6.71	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				89		%
Yttrium	89-2				98		%
Zinc	66-2	18.58	18.53	18.43	18.51	0.41	ppb
Zirconium	90-1	0.46	0.46	0.45	0.45	1.19	ppb
Zirconium	91-1	0.44	0.45	0.46	0.45	2.63	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICV01 Instrumnet Name : P8
Client Sample ID : ICV01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:05:25 DataFile Name : 014ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	490.70	488.36	494.85	491.30	0.67	ppb
Antimony	121-1	204.80	196.40	199.69	200.30	2.11	ppb
Arsenic	75-2	199.77	197.70	197.96	198.48	0.57	ppb
Barium	135-1	99.01	96.12	97.54	97.56	1.48	ppb
Barium	137-1	104.52	100.36	103.68	102.85	2.14	ppb
Beryllium	9-1	106.75	103.08	103.23	104.35	1.99	ppb
Bismuth	209-1				103		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Cadmium	108-1	187.02	180.16	184.05	183.74	1.87	ppb
Cadmium	106-1	192.27	187.39	190.83	190.17	1.32	ppb
Cadmium	111-1	109.36	105.96	108.65	107.99	1.66	ppb
Calcium	43-1	2261.20	2218.19	2257.60	2245.67	1.06	ppb
Calcium	44-1	2162.12	2099.11	2169.40	2143.54	1.80	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	100.73	98.79	99.50	99.67	0.98	ppb
Cobalt	59-2	104.79	104.36	107.34	105.50	1.53	ppb
Copper	63-2	95.02	93.25	94.39	94.22	0.95	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				105		%
Indium	115-1				103		%
Indium	115-2				98		%
Iron	54-2	2097.63	2048.94	2067.85	2071.47	1.18	ppb
Iron	56-2	2071.50	2035.94	2032.25	2046.56	1.06	ppb
Iron	57-2	2007.64	1952.72	1993.33	1984.56	1.44	ppb
Krypton	83-1						cps
Lead	206-1	212.35	201.89	206.18	206.81	2.54	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICV01 Instrumnet Name : P8
Client Sample ID : ICV01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:05:25 DataFile Name : 014ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	202.06	192.04	196.80	196.97	2.54	ppb
Lead	208-1	204.90	196.04	200.37	200.43	2.21	ppb
Lithium	6-1				101		%
Magnesium	24-2	1196.75	1170.20	1167.65	1178.20	1.37	ppb
Manganese	55-2	94.87	92.93	93.81	93.87	1.04	ppb
Molybdenum	94-1	5026.75	4872.87	4921.99	4940.54	1.59	ppb
Molybdenum	95-1	5048.04	4907.64	4971.98	4975.89	1.41	ppb
Molybdenum	96-1	4999.50	4936.88	4935.23	4957.20	0.74	ppb
Molybdenum	97-1	5043.15	4950.51	4905.92	4966.53	1.41	ppb
Molybdenum	98-1	5123.17	4923.12	4962.62	5002.97	2.12	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	100.90	98.75	100.16	99.94	1.09	ppb
Phosphorus	31-2	-102.56	-115.17	-102.21	-106.64		ppb
Potassium	39-2	1885.76	1850.00	1867.06	1867.61	0.96	ppb
Rhodium	103-1				104		%
Rhodium	103-2				104		%
Scandium	45-1				106		%
Scandium	45-2				106		%
Selenium	82-1	208.22	203.89	199.70	203.94	2.09	ppb
Selenium	77-2	196.86	203.86	198.13	199.62	1.87	ppb
Selenium	78-2	206.25	198.29	199.50	201.35	2.13	ppb
Silicon	28-1	86.26	85.16	86.98	86.14	1.07	ppb
Silver	107-1	53.54	53.70	53.42	53.55	0.26	ppb
Silver	109-1	54.32	52.65	52.85	53.27	1.72	ppb
Sodium	23-2	2111.73	2039.45	2059.35	2070.18	1.80	ppb
Strontium	86-1	504.71	492.93	495.01	497.55	1.26	ppb
Strontium	88-1	498.07	496.20	494.83	496.37	0.33	ppb
Sulfur	34-1	-984.86	-1170.42	-1161.48	-1105.59		ppb
Terbium	159-1				105		%
Terbium	159-2				105		%
Thallium	203-1	203.15	194.35	196.22	197.90	2.34	ppb
Thallium	205-1	200.43	191.52	197.51	196.49	2.31	ppb
Tin	118-1	525.14	504.22	513.20	514.19	2.04	ppb
Titanium	47-1	4869.59	4743.58	4839.04	4817.40	1.36	ppb
Uranium	238-1	522.58	513.68	516.51	517.59	0.88	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICV01 Instrumnet Name : P8
Client Sample ID : ICV01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:05:25 DataFile Name : 014ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	98.09	95.61	95.77	96.49	1.44	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				105		%
Zinc	66-2	183.78	179.63	181.62	181.67	1.14	ppb
Zirconium	90-1	484.36	479.28	480.50	481.38	0.55	ppb
Zirconium	91-1	485.00	472.18	474.27	477.15	1.44	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LLICV Instrumnet Name : P8
Client Sample ID : LLICV Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:10:13 DataFile Name : 015LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	22.64	22.83	18.47	21.31	11.57	ppb
Antimony	121-1	2.06	2.10	2.11	2.09	1.22	ppb
Arsenic	75-2	1.02	1.17	1.00	1.07	8.73	ppb
Barium	135-1	10.17	10.12	10.37	10.22	1.30	ppb
Barium	137-1	10.34	10.42	10.57	10.44	1.13	ppb
Beryllium	9-1	1.13	1.18	1.18	1.17	2.57	ppb
Bismuth	209-1				105		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Cadmium	108-1	1.09	1.03	1.14	1.09	4.90	ppb
Cadmium	106-1	0.59	0.15	0.18	0.30	80.79	ppb
Cadmium	111-1	1.08	1.04	1.03	1.05	2.28	ppb
Calcium	43-1	553.34	550.78	546.77	550.30	0.60	ppb
Calcium	44-1	544.49	547.52	545.95	545.99	0.28	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.17	2.09	1.97	2.08	4.72	ppb
Cobalt	59-2	1.14	1.12	1.03	1.10	5.12	ppb
Copper	63-2	2.05	1.94	1.86	1.95	4.89	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				107		%
Indium	115-1				107		%
Indium	115-2				107		%
Iron	54-2	57.69	54.35	51.86	54.63	5.35	ppb
Iron	56-2	55.49	54.75	50.77	53.67	4.73	ppb
Iron	57-2	57.55	50.68	49.12	52.45	8.55	ppb
Krypton	83-1						cps
Lead	206-1	1.00	0.97	0.97	0.98	1.89	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LLICV Instrumnet Name : P8
Client Sample ID : LLICV Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:10:13 DataFile Name : 015LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.99	0.98	0.98	0.98	0.43	ppb
Lead	208-1	0.99	0.97	0.98	0.98	0.76	ppb
Lithium	6-1				99		%
Magnesium	24-2	576.11	550.33	522.76	549.73	4.85	ppb
Manganese	55-2	1.12	1.09	0.98	1.06	6.88	ppb
Molybdenum	94-1	6.29	6.28	6.20	6.26	0.78	ppb
Molybdenum	95-1	5.29	5.23	5.25	5.26	0.56	ppb
Molybdenum	96-1	5.36	5.36	5.35	5.36	0.07	ppb
Molybdenum	97-1	5.31	5.24	5.30	5.29	0.70	ppb
Molybdenum	98-1	5.21	5.23	5.25	5.23	0.43	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.96	0.97	1.02	0.98	3.15	ppb
Phosphorus	31-2	-80.02	-70.05	-85.33	-78.47		ppb
Potassium	39-2	529.19	519.08	495.07	514.45	3.41	ppb
Rhodium	103-1				105		%
Rhodium	103-2				107		%
Scandium	45-1				106		%
Scandium	45-2				107		%
Selenium	82-1	5.42	5.49	5.28	5.39	2.03	ppb
Selenium	77-2	6.73	2.95	5.89	5.19	38.23	ppb
Selenium	78-2	5.14	5.71	4.16	5.00	15.71	ppb
Silicon	28-1	1.86	1.40	1.31	1.52	19.24	ppb
Silver	107-1	1.04	1.03	1.08	1.05	2.16	ppb
Silver	109-1	1.03	1.06	1.07	1.05	1.63	ppb
Sodium	23-2	574.45	570.27	537.40	560.70	3.62	ppb
Strontium	86-1	1.05	1.07	1.03	1.05	1.95	ppb
Strontium	88-1	1.08	1.07	1.07	1.07	0.33	ppb
Sulfur	34-1	-957.44	-929.68	-1021.66	-969.59		ppb
Terbium	159-1				107		%
Terbium	159-2				107		%
Thallium	203-1	0.99	1.00	0.99	1.00	0.23	ppb
Thallium	205-1	0.98	0.97	0.99	0.98	1.03	ppb
Tin	118-1	5.22	5.27	5.34	5.27	1.15	ppb
Titanium	47-1	5.57	5.49	5.47	5.51	1.04	ppb
Uranium	238-1	0.98	0.98	0.99	0.98	0.66	ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :LLICVINstrumnet Name :P8

Client Sample ID :LLICVDilution Factor :1

Date & Time Acquired :2025-04-01 13:10:13DataFile Name :015LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.44	5.30	4.86	5.20	5.79	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				107		%
Zinc	66-2	4.83	4.78	4.53	4.71	3.41	ppb
Zirconium	90-1	1.04	1.04	1.05	1.04	0.53	ppb
Zirconium	91-1	1.06	1.05	1.06	1.06	0.43	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICB01 Instrumnet Name : P8
Client Sample ID : ICB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:13:39 DataFile Name : 016CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.31	0.74	0.49	0.51	42.03	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	20.00	ppb
Arsenic	75-2	0.01	-0.01	0.00	0.00		ppb
Barium	135-1	-0.01	0.00	0.00	0.00		ppb
Barium	137-1	0.00	0.00	0.00	0.00		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	1870.54	ppb
Bismuth	209-1				104		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.00	-0.01	0.00		ppb
Cadmium	106-1	-0.97	-1.02	-0.96	-0.99		ppb
Cadmium	111-1	-0.08	-0.08	-0.07	-0.08		ppb
Calcium	43-1	-0.63	0.15	-1.07	-0.52		ppb
Calcium	44-1	1.46	0.82	1.16	1.15	27.92	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.07	0.00	0.01	-0.02		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.02	0.01	0.05	0.01	286.38	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				107		%
Indium	115-1				106		%
Indium	115-2				106		%
Iron	54-2	-0.16	0.39	0.55	0.26	143.24	ppb
Iron	56-2	-0.07	0.22	0.56	0.24	134.09	ppb
Iron	57-2	0.28	0.13	0.85	0.42	90.54	ppb
Krypton	83-1						cps
Lead	206-1	0.00	0.00	0.01	0.00	65.84	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICB01 Instrumnet Name : P8
Client Sample ID : ICB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:13:39 DataFile Name : 016CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.00	0.00	0.00	0.00	62.94	ppb
Lead	208-1	0.00	0.00	0.00	0.00	47.31	ppb
Lithium	6-1				100		%
Magnesium	24-2	0.33	0.32	0.44	0.36	18.71	ppb
Manganese	55-2	0.21	0.17	0.05	0.15	58.10	ppb
Molybdenum	94-1	0.04	0.04	0.04	0.04	3.10	ppb
Molybdenum	95-1	0.02	0.02	0.01	0.02	41.78	ppb
Molybdenum	96-1	0.02	0.02	0.02	0.02	11.57	ppb
Molybdenum	97-1	0.02	0.02	0.01	0.02	34.65	ppb
Molybdenum	98-1	0.02	0.02	0.02	0.02	8.11	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.08	0.00	0.03	-0.02		ppb
Phosphorus	31-2	-114.46	-101.59	-111.30	-109.12		ppb
Potassium	39-2	1.07	2.57	3.22	2.28	48.33	ppb
Rhodium	103-1				106		%
Rhodium	103-2				106		%
Scandium	45-1				106		%
Scandium	45-2				106		%
Selenium	82-1	-0.03	0.14	0.07	0.06	146.22	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.37	-0.12	-0.11	-0.20		ppb
Silicon	28-1	0.74	0.76	0.70	0.73	3.77	ppb
Silver	107-1	0.01	0.01	0.01	0.01	14.49	ppb
Silver	109-1	0.01	0.01	0.01	0.01	6.90	ppb
Sodium	23-2	1.16	1.74	2.04	1.65	27.16	ppb
Strontium	86-1	0.00	0.01	0.00	0.00	195.25	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	5.31	ppb
Sulfur	34-1	-910.05	-957.05	-952.29	-939.80		ppb
Terbium	159-1				107		%
Terbium	159-2				107		%
Thallium	203-1	0.01	0.01	0.00	0.01	13.57	ppb
Thallium	205-1	0.01	0.00	0.01	0.01	16.26	ppb
Tin	118-1	0.52	0.52	0.50	0.51	2.45	ppb
Titanium	47-1	0.01	0.01	0.01	0.01	6.58	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	31.03	ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :ICB01Instrumnet Name :P8

Client Sample ID :ICB01Dilution Factor :1

Date & Time Acquired :2025-04-01 13:13:39DataFile Name :016CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				107		%
Zinc	66-2	0.02	0.14	0.15	0.10	67.86	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	17.54	ppb
Zirconium	91-1	0.00	0.00	0.01	0.01	23.55	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICSA01 Instrumnet Name : P8
Client Sample ID : ICSA01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:17:02 DataFile Name : 017ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	93319.52	90613.69	91386.85	91773.35	1.52	ppb
Antimony	121-1	1.05	1.04	1.06	1.05	0.62	ppb
Arsenic	75-2	0.27	0.31	0.39	0.32	17.84	ppb
Barium	135-1	1.37	1.37	1.37	1.37	0.02	ppb
Barium	137-1	1.36	1.37	1.38	1.37	0.74	ppb
Beryllium	9-1	0.31	0.33	0.31	0.32	3.27	ppb
Bismuth	209-1				93		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	14.39	14.51	14.54	14.48	0.54	ppb
Cadmium	106-1	-0.75	-0.81	-0.96	-0.84		ppb
Cadmium	111-1	0.47	0.46	0.42	0.45	6.15	ppb
Calcium	43-1	97428.54	96855.13	99541.97	97941.88	1.44	ppb
Calcium	44-1	96364.95	97535.04	98784.44	97561.48	1.24	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	19.37	19.22	19.39	19.33	0.49	ppb
Cobalt	59-2	1.14	1.10	1.09	1.11	2.15	ppb
Copper	63-2	6.67	6.57	6.72	6.65	1.10	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				101		%
Indium	115-1				99		%
Indium	115-2				97		%
Iron	54-2	99306.99	100415.26	101387.14	100369.80	1.04	ppb
Iron	56-2	100712.54	99973.96	99989.10	100225.20	0.42	ppb
Iron	57-2	100823.49	100703.90	100774.59	100767.33	0.06	ppb
Krypton	83-1						cps
Lead	206-1	4.55	4.52	4.44	4.50	1.37	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICSA01 Instrumnet Name : P8
Client Sample ID : ICSA01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:17:02 DataFile Name : 017ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	4.22	4.15	3.95	4.11	3.35	ppb
Lead	208-1	4.32	4.24	4.15	4.24	1.94	ppb
Lithium	6-1				91		%
Magnesium	24-2	98818.74	95735.72	96025.41	96859.96	1.76	ppb
Manganese	55-2	6.80	6.79	6.85	6.81	0.52	ppb
Molybdenum	94-1	1570.77	1550.72	1551.56	1557.69	0.73	ppb
Molybdenum	95-1	1916.08	1881.68	1905.58	1901.11	0.93	ppb
Molybdenum	96-1	1898.86	1842.39	1886.60	1875.95	1.58	ppb
Molybdenum	97-1	1950.51	1925.30	1924.07	1933.30	0.77	ppb
Molybdenum	98-1	1950.06	1904.78	1919.33	1924.72	1.20	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.88	4.95	4.92	4.92	0.66	ppb
Phosphorus	31-2	105628.23	104413.45	105878.59	105306.76	0.74	ppb
Potassium	39-2	98785.36	97649.05	99473.68	98636.03	0.93	ppb
Rhodium	103-1				94		%
Rhodium	103-2				93		%
Scandium	45-1				103		%
Scandium	45-2				103		%
Selenium	82-1	0.26	0.11	-0.01	0.12	112.39	ppb
Selenium	77-2	0.31	0.00	0.62	0.31	99.90	ppb
Selenium	78-2	-0.07	0.10	-0.26	-0.08		ppb
Silicon	28-1	4.33	4.39	4.36	4.36	0.70	ppb
Silver	107-1	0.04	0.04	0.03	0.04	13.94	ppb
Silver	109-1	0.05	0.04	0.04	0.04	18.27	ppb
Sodium	23-2	106400.45	105378.35	103820.27	105199.69	1.24	ppb
Strontium	86-1	32.89	32.47	32.31	32.56	0.93	ppb
Strontium	88-1	33.85	33.70	33.95	33.84	0.37	ppb
Sulfur	34-1	100193.57	103316.64	102986.61	102165.61	1.68	ppb
Terbium	159-1				102		%
Terbium	159-2				101		%
Thallium	203-1	0.07	0.08	0.08	0.08	6.54	ppb
Thallium	205-1	0.07	0.08	0.08	0.08	7.41	ppb
Tin	118-1	0.56	0.54	0.56	0.56	1.88	ppb
Titanium	47-1	2018.57	2002.23	2005.43	2008.74	0.43	ppb
Uranium	238-1	0.02	0.02	0.01	0.02	4.08	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICSA01 Instrumnet Name : P8
Client Sample ID : ICSA01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:17:02 DataFile Name : 017ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.14	0.14	0.13	0.14	6.80	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				102		%
Zinc	66-2	9.91	9.39	9.33	9.54	3.33	ppb
Zirconium	90-1	0.02	0.02	0.03	0.02	14.80	ppb
Zirconium	91-1	0.02	0.03	0.03	0.03	15.75	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICSAB01 Instrumnet Name : P8
Client Sample ID : ICSAB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:20:14 DataFile Name : 018ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	94220.52	93979.15	89078.76	92426.14	3.14	ppb
Antimony	121-1	21.24	21.50	21.12	21.29	0.91	ppb
Arsenic	75-2	20.59	20.99	20.09	20.56	2.19	ppb
Barium	135-1	21.14	21.39	21.33	21.29	0.61	ppb
Barium	137-1	21.48	21.77	21.61	21.62	0.66	ppb
Beryllium	9-1	22.61	21.41	21.59	21.87	2.97	ppb
Bismuth	209-1				94		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Cadmium	108-1	36.83	37.15	35.79	36.59	1.95	ppb
Cadmium	106-1	25.58	25.40	25.48	25.49	0.36	ppb
Cadmium	111-1	20.28	20.50	20.53	20.44	0.67	ppb
Calcium	43-1	102824.87	103047.28	103653.72	103175.29	0.42	ppb
Calcium	44-1	101654.12	101837.90	103006.07	102166.03	0.72	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	39.98	39.19	38.52	39.23	1.86	ppb
Cobalt	59-2	20.99	20.87	20.44	20.77	1.41	ppb
Copper	63-2	24.82	24.61	24.05	24.49	1.63	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				102		%
Indium	115-1				98		%
Indium	115-2				97		%
Iron	54-2	102539.18	102503.09	98350.86	101131.04	2.38	ppb
Iron	56-2	103420.63	102170.98	98233.34	101274.98	2.67	ppb
Iron	57-2	101273.10	102836.22	98859.64	100989.65	1.98	ppb
Krypton	83-1						cps
Lead	206-1	24.80	24.15	24.44	24.46	1.32	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICSAB01 Instrumnet Name : P8
Client Sample ID : ICSAB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:20:14 DataFile Name : 018ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	23.94	23.56	23.53	23.68	0.95	ppb
Lead	208-1	24.01	23.55	23.72	23.76	0.97	ppb
Lithium	6-1				93		%
Magnesium	24-2	98164.62	98540.69	95520.76	97408.69	1.69	ppb
Manganese	55-2	24.93	25.02	23.86	24.60	2.63	ppb
Molybdenum	94-1	1705.79	1735.34	1750.02	1730.39	1.30	ppb
Molybdenum	95-1	2009.17	2019.53	2032.72	2020.47	0.58	ppb
Molybdenum	96-1	1996.39	1989.77	1975.45	1987.20	0.54	ppb
Molybdenum	97-1	2033.15	2015.53	2001.04	2016.57	0.80	ppb
Molybdenum	98-1	2017.56	2009.79	1997.10	2008.15	0.51	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	23.93	23.91	22.82	23.55	2.72	ppb
Phosphorus	31-2	106555.22	106543.85	104032.13	105710.40	1.37	ppb
Potassium	39-2	99302.00	100558.35	98815.14	99558.50	0.90	ppb
Rhodium	103-1				94		%
Rhodium	103-2				95		%
Scandium	45-1				102		%
Scandium	45-2				104		%
Selenium	82-1	20.70	21.41	20.41	20.84	2.47	ppb
Selenium	77-2	18.21	23.36	22.99	21.52	13.34	ppb
Selenium	78-2	21.60	19.82	17.54	19.65	10.34	ppb
Silicon	28-1	12.94	12.49	13.20	12.88	2.78	ppb
Silver	107-1	18.59	18.65	18.44	18.56	0.57	ppb
Silver	109-1	18.50	18.75	18.73	18.66	0.74	ppb
Sodium	23-2	106058.74	107323.08	104392.62	105924.81	1.39	ppb
Strontium	86-1	81.60	81.05	80.91	81.19	0.45	ppb
Strontium	88-1	84.82	83.53	84.85	84.40	0.90	ppb
Sulfur	34-1	106105.00	104159.02	107140.09	105801.37	1.43	ppb
Terbium	159-1				103		%
Terbium	159-2				102		%
Thallium	203-1	19.88	19.71	19.94	19.84	0.61	ppb
Thallium	205-1	20.23	20.43	19.97	20.21	1.14	ppb
Tin	118-1	51.75	51.15	50.98	51.29	0.78	ppb
Titanium	47-1	2111.21	2089.59	2114.35	2105.05	0.64	ppb
Uranium	238-1	51.46	51.92	52.15	51.85	0.68	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICSAB01 Instrumnet Name : P8
Client Sample ID : ICSAB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:20:14 DataFile Name : 018ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	19.97	20.18	19.68	19.94	1.25	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				103		%
Zinc	66-2	27.15	26.95	26.92	27.01	0.46	ppb
Zirconium	90-1	50.82	50.62	50.06	50.50	0.78	ppb
Zirconium	91-1	48.53	48.91	48.37	48.60	0.57	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV01 Instrumnet Name : P8
Client Sample ID : CCV01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:24:40 DataFile Name : 019CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	49954.24	49332.09	49787.79	49691.37	0.65	ppb
Antimony	121-1	478.11	471.57	479.00	476.23	0.85	ppb
Arsenic	75-2	473.23	473.75	479.47	475.48	0.73	ppb
Barium	135-1	2403.67	2405.20	2443.60	2417.49	0.94	ppb
Barium	137-1	2452.30	2408.87	2472.10	2444.43	1.32	ppb
Beryllium	9-1	501.84	499.01	504.57	501.81	0.55	ppb
Bismuth	209-1				88		%
Bismuth	209-2				89		%
Bromine	81-1						cps
Cadmium	108-1	476.07	470.23	477.60	474.63	0.82	ppb
Cadmium	106-1	480.33	468.53	479.21	476.02	1.37	ppb
Cadmium	111-1	480.31	475.91	477.87	478.03	0.46	ppb
Calcium	43-1	247149.39	246950.53	245580.99	246560.30	0.35	ppb
Calcium	44-1	245930.48	246468.85	242757.16	245052.16	0.82	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	482.11	484.72	494.21	487.01	1.31	ppb
Cobalt	59-2	474.93	470.53	471.82	472.42	0.48	ppb
Copper	63-2	4607.06	4521.51	4568.08	4565.55	0.94	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				98		%
Holmium	165-2				100		%
Indium	115-1				91		%
Indium	115-2				89		%
Iron	54-2	120522.62	120560.27	120219.79	120434.23	0.15	ppb
Iron	56-2	118688.31	118980.65	119734.96	119134.64	0.45	ppb
Iron	57-2	120239.61	118602.33	120229.25	119690.40	0.79	ppb
Krypton	83-1						cps
Lead	206-1	2469.77	2434.23	2492.36	2465.46	1.19	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV01 Instrumnet Name : P8
Client Sample ID : CCV01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:24:40 DataFile Name : 019CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2459.02	2406.07	2483.25	2449.44	1.61	ppb
Lead	208-1	2438.65	2420.83	2465.29	2441.59	0.92	ppb
Lithium	6-1				89		%
Magnesium	24-2	238677.19	237438.95	235829.24	237315.13	0.60	ppb
Manganese	55-2	4868.20	4892.94	4912.88	4891.34	0.46	ppb
Molybdenum	94-1	4867.42	4992.61	4819.66	4893.23	1.83	ppb
Molybdenum	95-1	4779.86	5068.54	4766.00	4871.47	3.51	ppb
Molybdenum	96-1	4815.17	5025.05	4739.34	4859.85	3.05	ppb
Molybdenum	97-1	4905.18	5042.09	4803.00	4916.76	2.44	ppb
Molybdenum	98-1	4964.09	5057.14	4824.26	4948.50	2.37	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	476.25	467.71	462.75	468.90	1.46	ppb
Phosphorus	31-2	9908.32	9982.10	9859.19	9916.54	0.62	ppb
Potassium	39-2	122079.36	121593.02	122247.88	121973.42	0.28	ppb
Rhodium	103-1				88		%
Rhodium	103-2				88		%
Scandium	45-1				98		%
Scandium	45-2				100		%
Selenium	82-1	497.60	516.12	491.66	501.79	2.54	ppb
Selenium	77-2	533.04	488.15	516.92	512.70	4.44	ppb
Selenium	78-2	489.65	510.76	501.43	500.62	2.11	ppb
Silicon	28-1	508.12	501.56	502.95	504.21	0.69	ppb
Silver	107-1	461.07	461.77	460.62	461.15	0.13	ppb
Silver	109-1	458.00	461.40	462.83	460.74	0.54	ppb
Sodium	23-2	252025.89	247759.27	246917.49	248900.88	1.10	ppb
Strontium	86-1	481.39	498.02	480.41	486.61	2.03	ppb
Strontium	88-1	478.88	499.02	483.90	487.27	2.15	ppb
Sulfur	34-1	9976.72	9550.52	9528.77	9685.34	2.61	ppb
Terbium	159-1				99		%
Terbium	159-2				100		%
Thallium	203-1	493.72	496.16	495.42	495.10	0.25	ppb
Thallium	205-1	491.01	490.73	495.21	492.32	0.51	ppb
Tin	118-1	485.89	474.92	484.79	481.87	1.25	ppb
Titanium	47-1	4948.06	4842.26	4971.94	4920.75	1.40	ppb
Uranium	238-1	493.20	501.24	497.91	497.45	0.81	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV01 Instrumnet Name : P8
Client Sample ID : CCV01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:24:40 DataFile Name : 019CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	500.21	492.44	502.15	498.27	1.03	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				99		%
Zinc	66-2	4657.82	4636.07	4663.17	4652.35	0.31	ppb
Zirconium	90-1	487.49	493.79	489.87	490.38	0.65	ppb
Zirconium	91-1	477.70	503.80	483.45	488.31	2.81	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB01 Instrumnet Name : P8
Client Sample ID : CCB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:30:06 DataFile Name : 020CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.75	0.06	0.47	0.42	80.87	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	12.79	ppb
Arsenic	75-2	0.02	0.00	0.00	0.00	223.19	ppb
Barium	135-1	0.02	0.02	0.03	0.02	22.00	ppb
Barium	137-1	0.02	0.02	0.02	0.02	10.44	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	40.25	ppb
Bismuth	209-1				104		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Cadmium	108-1	0.01	-0.01	0.01	0.00	441.33	ppb
Cadmium	106-1	-0.57	-1.07	-0.59	-0.75		ppb
Cadmium	111-1	-0.03	-0.08	-0.04	-0.05		ppb
Calcium	43-1	0.12	0.39	-1.44	-0.31		ppb
Calcium	44-1	1.69	1.04	0.90	1.21	34.70	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.06	-0.03	0.01	-0.03		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	4.28	ppb
Copper	63-2	0.04	0.10	0.15	0.10	52.58	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				106		%
Indium	115-1				106		%
Indium	115-2				105		%
Iron	54-2	0.95	0.97	1.60	1.17	31.33	ppb
Iron	56-2	1.23	1.50	1.56	1.43	12.15	ppb
Iron	57-2	1.21	1.25	1.52	1.33	12.57	ppb
Krypton	83-1						cps
Lead	206-1	0.07	0.07	0.07	0.07	2.63	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB01 Instrumnet Name : P8
Client Sample ID : CCB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:30:06 DataFile Name : 020CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.08	0.07	0.08	0.08	3.25	ppb
Lead	208-1	0.08	0.07	0.08	0.07	3.52	ppb
Lithium	6-1				102		%
Magnesium	24-2	2.71	2.87	2.48	2.69	7.43	ppb
Manganese	55-2	0.29	0.23	0.16	0.23	30.29	ppb
Molybdenum	94-1	0.12	0.09	0.11	0.11	11.81	ppb
Molybdenum	95-1	0.10	0.07	0.05	0.07	29.33	ppb
Molybdenum	96-1	0.10	0.08	0.07	0.08	19.74	ppb
Molybdenum	97-1	0.09	0.07	0.07	0.08	16.12	ppb
Molybdenum	98-1	0.09	0.07	0.06	0.07	20.77	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.07	-0.01	0.03	-0.02		ppb
Phosphorus	31-2	-106.92	-106.26	-108.59	-107.26		ppb
Potassium	39-2	24.58	25.54	24.18	24.77	2.83	ppb
Rhodium	103-1				106		%
Rhodium	103-2				107		%
Scandium	45-1				106		%
Scandium	45-2				103		%
Selenium	82-1	-0.01	0.05	0.10	0.04	113.02	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.54	-0.19	-0.45	-0.39		ppb
Silicon	28-1	0.56	0.56	0.49	0.53	7.71	ppb
Silver	107-1	0.02	0.02	0.01	0.02	16.27	ppb
Silver	109-1	0.02	0.01	0.02	0.02	9.98	ppb
Sodium	23-2	30.57	32.48	31.39	31.48	3.04	ppb
Strontium	86-1	0.00	0.00	0.00	0.00		ppb
Strontium	88-1	0.01	0.01	0.00	0.01	15.60	ppb
Sulfur	34-1	-923.86	-887.55	-851.41	-887.61		ppb
Terbium	159-1				106		%
Terbium	159-2				108		%
Thallium	203-1	0.04	0.04	0.04	0.04	2.73	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	1.10	ppb
Tin	118-1	0.45	0.42	0.40	0.42	5.57	ppb
Titanium	47-1	0.07	0.04	0.04	0.05	31.42	ppb
Uranium	238-1	0.01	0.00	0.00	0.00	12.16	ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :CCB01Instrumnet Name :P8

Client Sample ID :CCB01Dilution Factor :1

Date & Time Acquired :2025-04-01 13:30:06DataFile Name :020CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.00	0.00	0.00	22.73	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				105		%
Zinc	66-2	0.06	0.10	0.11	0.09	26.65	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	9.07	ppb
Zirconium	91-1	0.02	0.02	0.02	0.02	15.11	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CRI Instrumnet Name : P8
Client Sample ID : CRI Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:33:47 DataFile Name : 021LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	23.23	23.67	21.81	22.90	4.26	ppb
Antimony	121-1	2.13	2.11	2.11	2.12	0.54	ppb
Arsenic	75-2	1.14	0.97	1.04	1.05	8.24	ppb
Barium	135-1	10.44	10.30	10.46	10.40	0.82	ppb
Barium	137-1	10.59	10.37	10.57	10.51	1.17	ppb
Beryllium	9-1	1.12	1.16	1.13	1.14	1.61	ppb
Bismuth	209-1				105		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Cadmium	108-1	1.07	1.10	1.19	1.12	5.55	ppb
Cadmium	106-1	0.65	0.62	0.38	0.55	26.52	ppb
Cadmium	111-1	1.10	1.05	1.04	1.06	2.87	ppb
Calcium	43-1	549.23	548.45	551.45	549.71	0.28	ppb
Calcium	44-1	550.61	549.16	536.45	545.40	1.43	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.18	2.11	1.96	2.08	5.28	ppb
Cobalt	59-2	1.16	1.11	1.07	1.11	3.97	ppb
Copper	63-2	2.07	2.02	1.90	1.99	4.34	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				106		%
Indium	115-1				106		%
Indium	115-2				105		%
Iron	54-2	57.97	57.03	53.89	56.30	3.80	ppb
Iron	56-2	57.78	56.37	52.09	55.41	5.35	ppb
Iron	57-2	56.24	55.12	54.05	55.13	1.99	ppb
Krypton	83-1						cps
Lead	206-1	1.00	1.02	1.01	1.01	0.75	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CRI Instrumnet Name : P8
Client Sample ID : CRI Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:33:47 DataFile Name : 021LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.04	1.04	1.04	1.04	0.22	ppb
Lead	208-1	1.02	1.02	1.02	1.02	0.02	ppb
Lithium	6-1				101		%
Magnesium	24-2	582.46	569.75	534.61	562.27	4.41	ppb
Manganese	55-2	1.17	1.13	1.03	1.11	6.38	ppb
Molybdenum	94-1	6.12	6.32	6.27	6.24	1.71	ppb
Molybdenum	95-1	5.14	5.32	5.28	5.25	1.72	ppb
Molybdenum	96-1	5.30	5.30	5.36	5.32	0.70	ppb
Molybdenum	97-1	5.36	5.29	5.26	5.31	0.95	ppb
Molybdenum	98-1	5.19	5.27	5.21	5.22	0.79	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.98	1.01	0.94	0.98	3.48	ppb
Phosphorus	31-2	-69.33	-80.43	-76.12	-75.29		ppb
Potassium	39-2	556.00	546.45	523.59	542.01	3.07	ppb
Rhodium	103-1				105		%
Rhodium	103-2				106		%
Scandium	45-1				106		%
Scandium	45-2				104		%
Selenium	82-1	5.31	5.46	5.52	5.43	2.00	ppb
Selenium	77-2	5.39	5.37	4.80	5.19	6.47	ppb
Selenium	78-2	4.42	4.83	3.73	4.33	12.83	ppb
Silicon	28-1	0.99	1.03	0.81	0.94	12.37	ppb
Silver	107-1	1.05	1.05	1.07	1.06	1.02	ppb
Silver	109-1	1.05	1.05	1.07	1.05	1.12	ppb
Sodium	23-2	608.94	595.32	570.56	591.61	3.29	ppb
Strontium	86-1	1.04	1.07	1.04	1.05	1.64	ppb
Strontium	88-1	1.07	1.08	1.08	1.08	0.88	ppb
Sulfur	34-1	-592.50	-684.89	-698.03	-658.47		ppb
Terbium	159-1				107		%
Terbium	159-2				106		%
Thallium	203-1	1.03	0.99	1.01	1.01	2.19	ppb
Thallium	205-1	1.02	1.01	1.00	1.01	0.67	ppb
Tin	118-1	5.45	5.59	5.35	5.46	2.23	ppb
Titanium	47-1	5.47	5.40	5.45	5.44	0.72	ppb
Uranium	238-1	0.99	0.99	1.00	0.99	0.56	ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :CRIInstrumnet Name :P8

Client Sample ID :CRIDilution Factor :1

Date & Time Acquired :2025-04-01 13:33:47DataFile Name :021LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.44	5.44	5.04	5.31	4.41	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				105		%
Yttrium	89-2				106		%
Zinc	66-2	4.70	5.06	4.55	4.77	5.47	ppb
Zirconium	90-1	1.03	1.07	1.06	1.06	1.82	ppb
Zirconium	91-1	1.05	1.06	1.05	1.05	0.74	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-02 Instrumnet Name : P8
Client Sample ID : PT-TM1-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:46:37 DataFile Name : 022AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2690.76	2696.50	2677.90	2688.38	0.35	ppb
Antimony	121-1	289.73	285.02	285.96	286.90	0.87	ppb
Arsenic	75-2	586.48	595.49	590.21	590.73	0.77	ppb
Barium	135-1	707.10	675.21	689.19	690.50	2.32	ppb
Barium	137-1	707.18	690.36	691.29	696.28	1.36	ppb
Beryllium	9-1	365.88	362.93	361.80	363.54	0.58	ppb
Bismuth	209-1				104		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Cadmium	108-1	589.86	592.89	589.38	590.71	0.32	ppb
Cadmium	106-1	560.77	554.58	572.71	562.69	1.64	ppb
Cadmium	111-1	709.14	724.03	718.80	717.32	1.05	ppb
Calcium	43-1	150.12	153.13	155.85	153.03	1.88	ppb
Calcium	44-1	82.50	85.08	82.39	83.32	1.83	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	232.97	226.75	227.33	229.01	1.50	ppb
Cobalt	59-2	681.80	660.08	663.09	668.32	1.76	ppb
Copper	63-2	660.63	662.89	650.26	657.93	1.02	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				106		%
Indium	115-1				106		%
Indium	115-2				106		%
Iron	54-2	3850.18	3856.35	3848.26	3851.60	0.11	ppb
Iron	56-2	3829.89	3803.15	3839.75	3824.27	0.50	ppb
Iron	57-2	3652.53	3604.10	3629.36	3628.66	0.67	ppb
Krypton	83-1						cps
Lead	206-1	1014.00	1035.48	1022.43	1023.97	1.06	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-02 Instrumnet Name : P8
Client Sample ID : PT-TM1-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:46:37 DataFile Name : 022AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	980.55	1009.74	995.72	995.34	1.47	ppb
Lead	208-1	994.91	1016.88	1005.24	1005.68	1.09	ppb
Lithium	6-1				98		%
Magnesium	24-2	0.13	0.33	0.26	0.24	42.88	ppb
Manganese	55-2	1621.43	1606.19	1603.73	1610.45	0.60	ppb
Molybdenum	94-1	399.63	404.45	381.44	395.17	3.07	ppb
Molybdenum	95-1	490.60	490.13	466.22	482.32	2.89	ppb
Molybdenum	96-1	474.27	479.78	460.54	471.53	2.10	ppb
Molybdenum	97-1	488.89	483.88	469.45	480.74	2.10	ppb
Molybdenum	98-1	485.12	482.69	466.82	478.21	2.08	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	571.36	553.78	562.65	562.60	1.56	ppb
Phosphorus	31-2	-105.07	-107.81	-108.30	-107.06		ppb
Potassium	39-2	9.36	8.48	10.26	9.37	9.48	ppb
Rhodium	103-1				104		%
Rhodium	103-2				106		%
Scandium	45-1				108		%
Scandium	45-2				107		%
Selenium	82-1	868.48	875.41	868.00	870.63	0.48	ppb
Selenium	77-2	894.47	891.66	917.39	901.17	1.57	ppb
Selenium	78-2	885.72	886.45	896.32	889.50	0.67	ppb
Silicon	28-1	93.21	92.90	90.77	92.29	1.44	ppb
Silver	107-1	854.85	848.21	870.19	857.75	1.31	ppb
Silver	109-1	854.40	855.54	864.62	858.19	0.65	ppb
Sodium	23-2	83.28	82.27	83.28	82.94	0.71	ppb
Strontium	86-1	288.08	291.92	284.75	288.25	1.24	ppb
Strontium	88-1	288.26	289.05	286.15	287.82	0.52	ppb
Sulfur	34-1	-1015.29	-1141.49	-1356.60	-1171.12		ppb
Terbium	159-1				105		%
Terbium	159-2				106		%
Thallium	203-1	217.10	220.21	217.51	218.27	0.77	ppb
Thallium	205-1	215.16	223.35	218.66	219.06	1.88	ppb
Tin	118-1	-0.04	-0.04	-0.05	-0.05		ppb
Titanium	47-1	0.29	0.32	0.27	0.30	8.51	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	11.65	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-02 Instrumnet Name : P8
Client Sample ID : PT-TM1-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:46:37 DataFile Name : 022AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	1489.22	1483.13	1492.85	1488.40	0.33	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				107		%
Zinc	66-2	1041.13	1038.36	1019.43	1032.97	1.14	ppb
Zirconium	90-1	0.43	0.42	0.43	0.43	1.64	ppb
Zirconium	91-1	0.67	0.67	0.65	0.66	1.41	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-04 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:49:30 DataFile Name : 023AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	93.05	93.30	92.38	92.91	0.51	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	3.88	ppb
Arsenic	75-2	0.00	0.01	-0.01	0.00		ppb
Barium	135-1	0.25	0.23	0.27	0.25	8.29	ppb
Barium	137-1	0.21	0.23	0.21	0.22	4.70	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	4.33	ppb
Bismuth	209-1				104		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Cadmium	108-1	0.24	0.21	0.23	0.23	7.45	ppb
Cadmium	106-1	-0.67	-0.53	-0.32	-0.50		ppb
Cadmium	111-1	-0.03	-0.03	-0.01	-0.03		ppb
Calcium	43-1	0.22	-0.18	0.86	0.30	175.43	ppb
Calcium	44-1	10.25	9.99	11.29	10.51	6.51	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	-0.01	0.00	-0.01		ppb
Cobalt	59-2	0.08	0.07	0.07	0.07	10.46	ppb
Copper	63-2	0.02	0.02	0.03	0.02	31.31	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				104		%
Holmium	165-2				107		%
Indium	115-1				96		%
Indium	115-2				88		%
Iron	54-2	1.19	1.22	1.22	1.21	1.47	ppb
Iron	56-2	1.23	1.29	1.28	1.27	2.71	ppb
Iron	57-2	1.73	1.57	1.41	1.57	10.35	ppb
Krypton	83-1						cps
Lead	206-1	0.34	0.42	0.41	0.39	11.03	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-04 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:49:30 DataFile Name : 023AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.34	0.41	0.40	0.38	10.53	ppb
Lead	208-1	0.34	0.41	0.41	0.39	9.90	ppb
Lithium	6-1				100		%
Magnesium	24-2	0.87	1.14	1.13	1.05	14.35	ppb
Manganese	55-2	0.23	0.14	0.14	0.17	30.27	ppb
Molybdenum	94-1	3.40	3.46	3.44	3.43	0.90	ppb
Molybdenum	95-1	0.03	0.03	0.03	0.03	4.68	ppb
Molybdenum	96-1	0.38	0.39	0.39	0.39	0.86	ppb
Molybdenum	97-1	0.04	0.02	0.02	0.03	35.83	ppb
Molybdenum	98-1	0.03	0.03	0.03	0.03	8.66	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.32	0.30	0.27	0.30	7.17	ppb
Phosphorus	31-2	-106.36	-111.25	-110.81	-109.47		ppb
Potassium	39-2	17.50	19.55	17.92	18.32	5.91	ppb
Rhodium	103-1				107		%
Rhodium	103-2				108		%
Scandium	45-1				109		%
Scandium	45-2				109		%
Selenium	82-1	0.02	-0.08	0.06	0.00		ppb
Selenium	77-2	0.58	0.00	0.00	0.19	173.21	ppb
Selenium	78-2	-0.12	-0.30	0.13	-0.10		ppb
Silicon	28-1	417.30	406.40	410.74	411.48	1.33	ppb
Silver	107-1	0.10	0.07	0.06	0.07	27.17	ppb
Silver	109-1	0.09	0.07	0.05	0.07	28.08	ppb
Sodium	23-2	272.41	268.18	260.12	266.91	2.34	ppb
Strontium	86-1	0.03	0.03	0.03	0.03	11.72	ppb
Strontium	88-1	0.04	0.03	0.03	0.03	3.84	ppb
Sulfur	34-1	-1602.93	-1757.23	-1767.09	-1709.08		ppb
Terbium	159-1				107		%
Terbium	159-2				108		%
Thallium	203-1	0.04	0.04	0.04	0.04	2.25	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	3.06	ppb
Tin	118-1	1737.10	1758.39	1748.45	1747.98	0.61	ppb
Titanium	47-1	234.20	228.61	234.43	232.41	1.42	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	21.12	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-04 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:49:30 DataFile Name : 023AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.03	0.03	0.03	0.03	7.11	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				109		%
Zinc	66-2	0.03	-0.07	0.14	0.03	312.21	ppb
Zirconium	90-1	1.88	1.85	1.91	1.88	1.58	ppb
Zirconium	91-1	1.85	1.89	1.87	1.87	1.08	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-06 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:52:50 DataFile Name : 024AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.92	-1.00	-0.54	-0.82		ppb
Antimony	121-1	0.03	0.02	0.01	0.02	35.50	ppb
Arsenic	75-2	0.00	0.01	0.01	0.01	28.78	ppb
Barium	135-1	0.19	0.18	0.17	0.18	4.15	ppb
Barium	137-1	0.18	0.19	0.18	0.18	3.30	ppb
Beryllium	9-1	0.00	0.01	0.00	0.00	42.99	ppb
Bismuth	209-1				122		%
Bismuth	209-2				123		%
Bromine	81-1						cps
Cadmium	108-1	0.02	-0.01	0.02	0.01	130.07	ppb
Cadmium	106-1	-1.39	-0.87	-1.06	-1.10		ppb
Cadmium	111-1	-0.07	-0.04	-0.06	-0.06		ppb
Calcium	43-1	55401.01	55358.58	56667.11	55808.90	1.33	ppb
Calcium	44-1	54042.03	55319.43	56283.59	55215.02	2.04	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.16	-0.17	-0.12	-0.15		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.02	-0.02	0.02	-0.01		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				128		%
Holmium	165-2				125		%
Indium	115-1				128		%
Indium	115-2				124		%
Iron	54-2	-1.63	-1.60	-0.80	-1.34		ppb
Iron	56-2	-0.60	-0.63	-0.22	-0.49		ppb
Iron	57-2	0.64	1.55	2.37	1.52	57.05	ppb
Krypton	83-1						cps
Lead	206-1	0.47	0.45	0.38	0.43	11.48	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-06 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:52:50 DataFile Name : 024AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.47	0.44	0.36	0.43	12.82	ppb
Lead	208-1	0.47	0.44	0.38	0.43	10.88	ppb
Lithium	6-1				122		%
Magnesium	24-2	19030.73	19078.73	20585.20	19564.88	4.52	ppb
Manganese	55-2	-0.78	-0.81	-0.75	-0.78		ppb
Molybdenum	94-1	0.11	0.11	0.11	0.11	2.47	ppb
Molybdenum	95-1	0.14	0.14	0.14	0.14	1.20	ppb
Molybdenum	96-1	0.14	0.13	0.13	0.13	1.95	ppb
Molybdenum	97-1	0.13	0.14	0.15	0.14	4.55	ppb
Molybdenum	98-1	0.13	0.15	0.14	0.14	4.03	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.03	-0.03	0.01	-0.02		ppb
Phosphorus	31-2	-115.77	-115.88	-118.33	-116.66		ppb
Potassium	39-2	22253.53	22401.26	24373.77	23009.52	5.14	ppb
Rhodium	103-1				124		%
Rhodium	103-2				121		%
Scandium	45-1				132		%
Scandium	45-2				128		%
Selenium	82-1	0.11	0.07	0.14	0.11	28.95	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.15	-0.62	-0.34	-0.37		ppb
Silicon	28-1	-2.70	-2.70	-2.67	-2.69		ppb
Silver	107-1	0.01	0.01	0.01	0.01	11.01	ppb
Silver	109-1	0.01	0.01	0.01	0.01	19.29	ppb
Sodium	23-2	58038.92	57776.79	62208.42	59341.38	4.19	ppb
Strontium	86-1	5.11	5.19	5.13	5.14	0.82	ppb
Strontium	88-1	5.20	5.24	5.20	5.21	0.41	ppb
Sulfur	34-1	-2652.53	-2117.31	-1759.55	-2176.46		ppb
Terbium	159-1				129		%
Terbium	159-2				126		%
Thallium	203-1	0.10	0.07	0.06	0.07	28.87	ppb
Thallium	205-1	0.10	0.07	0.06	0.08	29.16	ppb
Tin	118-1	-0.09	-0.10	-0.12	-0.10		ppb
Titanium	47-1	-0.02	-0.02	-0.01	-0.02		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-06 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:52:50 DataFile Name : 024AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	127.25	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				131		%
Yttrium	89-2				136		%
Zinc	66-2	0.69	0.69	0.81	0.73	9.03	ppb
Zirconium	90-1	-0.01	-0.01	-0.01	-0.01		ppb
Zirconium	91-1	-0.01	-0.01	-0.01	-0.01		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-02 Instrumnet Name : P8
Client Sample ID : PT-TM1-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:56:08 DataFile Name : 025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2706.95	2731.07	2704.83	2714.28	0.54	ppb
Antimony	121-1	290.37	291.99	288.47	290.28	0.61	ppb
Arsenic	75-2	604.82	598.13	593.71	598.89	0.93	ppb
Barium	135-1	696.01	685.03	688.80	689.95	0.81	ppb
Barium	137-1	703.06	691.03	694.86	696.32	0.88	ppb
Beryllium	9-1	352.20	359.59	360.41	357.40	1.27	ppb
Bismuth	209-1				106		%
Bismuth	209-2				108		%
Bromine	81-1						cps
Cadmium	108-1	588.37	594.38	594.63	592.46	0.60	ppb
Cadmium	106-1	567.70	575.93	575.41	573.01	0.80	ppb
Cadmium	111-1	722.67	728.27	740.89	730.61	1.28	ppb
Calcium	43-1	149.96	151.67	146.93	149.52	1.60	ppb
Calcium	44-1	86.32	85.91	83.93	85.38	1.50	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	234.75	236.26	234.35	235.12	0.43	ppb
Cobalt	59-2	688.02	691.31	690.70	690.01	0.25	ppb
Copper	63-2	683.08	682.86	679.65	681.86	0.28	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				109		%
Indium	115-1				109		%
Indium	115-2				107		%
Iron	54-2	3888.51	3931.55	3907.80	3909.28	0.55	ppb
Iron	56-2	3835.71	3905.22	3870.36	3870.43	0.90	ppb
Iron	57-2	3710.45	3701.57	3704.13	3705.38	0.12	ppb
Krypton	83-1						cps
Lead	206-1	1040.44	1055.72	1046.76	1047.64	0.73	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-02 Instrumnet Name : P8
Client Sample ID : PT-TM1-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:56:08 DataFile Name : 025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1014.38	1023.81	1018.26	1018.82	0.47	ppb
Lead	208-1	1028.35	1030.74	1025.16	1028.08	0.27	ppb
Lithium	6-1				104		%
Magnesium	24-2	0.54	0.40	0.36	0.43	21.49	ppb
Manganese	55-2	1610.76	1644.49	1639.98	1631.75	1.12	ppb
Molybdenum	94-1	410.18	404.20	398.08	404.15	1.50	ppb
Molybdenum	95-1	502.00	495.78	483.07	493.62	1.96	ppb
Molybdenum	96-1	481.81	486.51	475.59	481.30	1.14	ppb
Molybdenum	97-1	496.48	497.44	487.27	493.73	1.14	ppb
Molybdenum	98-1	510.53	502.28	485.99	499.60	2.50	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	574.58	584.89	575.82	578.43	0.97	ppb
Phosphorus	31-2	-109.89	-108.28	-110.99	-109.72		ppb
Potassium	39-2	15.98	16.30	14.09	15.46	7.74	ppb
Rhodium	103-1				107		%
Rhodium	103-2				108		%
Scandium	45-1				108		%
Scandium	45-2				107		%
Selenium	82-1	908.13	905.80	901.27	905.07	0.39	ppb
Selenium	77-2	934.45	927.94	904.79	922.39	1.69	ppb
Selenium	78-2	908.65	914.42	892.75	905.28	1.24	ppb
Silicon	28-1	93.60	94.06	92.40	93.36	0.92	ppb
Silver	107-1	848.49	867.95	857.71	858.05	1.13	ppb
Silver	109-1	856.83	860.01	864.39	860.41	0.44	ppb
Sodium	23-2	92.24	93.11	91.62	92.33	0.81	ppb
Strontium	86-1	288.23	291.61	292.07	290.64	0.72	ppb
Strontium	88-1	292.81	290.77	293.38	292.32	0.47	ppb
Sulfur	34-1	138.43	-275.35	-664.10	-267.01		ppb
Terbium	159-1				109		%
Terbium	159-2				109		%
Thallium	203-1	225.48	226.05	224.32	225.28	0.39	ppb
Thallium	205-1	223.84	226.12	225.03	225.00	0.51	ppb
Tin	118-1	-0.02	-0.03	-0.03	-0.03		ppb
Titanium	47-1	0.30	0.33	0.29	0.31	6.12	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	7.66	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-02 Instrumnet Name : P8
Client Sample ID : PT-TM1-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:56:08 DataFile Name : 025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	1509.85	1496.52	1509.74	1505.37	0.51	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				108		%
Zinc	66-2	1065.69	1075.89	1065.76	1069.11	0.55	ppb
Zirconium	90-1	0.44	0.41	0.41	0.42	3.56	ppb
Zirconium	91-1	0.69	0.68	0.66	0.68	1.87	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-04 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:59:02 DataFile Name : 026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	97.24	99.73	98.83	98.60	1.28	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	2.75	ppb
Arsenic	75-2	0.01	0.03	0.02	0.02	34.49	ppb
Barium	135-1	0.26	0.22	0.24	0.24	6.77	ppb
Barium	137-1	0.23	0.24	0.22	0.23	4.82	ppb
Beryllium	9-1	0.02	0.02	0.02	0.02	6.49	ppb
Bismuth	209-1				106		%
Bismuth	209-2				108		%
Bromine	81-1						cps
Cadmium	108-1	0.20	0.25	0.20	0.22	13.42	ppb
Cadmium	106-1	-0.37	-0.19	0.13	-0.14		ppb
Cadmium	111-1	-0.02	0.00	0.02	0.00		ppb
Calcium	43-1	-0.82	-1.85	-1.56	-1.41		ppb
Calcium	44-1	9.07	9.57	10.23	9.62	6.06	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.02	-0.01	0.00	-0.01		ppb
Cobalt	59-2	0.07	0.07	0.07	0.07	3.09	ppb
Copper	63-2	0.03	0.03	0.06	0.04	53.99	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				108		%
Indium	115-1				95		%
Indium	115-2				87		%
Iron	54-2	0.94	1.26	1.04	1.08	15.28	ppb
Iron	56-2	1.31	1.24	1.29	1.28	3.17	ppb
Iron	57-2	1.08	1.24	1.11	1.14	7.57	ppb
Krypton	83-1						cps
Lead	206-1	0.28	0.35	0.34	0.32	10.50	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-04 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:59:02 DataFile Name : 026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.28	0.33	0.34	0.32	9.69	ppb
Lead	208-1	0.28	0.34	0.33	0.32	9.93	ppb
Lithium	6-1				99		%
Magnesium	24-2	1.19	1.19	1.21	1.19	0.88	ppb
Manganese	55-2	0.16	0.18	0.22	0.19	16.95	ppb
Molybdenum	94-1	3.54	3.52	3.44	3.50	1.57	ppb
Molybdenum	95-1	0.02	0.02	0.03	0.02	9.66	ppb
Molybdenum	96-1	0.42	0.41	0.40	0.41	2.27	ppb
Molybdenum	97-1	0.03	0.02	0.02	0.03	8.54	ppb
Molybdenum	98-1	0.03	0.03	0.02	0.03	14.06	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.29	0.29	0.31	0.30	4.72	ppb
Phosphorus	31-2	-109.12	-109.56	-115.35	-111.34		ppb
Potassium	39-2	17.80	18.95	17.83	18.19	3.61	ppb
Rhodium	103-1				109		%
Rhodium	103-2				109		%
Scandium	45-1				110		%
Scandium	45-2				109		%
Selenium	82-1	0.24	0.09	0.04	0.12	84.86	ppb
Selenium	77-2	0.29	0.29	0.00	0.19	86.61	ppb
Selenium	78-2	-0.29	0.63	-0.04	0.10	479.70	ppb
Silicon	28-1	422.58	424.99	426.48	424.68	0.46	ppb
Silver	107-1	0.09	0.07	0.06	0.07	23.48	ppb
Silver	109-1	0.09	0.07	0.06	0.07	23.92	ppb
Sodium	23-2	275.29	272.72	264.73	270.91	2.03	ppb
Strontium	86-1	0.02	0.03	0.03	0.03	15.95	ppb
Strontium	88-1	0.04	0.04	0.03	0.04	2.25	ppb
Sulfur	34-1	-1500.04	-1561.38	-1571.04	-1544.15		ppb
Terbium	159-1				108		%
Terbium	159-2				108		%
Thallium	203-1	0.04	0.04	0.04	0.04	4.91	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	2.63	ppb
Tin	118-1	1740.27	1823.08	1833.52	1798.96	2.84	ppb
Titanium	47-1	243.31	239.90	236.68	239.96	1.38	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	21.46	ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :Q1504-04Instrumnet Name :P8

Client Sample ID :PT-SNTI-WPDilution Factor :1

Date & Time Acquired :2025-04-01 13:59:02DataFile Name :026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.04	0.03	0.03	0.03	19.06	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				108		%
Zinc	66-2	0.00	0.05	0.00	0.02	166.38	ppb
Zirconium	90-1	1.93	1.95	1.89	1.92	1.49	ppb
Zirconium	91-1	1.93	1.92	1.88	1.91	1.38	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-06 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:02:20 DataFile Name : 027AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-1.17	-1.04	-0.40	-0.87		ppb
Antimony	121-1	0.01	0.01	0.01	0.01	14.01	ppb
Arsenic	75-2	0.02	0.01	0.00	0.01	80.66	ppb
Barium	135-1	0.18	0.19	0.17	0.18	3.77	ppb
Barium	137-1	0.17	0.18	0.17	0.17	1.99	ppb
Beryllium	9-1	0.00	0.00	0.01	0.00	43.78	ppb
Bismuth	209-1				123		%
Bismuth	209-2				123		%
Bromine	81-1						cps
Cadmium	108-1	0.03	0.04	0.03	0.03	28.26	ppb
Cadmium	106-1	-1.28	-0.93	-1.07	-1.09		ppb
Cadmium	111-1	-0.07	-0.05	-0.06	-0.06		ppb
Calcium	43-1	57142.54	57292.25	56096.20	56843.66	1.15	ppb
Calcium	44-1	56827.76	56620.66	56704.86	56717.76	0.18	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.18	-0.16	-0.13	-0.16		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.02	-0.02	0.03	0.00		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				128		%
Holmium	165-2				128		%
Indium	115-1				129		%
Indium	115-2				126		%
Iron	54-2	-1.46	-1.62	-1.24	-1.44		ppb
Iron	56-2	-0.67	-0.66	-0.32	-0.55		ppb
Iron	57-2	1.50	1.48	1.72	1.56	8.59	ppb
Krypton	83-1						cps
Lead	206-1	0.35	0.30	0.28	0.31	10.22	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-06 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:02:20 DataFile Name : 027AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.34	0.30	0.26	0.30	12.46	ppb
Lead	208-1	0.34	0.30	0.27	0.30	10.37	ppb
Lithium	6-1				121		%
Magnesium	24-2	18899.30	19595.34	21012.02	19835.55	5.43	ppb
Manganese	55-2	-0.80	-0.80	-0.75	-0.78		ppb
Molybdenum	94-1	0.11	0.10	0.11	0.11	4.12	ppb
Molybdenum	95-1	0.14	0.14	0.13	0.14	2.89	ppb
Molybdenum	96-1	0.14	0.13	0.13	0.13	3.43	ppb
Molybdenum	97-1	0.13	0.14	0.15	0.14	4.67	ppb
Molybdenum	98-1	0.13	0.14	0.13	0.13	3.69	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.03	-0.02	0.04	0.00		ppb
Phosphorus	31-2	-118.21	-116.48	-116.64	-117.11		ppb
Potassium	39-2	21814.15	23321.78	24392.99	23176.30	5.59	ppb
Rhodium	103-1				126		%
Rhodium	103-2				122		%
Scandium	45-1				132		%
Scandium	45-2				130		%
Selenium	82-1	0.10	-0.03	0.09	0.05	129.14	ppb
Selenium	77-2	0.22	0.23	0.00	0.15	86.63	ppb
Selenium	78-2	-0.18	-0.29	-0.61	-0.36		ppb
Silicon	28-1	-2.58	-2.66	-2.69	-2.64		ppb
Silver	107-1	0.01	0.01	0.01	0.01	13.78	ppb
Silver	109-1	0.01	0.01	0.01	0.01	11.14	ppb
Sodium	23-2	57903.04	59319.29	62304.42	59842.25	3.75	ppb
Strontium	86-1	5.03	5.16	5.00	5.06	1.62	ppb
Strontium	88-1	5.21	5.20	5.16	5.19	0.53	ppb
Sulfur	34-1	-2531.19	-2082.83	-1869.66	-2161.23		ppb
Terbium	159-1				131		%
Terbium	159-2				127		%
Thallium	203-1	0.06	0.04	0.04	0.05	27.40	ppb
Thallium	205-1	0.06	0.04	0.04	0.05	26.91	ppb
Tin	118-1	-0.12	-0.13	-0.14	-0.13		ppb
Titanium	47-1	-0.03	-0.02	-0.02	-0.02		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-06 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:02:20 DataFile Name : 027AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	57.58	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				133		%
Yttrium	89-2				138		%
Zinc	66-2	0.63	0.65	0.92	0.73	21.74	ppb
Zirconium	90-1	-0.01	-0.01	-0.01	-0.01		ppb
Zirconium	91-1	-0.01	-0.01	-0.01	-0.01		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-02DLX2 Instrumnet Name : P8
Client Sample ID : PT-TM1-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:05:40 DataFile Name : 028AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1334.90	1348.70	1323.21	1335.61	0.96	ppb
Antimony	121-1	140.59	141.35	140.18	140.71	0.42	ppb
Arsenic	75-2	288.90	289.48	286.99	288.46	0.45	ppb
Barium	135-1	342.53	350.06	336.49	343.03	1.98	ppb
Barium	137-1	342.83	350.36	331.25	341.48	2.82	ppb
Beryllium	9-1	176.81	178.09	173.03	175.98	1.50	ppb
Bismuth	209-1				106		%
Bismuth	209-2				108		%
Bromine	81-1						cps
Cadmium	108-1	283.82	283.80	284.06	283.89	0.05	ppb
Cadmium	106-1	272.42	277.54	276.01	275.32	0.96	ppb
Cadmium	111-1	354.03	355.63	353.42	354.36	0.32	ppb
Calcium	43-1	70.70	72.09	73.66	72.15	2.06	ppb
Calcium	44-1	42.66	42.80	41.47	42.31	1.74	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	109.29	109.03	107.88	108.73	0.69	ppb
Cobalt	59-2	339.96	350.64	341.40	344.00	1.68	ppb
Copper	63-2	336.39	341.33	338.43	338.72	0.73	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				108		%
Indium	115-1				107		%
Indium	115-2				106		%
Iron	54-2	1932.85	1946.38	1921.58	1933.60	0.64	ppb
Iron	56-2	1920.77	1914.72	1902.55	1912.68	0.49	ppb
Iron	57-2	1821.77	1842.17	1821.81	1828.58	0.64	ppb
Krypton	83-1						cps
Lead	206-1	509.00	504.78	506.94	506.91	0.42	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-02DLX2 Instrumnet Name : P8
Client Sample ID : PT-TM1-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:05:40 DataFile Name : 028AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	495.64	488.17	487.48	490.43	0.92	ppb
Lead	208-1	500.89	492.78	496.21	496.63	0.82	ppb
Lithium	6-1				103		%
Magnesium	24-2	0.99	0.95	0.98	0.97	2.05	ppb
Manganese	55-2	822.25	822.15	806.69	817.03	1.10	ppb
Molybdenum	94-1	194.89	202.77	195.07	197.58	2.28	ppb
Molybdenum	95-1	234.16	247.01	235.56	238.91	2.95	ppb
Molybdenum	96-1	231.53	243.21	235.60	236.78	2.50	ppb
Molybdenum	97-1	237.74	246.42	239.90	241.35	1.87	ppb
Molybdenum	98-1	230.52	244.59	237.53	237.55	2.96	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	262.99	266.55	263.01	264.18	0.78	ppb
Phosphorus	31-2	-110.46	-104.27	-107.89	-107.54		ppb
Potassium	39-2	17.03	15.63	15.00	15.89	6.53	ppb
Rhodium	103-1				106		%
Rhodium	103-2				107		%
Scandium	45-1				108		%
Scandium	45-2				104		%
Selenium	82-1	436.63	437.93	438.06	437.54	0.18	ppb
Selenium	77-2	441.31	448.01	440.60	443.31	0.92	ppb
Selenium	78-2	432.02	439.25	423.44	431.57	1.83	ppb
Silicon	28-1	44.39	45.90	44.10	44.80	2.16	ppb
Silver	107-1	419.77	418.76	418.77	419.10	0.14	ppb
Silver	109-1	415.84	421.19	418.37	418.47	0.64	ppb
Sodium	23-2	57.53	58.98	56.79	57.77	1.92	ppb
Strontium	86-1	142.72	142.94	143.00	142.89	0.10	ppb
Strontium	88-1	139.48	139.85	141.34	140.22	0.70	ppb
Sulfur	34-1	156.80	128.39	-190.68	31.50	612.46	ppb
Terbium	159-1				108		%
Terbium	159-2				108		%
Thallium	203-1	110.01	108.38	109.15	109.18	0.75	ppb
Thallium	205-1	108.28	108.89	108.57	108.58	0.28	ppb
Tin	118-1	-0.01	-0.03	-0.02	-0.02		ppb
Titanium	47-1	0.15	0.17	0.17	0.16	8.02	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	20.12	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-02DLX2 Instrumnet Name : P8
Client Sample ID : PT-TM1-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:05:40 DataFile Name : 028AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	744.18	739.25	727.83	737.09	1.14	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				106		%
Zinc	66-2	498.10	498.79	489.49	495.46	1.04	ppb
Zirconium	90-1	0.20	0.22	0.21	0.21	3.62	ppb
Zirconium	91-1	0.35	0.35	0.31	0.34	6.30	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-04DLX2 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:08:36 DataFile Name : 029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	52.49	52.12	48.41	51.01	4.42	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	2.60	ppb
Arsenic	75-2	0.00	0.01	0.02	0.01	174.86	ppb
Barium	135-1	0.14	0.13	0.12	0.13	7.47	ppb
Barium	137-1	0.13	0.13	0.12	0.12	1.68	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	24.11	ppb
Bismuth	209-1				104		%
Bismuth	209-2				108		%
Bromine	81-1						cps
Cadmium	108-1	0.14	0.11	0.16	0.14	18.53	ppb
Cadmium	106-1	-0.45	-0.82	-0.60	-0.63		ppb
Cadmium	111-1	-0.03	-0.05	-0.04	-0.04		ppb
Calcium	43-1	0.42	-0.49	0.09	0.01	6990.95	ppb
Calcium	44-1	5.44	5.32	5.71	5.49	3.68	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.02	-0.01	-0.01	-0.01		ppb
Cobalt	59-2	0.03	0.04	0.03	0.03	10.23	ppb
Copper	63-2	0.11	0.10	0.12	0.11	11.80	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				108		%
Indium	115-1				102		%
Indium	115-2				97		%
Iron	54-2	0.32	0.55	0.36	0.41	30.22	ppb
Iron	56-2	0.66	0.57	0.71	0.65	11.11	ppb
Iron	57-2	0.99	0.96	0.88	0.94	6.03	ppb
Krypton	83-1						cps
Lead	206-1	0.16	0.22	0.25	0.21	20.13	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-04DLX2 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:08:36 DataFile Name : 029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.15	0.22	0.24	0.20	21.56	ppb
Lead	208-1	0.16	0.22	0.24	0.21	19.17	ppb
Lithium	6-1				101		%
Magnesium	24-2	1.01	0.80	0.75	0.85	15.73	ppb
Manganese	55-2	0.25	0.18	0.14	0.19	29.70	ppb
Molybdenum	94-1	1.71	1.73	1.74	1.73	1.11	ppb
Molybdenum	95-1	0.02	0.02	0.02	0.02	22.75	ppb
Molybdenum	96-1	0.19	0.20	0.20	0.20	1.44	ppb
Molybdenum	97-1	0.02	0.02	0.01	0.02	31.48	ppb
Molybdenum	98-1	0.02	0.02	0.02	0.02	11.27	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.13	0.10	0.17	0.13	25.88	ppb
Phosphorus	31-2	-101.89	-113.63	-110.53	-108.68		ppb
Potassium	39-2	13.61	12.80	12.85	13.08	3.45	ppb
Rhodium	103-1				106		%
Rhodium	103-2				108		%
Scandium	45-1				108		%
Scandium	45-2				107		%
Selenium	82-1	0.01	0.22	0.04	0.09	121.12	ppb
Selenium	77-2	0.30	0.00	0.88	0.39	114.10	ppb
Selenium	78-2	-0.46	-0.20	-0.12	-0.26		ppb
Silicon	28-1	205.02	206.55	201.81	204.46	1.18	ppb
Silver	107-1	0.07	0.05	0.04	0.05	25.51	ppb
Silver	109-1	0.07	0.05	0.04	0.05	28.21	ppb
Sodium	23-2	139.59	140.69	134.75	138.35	2.28	ppb
Strontium	86-1	0.01	0.01	0.02	0.01	34.07	ppb
Strontium	88-1	0.02	0.02	0.02	0.02	8.68	ppb
Sulfur	34-1	-999.32	-1086.39	-1144.87	-1076.86		ppb
Terbium	159-1				107		%
Terbium	159-2				109		%
Thallium	203-1	0.03	0.03	0.03	0.03	7.51	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	6.59	ppb
Tin	118-1	876.13	890.50	882.12	882.92	0.82	ppb
Titanium	47-1	115.21	115.79	115.28	115.43	0.27	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	45.74	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-04DLX2 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:08:36 DataFile Name : 029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.02	0.02	0.02	0.02	13.88	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				107		%
Zinc	66-2	0.21	0.30	0.34	0.28	23.62	ppb
Zirconium	90-1	0.93	0.94	0.93	0.93	0.79	ppb
Zirconium	91-1	0.90	0.96	0.94	0.94	2.94	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-06DLX2 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:11:57 DataFile Name : 030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.61	0.36	-0.12	0.28	133.07	ppb
Antimony	121-1	0.01	0.00	0.00	0.00	29.29	ppb
Arsenic	75-2	-0.01	0.00	-0.01	-0.01		ppb
Barium	135-1	0.09	0.10	0.09	0.09	6.04	ppb
Barium	137-1	0.09	0.09	0.09	0.09	2.43	ppb
Beryllium	9-1	0.00	0.01	0.00	0.00	26.40	ppb
Bismuth	209-1				107		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Cadmium	108-1	-0.01	-0.03	-0.01	-0.02		ppb
Cadmium	106-1	-0.93	-0.97	-0.80	-0.90		ppb
Cadmium	111-1	-0.06	-0.06	-0.05	-0.06		ppb
Calcium	43-1	27754.81	27571.81	28225.31	27850.64	1.21	ppb
Calcium	44-1	27953.17	27226.53	27366.82	27515.51	1.40	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.11	-0.10	-0.08	-0.10		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.02	-0.03	-0.02	-0.02		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				113		%
Indium	115-1				112		%
Indium	115-2				113		%
Iron	54-2	-1.21	-1.02	-0.71	-0.98		ppb
Iron	56-2	-0.38	-0.48	-0.05	-0.30		ppb
Iron	57-2	0.81	0.65	0.65	0.70	12.90	ppb
Krypton	83-1						cps
Lead	206-1	0.12	0.17	0.19	0.16	21.59	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-06DLX2 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:11:57 DataFile Name : 030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.11	0.16	0.19	0.16	25.61	ppb
Lead	208-1	0.12	0.17	0.19	0.16	23.50	ppb
Lithium	6-1				106		%
Magnesium	24-2	9333.94	9420.09	9241.58	9331.87	0.96	ppb
Manganese	55-2	-0.30	-0.33	-0.30	-0.31		ppb
Molybdenum	94-1	0.06	0.06	0.06	0.06	1.92	ppb
Molybdenum	95-1	0.08	0.08	0.07	0.07	5.85	ppb
Molybdenum	96-1	0.08	0.07	0.07	0.07	7.87	ppb
Molybdenum	97-1	0.07	0.07	0.08	0.08	9.06	ppb
Molybdenum	98-1	0.08	0.07	0.08	0.07	3.68	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.05	-0.07	-0.04	-0.06		ppb
Phosphorus	31-2	-115.51	-112.08	-113.12	-113.57		ppb
Potassium	39-2	10871.74	10816.92	10856.35	10848.34	0.26	ppb
Rhodium	103-1				111		%
Rhodium	103-2				112		%
Scandium	45-1				115		%
Scandium	45-2				116		%
Selenium	82-1	-0.05	0.02	-0.10	-0.04		ppb
Selenium	77-2	0.00	0.00	0.26	0.09	173.21	ppb
Selenium	78-2	-0.06	-0.21	-0.13	-0.13		ppb
Silicon	28-1	-1.33	-1.50	-1.57	-1.47		ppb
Silver	107-1	0.01	0.01	0.01	0.01	6.75	ppb
Silver	109-1	0.01	0.01	0.01	0.01	1.93	ppb
Sodium	23-2	28208.34	28407.71	28406.32	28340.79	0.40	ppb
Strontium	86-1	2.55	2.58	2.62	2.58	1.33	ppb
Strontium	88-1	2.58	2.61	2.56	2.58	0.93	ppb
Sulfur	34-1	-1395.35	-1111.68	-815.08	-1107.37		ppb
Terbium	159-1				114		%
Terbium	159-2				114		%
Thallium	203-1	0.02	0.02	0.02	0.02	10.24	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	1.41	ppb
Tin	118-1	-0.07	-0.09	-0.09	-0.08		ppb
Titanium	47-1	-0.01	0.01	-0.02	-0.01		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :Q1503-06DLX2Instrumnet Name :P8

Client Sample ID :PT-MIN2-WPDLDilution Factor :2

Date & Time Acquired :2025-04-01 14:11:57DataFile Name :030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	16.41	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				114		%
Yttrium	89-2				122		%
Zinc	66-2	0.45	0.34	0.38	0.39	14.76	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00		ppb
Zirconium	91-1	0.00	0.00	0.00	0.00		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV02 Instrumnet Name : P8
Client Sample ID : CCV02 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:20:16 DataFile Name : 032CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	50261.43	51827.39	51227.47	51105.43	1.55	ppb
Antimony	121-1	504.41	488.80	496.74	496.65	1.57	ppb
Arsenic	75-2	485.85	491.27	486.25	487.79	0.62	ppb
Barium	135-1	2575.22	2491.32	2502.36	2522.97	1.81	ppb
Barium	137-1	2572.85	2505.52	2513.20	2530.52	1.46	ppb
Beryllium	9-1	533.32	516.93	520.94	523.73	1.63	ppb
Bismuth	209-1				89		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Cadmium	108-1	497.07	493.53	490.01	493.54	0.72	ppb
Cadmium	106-1	494.63	489.13	489.15	490.97	0.65	ppb
Cadmium	111-1	501.87	485.52	489.88	492.42	1.72	ppb
Calcium	43-1	245984.11	252777.54	249893.27	249551.64	1.37	ppb
Calcium	44-1	246976.14	250794.48	250731.84	249500.82	0.88	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	493.20	503.39	507.01	501.20	1.43	ppb
Cobalt	59-2	472.90	482.59	484.27	479.92	1.28	ppb
Copper	63-2	4801.43	4873.26	4889.10	4854.60	0.96	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				99		%
Holmium	165-2				105		%
Indium	115-1				92		%
Indium	115-2				94		%
Iron	54-2	122990.25	123342.58	125365.73	123899.52	1.03	ppb
Iron	56-2	122796.88	122474.87	124148.32	123140.02	0.72	ppb
Iron	57-2	120590.28	122485.60	123080.56	122052.15	1.07	ppb
Krypton	83-1						cps
Lead	206-1	2539.86	2533.30	2528.34	2533.83	0.23	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV02 Instrumnet Name : P8
Client Sample ID : CCV02 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:20:16 DataFile Name : 032CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2519.83	2531.91	2513.13	2521.62	0.38	ppb
Lead	208-1	2518.88	2509.38	2528.13	2518.79	0.37	ppb
Lithium	6-1				93		%
Magnesium	24-2	248800.40	249087.61	248227.12	248705.05	0.18	ppb
Manganese	55-2	4997.83	5090.26	5144.66	5077.58	1.46	ppb
Molybdenum	94-1	4992.46	4983.92	5060.20	5012.19	0.83	ppb
Molybdenum	95-1	5090.68	4938.94	5011.34	5013.65	1.51	ppb
Molybdenum	96-1	5065.10	4932.63	4974.49	4990.74	1.36	ppb
Molybdenum	97-1	4990.79	4993.19	4961.49	4981.82	0.35	ppb
Molybdenum	98-1	5001.28	5046.23	4997.23	5014.91	0.54	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	475.59	477.28	478.44	477.10	0.30	ppb
Phosphorus	31-2	10104.62	10453.49	10274.64	10277.58	1.70	ppb
Potassium	39-2	125221.47	125809.19	125277.28	125435.98	0.26	ppb
Rhodium	103-1				90		%
Rhodium	103-2				93		%
Scandium	45-1				103		%
Scandium	45-2				108		%
Selenium	82-1	488.68	480.37	476.55	481.87	1.29	ppb
Selenium	77-2	501.01	502.69	487.27	496.99	1.70	ppb
Selenium	78-2	488.35	486.13	504.48	492.99	2.03	ppb
Silicon	28-1	535.19	548.17	550.61	544.66	1.52	ppb
Silver	107-1	494.95	483.24	482.57	486.92	1.43	ppb
Silver	109-1	496.80	477.48	475.80	483.36	2.41	ppb
Sodium	23-2	244740.17	251630.00	247023.45	247797.87	1.42	ppb
Strontium	86-1	502.05	501.61	492.90	498.86	1.03	ppb
Strontium	88-1	509.09	504.67	494.54	502.77	1.48	ppb
Sulfur	34-1	9534.15	9836.11	9843.69	9737.99	1.81	ppb
Terbium	159-1				100		%
Terbium	159-2				105		%
Thallium	203-1	507.20	505.69	505.96	506.29	0.16	ppb
Thallium	205-1	505.39	504.23	502.97	504.20	0.24	ppb
Tin	118-1	503.79	495.89	493.34	497.68	1.09	ppb
Titanium	47-1	4931.27	5059.39	5062.73	5017.79	1.49	ppb
Uranium	238-1	509.99	510.71	513.87	511.52	0.40	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV02 Instrumnet Name : P8
Client Sample ID : CCV02 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:20:16 DataFile Name : 032CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	504.45	509.96	514.34	509.58	0.97	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				101		%
Yttrium	89-2				105		%
Zinc	66-2	4939.91	5024.47	5010.54	4991.64	0.91	ppb
Zirconium	90-1	504.38	503.10	502.10	503.20	0.23	ppb
Zirconium	91-1	511.82	505.61	505.27	507.57	0.73	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB02 Instrumnet Name : P8
Client Sample ID : CCB02 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:28:25 DataFile Name : 033CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.97	0.90	1.04	0.97	6.92	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	4.56	ppb
Arsenic	75-2	-0.01	0.01	-0.01	0.00		ppb
Barium	135-1	0.01	0.01	0.01	0.01	12.36	ppb
Barium	137-1	0.01	0.00	0.00	0.00	84.51	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	14.77	ppb
Bismuth	209-1				106		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Cadmium	108-1	-0.01	0.00	-0.01	-0.01		ppb
Cadmium	106-1	-0.51	-0.86	-0.92	-0.76		ppb
Cadmium	111-1	-0.03	-0.06	-0.06	-0.05		ppb
Calcium	43-1	-4.22	-3.57	-4.28	-4.02		ppb
Calcium	44-1	-4.04	-4.37	-4.49	-4.30		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.04	0.00	-0.03		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	56.08	ppb
Copper	63-2	0.01	0.00	0.05	0.02	123.05	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				112		%
Indium	115-1				110		%
Indium	115-2				110		%
Iron	54-2	0.44	-0.08	0.41	0.26	115.33	ppb
Iron	56-2	0.35	0.36	0.46	0.39	16.34	ppb
Iron	57-2	0.17	0.86	0.07	0.37	117.69	ppb
Krypton	83-1						cps
Lead	206-1	0.04	0.04	0.03	0.04	5.12	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB02 Instrumnet Name : P8
Client Sample ID : CCB02 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:28:25 DataFile Name : 033CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.03	0.03	0.04	0.03	9.67	ppb
Lead	208-1	0.03	0.03	0.03	0.03	2.15	ppb
Lithium	6-1				106		%
Magnesium	24-2	1.11	1.10	1.39	1.20	13.74	ppb
Manganese	55-2	0.20	0.20	0.15	0.19	16.36	ppb
Molybdenum	94-1	0.06	0.07	0.07	0.06	9.22	ppb
Molybdenum	95-1	0.04	0.03	0.03	0.04	18.25	ppb
Molybdenum	96-1	0.04	0.04	0.03	0.04	6.74	ppb
Molybdenum	97-1	0.04	0.03	0.03	0.03	14.00	ppb
Molybdenum	98-1	0.04	0.03	0.03	0.04	19.51	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.07	-0.05	-0.02	-0.05		ppb
Phosphorus	31-2	-110.23	-110.17	-112.56	-110.99		ppb
Potassium	39-2	15.94	16.68	15.38	16.00	4.08	ppb
Rhodium	103-1				109		%
Rhodium	103-2				111		%
Scandium	45-1				109		%
Scandium	45-2				106		%
Selenium	82-1	0.03	0.06	-0.01	0.03	134.77	ppb
Selenium	77-2	0.00	0.29	0.00	0.10	173.21	ppb
Selenium	78-2	0.13	0.03	0.20	0.12	71.79	ppb
Silicon	28-1	-0.36	-0.34	-0.31	-0.34		ppb
Silver	107-1	0.01	0.01	0.01	0.01	11.86	ppb
Silver	109-1	0.01	0.01	0.01	0.01	7.93	ppb
Sodium	23-2	17.83	17.70	16.36	17.30	4.72	ppb
Strontium	86-1	-0.01	0.00	-0.01	-0.01		ppb
Strontium	88-1	0.00	0.00	0.00	0.00	28.23	ppb
Sulfur	34-1	-936.06	-1019.93	-858.46	-938.15		ppb
Terbium	159-1				109		%
Terbium	159-2				111		%
Thallium	203-1	0.02	0.02	0.02	0.02	3.59	ppb
Thallium	205-1	0.02	0.01	0.02	0.02	11.10	ppb
Tin	118-1	0.08	0.08	0.09	0.08	8.74	ppb
Titanium	47-1	0.02	0.01	0.02	0.01	31.39	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	8.47	ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :CCB02Instrumnet Name :P8

Client Sample ID :CCB02Dilution Factor :1

Date & Time Acquired :2025-04-01 14:28:25DataFile Name :033CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.01	0.00	150.82	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				109		%
Zinc	66-2	0.03	0.03	0.15	0.07	94.48	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	15.37	ppb
Zirconium	91-1	0.01	0.01	0.03	0.02	43.75	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-02DLX2 Instrumnet Name : P8
Client Sample ID : PT-TM1-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:31:47 DataFile Name : 034AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1366.50	1376.75	1347.41	1363.55	1.09	ppb
Antimony	121-1	140.80	141.58	144.59	142.32	1.41	ppb
Arsenic	75-2	293.67	272.60	293.88	286.72	4.26	ppb
Barium	135-1	343.64	338.46	346.04	342.71	1.13	ppb
Barium	137-1	339.15	339.78	343.01	340.65	0.61	ppb
Beryllium	9-1	178.05	181.36	172.81	177.41	2.43	ppb
Bismuth	209-1				107		%
Bismuth	209-2				109		%
Bromine	81-1						cps
Cadmium	108-1	286.78	289.80	287.10	287.89	0.58	ppb
Cadmium	106-1	273.15	276.12	280.90	276.73	1.41	ppb
Cadmium	111-1	357.58	366.42	360.31	361.43	1.25	ppb
Calcium	43-1	69.70	74.86	74.96	73.17	4.11	ppb
Calcium	44-1	38.78	40.05	38.56	39.13	2.06	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	110.92	109.84	110.28	110.35	0.49	ppb
Cobalt	59-2	345.14	345.59	348.78	346.50	0.57	ppb
Copper	63-2	347.04	341.37	340.88	343.10	1.00	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				110		%
Indium	115-1				109		%
Indium	115-2				110		%
Iron	54-2	1947.73	1940.80	1943.37	1943.96	0.18	ppb
Iron	56-2	1948.21	1959.25	1936.32	1947.93	0.59	ppb
Iron	57-2	1880.04	1855.98	1858.97	1864.99	0.70	ppb
Krypton	83-1						cps
Lead	206-1	519.25	528.46	511.55	519.75	1.63	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-02DLX2 Instrumnet Name : P8
Client Sample ID : PT-TM1-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:31:47 DataFile Name : 034AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	504.64	503.98	500.08	502.90	0.49	ppb
Lead	208-1	508.49	513.85	508.88	510.41	0.59	ppb
Lithium	6-1				105		%
Magnesium	24-2	0.69	0.43	0.66	0.59	24.11	ppb
Manganese	55-2	838.50	851.99	833.16	841.22	1.15	ppb
Molybdenum	94-1	198.35	206.82	202.10	202.42	2.10	ppb
Molybdenum	95-1	240.69	248.65	247.47	245.60	1.75	ppb
Molybdenum	96-1	238.76	241.94	244.22	241.64	1.14	ppb
Molybdenum	97-1	243.07	251.79	249.15	248.00	1.80	ppb
Molybdenum	98-1	238.91	248.11	246.02	244.35	1.97	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	265.45	266.18	265.83	265.82	0.14	ppb
Phosphorus	31-2	-113.17	-109.08	-107.91	-110.06		ppb
Potassium	39-2	15.28	17.24	14.94	15.82	7.83	ppb
Rhodium	103-1				109		%
Rhodium	103-2				111		%
Scandium	45-1				111		%
Scandium	45-2				108		%
Selenium	82-1	431.46	445.54	452.24	443.08	2.39	ppb
Selenium	77-2	463.25	425.39	454.38	447.68	4.42	ppb
Selenium	78-2	448.36	401.03	441.41	430.27	5.94	ppb
Silicon	28-1	44.41	46.29	44.89	45.20	2.16	ppb
Silver	107-1	419.64	427.23	429.45	425.44	1.21	ppb
Silver	109-1	423.17	425.32	431.68	426.72	1.04	ppb
Sodium	23-2	50.85	51.80	53.07	51.91	2.15	ppb
Strontium	86-1	144.29	146.32	148.88	146.50	1.57	ppb
Strontium	88-1	142.42	146.89	147.66	145.66	1.94	ppb
Sulfur	34-1	-1224.65	-1281.34	-1333.29	-1279.76		ppb
Terbium	159-1				111		%
Terbium	159-2				113		%
Thallium	203-1	112.59	113.50	111.69	112.59	0.80	ppb
Thallium	205-1	111.74	111.30	109.84	110.96	0.90	ppb
Tin	118-1	-0.05	-0.05	-0.04	-0.05		ppb
Titanium	47-1	0.17	0.16	0.13	0.15	13.08	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	13.39	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-02DLX2 Instrumnet Name : P8
Client Sample ID : PT-TM1-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:31:47 DataFile Name : 034AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	761.24	754.35	749.22	754.94	0.80	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				113		%
Zinc	66-2	508.14	502.61	501.17	503.98	0.73	ppb
Zirconium	90-1	0.24	0.24	0.24	0.24	0.57	ppb
Zirconium	91-1	0.34	0.36	0.35	0.35	2.91	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-04DLX2 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:34:45 DataFile Name : 035AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	55.70	51.51	48.15	51.79	7.30	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	9.80	ppb
Arsenic	75-2	0.00	0.00	0.01	0.00	389.53	ppb
Barium	135-1	0.12	0.12	0.12	0.12	2.36	ppb
Barium	137-1	0.11	0.11	0.10	0.11	3.54	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	12.16	ppb
Bismuth	209-1				108		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Cadmium	108-1	0.12	0.13	0.11	0.12	9.22	ppb
Cadmium	106-1	-0.91	-0.83	-0.79	-0.84		ppb
Cadmium	111-1	-0.05	-0.05	-0.06	-0.05		ppb
Calcium	43-1	-0.04	-1.30	-1.02	-0.79		ppb
Calcium	44-1	2.84	2.59	2.28	2.57	10.86	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	-0.01	-0.01	-0.01		ppb
Cobalt	59-2	0.04	0.03	0.03	0.03	13.61	ppb
Copper	63-2	0.02	0.02	0.02	0.02	18.10	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				112		%
Indium	115-1				105		%
Indium	115-2				100		%
Iron	54-2	0.57	0.48	0.61	0.55	11.79	ppb
Iron	56-2	0.54	0.60	0.62	0.59	7.44	ppb
Iron	57-2	0.40	0.38	0.69	0.49	35.62	ppb
Krypton	83-1						cps
Lead	206-1	0.12	0.16	0.18	0.15	19.92	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-04DLX2 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:34:45 DataFile Name : 035AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.11	0.16	0.18	0.15	23.58	ppb
Lead	208-1	0.12	0.16	0.17	0.15	20.25	ppb
Lithium	6-1				105		%
Magnesium	24-2	0.75	0.73	0.66	0.71	6.13	ppb
Manganese	55-2	0.20	0.16	0.16	0.17	13.12	ppb
Molybdenum	94-1	1.73	1.76	1.80	1.76	2.01	ppb
Molybdenum	95-1	0.02	0.02	0.02	0.02	8.87	ppb
Molybdenum	96-1	0.20	0.22	0.21	0.21	3.66	ppb
Molybdenum	97-1	0.02	0.02	0.02	0.02	19.37	ppb
Molybdenum	98-1	0.02	0.02	0.02	0.02	11.28	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.12	0.11	0.11	0.11	7.52	ppb
Phosphorus	31-2	-110.15	-107.84	-107.32	-108.44		ppb
Potassium	39-2	17.13	16.10	14.58	15.94	8.08	ppb
Rhodium	103-1				109		%
Rhodium	103-2				113		%
Scandium	45-1				113		%
Scandium	45-2				110		%
Selenium	82-1	0.27	0.10	0.05	0.14	82.51	ppb
Selenium	77-2	0.00	0.00	0.27	0.09	173.21	ppb
Selenium	78-2	-0.12	-0.27	-0.18	-0.19		ppb
Silicon	28-1	206.25	203.94	207.21	205.80	0.82	ppb
Silver	107-1	0.07	0.05	0.04	0.06	26.52	ppb
Silver	109-1	0.07	0.05	0.04	0.05	25.56	ppb
Sodium	23-2	143.47	138.09	134.45	138.67	3.28	ppb
Strontium	86-1	0.02	0.01	0.01	0.01	59.03	ppb
Strontium	88-1	0.02	0.02	0.02	0.02	4.67	ppb
Sulfur	34-1	-1570.56	-1683.53	-1722.67	-1658.92		ppb
Terbium	159-1				112		%
Terbium	159-2				112		%
Thallium	203-1	0.03	0.04	0.04	0.04	9.57	ppb
Thallium	205-1	0.03	0.03	0.04	0.03	6.37	ppb
Tin	118-1	842.13	875.71	879.59	865.81	2.38	ppb
Titanium	47-1	113.03	113.07	114.61	113.57	0.79	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	14.01	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-04DLX2 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:34:45 DataFile Name : 035AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.02	0.01	0.01	0.02	16.71	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				118		%
Zinc	66-2	0.19	0.16	0.15	0.17	13.29	ppb
Zirconium	90-1	0.96	0.94	0.94	0.95	1.06	ppb
Zirconium	91-1	0.94	0.97	0.94	0.95	1.85	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-06DLX5 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WPDL Dilution Factor : 5
Date & Time Acquired : 2025-04-01 14:38:29 DataFile Name : 036AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	3.32	1.94	2.02	2.42	31.86	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	21.29	ppb
Arsenic	75-2	-0.01	0.00	0.00	-0.01		ppb
Barium	135-1	0.04	0.03	0.04	0.04	14.40	ppb
Barium	137-1	0.03	0.04	0.04	0.03	9.83	ppb
Beryllium	9-1	0.00	0.00	0.01	0.00	47.21	ppb
Bismuth	209-1				108		%
Bismuth	209-2				112		%
Bromine	81-1						cps
Cadmium	108-1	0.00	-0.03	-0.01	-0.01		ppb
Cadmium	106-1	-1.18	-1.05	-0.89	-1.04		ppb
Cadmium	111-1	-0.08	-0.07	-0.06	-0.07		ppb
Calcium	43-1	10711.66	11098.82	11582.43	11130.97	3.92	ppb
Calcium	44-1	10767.35	11130.43	11045.84	10981.21	1.73	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.07	-0.06	-0.05	-0.06		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.03	-0.04	-0.02	-0.03		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				111		%
Holmium	165-2				114		%
Indium	115-1				112		%
Indium	115-2				113		%
Iron	54-2	-0.45	-0.78	-0.52	-0.58		ppb
Iron	56-2	-0.37	-0.12	-0.31	-0.27		ppb
Iron	57-2	0.54	-0.10	0.40	0.28	121.72	ppb
Krypton	83-1						cps
Lead	206-1	0.06	0.07	0.07	0.07	13.12	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-06DLX5 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WPDL Dilution Factor : 5
Date & Time Acquired : 2025-04-01 14:38:29 DataFile Name : 036AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.06	0.07	0.07	0.07	6.19	ppb
Lead	208-1	0.06	0.07	0.07	0.07	10.26	ppb
Lithium	6-1				106		%
Magnesium	24-2	3863.22	3843.91	3813.56	3840.23	0.65	ppb
Manganese	55-2	-0.05	-0.05	-0.05	-0.05		ppb
Molybdenum	94-1	0.04	0.03	0.03	0.03	11.14	ppb
Molybdenum	95-1	0.04	0.03	0.03	0.03	7.18	ppb
Molybdenum	96-1	0.03	0.04	0.03	0.03	12.65	ppb
Molybdenum	97-1	0.03	0.03	0.03	0.03	3.19	ppb
Molybdenum	98-1	0.03	0.03	0.03	0.03	5.16	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.05	-0.06	-0.05	-0.05		ppb
Phosphorus	31-2	-107.25	-109.81	-107.29	-108.11		ppb
Potassium	39-2	4383.72	4404.56	4389.63	4392.64	0.24	ppb
Rhodium	103-1				111		%
Rhodium	103-2				111		%
Scandium	45-1				115		%
Scandium	45-2				113		%
Selenium	82-1	0.08	0.17	0.14	0.13	35.16	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.06	-0.44	-0.05	-0.18		ppb
Silicon	28-1	-1.16	-0.98	-1.08	-1.07		ppb
Silver	107-1	0.01	0.01	0.01	0.01	7.53	ppb
Silver	109-1	0.01	0.01	0.01	0.01	12.74	ppb
Sodium	23-2	11270.23	11278.62	11245.46	11264.77	0.15	ppb
Strontium	86-1	1.00	1.04	1.01	1.01	2.13	ppb
Strontium	88-1	1.04	1.02	1.01	1.02	1.35	ppb
Sulfur	34-1	-1801.76	-1446.24	-1233.29	-1493.76		ppb
Terbium	159-1				112		%
Terbium	159-2				114		%
Thallium	203-1	0.03	0.03	0.03	0.03	2.77	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	5.98	ppb
Tin	118-1	-0.05	-0.05	-0.05	-0.05		ppb
Titanium	47-1	0.00	0.00	0.01	0.00	199.73	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :Q1504-06DLX5Instrumnet Name :P8

Client Sample ID :PT-MIN2-WPDLDilution Factor :5

Date & Time Acquired :2025-04-01 14:38:29DataFile Name :036AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	94.82	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				113		%
Yttrium	89-2				122		%
Zinc	66-2	0.18	0.23	0.25	0.22	14.57	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00		ppb
Zirconium	91-1	0.00	0.00	0.00	0.00		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167397BL Instrumnet Name : P8
Client Sample ID : PB167397BL Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:42:27 DataFile Name : 037CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.14	-0.55	-0.75	-0.48		ppb
Antimony	121-1	0.00	0.00	0.00	0.00	5.64	ppb
Arsenic	75-2	0.00	-0.01	-0.01	0.00		ppb
Barium	135-1	0.00	-0.01	-0.01	-0.01		ppb
Barium	137-1	0.00	-0.01	-0.01	-0.01		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	42.32	ppb
Bismuth	209-1				108		%
Bismuth	209-2				112		%
Bromine	81-1						cps
Cadmium	108-1	-0.03	-0.03	0.00	-0.02		ppb
Cadmium	106-1	-1.02	-0.81	-0.78	-0.87		ppb
Cadmium	111-1	-0.07	-0.06	-0.06	-0.06		ppb
Calcium	43-1	-4.49	-6.20	-4.54	-5.08		ppb
Calcium	44-1	-5.37	-5.60	-4.64	-5.20		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.06	0.02	-0.03		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.04	-0.02	0.00	-0.02		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				111		%
Indium	115-1				112		%
Indium	115-2				110		%
Iron	54-2	-0.99	-0.15	-0.43	-0.52		ppb
Iron	56-2	-0.32	-0.35	-0.20	-0.29		ppb
Iron	57-2	-0.69	-0.21	-0.17	-0.36		ppb
Krypton	83-1						cps
Lead	206-1	0.01	0.01	0.01	0.01	8.64	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167397BL Instrumnet Name : P8
Client Sample ID : PB167397BL Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:42:27 DataFile Name : 037CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.01	0.01	0.01	0.01	0.89	ppb
Lead	208-1	0.01	0.01	0.01	0.01	1.33	ppb
Lithium	6-1				105		%
Magnesium	24-2	-0.11	-0.19	-0.16	-0.15		ppb
Manganese	55-2	0.10	0.13	0.12	0.12	12.53	ppb
Molybdenum	94-1	0.01	0.02	0.01	0.01	22.50	ppb
Molybdenum	95-1	0.01	0.00	0.00	0.00	127.96	ppb
Molybdenum	96-1	0.01	0.01	0.01	0.01	1.11	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	37.50	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	43.43	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.09	-0.05	-0.05	-0.07		ppb
Phosphorus	31-2	-104.70	-102.62	-110.19	-105.84		ppb
Potassium	39-2	9.32	9.26	10.78	9.78	8.80	ppb
Rhodium	103-1				111		%
Rhodium	103-2				111		%
Scandium	45-1				112		%
Scandium	45-2				110		%
Selenium	82-1	0.11	-0.01	0.02	0.04	148.66	ppb
Selenium	77-2	0.57	0.00	0.00	0.19	173.21	ppb
Selenium	78-2	0.19	-0.20	-0.18	-0.06		ppb
Silicon	28-1	-0.79	-0.92	-0.86	-0.86		ppb
Silver	107-1	0.01	0.01	0.01	0.01	8.91	ppb
Silver	109-1	0.01	0.01	0.01	0.01	8.69	ppb
Sodium	23-2	8.44	8.55	8.84	8.61	2.43	ppb
Strontium	86-1	-0.01	-0.01	-0.01	-0.01		ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-683.69	-767.50	-672.39	-707.86		ppb
Terbium	159-1				111		%
Terbium	159-2				113		%
Thallium	203-1	0.02	0.02	0.02	0.02	8.02	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	1.58	ppb
Tin	118-1	-0.04	-0.05	-0.05	-0.05		ppb
Titanium	47-1	-0.01	-0.01	0.00	0.00		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :PB167397BLInstrumnet Name :P8

Client Sample ID :PB167397BLDilution Factor :1

Date & Time Acquired :2025-04-01 14:42:27DataFile Name :037CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	324.31	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				116		%
Zinc	66-2	-0.19	-0.08	0.02	-0.08		ppb
Zirconium	90-1	0.01	0.00	0.00	0.00	22.47	ppb
Zirconium	91-1	0.01	0.00	0.00	0.00	48.45	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167399BL Instrumnet Name : P8
Client Sample ID : PB167399BL Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:45:49 DataFile Name : 038CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.80	-0.52	-0.05	-0.46		ppb
Antimony	121-1	0.00	0.00	0.00	0.00	8.50	ppb
Arsenic	75-2	-0.01	0.00	0.00	0.00		ppb
Barium	135-1	0.00	0.00	-0.01	0.00		ppb
Barium	137-1	-0.01	-0.01	-0.01	-0.01		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	56.65	ppb
Bismuth	209-1				109		%
Bismuth	209-2				112		%
Bromine	81-1						cps
Cadmium	108-1	0.00	-0.01	-0.01	-0.01		ppb
Cadmium	106-1	-0.69	-0.68	-0.39	-0.58		ppb
Cadmium	111-1	-0.05	-0.05	-0.03	-0.04		ppb
Calcium	43-1	-5.42	-5.82	-6.64	-5.96		ppb
Calcium	44-1	-5.05	-5.44	-4.77	-5.08		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.02	-0.03	-0.03		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.03	-0.03	0.00	-0.02		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				112		%
Indium	115-1				112		%
Indium	115-2				111		%
Iron	54-2	-0.66	-0.84	-0.41	-0.64		ppb
Iron	56-2	-0.37	-0.26	-0.19	-0.28		ppb
Iron	57-2	-0.14	-0.45	-0.31	-0.30		ppb
Krypton	83-1						cps
Lead	206-1	0.00	0.00	0.00	0.00		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167399BL Instrumnet Name : P8
Client Sample ID : PB167399BL Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:45:49 DataFile Name : 038CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.00	0.00	0.00	0.00	120.15	ppb
Lead	208-1	0.00	0.00	0.00	0.00	283.23	ppb
Lithium	6-1				106		%
Magnesium	24-2	-0.20	-0.16	-0.19	-0.18		ppb
Manganese	55-2	0.16	0.13	0.10	0.13	23.20	ppb
Molybdenum	94-1	0.01	0.02	0.01	0.01	10.98	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	314.76	ppb
Molybdenum	96-1	0.00	0.01	0.00	0.00	20.78	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	363.88	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	27.09	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.08	-0.05	-0.06	-0.06		ppb
Phosphorus	31-2	-108.40	-105.58	-112.51	-108.83		ppb
Potassium	39-2	8.09	9.48	9.16	8.91	8.20	ppb
Rhodium	103-1				110		%
Rhodium	103-2				112		%
Scandium	45-1				112		%
Scandium	45-2				111		%
Selenium	82-1	0.08	0.09	0.08	0.08	10.64	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.11	-0.07	-0.21	-0.13		ppb
Silicon	28-1	-0.86	-0.92	-0.91	-0.90		ppb
Silver	107-1	0.00	0.00	0.01	0.00	10.55	ppb
Silver	109-1	0.00	0.01	0.01	0.01	8.55	ppb
Sodium	23-2	7.16	6.44	6.05	6.55	8.57	ppb
Strontium	86-1	-0.01	-0.01	0.00	-0.01		ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-640.01	-714.74	-642.59	-665.78		ppb
Terbium	159-1				111		%
Terbium	159-2				112		%
Thallium	203-1	0.01	0.01	0.01	0.01	6.38	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	5.32	ppb
Tin	118-1	-0.06	-0.04	-0.06	-0.05		ppb
Titanium	47-1	-0.01	0.00	-0.01	-0.01		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167399BL Instrumnet Name : P8
Client Sample ID : PB167399BL Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:45:49 DataFile Name : 038CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				113		%
Yttrium	89-2				118		%
Zinc	66-2	-0.14	-0.03	-0.14	-0.10		ppb
Zirconium	90-1	0.00	0.00	0.01	0.00	37.09	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	18.76	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167397BS Instrumnet Name : P8
Client Sample ID : PB167397BS Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:49:13 DataFile Name : 039LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10093.83	10360.13	10287.39	10247.12	1.34	ppb
Antimony	121-1	508.20	498.12	504.77	503.70	1.02	ppb
Arsenic	75-2	502.74	500.58	496.98	500.10	0.58	ppb
Barium	135-1	2559.54	2499.19	2553.64	2537.46	1.31	ppb
Barium	137-1	2530.39	2543.27	2553.66	2542.44	0.46	ppb
Beryllium	9-1	514.21	531.08	504.11	516.47	2.64	ppb
Bismuth	209-1				101		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Cadmium	108-1	512.19	509.42	513.77	511.79	0.43	ppb
Cadmium	106-1	508.59	504.99	508.12	507.23	0.39	ppb
Cadmium	111-1	518.22	523.67	519.29	520.39	0.56	ppb
Calcium	43-1	52433.14	50671.92	51843.77	51649.61	1.74	ppb
Calcium	44-1	51364.25	50807.03	51052.94	51074.74	0.55	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	510.89	507.72	521.30	513.30	1.38	ppb
Cobalt	59-2	506.54	506.57	508.85	507.32	0.26	ppb
Copper	63-2	5002.86	5046.56	5056.20	5035.21	0.56	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				108		%
Indium	115-1				102		%
Indium	115-2				99		%
Iron	54-2	26398.10	26755.71	26386.65	26513.48	0.79	ppb
Iron	56-2	26152.87	26430.10	26472.27	26351.74	0.66	ppb
Iron	57-2	26076.55	25991.08	26492.48	26186.70	1.02	ppb
Krypton	83-1						cps
Lead	206-1	2520.91	2510.95	2523.38	2518.41	0.26	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167397BS Instrumnet Name : P8
Client Sample ID : PB167397BS Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:49:13 DataFile Name : 039LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2513.68	2529.19	2479.37	2507.41	1.02	ppb
Lead	208-1	2504.84	2512.49	2484.06	2500.46	0.59	ppb
Lithium	6-1				100		%
Magnesium	24-2	52444.99	53320.32	52693.61	52819.64	0.85	ppb
Manganese	55-2	5064.84	5205.21	5221.71	5163.92	1.67	ppb
Molybdenum	94-1	4980.20	5025.93	5065.90	5024.01	0.85	ppb
Molybdenum	95-1	4991.59	5134.01	5088.06	5071.22	1.43	ppb
Molybdenum	96-1	5016.38	5185.60	5080.04	5094.01	1.68	ppb
Molybdenum	97-1	5014.79	5095.59	5095.13	5068.50	0.92	ppb
Molybdenum	98-1	4990.74	5026.45	5147.23	5054.81	1.62	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	519.00	507.55	520.98	515.84	1.41	ppb
Phosphorus	31-2	10327.12	10245.61	10221.83	10264.85	0.54	ppb
Potassium	39-2	25621.33	25340.97	25154.16	25372.15	0.93	ppb
Rhodium	103-1				102		%
Rhodium	103-2				104		%
Scandium	45-1				110		%
Scandium	45-2				111		%
Selenium	82-1	487.30	499.25	503.01	496.52	1.65	ppb
Selenium	77-2	520.49	518.26	511.24	516.66	0.93	ppb
Selenium	78-2	509.71	503.79	509.22	507.57	0.65	ppb
Silicon	28-1	552.21	548.23	550.94	550.46	0.37	ppb
Silver	107-1	516.43	518.25	520.56	518.42	0.40	ppb
Silver	109-1	523.42	521.29	523.06	522.59	0.22	ppb
Sodium	23-2	52883.63	53712.07	52795.42	53130.37	0.95	ppb
Strontium	86-1	506.51	512.46	505.63	508.20	0.73	ppb
Strontium	88-1	500.44	512.36	504.18	505.66	1.21	ppb
Sulfur	34-1	10315.67	10093.94	9904.55	10104.72	2.04	ppb
Terbium	159-1				109		%
Terbium	159-2				109		%
Thallium	203-1	494.93	508.57	501.86	501.79	1.36	ppb
Thallium	205-1	496.18	503.30	496.54	498.67	0.80	ppb
Tin	118-1	511.45	496.14	509.35	505.64	1.64	ppb
Titanium	47-1	5064.04	5042.26	5075.38	5060.56	0.33	ppb
Uranium	238-1	488.57	488.66	487.11	488.11	0.18	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167397BS Instrumnet Name : P8
Client Sample ID : PB167397BS Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:49:13 DataFile Name : 039LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	520.58	511.16	515.35	515.70	0.91	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				108		%
Zinc	66-2	5027.12	5036.39	5022.09	5028.53	0.14	ppb
Zirconium	90-1	498.46	495.63	501.53	498.54	0.59	ppb
Zirconium	91-1	502.20	510.56	504.68	505.81	0.85	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167399BS Instrumnet Name : P8
Client Sample ID : PB167399BS Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:51:57 DataFile Name : 040LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10485.01	10025.60	10259.51	10256.71	2.24	ppb
Antimony	121-1	503.34	514.90	495.40	504.55	1.94	ppb
Arsenic	75-2	501.03	457.33	502.00	486.79	5.24	ppb
Barium	135-1	2527.32	2581.19	2450.41	2519.64	2.61	ppb
Barium	137-1	2515.87	2594.02	2518.76	2542.88	1.74	ppb
Beryllium	9-1	514.71	524.73	515.33	518.26	1.08	ppb
Bismuth	209-1				101		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Cadmium	108-1	502.92	512.19	498.06	504.39	1.42	ppb
Cadmium	106-1	496.81	514.10	499.64	503.52	1.84	ppb
Cadmium	111-1	516.61	533.20	504.94	518.25	2.74	ppb
Calcium	43-1	51046.31	51870.12	51631.03	51515.82	0.82	ppb
Calcium	44-1	51007.74	51115.46	50911.36	51011.52	0.20	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	503.28	512.29	514.51	510.03	1.17	ppb
Cobalt	59-2	506.09	500.84	515.32	507.42	1.44	ppb
Copper	63-2	5072.95	4976.86	5134.17	5061.32	1.57	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				110		%
Indium	115-1				104		%
Indium	115-2				99		%
Iron	54-2	26510.12	26505.14	26640.90	26552.05	0.29	ppb
Iron	56-2	26264.91	26129.55	26211.84	26202.10	0.26	ppb
Iron	57-2	25976.21	26002.93	26345.22	26108.12	0.79	ppb
Krypton	83-1						cps
Lead	206-1	2518.25	2489.83	2542.04	2516.70	1.04	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167399BS Instrumnet Name : P8
Client Sample ID : PB167399BS Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:51:57 DataFile Name : 040LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2504.85	2501.66	2503.10	2503.20	0.06	ppb
Lead	208-1	2500.55	2485.21	2513.52	2499.76	0.57	ppb
Lithium	6-1				101		%
Magnesium	24-2	53733.57	52124.41	52491.40	52783.13	1.60	ppb
Manganese	55-2	5170.45	5132.59	5177.44	5160.16	0.47	ppb
Molybdenum	94-1	4944.31	4916.56	4862.87	4907.91	0.84	ppb
Molybdenum	95-1	4970.51	4982.07	4796.99	4916.52	2.11	ppb
Molybdenum	96-1	5000.66	5037.92	4819.53	4952.70	2.36	ppb
Molybdenum	97-1	5023.97	4952.81	4916.50	4964.43	1.10	ppb
Molybdenum	98-1	5014.42	4936.13	4924.32	4958.29	0.99	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	516.43	513.95	517.99	516.12	0.40	ppb
Phosphorus	31-2	10461.94	10188.03	10133.08	10261.02	1.72	ppb
Potassium	39-2	25801.20	25606.76	25810.84	25739.60	0.45	ppb
Rhodium	103-1				102		%
Rhodium	103-2				104		%
Scandium	45-1				111		%
Scandium	45-2				111		%
Selenium	82-1	497.65	496.03	478.08	490.59	2.21	ppb
Selenium	77-2	506.17	460.43	515.43	494.01	5.96	ppb
Selenium	78-2	503.88	449.39	511.48	488.25	6.94	ppb
Silicon	28-1	542.74	541.59	530.87	538.40	1.22	ppb
Silver	107-1	512.53	527.03	510.53	516.70	1.74	ppb
Silver	109-1	517.28	523.40	508.52	516.40	1.45	ppb
Sodium	23-2	54180.57	52395.15	53391.51	53322.41	1.68	ppb
Strontium	86-1	505.38	497.70	502.39	501.82	0.77	ppb
Strontium	88-1	504.22	508.63	497.53	503.46	1.11	ppb
Sulfur	34-1	9709.83	9433.07	9403.85	9515.58	1.77	ppb
Terbium	159-1				109		%
Terbium	159-2				110		%
Thallium	203-1	508.71	490.97	501.80	500.50	1.79	ppb
Thallium	205-1	500.15	489.18	505.86	498.40	1.70	ppb
Tin	118-1	500.72	513.45	502.89	505.69	1.35	ppb
Titanium	47-1	4927.65	5006.64	5030.85	4988.38	1.08	ppb
Uranium	238-1	492.39	492.88	502.52	495.93	1.15	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167399BS Instrumnet Name : P8
Client Sample ID : PB167399BS Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:51:57 DataFile Name : 040LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	512.89	509.78	512.44	511.70	0.33	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				111		%
Zinc	66-2	5112.52	5045.03	5121.76	5093.10	0.82	ppb
Zirconium	90-1	494.52	496.75	491.11	494.12	0.58	ppb
Zirconium	91-1	496.40	498.96	486.31	493.89	1.35	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV03 Instrumnet Name : P8
Client Sample ID : CCV03 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:54:42 DataFile Name : 041CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51426.42	50626.55	51496.13	51183.03	0.94	ppb
Antimony	121-1	497.65	496.56	496.88	497.03	0.11	ppb
Arsenic	75-2	485.19	483.00	484.47	484.22	0.23	ppb
Barium	135-1	2515.75	2524.54	2522.81	2521.03	0.18	ppb
Barium	137-1	2552.21	2531.67	2504.74	2529.54	0.94	ppb
Beryllium	9-1	518.74	532.23	512.58	521.18	1.93	ppb
Bismuth	209-1				90		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Cadmium	108-1	489.46	490.12	489.09	489.55	0.11	ppb
Cadmium	106-1	490.12	491.03	489.96	490.37	0.12	ppb
Cadmium	111-1	498.29	491.87	493.11	494.42	0.69	ppb
Calcium	43-1	254326.77	250860.04	243560.71	249582.50	2.20	ppb
Calcium	44-1	254370.67	250445.11	244376.98	249730.92	2.02	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	499.30	499.34	498.61	499.08	0.08	ppb
Cobalt	59-2	478.33	480.71	489.99	483.01	1.28	ppb
Copper	63-2	4826.92	4838.28	4891.44	4852.21	0.71	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				102		%
Holmium	165-2				106		%
Indium	115-1				95		%
Indium	115-2				96		%
Iron	54-2	122444.48	122750.95	122743.28	122646.24	0.14	ppb
Iron	56-2	122479.51	121534.83	123519.52	122511.29	0.81	ppb
Iron	57-2	122146.43	121202.63	124345.55	122564.87	1.32	ppb
Krypton	83-1						cps
Lead	206-1	2474.36	2514.82	2538.72	2509.30	1.30	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV03 Instrumnet Name : P8
Client Sample ID : CCV03 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:54:42 DataFile Name : 041CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2491.85	2542.15	2549.41	2527.80	1.24	ppb
Lead	208-1	2483.77	2528.79	2531.55	2514.70	1.07	ppb
Lithium	6-1				93		%
Magnesium	24-2	245211.68	250710.98	249383.67	248435.44	1.16	ppb
Manganese	55-2	5052.75	4999.92	5079.55	5044.08	0.80	ppb
Molybdenum	94-1	4955.99	4978.77	5076.19	5003.65	1.28	ppb
Molybdenum	95-1	4937.19	5028.06	5077.12	5014.12	1.42	ppb
Molybdenum	96-1	4983.46	4992.29	5107.41	5027.72	1.38	ppb
Molybdenum	97-1	4939.76	4909.38	5069.18	4972.78	1.71	ppb
Molybdenum	98-1	4946.43	4967.84	5119.15	5011.14	1.88	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	471.19	474.17	484.91	476.76	1.51	ppb
Phosphorus	31-2	10171.27	10245.95	10195.01	10204.07	0.37	ppb
Potassium	39-2	123600.03	123827.99	124580.52	124002.85	0.41	ppb
Rhodium	103-1				92		%
Rhodium	103-2				96		%
Scandium	45-1				105		%
Scandium	45-2				110		%
Selenium	82-1	477.42	482.05	482.98	480.82	0.62	ppb
Selenium	77-2	482.86	481.06	480.90	481.61	0.23	ppb
Selenium	78-2	489.27	506.27	499.41	498.32	1.72	ppb
Silicon	28-1	543.01	546.17	532.83	540.67	1.29	ppb
Silver	107-1	485.95	485.63	483.82	485.13	0.24	ppb
Silver	109-1	494.58	483.41	485.17	487.72	1.23	ppb
Sodium	23-2	243958.02	244124.63	250058.64	246047.10	1.41	ppb
Strontium	86-1	496.14	489.14	498.81	494.70	1.01	ppb
Strontium	88-1	500.53	503.27	505.27	503.03	0.47	ppb
Sulfur	34-1	9641.18	9791.11	9689.31	9707.20	0.79	ppb
Terbium	159-1				102		%
Terbium	159-2				107		%
Thallium	203-1	495.50	508.61	504.06	502.72	1.32	ppb
Thallium	205-1	492.76	503.84	503.36	499.99	1.25	ppb
Tin	118-1	495.47	487.41	501.55	494.81	1.43	ppb
Titanium	47-1	5006.67	4944.33	4891.31	4947.44	1.17	ppb
Uranium	238-1	513.88	520.00	521.50	518.46	0.78	ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :CCV03Instrumnet Name :P8

Client Sample ID :CCV03Dilution Factor :1

Date & Time Acquired :2025-04-01 14:54:42DataFile Name :041CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	509.61	508.66	512.99	510.42	0.45	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				107		%
Zinc	66-2	4924.27	4895.81	4972.11	4930.73	0.78	ppb
Zirconium	90-1	498.24	507.29	504.54	503.36	0.92	ppb
Zirconium	91-1	497.13	510.11	506.16	504.47	1.32	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB03 Instrumnet Name : P8
Client Sample ID : CCB03 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:58:48 DataFile Name : 042CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.96	1.13	0.70	0.93	23.28	ppb
Antimony	121-1	0.07	0.06	0.05	0.06	17.01	ppb
Arsenic	75-2	0.00	0.00	0.02	0.01	168.13	ppb
Barium	135-1	0.03	0.03	0.03	0.03	4.59	ppb
Barium	137-1	0.04	0.03	0.03	0.03	11.78	ppb
Beryllium	9-1	0.03	0.03	0.03	0.03	2.23	ppb
Bismuth	209-1				110		%
Bismuth	209-2				115		%
Bromine	81-1						cps
Cadmium	108-1	0.03	-0.01	0.00	0.01	339.27	ppb
Cadmium	106-1	-0.62	-0.94	-0.76	-0.77		ppb
Cadmium	111-1	-0.03	-0.05	-0.04	-0.04		ppb
Calcium	43-1	-1.98	-4.44	-3.81	-3.41		ppb
Calcium	44-1	-3.38	-4.45	-4.49	-4.11		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	-0.03	-0.02	-0.03		ppb
Cobalt	59-2	0.00	0.01	0.00	0.00	32.25	ppb
Copper	63-2	0.05	0.06	0.08	0.06	18.46	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				115		%
Indium	115-1				113		%
Indium	115-2				113		%
Iron	54-2	0.97	0.87	1.11	0.98	12.47	ppb
Iron	56-2	1.04	1.10	1.19	1.11	7.07	ppb
Iron	57-2	0.68	1.50	1.10	1.09	37.38	ppb
Krypton	83-1						cps
Lead	206-1	0.12	0.10	0.11	0.11	8.75	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB03 Instrumnet Name : P8
Client Sample ID : CCB03 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:58:48 DataFile Name : 042CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.11	0.11	0.10	0.11	7.08	ppb
Lead	208-1	0.12	0.11	0.11	0.11	6.22	ppb
Lithium	6-1				108		%
Magnesium	24-2	2.79	2.41	2.42	2.54	8.47	ppb
Manganese	55-2	0.20	0.15	0.14	0.16	19.24	ppb
Molybdenum	94-1	0.19	0.18	0.19	0.19	3.14	ppb
Molybdenum	95-1	0.12	0.10	0.10	0.11	9.99	ppb
Molybdenum	96-1	0.13	0.12	0.11	0.12	10.99	ppb
Molybdenum	97-1	0.13	0.11	0.09	0.11	15.05	ppb
Molybdenum	98-1	0.12	0.10	0.10	0.11	13.83	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.07	-0.02	0.01	-0.03		ppb
Phosphorus	31-2	-108.61	-109.20	-102.54	-106.78		ppb
Potassium	39-2	25.55	24.64	24.77	24.98	1.97	ppb
Rhodium	103-1				112		%
Rhodium	103-2				114		%
Scandium	45-1				113		%
Scandium	45-2				109		%
Selenium	82-1	-0.07	0.11	0.24	0.09	161.51	ppb
Selenium	77-2	0.52	0.00	0.52	0.35	86.61	ppb
Selenium	78-2	-0.36	-0.21	0.24	-0.11		ppb
Silicon	28-1	0.10	-0.17	-0.24	-0.10		ppb
Silver	107-1	0.03	0.03	0.03	0.03	6.85	ppb
Silver	109-1	0.04	0.03	0.03	0.03	8.59	ppb
Sodium	23-2	27.86	28.16	25.12	27.05	6.19	ppb
Strontium	86-1	0.01	0.00	-0.01	0.00	254.82	ppb
Strontium	88-1	0.01	0.01	0.01	0.01	18.24	ppb
Sulfur	34-1	-1127.47	-1212.01	-1171.98	-1170.48		ppb
Terbium	159-1				112		%
Terbium	159-2				114		%
Thallium	203-1	0.03	0.03	0.04	0.03	9.93	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	5.84	ppb
Tin	118-1	0.08	0.08	0.09	0.08	8.70	ppb
Titanium	47-1	0.08	0.06	0.07	0.07	12.18	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	17.97	ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :CCB03Instrumnet Name :P8

Client Sample ID :CCB03Dilution Factor :1

Date & Time Acquired :2025-04-01 14:58:48DataFile Name :042CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.01	0.01	0.01	12.83	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				113		%
Yttrium	89-2				122		%
Zinc	66-2	0.15	0.19	0.23	0.19	19.18	ppb
Zirconium	90-1	0.04	0.05	0.05	0.05	5.51	ppb
Zirconium	91-1	0.04	0.04	0.05	0.05	2.97	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : 200.8 MDL-6 Instrumnet Name : P8
Client Sample ID : 200.8 MDL-6 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:33:41 DataFile Name : 043AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	17.12	15.31	14.10	15.51	9.81	ppb
Antimony	121-1	0.41	0.40	0.40	0.40	1.59	ppb
Arsenic	75-2	0.37	0.38	0.33	0.36	7.82	ppb
Barium	135-1	2.03	1.90	1.98	1.97	3.30	ppb
Barium	137-1	1.98	1.99	2.04	2.00	1.56	ppb
Beryllium	9-1	0.43	0.43	0.45	0.44	2.27	ppb
Bismuth	209-1				107		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Cadmium	108-1	0.38	0.42	0.47	0.42	10.08	ppb
Cadmium	106-1	-0.68	-0.57	-0.65	-0.63		ppb
Cadmium	111-1	0.34	0.34	0.33	0.34	1.50	ppb
Calcium	43-1	189.34	188.60	193.53	190.49	1.39	ppb
Calcium	44-1	185.30	189.32	186.18	186.93	1.13	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.40	0.37	0.37	0.38	4.42	ppb
Cobalt	59-2	0.43	0.40	0.36	0.40	8.49	ppb
Copper	63-2	0.83	0.79	0.77	0.80	3.74	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				111		%
Indium	115-1				111		%
Indium	115-2				111		%
Iron	54-2	22.96	23.15	21.08	22.40	5.11	ppb
Iron	56-2	23.36	22.31	21.14	22.27	5.00	ppb
Iron	57-2	21.64	22.40	20.58	21.54	4.24	ppb
Krypton	83-1						cps
Lead	206-1	0.37	0.39	0.39	0.38	2.47	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : 200.8 MDL-6 Instrumnet Name : P8
Client Sample ID : 200.8 MDL-6 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:33:41 DataFile Name : 043AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.37	0.38	0.39	0.38	2.79	ppb
Lead	208-1	0.38	0.39	0.39	0.38	1.85	ppb
Lithium	6-1				104		%
Magnesium	24-2	209.91	199.31	189.93	199.72	5.01	ppb
Manganese	55-2	0.99	0.91	0.83	0.91	9.02	ppb
Molybdenum	94-1	1.02	1.02	1.05	1.03	1.47	ppb
Molybdenum	95-1	0.40	0.39	0.39	0.39	1.55	ppb
Molybdenum	96-1	0.44	0.45	0.46	0.45	1.96	ppb
Molybdenum	97-1	0.40	0.40	0.38	0.39	2.42	ppb
Molybdenum	98-1	0.39	0.39	0.39	0.39	0.71	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.40	0.38	0.36	0.38	4.71	ppb
Phosphorus	31-2	-97.75	-96.82	-102.26	-98.94		ppb
Potassium	39-2	133.61	128.94	125.82	129.46	3.03	ppb
Rhodium	103-1				111		%
Rhodium	103-2				111		%
Scandium	45-1				113		%
Scandium	45-2				113		%
Selenium	82-1	2.41	2.74	2.74	2.63	7.32	ppb
Selenium	77-2	1.83	3.10	1.56	2.16	38.05	ppb
Selenium	78-2	2.45	1.82	2.51	2.26	17.08	ppb
Silicon	28-1	-0.74	-0.74	-0.81	-0.77		ppb
Silver	107-1	0.40	0.40	0.41	0.41	1.24	ppb
Silver	109-1	0.41	0.41	0.42	0.41	1.66	ppb
Sodium	23-2	213.37	207.61	201.11	207.36	2.96	ppb
Strontium	86-1	0.41	0.40	0.39	0.40	2.85	ppb
Strontium	88-1	0.40	0.40	0.39	0.40	1.06	ppb
Sulfur	34-1	-847.45	-762.69	-821.41	-810.51		ppb
Terbium	159-1				111		%
Terbium	159-2				111		%
Thallium	203-1	0.37	0.38	0.38	0.38	1.25	ppb
Thallium	205-1	0.38	0.38	0.38	0.38	0.79	ppb
Tin	118-1	0.37	0.37	0.37	0.37	0.15	ppb
Titanium	47-1	0.41	0.41	0.43	0.42	3.21	ppb
Uranium	238-1	0.36	0.36	0.37	0.36	0.38	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : 200.8 MDL-6 Instrumnet Name : P8
Client Sample ID : 200.8 MDL-6 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:33:41 DataFile Name : 043AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.42	0.39	0.39	0.40	5.02	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				118		%
Zinc	66-2	1.11	1.06	1.00	1.05	5.20	ppb
Zirconium	90-1	0.38	0.40	0.38	0.39	2.23	ppb
Zirconium	91-1	0.38	0.39	0.37	0.38	3.19	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : 200.8 MDL-7 Instrumnet Name : P8
Client Sample ID : 200.8 MDL-7 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:37:04 DataFile Name : 044AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	16.41	14.54	16.23	15.73	6.57	ppb
Antimony	121-1	0.42	0.41	0.41	0.41	1.55	ppb
Arsenic	75-2	0.43	0.36	0.38	0.39	9.74	ppb
Barium	135-1	1.96	1.95	1.97	1.96	0.65	ppb
Barium	137-1	2.02	2.02	2.02	2.02	0.14	ppb
Beryllium	9-1	0.44	0.43	0.46	0.44	3.10	ppb
Bismuth	209-1				105		%
Bismuth	209-2				110		%
Bromine	81-1						cps
Cadmium	108-1	0.40	0.35	0.33	0.36	9.95	ppb
Cadmium	106-1	-0.38	-0.84	-0.52	-0.58		ppb
Cadmium	111-1	0.39	0.31	0.36	0.35	11.19	ppb
Calcium	43-1	190.20	193.64	195.12	192.99	1.31	ppb
Calcium	44-1	187.76	190.35	193.56	190.56	1.52	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.40	0.37	0.37	0.38	4.86	ppb
Cobalt	59-2	0.43	0.42	0.41	0.42	2.31	ppb
Copper	63-2	0.80	0.80	0.76	0.79	2.61	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				110		%
Indium	115-1				110		%
Indium	115-2				110		%
Iron	54-2	23.96	22.50	21.44	22.63	5.58	ppb
Iron	56-2	23.24	22.56	21.41	22.41	4.12	ppb
Iron	57-2	22.20	23.72	20.84	22.26	6.48	ppb
Krypton	83-1						cps
Lead	206-1	0.39	0.38	0.38	0.38	1.97	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : 200.8 MDL-7 Instrumnet Name : P8
Client Sample ID : 200.8 MDL-7 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:37:04 DataFile Name : 044AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.41	0.40	0.40	0.40	1.08	ppb
Lead	208-1	0.39	0.39	0.38	0.39	1.45	ppb
Lithium	6-1				102		%
Magnesium	24-2	214.96	206.41	195.56	205.64	4.73	ppb
Manganese	55-2	0.96	0.88	0.77	0.87	10.89	ppb
Molybdenum	94-1	1.04	1.04	1.02	1.03	1.23	ppb
Molybdenum	95-1	0.39	0.39	0.37	0.38	2.45	ppb
Molybdenum	96-1	0.46	0.45	0.47	0.46	2.28	ppb
Molybdenum	97-1	0.40	0.41	0.39	0.40	2.05	ppb
Molybdenum	98-1	0.39	0.38	0.40	0.39	1.48	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.39	0.36	0.36	0.37	4.40	ppb
Phosphorus	31-2	-104.89	-89.97	-98.89	-97.92		ppb
Potassium	39-2	133.46	132.31	127.05	130.94	2.61	ppb
Rhodium	103-1				109		%
Rhodium	103-2				111		%
Scandium	45-1				112		%
Scandium	45-2				112		%
Selenium	82-1	2.74	2.68	2.65	2.69	1.71	ppb
Selenium	77-2	3.68	1.29	1.41	2.13	63.19	ppb
Selenium	78-2	1.58	2.11	1.00	1.56	35.43	ppb
Silicon	28-1	-0.82	-0.76	-0.71	-0.76		ppb
Silver	107-1	0.42	0.41	0.43	0.42	2.65	ppb
Silver	109-1	0.43	0.42	0.42	0.42	1.76	ppb
Sodium	23-2	217.65	209.98	202.16	209.93	3.69	ppb
Strontium	86-1	0.39	0.40	0.37	0.39	3.66	ppb
Strontium	88-1	0.41	0.39	0.40	0.40	1.86	ppb
Sulfur	34-1	-780.96	-620.92	-530.25	-644.04		ppb
Terbium	159-1				108		%
Terbium	159-2				110		%
Thallium	203-1	0.39	0.38	0.37	0.38	3.24	ppb
Thallium	205-1	0.39	0.39	0.39	0.39	0.43	ppb
Tin	118-1	0.39	0.38	0.38	0.39	1.32	ppb
Titanium	47-1	0.42	0.41	0.40	0.41	3.04	ppb
Uranium	238-1	0.37	0.37	0.37	0.37	0.70	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : 200.8 MDL-7 Instrumnet Name : P8
Client Sample ID : 200.8 MDL-7 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:37:04 DataFile Name : 044AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.40	0.41	0.38	0.40	3.93	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				115		%
Zinc	66-2	0.95	0.88	0.95	0.93	4.40	ppb
Zirconium	90-1	0.39	0.38	0.39	0.39	1.17	ppb
Zirconium	91-1	0.38	0.38	0.39	0.38	1.50	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW06 Instrumnet Name : P8
Client Sample ID : PBW06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:40:36 DataFile Name : 045AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.14	-0.31	-0.51	-0.32		ppb
Antimony	121-1	0.00	0.00	0.00	0.00	38.65	ppb
Arsenic	75-2	-0.01	-0.01	-0.01	-0.01		ppb
Barium	135-1	0.00	0.00	0.00	0.00		ppb
Barium	137-1	-0.01	-0.01	-0.01	-0.01		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	330.42	ppb
Bismuth	209-1				106		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Cadmium	108-1	0.00	-0.02	-0.01	-0.01		ppb
Cadmium	106-1	-0.74	-0.76	-0.60	-0.70		ppb
Cadmium	111-1	-0.06	-0.06	-0.05	-0.05		ppb
Calcium	43-1	-4.18	-5.65	-7.18	-5.67		ppb
Calcium	44-1	-5.18	-5.13	-5.58	-5.29		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.04	-0.05	-0.03	-0.04		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.05	-0.05	-0.02	-0.04		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				110		%
Indium	115-1				110		%
Indium	115-2				111		%
Iron	54-2	-0.45	-0.38	-0.46	-0.43		ppb
Iron	56-2	-0.47	-0.38	-0.15	-0.33		ppb
Iron	57-2	-0.10	-0.45	-0.47	-0.34		ppb
Krypton	83-1						cps
Lead	206-1	0.00	-0.01	0.00	0.00		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW06 Instrumnet Name : P8
Client Sample ID : PBW06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:40:36 DataFile Name : 045AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.00	-0.01	0.00	0.00		ppb
Lead	208-1	-0.01	-0.01	0.00	0.00		ppb
Lithium	6-1				102		%
Magnesium	24-2	-0.20	-0.17	-0.04	-0.14		ppb
Manganese	55-2	0.13	0.11	0.14	0.13	9.21	ppb
Molybdenum	94-1	0.01	0.01	0.01	0.01	35.05	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	121.05	ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00	50.92	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	56.01	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	108.63	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.07	-0.06	-0.05	-0.06		ppb
Phosphorus	31-2	-106.24	-110.69	-111.18	-109.37		ppb
Potassium	39-2	7.20	8.06	5.38	6.88	19.86	ppb
Rhodium	103-1				110		%
Rhodium	103-2				112		%
Scandium	45-1				111		%
Scandium	45-2				113		%
Selenium	82-1	0.04	0.01	0.04	0.03	67.89	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.20	-0.35	-0.13	-0.23		ppb
Silicon	28-1	-0.87	-0.92	-0.68	-0.82		ppb
Silver	107-1	0.01	0.01	0.00	0.01	21.36	ppb
Silver	109-1	0.01	0.01	0.01	0.01	5.40	ppb
Sodium	23-2	1.64	3.63	3.44	2.90	37.80	ppb
Strontium	86-1	0.00	0.00	0.00	0.00		ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-514.57	-545.84	-586.28	-548.90		ppb
Terbium	159-1				108		%
Terbium	159-2				111		%
Thallium	203-1	0.00	0.01	0.01	0.01	17.23	ppb
Thallium	205-1	0.00	0.00	0.01	0.00	5.66	ppb
Tin	118-1	-0.06	-0.05	-0.06	-0.06		ppb
Titanium	47-1	0.00	-0.02	-0.01	-0.01		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :PBW06Instrumnet Name :P8

Client Sample ID :PBW06Dilution Factor :1

Date & Time Acquired :2025-04-01 15:40:36DataFile Name :045AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				113		%
Yttrium	89-2				120		%
Zinc	66-2	0.04	0.03	0.03	0.04	17.09	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	1.34	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	45.38	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW07 Instrumnet Name : P8
Client Sample ID : PBW07 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:43:58 DataFile Name : 046AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.40	-0.12	-0.18	-0.23		ppb
Antimony	121-1	0.00	0.00	0.00	0.00	36.20	ppb
Arsenic	75-2	0.00	-0.01	0.00	0.00		ppb
Barium	135-1	-0.01	0.00	0.00	-0.01		ppb
Barium	137-1	-0.01	-0.01	-0.01	-0.01		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	84.80	ppb
Bismuth	209-1				106		%
Bismuth	209-2				109		%
Bromine	81-1						cps
Cadmium	108-1	-0.01	-0.01	0.01	0.00		ppb
Cadmium	106-1	-1.03	-0.80	-1.19	-1.01		ppb
Cadmium	111-1	-0.08	-0.06	-0.09	-0.08		ppb
Calcium	43-1	-6.19	-5.95	-5.96	-6.03		ppb
Calcium	44-1	-5.93	-5.58	-5.72	-5.74		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.05	-0.04	-0.05		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.05	-0.05	-0.02	-0.04		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				111		%
Indium	115-1				112		%
Indium	115-2				110		%
Iron	54-2	-0.29	-0.34	-0.11	-0.25		ppb
Iron	56-2	-0.45	-0.32	-0.18	-0.32		ppb
Iron	57-2	-0.20	-0.42	-0.14	-0.25		ppb
Krypton	83-1						cps
Lead	206-1	-0.01	-0.01	0.00	-0.01		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW07 Instrumnet Name : P8
Client Sample ID : PBW07 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:43:58 DataFile Name : 046AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	-0.01	-0.01	0.00	-0.01		ppb
Lead	208-1	-0.01	-0.01	0.00	-0.01		ppb
Lithium	6-1				104		%
Magnesium	24-2	-0.22	-0.22	-0.06	-0.16		ppb
Manganese	55-2	0.12	0.19	0.08	0.13	41.70	ppb
Molybdenum	94-1	0.01	0.00	0.01	0.01	71.77	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	141.13	ppb
Molybdenum	96-1	0.01	0.00	0.00	0.00	69.97	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00		ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.06	-0.03	-0.03	-0.04		ppb
Phosphorus	31-2	-114.78	-109.73	-111.49	-112.00		ppb
Potassium	39-2	4.60	4.83	6.75	5.39	21.91	ppb
Rhodium	103-1				110		%
Rhodium	103-2				111		%
Scandium	45-1				113		%
Scandium	45-2				112		%
Selenium	82-1	-0.01	-0.05	0.01	-0.02		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.59	-0.43	-0.47	-0.50		ppb
Silicon	28-1	-0.31	-0.92	-1.03	-0.75		ppb
Silver	107-1	0.00	0.00	0.00	0.00	23.02	ppb
Silver	109-1	0.00	0.00	0.00	0.00	13.40	ppb
Sodium	23-2	1.24	2.15	4.37	2.59	62.16	ppb
Strontium	86-1	-0.01	-0.01	0.00	0.00		ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-704.04	-564.74	-644.35	-637.71		ppb
Terbium	159-1				110		%
Terbium	159-2				112		%
Thallium	203-1	0.00	0.00	0.01	0.01	35.74	ppb
Thallium	205-1	0.00	0.01	0.00	0.00	17.65	ppb
Tin	118-1	-0.05	-0.05	-0.06	-0.05		ppb
Titanium	47-1	-0.01	-0.02	-0.01	-0.01		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number :

LB135261

Operator :

Jaswal

Lab Sample ID :

PBW07

Instrumnet Name :

P8

Client Sample ID :

PBW07

Dilution Factor :

1

Date & Time Acquired :

2025-04-01 15:43:58

DataFile Name :

046AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				118		%
Zinc	66-2	0.00	0.11	0.22	0.11	98.95	ppb
Zirconium	90-1	0.00	0.01	0.01	0.01	22.47	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	95.02	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW Instrumnet Name : P8
Client Sample ID : PBW Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:47:22 DataFile Name : 047CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.27	-0.89	-1.01	-0.72		ppb
Antimony	121-1	0.00	0.00	0.00	0.00	17.76	ppb
Arsenic	75-2	-0.01	-0.01	0.00	0.00		ppb
Barium	135-1	0.00	-0.01	0.00	0.00		ppb
Barium	137-1	0.00	0.00	-0.01	0.00		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	44.96	ppb
Bismuth	209-1				106		%
Bismuth	209-2				110		%
Bromine	81-1						cps
Cadmium	108-1	-0.03	-0.02	-0.01	-0.02		ppb
Cadmium	106-1	-0.95	-0.82	-0.99	-0.92		ppb
Cadmium	111-1	-0.07	-0.06	-0.07	-0.07		ppb
Calcium	43-1	-5.82	-6.00	-6.60	-6.14		ppb
Calcium	44-1	-6.17	-5.98	-6.19	-6.11		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.03	-0.02	-0.04		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.05	-0.02	-0.02	-0.03		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				110		%
Indium	115-1				111		%
Indium	115-2				111		%
Iron	54-2	-0.56	-0.22	-0.34	-0.37		ppb
Iron	56-2	-0.41	-0.33	-0.22	-0.32		ppb
Iron	57-2	-0.46	-0.81	0.06	-0.40		ppb
Krypton	83-1						cps
Lead	206-1	-0.01	-0.01	-0.01	-0.01		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW Instrumnet Name : P8
Client Sample ID : PBW Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:47:22 DataFile Name : 047CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	-0.01	-0.01	-0.01	-0.01		ppb
Lead	208-1	-0.01	-0.01	-0.01	-0.01		ppb
Lithium	6-1				105		%
Magnesium	24-2	-0.27	-0.12	-0.10	-0.16		ppb
Manganese	55-2	0.11	0.12	0.04	0.09	48.43	ppb
Molybdenum	94-1	0.01	0.01	0.01	0.01	38.06	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00	29.37	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	9126.12	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	58.09	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.08	-0.06	-0.05	-0.06		ppb
Phosphorus	31-2	-109.03	-105.00	-110.39	-108.14		ppb
Potassium	39-2	5.81	4.84	4.21	4.95	16.30	ppb
Rhodium	103-1				111		%
Rhodium	103-2				114		%
Scandium	45-1				114		%
Scandium	45-2				113		%
Selenium	82-1	0.15	0.04	-0.02	0.06	146.73	ppb
Selenium	77-2	0.00	0.26	0.00	0.09	173.21	ppb
Selenium	78-2	-0.40	-0.04	-0.29	-0.24		ppb
Silicon	28-1	-0.31	-0.99	-0.98	-0.76		ppb
Silver	107-1	0.00	0.00	0.00	0.00	3.91	ppb
Silver	109-1	0.00	0.00	0.00	0.00	19.24	ppb
Sodium	23-2	1.60	1.75	1.11	1.49	22.55	ppb
Strontium	86-1	0.00	-0.01	0.00	0.00		ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-695.02	-720.50	-667.54	-694.35		ppb
Terbium	159-1				109		%
Terbium	159-2				112		%
Thallium	203-1	0.00	0.00	0.00	0.00	12.18	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	4.12	ppb
Tin	118-1	-0.06	-0.05	-0.06	-0.06		ppb
Titanium	47-1	-0.01	-0.02	-0.01	-0.01		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW Instrumnet Name : P8
Client Sample ID : PBW Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:47:22 DataFile Name : 047CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	430.52	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				118		%
Zinc	66-2	-0.12	-0.16	-0.06	-0.11		ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	10.50	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00	108.13	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCSW Instrumnet Name : P8
Client Sample ID : LCSW Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:50:44 DataFile Name : 048LCSW.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10499.68	10464.42	10295.48	10419.86	1.05	ppb
Antimony	121-1	507.86	504.37	501.47	504.56	0.63	ppb
Arsenic	75-2	496.65	502.82	501.47	500.31	0.65	ppb
Barium	135-1	2545.59	2503.15	2505.65	2518.13	0.95	ppb
Barium	137-1	2544.00	2495.64	2490.68	2510.11	1.17	ppb
Beryllium	9-1	522.52	528.62	509.88	520.34	1.84	ppb
Bismuth	209-1				100		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Cadmium	108-1	510.43	496.19	496.98	501.20	1.60	ppb
Cadmium	106-1	508.99	495.25	499.89	501.38	1.39	ppb
Cadmium	111-1	513.67	506.57	509.38	509.87	0.70	ppb
Calcium	43-1	50863.19	50364.83	52100.17	51109.40	1.75	ppb
Calcium	44-1	50308.20	50338.82	51198.81	50615.27	1.00	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	515.42	511.68	516.31	514.47	0.48	ppb
Cobalt	59-2	508.92	515.74	511.70	512.12	0.67	ppb
Copper	63-2	5064.75	5100.96	5054.11	5073.27	0.48	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				106		%
Holmium	165-2				107		%
Indium	115-1				102		%
Indium	115-2				98		%
Iron	54-2	26247.04	26764.91	26346.22	26452.73	1.04	ppb
Iron	56-2	26315.64	26180.87	26149.84	26215.45	0.34	ppb
Iron	57-2	26223.55	26244.93	26228.26	26232.25	0.04	ppb
Krypton	83-1						cps
Lead	206-1	2453.85	2456.30	2487.40	2465.85	0.76	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCSW Instrumnet Name : P8
Client Sample ID : LCSW Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:50:44 DataFile Name : 048LCSW.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2452.92	2458.71	2449.73	2453.78	0.19	ppb
Lead	208-1	2462.34	2468.58	2455.32	2462.08	0.27	ppb
Lithium	6-1				100		%
Magnesium	24-2	53357.56	53864.68	52885.23	53369.16	0.92	ppb
Manganese	55-2	5185.38	5188.18	5167.28	5180.28	0.22	ppb
Molybdenum	94-1	4882.18	4965.45	4930.98	4926.20	0.85	ppb
Molybdenum	95-1	4926.70	4988.98	4967.16	4960.95	0.64	ppb
Molybdenum	96-1	4939.89	5032.21	4987.09	4986.40	0.93	ppb
Molybdenum	97-1	4956.25	5012.23	5021.18	4996.55	0.70	ppb
Molybdenum	98-1	4959.49	5015.68	4977.55	4984.24	0.58	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	517.28	521.02	519.63	519.31	0.36	ppb
Phosphorus	31-2	10297.78	10523.89	10285.19	10368.95	1.30	ppb
Potassium	39-2	25704.21	25630.08	25366.86	25567.05	0.69	ppb
Rhodium	103-1				103		%
Rhodium	103-2				103		%
Scandium	45-1				111		%
Scandium	45-2				110		%
Selenium	82-1	487.91	485.16	488.49	487.19	0.37	ppb
Selenium	77-2	493.13	504.71	492.03	496.63	1.41	ppb
Selenium	78-2	490.26	504.81	501.98	499.02	1.55	ppb
Silicon	28-1	545.53	545.54	541.77	544.28	0.40	ppb
Silver	107-1	515.73	513.33	513.14	514.07	0.28	ppb
Silver	109-1	521.12	508.35	509.75	513.07	1.36	ppb
Sodium	23-2	54010.19	54588.05	53692.73	54096.99	0.84	ppb
Strontium	86-1	497.90	487.48	502.23	495.87	1.53	ppb
Strontium	88-1	499.34	495.47	501.82	498.88	0.64	ppb
Sulfur	34-1	9939.04	10047.19	9598.76	9861.67	2.37	ppb
Terbium	159-1				108		%
Terbium	159-2				108		%
Thallium	203-1	489.22	493.82	499.03	494.02	0.99	ppb
Thallium	205-1	494.99	495.00	496.49	495.49	0.17	ppb
Tin	118-1	510.32	506.57	505.31	507.40	0.51	ppb
Titanium	47-1	4953.80	4992.64	5013.89	4986.78	0.61	ppb
Uranium	238-1	488.40	488.32	477.45	484.72	1.30	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCSW Instrumnet Name : P8
Client Sample ID : LCSW Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:50:44 DataFile Name : 048LCSW.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	513.40	517.63	514.30	515.11	0.43	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				109		%
Yttrium	89-2				107		%
Zinc	66-2	5022.36	5040.60	5007.93	5023.63	0.33	ppb
Zirconium	90-1	496.10	493.10	491.31	493.50	0.49	ppb
Zirconium	91-1	494.33	493.94	493.17	493.82	0.12	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV04 Instrumnet Name : P8
Client Sample ID : CCV04 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:53:29 DataFile Name : 049CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51364.09	52003.61	51003.88	51457.19	0.98	ppb
Antimony	121-1	483.63	496.70	485.97	488.77	1.43	ppb
Arsenic	75-2	485.68	485.05	486.85	485.86	0.19	ppb
Barium	135-1	2445.54	2552.18	2460.78	2486.17	2.32	ppb
Barium	137-1	2426.69	2541.67	2516.22	2494.86	2.42	ppb
Beryllium	9-1	523.35	535.23	521.03	526.54	1.45	ppb
Bismuth	209-1				89		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Cadmium	108-1	468.87	486.18	472.52	475.86	1.92	ppb
Cadmium	106-1	471.62	482.91	473.97	476.17	1.25	ppb
Cadmium	111-1	477.81	494.46	482.58	484.95	1.77	ppb
Calcium	43-1	244698.01	243839.48	251275.09	246604.19	1.65	ppb
Calcium	44-1	243286.87	246259.44	250579.41	246708.57	1.49	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	499.24	509.75	490.54	499.84	1.92	ppb
Cobalt	59-2	473.24	479.12	476.54	476.30	0.62	ppb
Copper	63-2	4801.70	4807.60	4831.11	4813.47	0.32	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				105		%
Indium	115-1				93		%
Indium	115-2				94		%
Iron	54-2	122800.12	123067.68	122765.08	122877.63	0.13	ppb
Iron	56-2	122263.18	121703.55	120636.84	121534.53	0.68	ppb
Iron	57-2	121662.95	123001.22	120506.93	121723.70	1.03	ppb
Krypton	83-1						cps
Lead	206-1	2464.51	2506.89	2504.24	2491.88	0.95	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV04 Instrumnet Name : P8
Client Sample ID : CCV04 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:53:29 DataFile Name : 049CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2461.99	2539.76	2550.36	2517.37	1.92	ppb
Lead	208-1	2477.05	2532.78	2517.62	2509.15	1.15	ppb
Lithium	6-1				91		%
Magnesium	24-2	250921.76	252092.45	245578.40	249530.87	1.39	ppb
Manganese	55-2	5038.03	5020.53	5014.90	5024.49	0.24	ppb
Molybdenum	94-1	4857.93	4980.20	4977.72	4938.62	1.42	ppb
Molybdenum	95-1	4839.60	5046.90	5002.28	4962.93	2.20	ppb
Molybdenum	96-1	4851.64	5043.46	5010.35	4968.48	2.06	ppb
Molybdenum	97-1	4940.31	5022.61	5074.57	5012.50	1.35	ppb
Molybdenum	98-1	4955.76	5021.58	5018.69	4998.68	0.74	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	466.09	471.61	474.05	470.58	0.87	ppb
Phosphorus	31-2	10144.35	10190.98	10277.50	10204.28	0.66	ppb
Potassium	39-2	124722.27	125531.50	125674.95	125309.57	0.41	ppb
Rhodium	103-1				91		%
Rhodium	103-2				96		%
Scandium	45-1				104		%
Scandium	45-2				109		%
Selenium	82-1	468.01	480.95	472.60	473.85	1.39	ppb
Selenium	77-2	511.42	478.52	503.42	497.79	3.45	ppb
Selenium	78-2	486.88	491.07	489.85	489.26	0.44	ppb
Silicon	28-1	543.34	532.60	537.44	537.79	1.00	ppb
Silver	107-1	467.97	486.48	468.20	474.22	2.24	ppb
Silver	109-1	473.17	485.68	473.18	477.34	1.51	ppb
Sodium	23-2	246083.65	250838.19	246613.95	247845.26	1.05	ppb
Strontium	86-1	489.35	494.83	497.18	493.79	0.81	ppb
Strontium	88-1	496.73	503.34	495.77	498.62	0.83	ppb
Sulfur	34-1	9831.31	9400.71	9858.52	9696.85	2.65	ppb
Terbium	159-1				102		%
Terbium	159-2				106		%
Thallium	203-1	500.18	500.03	503.87	501.36	0.43	ppb
Thallium	205-1	496.95	502.59	499.30	499.61	0.57	ppb
Tin	118-1	491.67	487.54	490.76	489.99	0.44	ppb
Titanium	47-1	4959.78	4873.24	4985.22	4939.41	1.19	ppb
Uranium	238-1	501.44	516.19	515.04	510.89	1.61	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV04 Instrumnet Name : P8
Client Sample ID : CCV04 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:53:29 DataFile Name : 049CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	505.05	506.01	519.58	510.21	1.59	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				106		%
Zinc	66-2	4884.78	4955.65	4965.89	4935.44	0.89	ppb
Zirconium	90-1	494.64	500.30	503.70	499.55	0.92	ppb
Zirconium	91-1	489.42	507.35	495.98	497.58	1.82	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB04 Instrumnet Name : P8
Client Sample ID : CCB04 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:01:58 DataFile Name : 050CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.06	-0.09	-0.13	0.28	243.83	ppb
Antimony	121-1	0.03	0.02	0.02	0.02	12.99	ppb
Arsenic	75-2	0.00	0.01	0.00	0.00	221.32	ppb
Barium	135-1	0.01	0.01	0.01	0.01	17.08	ppb
Barium	137-1	0.01	0.00	0.00	0.01	45.89	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	18.87	ppb
Bismuth	209-1				109		%
Bismuth	209-2				112		%
Bromine	81-1						cps
Cadmium	108-1	-0.02	0.01	0.02	0.00	1263.55	ppb
Cadmium	106-1	-0.91	-0.95	-1.17	-1.01		ppb
Cadmium	111-1	-0.06	-0.07	-0.09	-0.07		ppb
Calcium	43-1	-4.85	-5.83	-3.56	-4.75		ppb
Calcium	44-1	-6.52	-6.69	-6.35	-6.52		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.05	-0.04	-0.05		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	6525.07	ppb
Copper	63-2	-0.03	-0.01	0.00	-0.01		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				112		%
Indium	115-1				112		%
Indium	115-2				111		%
Iron	54-2	0.08	-0.10	-0.08	-0.04		ppb
Iron	56-2	0.13	0.47	0.37	0.32	54.02	ppb
Iron	57-2	0.48	0.35	0.22	0.35	36.66	ppb
Krypton	83-1						cps
Lead	206-1	0.04	0.04	0.03	0.04	12.41	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB04 Instrumnet Name : P8
Client Sample ID : CCB04 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:01:58 DataFile Name : 050CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.04	0.04	0.03	0.03	13.97	ppb
Lead	208-1	0.04	0.03	0.03	0.03	12.37	ppb
Lithium	6-1				106		%
Magnesium	24-2	1.13	1.00	0.86	1.00	13.21	ppb
Manganese	55-2	0.20	0.20	0.10	0.17	34.67	ppb
Molybdenum	94-1	0.07	0.08	0.08	0.08	12.25	ppb
Molybdenum	95-1	0.04	0.03	0.04	0.04	11.82	ppb
Molybdenum	96-1	0.05	0.04	0.04	0.04	10.08	ppb
Molybdenum	97-1	0.04	0.04	0.03	0.03	14.13	ppb
Molybdenum	98-1	0.04	0.03	0.03	0.04	17.58	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.07	-0.06	-0.04	-0.06		ppb
Phosphorus	31-2	-110.17	-108.64	-104.87	-107.89		ppb
Potassium	39-2	10.89	12.31	9.70	10.96	11.90	ppb
Rhodium	103-1				111		%
Rhodium	103-2				112		%
Scandium	45-1				112		%
Scandium	45-2				110		%
Selenium	82-1	0.01	0.05	-0.03	0.01	454.41	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.13	-0.27	-0.66	-0.35		ppb
Silicon	28-1	-0.88	-0.88	-0.67	-0.81		ppb
Silver	107-1	0.01	0.01	0.01	0.01	16.46	ppb
Silver	109-1	0.01	0.01	0.01	0.01	6.13	ppb
Sodium	23-2	13.51	12.75	10.98	12.41	10.45	ppb
Strontium	86-1	0.00	-0.01	0.00	-0.01		ppb
Strontium	88-1	0.00	0.00	0.00	0.00	20.84	ppb
Sulfur	34-1	-1192.36	-1148.70	-1009.87	-1116.98		ppb
Terbium	159-1				112		%
Terbium	159-2				113		%
Thallium	203-1	0.02	0.01	0.01	0.01	17.68	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	10.92	ppb
Tin	118-1	-0.01	0.01	-0.02	-0.01		ppb
Titanium	47-1	0.02	0.02	0.02	0.02	9.11	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	21.09	ppb

LB Number :

LB135261

Operator :

Jaswal

Lab Sample ID :

CCB04

Instrumnet Name :

P8

Client Sample ID :

CCB04

Dilution Factor :

1

Date & Time Acquired :

2025-04-01 16:01:58

DataFile Name :

050CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	38.96	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				113		%
Yttrium	89-2				120		%
Zinc	66-2	0.02	0.17	0.15	0.11	73.06	ppb
Zirconium	90-1	0.02	0.02	0.03	0.02	19.62	ppb
Zirconium	91-1	0.02	0.02	0.03	0.02	30.98	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : WATER MDL-4 Instrumnet Name : P8
Client Sample ID : WATER MDL-4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:05:19 DataFile Name : 051AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	17.28	17.62	15.71	16.87	6.03	ppb
Antimony	121-1	0.42	0.40	0.42	0.41	1.70	ppb
Arsenic	75-2	0.28	0.34	0.31	0.31	9.88	ppb
Barium	135-1	1.96	1.96	2.01	1.98	1.45	ppb
Barium	137-1	2.04	1.95	2.04	2.01	2.55	ppb
Beryllium	9-1	0.44	0.44	0.40	0.43	4.97	ppb
Bismuth	209-1				107		%
Bismuth	209-2				112		%
Bromine	81-1						cps
Cadmium	108-1	0.39	0.39	0.38	0.39	2.38	ppb
Cadmium	106-1	-0.36	-0.48	-0.41	-0.42		ppb
Cadmium	111-1	0.38	0.33	0.36	0.36	7.31	ppb
Calcium	43-1	188.04	188.73	188.50	188.42	0.19	ppb
Calcium	44-1	191.26	186.12	186.70	188.03	1.50	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.37	0.41	0.39	0.39	5.53	ppb
Cobalt	59-2	0.43	0.44	0.39	0.42	6.33	ppb
Copper	63-2	0.90	0.87	0.85	0.87	3.22	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				113		%
Indium	115-1				112		%
Indium	115-2				111		%
Iron	54-2	23.97	23.79	21.79	23.18	5.22	ppb
Iron	56-2	23.92	23.10	21.61	22.87	5.12	ppb
Iron	57-2	23.81	22.21	21.92	22.65	4.50	ppb
Krypton	83-1						cps
Lead	206-1	0.42	0.40	0.41	0.41	2.01	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : WATER MDL-4 Instrumnet Name : P8
Client Sample ID : WATER MDL-4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:05:19 DataFile Name : 051AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.41	0.40	0.42	0.41	2.82	ppb
Lead	208-1	0.42	0.40	0.41	0.41	2.00	ppb
Lithium	6-1				103		%
Magnesium	24-2	214.14	203.38	189.88	202.47	6.00	ppb
Manganese	55-2	0.98	1.03	0.86	0.96	8.89	ppb
Molybdenum	94-1	1.04	1.02	1.03	1.03	0.81	ppb
Molybdenum	95-1	0.41	0.41	0.39	0.40	1.90	ppb
Molybdenum	96-1	0.47	0.46	0.47	0.47	0.81	ppb
Molybdenum	97-1	0.40	0.42	0.41	0.41	2.47	ppb
Molybdenum	98-1	0.40	0.41	0.39	0.40	2.57	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.38	0.39	0.37	0.38	2.61	ppb
Phosphorus	31-2	-103.49	-102.02	-110.42	-105.31		ppb
Potassium	39-2	137.38	132.88	129.49	133.25	2.97	ppb
Rhodium	103-1				110		%
Rhodium	103-2				112		%
Scandium	45-1				112		%
Scandium	45-2				110		%
Selenium	82-1	2.67	2.33	2.36	2.45	7.79	ppb
Selenium	77-2	2.65	1.55	1.59	1.93	32.25	ppb
Selenium	78-2	2.12	1.60	1.81	1.84	14.25	ppb
Silicon	28-1	-0.59	-0.69	-0.76	-0.68		ppb
Silver	107-1	0.39	0.40	0.42	0.41	4.06	ppb
Silver	109-1	0.41	0.40	0.42	0.41	2.60	ppb
Sodium	23-2	218.12	214.43	204.42	212.33	3.34	ppb
Strontium	86-1	0.40	0.37	0.39	0.39	4.29	ppb
Strontium	88-1	0.41	0.39	0.39	0.40	2.39	ppb
Sulfur	34-1	-935.40	-958.41	-955.03	-949.61		ppb
Terbium	159-1				111		%
Terbium	159-2				113		%
Thallium	203-1	0.39	0.37	0.40	0.39	2.99	ppb
Thallium	205-1	0.39	0.39	0.39	0.39	0.68	ppb
Tin	118-1	0.38	0.39	0.40	0.39	2.27	ppb
Titanium	47-1	0.41	0.41	0.40	0.41	0.56	ppb
Uranium	238-1	0.37	0.37	0.37	0.37	0.29	ppb

LB Number :

LB135261

Operator :

Jaswal

Lab Sample ID :

WATER MDL-4

Instrumnet Name :

P8

Client Sample ID :

WATER MDL-4

Dilution Factor :

1

Date & Time Acquired :

2025-04-01 16:05:19

DataFile Name :

051AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.40	0.39	0.38	0.39	3.15	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				120		%
Zinc	66-2	1.78	1.82	1.59	1.73	7.19	ppb
Zirconium	90-1	0.38	0.38	0.39	0.39	0.98	ppb
Zirconium	91-1	0.39	0.39	0.40	0.39	1.61	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : WATER MDL-5 Instrumnet Name : P8
Client Sample ID : WATER MDL-5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:08:43 DataFile Name : 052AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	21.04	19.35	19.30	19.89	4.97	ppb
Antimony	121-1	0.41	0.42	0.40	0.41	2.99	ppb
Arsenic	75-2	0.34	0.45	0.35	0.38	16.25	ppb
Barium	135-1	2.15	2.07	2.05	2.09	2.65	ppb
Barium	137-1	2.13	2.13	2.06	2.10	1.87	ppb
Beryllium	9-1	0.43	0.43	0.43	0.43	0.67	ppb
Bismuth	209-1				106		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Cadmium	108-1	0.41	0.40	0.43	0.41	3.98	ppb
Cadmium	106-1	-0.55	-0.40	-0.76	-0.57		ppb
Cadmium	111-1	0.33	0.36	0.34	0.34	4.63	ppb
Calcium	43-1	195.90	199.49	196.23	197.21	1.01	ppb
Calcium	44-1	194.28	192.50	191.39	192.72	0.76	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.40	0.42	0.39	0.40	4.50	ppb
Cobalt	59-2	0.45	0.43	0.39	0.42	6.90	ppb
Copper	63-2	1.01	1.01	1.04	1.02	1.98	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				111		%
Indium	115-1				111		%
Indium	115-2				110		%
Iron	54-2	24.12	25.39	23.69	24.40	3.62	ppb
Iron	56-2	24.85	24.27	23.67	24.26	2.43	ppb
Iron	57-2	24.69	23.56	24.62	24.29	2.60	ppb
Krypton	83-1						cps
Lead	206-1	0.43	0.41	0.43	0.42	2.88	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : WATER MDL-5 Instrumnet Name : P8
Client Sample ID : WATER MDL-5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:08:43 DataFile Name : 052AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.44	0.43	0.43	0.43	1.76	ppb
Lead	208-1	0.43	0.42	0.43	0.42	1.36	ppb
Lithium	6-1				105		%
Magnesium	24-2	207.06	207.83	199.36	204.75	2.29	ppb
Manganese	55-2	1.04	1.00	1.03	1.02	1.85	ppb
Molybdenum	94-1	1.03	1.05	1.08	1.05	2.24	ppb
Molybdenum	95-1	0.40	0.40	0.40	0.40	1.14	ppb
Molybdenum	96-1	0.45	0.45	0.49	0.46	4.51	ppb
Molybdenum	97-1	0.38	0.41	0.42	0.41	5.64	ppb
Molybdenum	98-1	0.41	0.39	0.41	0.40	2.10	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.48	0.51	0.51	0.50	3.69	ppb
Phosphorus	31-2	-99.61	-108.62	-107.02	-105.08		ppb
Potassium	39-2	137.76	138.40	137.14	137.76	0.46	ppb
Rhodium	103-1				111		%
Rhodium	103-2				111		%
Scandium	45-1				111		%
Scandium	45-2				110		%
Selenium	82-1	2.55	2.58	2.42	2.52	3.39	ppb
Selenium	77-2	2.67	2.00	2.66	2.44	15.78	ppb
Selenium	78-2	1.44	3.26	2.43	2.38	38.24	ppb
Silicon	28-1	-0.69	-0.73	-0.77	-0.73		ppb
Silver	107-1	0.42	0.41	0.42	0.42	1.05	ppb
Silver	109-1	0.44	0.42	0.43	0.43	2.33	ppb
Sodium	23-2	218.51	218.99	213.70	217.07	1.35	ppb
Strontium	86-1	0.40	0.40	0.39	0.39	1.88	ppb
Strontium	88-1	0.41	0.40	0.40	0.41	0.49	ppb
Sulfur	34-1	-769.29	-769.16	-831.79	-790.08		ppb
Terbium	159-1				109		%
Terbium	159-2				112		%
Thallium	203-1	0.40	0.39	0.40	0.40	1.14	ppb
Thallium	205-1	0.39	0.39	0.39	0.39	0.24	ppb
Tin	118-1	0.46	0.46	0.44	0.45	2.46	ppb
Titanium	47-1	0.42	0.41	0.43	0.42	1.65	ppb
Uranium	238-1	0.37	0.36	0.37	0.37	1.01	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : WATER MDL-5 Instrumnet Name : P8
Client Sample ID : WATER MDL-5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:08:43 DataFile Name : 052AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.43	0.42	0.38	0.41	6.94	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				116		%
Zinc	66-2	3.58	3.52	3.68	3.59	2.20	ppb
Zirconium	90-1	0.39	0.39	0.40	0.39	1.40	ppb
Zirconium	91-1	0.38	0.39	0.40	0.39	2.41	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW005 Instrumnet Name : P8
Client Sample ID : PBW005 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:16:57 DataFile Name : 054AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.58	-0.26	-0.19	-0.35		ppb
Antimony	121-1	0.00	0.00	0.00	0.00	17.93	ppb
Arsenic	75-2	-0.01	-0.01	-0.01	-0.01		ppb
Barium	135-1	0.00	0.00	0.00	0.00		ppb
Barium	137-1	-0.01	0.00	0.00	0.00		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	75.69	ppb
Bismuth	209-1				107		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Cadmium	108-1	-0.03	-0.01	-0.01	-0.02		ppb
Cadmium	106-1	-0.92	-1.00	-1.29	-1.07		ppb
Cadmium	111-1	-0.07	-0.07	-0.10	-0.08		ppb
Calcium	43-1	-5.45	-7.38	-6.15	-6.33		ppb
Calcium	44-1	-7.11	-7.73	-7.55	-7.46		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.04	-0.04	-0.04		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.04	-0.03	-0.02	-0.03		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				111		%
Indium	115-1				113		%
Indium	115-2				110		%
Iron	54-2	-0.61	-0.56	-0.62	-0.60		ppb
Iron	56-2	-0.43	-0.33	-0.15	-0.31		ppb
Iron	57-2	-0.12	-0.59	-0.27	-0.33		ppb
Krypton	83-1						cps
Lead	206-1	0.00	0.00	0.00	0.00	95.18	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW005 Instrumnet Name : P8
Client Sample ID : PBW005 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:16:57 DataFile Name : 054AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.00	0.00	0.00	0.00	916.96	ppb
Lead	208-1	0.00	0.00	0.00	0.00	70.49	ppb
Lithium	6-1				103		%
Magnesium	24-2	-0.09	-0.18	-0.17	-0.15		ppb
Manganese	55-2	0.19	0.12	0.13	0.14	25.55	ppb
Molybdenum	94-1	0.02	0.02	0.02	0.02	12.98	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	312.82	ppb
Molybdenum	96-1	0.00	0.01	0.01	0.01	25.31	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	88.00	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	128.38	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.06	-0.04	-0.05	-0.05		ppb
Phosphorus	31-2	-108.57	-106.37	-115.52	-110.15		ppb
Potassium	39-2	8.38	5.78	6.11	6.76	20.93	ppb
Rhodium	103-1				112		%
Rhodium	103-2				112		%
Scandium	45-1				115		%
Scandium	45-2				110		%
Selenium	82-1	0.03	0.01	0.03	0.02	61.85	ppb
Selenium	77-2	0.00	0.28	0.00	0.09	173.21	ppb
Selenium	78-2	0.27	-0.31	-0.26	-0.10		ppb
Silicon	28-1	-1.04	-1.15	-1.13	-1.11		ppb
Silver	107-1	0.01	0.01	0.00	0.01	12.18	ppb
Silver	109-1	0.00	0.01	0.00	0.00	19.38	ppb
Sodium	23-2	5.69	2.67	4.90	4.42	35.47	ppb
Strontium	86-1	0.00	0.00	-0.01	0.00		ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-975.17	-1003.80	-994.57	-991.18		ppb
Terbium	159-1				110		%
Terbium	159-2				112		%
Thallium	203-1	0.01	0.01	0.01	0.01	12.25	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	12.87	ppb
Tin	118-1	-0.06	-0.05	-0.06	-0.06		ppb
Titanium	47-1	-0.01	0.00	-0.01	-0.01		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW005 Instrumnet Name : P8
Client Sample ID : PBW005 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:16:57 DataFile Name : 054AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	72.58	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				116		%
Zinc	66-2	0.01	0.14	0.12	0.09	74.03	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	6.04	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	5.43	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : SOIL MDL-4 Instrumnet Name : P8
Client Sample ID : SOIL MDL-4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:23:43 DataFile Name : 056AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	16.96	17.91	13.88	16.25	12.94	ppb
Antimony	121-1	0.40	0.40	0.41	0.40	1.23	ppb
Arsenic	75-2	0.37	0.33	0.30	0.34	10.73	ppb
Barium	135-1	1.98	1.97	1.98	1.98	0.35	ppb
Barium	137-1	2.02	2.00	1.98	2.00	1.22	ppb
Beryllium	9-1	0.41	0.44	0.43	0.43	2.73	ppb
Bismuth	209-1				107		%
Bismuth	209-2				112		%
Bromine	81-1						cps
Cadmium	108-1	0.35	0.45	0.43	0.41	13.32	ppb
Cadmium	106-1	-0.51	-0.59	-0.63	-0.58		ppb
Cadmium	111-1	0.34	0.33	0.33	0.33	2.43	ppb
Calcium	43-1	188.79	185.91	184.92	186.54	1.08	ppb
Calcium	44-1	183.48	186.18	184.51	184.72	0.74	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.37	0.35	0.37	0.36	2.78	ppb
Cobalt	59-2	0.43	0.41	0.39	0.41	5.11	ppb
Copper	63-2	0.86	0.82	0.78	0.82	4.91	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				112		%
Indium	115-1				113		%
Indium	115-2				111		%
Iron	54-2	23.28	23.31	21.80	22.79	3.79	ppb
Iron	56-2	23.12	22.65	21.08	22.28	4.78	ppb
Iron	57-2	22.44	22.62	20.74	21.93	4.73	ppb
Krypton	83-1						cps
Lead	206-1	0.38	0.38	0.39	0.39	1.25	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : SOIL MDL-4 Instrumnet Name : P8
Client Sample ID : SOIL MDL-4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:23:43 DataFile Name : 056AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.39	0.38	0.40	0.39	2.11	ppb
Lead	208-1	0.40	0.38	0.39	0.39	2.69	ppb
Lithium	6-1				105		%
Magnesium	24-2	212.36	203.35	190.63	202.12	5.40	ppb
Manganese	55-2	0.92	0.90	0.83	0.88	5.43	ppb
Molybdenum	94-1	1.04	1.01	1.01	1.02	1.73	ppb
Molybdenum	95-1	0.38	0.39	0.39	0.39	1.63	ppb
Molybdenum	96-1	0.44	0.45	0.46	0.45	2.60	ppb
Molybdenum	97-1	0.40	0.38	0.38	0.39	2.96	ppb
Molybdenum	98-1	0.39	0.38	0.39	0.39	0.64	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.38	0.39	0.39	0.39	1.45	ppb
Phosphorus	31-2	-95.90	-103.45	-102.09	-100.48		ppb
Potassium	39-2	129.67	124.99	123.88	126.18	2.44	ppb
Rhodium	103-1				111		%
Rhodium	103-2				114		%
Scandium	45-1				115		%
Scandium	45-2				112		%
Selenium	82-1	2.27	2.46	2.57	2.43	6.36	ppb
Selenium	77-2	2.08	3.18	2.14	2.47	25.08	ppb
Selenium	78-2	2.06	1.27	2.45	1.93	31.27	ppb
Silicon	28-1	-0.81	-0.88	-0.93	-0.88		ppb
Silver	107-1	0.40	0.40	0.41	0.40	0.75	ppb
Silver	109-1	0.41	0.41	0.40	0.41	1.02	ppb
Sodium	23-2	212.44	207.34	199.93	206.57	3.05	ppb
Strontium	86-1	0.40	0.39	0.39	0.39	0.92	ppb
Strontium	88-1	0.40	0.39	0.40	0.40	1.71	ppb
Sulfur	34-1	-941.04	-997.75	-1008.48	-982.42		ppb
Terbium	159-1				111		%
Terbium	159-2				113		%
Thallium	203-1	0.39	0.37	0.38	0.38	2.83	ppb
Thallium	205-1	0.39	0.37	0.38	0.38	2.47	ppb
Tin	118-1	0.40	0.39	0.39	0.39	1.13	ppb
Titanium	47-1	0.45	0.43	0.39	0.42	7.09	ppb
Uranium	238-1	0.37	0.36	0.36	0.36	2.23	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : SOIL MDL-4 Instrumnet Name : P8
Client Sample ID : SOIL MDL-4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:23:43 DataFile Name : 056AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.42	0.44	0.37	0.41	8.13	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				120		%
Zinc	66-2	1.25	1.35	1.25	1.28	4.54	ppb
Zirconium	90-1	0.38	0.39	0.39	0.38	1.27	ppb
Zirconium	91-1	0.35	0.38	0.38	0.37	4.59	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : SOIL MDL-5 Instrumnet Name : P8
Client Sample ID : SOIL MDL-5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:27:05 DataFile Name : 057AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	17.59	17.63	15.64	16.95	6.72	ppb
Antimony	121-1	0.39	0.41	0.41	0.40	2.43	ppb
Arsenic	75-2	0.39	0.41	0.28	0.36	19.27	ppb
Barium	135-1	1.96	1.96	2.00	1.97	1.30	ppb
Barium	137-1	1.99	2.05	2.04	2.03	1.68	ppb
Beryllium	9-1	0.43	0.42	0.44	0.43	1.92	ppb
Bismuth	209-1				106		%
Bismuth	209-2				112		%
Bromine	81-1						cps
Cadmium	108-1	0.43	0.38	0.39	0.40	6.69	ppb
Cadmium	106-1	-0.50	-0.51	-0.56	-0.52		ppb
Cadmium	111-1	0.35	0.33	0.36	0.35	4.79	ppb
Calcium	43-1	187.55	191.55	195.22	191.44	2.01	ppb
Calcium	44-1	185.36	188.04	187.99	187.13	0.82	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.37	0.37	0.36	0.36	0.83	ppb
Cobalt	59-2	0.43	0.43	0.38	0.42	6.98	ppb
Copper	63-2	0.84	0.84	0.80	0.83	3.07	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				112		%
Indium	115-1				110		%
Indium	115-2				110		%
Iron	54-2	23.55	22.53	21.24	22.44	5.15	ppb
Iron	56-2	23.32	22.60	21.22	22.38	4.76	ppb
Iron	57-2	22.74	21.32	21.54	21.87	3.49	ppb
Krypton	83-1						cps
Lead	206-1	0.38	0.40	0.40	0.39	2.11	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : SOIL MDL-5 Instrumnet Name : P8
Client Sample ID : SOIL MDL-5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:27:05 DataFile Name : 057AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.38	0.39	0.40	0.39	2.75	ppb
Lead	208-1	0.38	0.39	0.40	0.39	2.03	ppb
Lithium	6-1				102		%
Magnesium	24-2	208.31	204.26	195.04	202.53	3.36	ppb
Manganese	55-2	0.99	0.97	0.93	0.96	2.83	ppb
Molybdenum	94-1	1.05	1.04	1.03	1.04	0.68	ppb
Molybdenum	95-1	0.38	0.38	0.39	0.38	1.80	ppb
Molybdenum	96-1	0.45	0.45	0.46	0.45	1.02	ppb
Molybdenum	97-1	0.39	0.41	0.40	0.40	2.79	ppb
Molybdenum	98-1	0.40	0.39	0.40	0.39	0.51	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.42	0.40	0.35	0.39	9.22	ppb
Phosphorus	31-2	-104.25	-97.80	-98.51	-100.18		ppb
Potassium	39-2	136.01	132.69	123.76	130.82	4.84	ppb
Rhodium	103-1				111		%
Rhodium	103-2				112		%
Scandium	45-1				113		%
Scandium	45-2				112		%
Selenium	82-1	2.25	2.78	2.54	2.53	10.57	ppb
Selenium	77-2	2.10	2.63	2.53	2.42	11.61	ppb
Selenium	78-2	1.94	2.70	1.24	1.96	37.37	ppb
Silicon	28-1	-0.57	-0.67	-0.75	-0.66		ppb
Silver	107-1	0.40	0.41	0.41	0.41	2.17	ppb
Silver	109-1	0.40	0.41	0.42	0.41	1.85	ppb
Sodium	23-2	216.77	211.73	202.33	210.28	3.48	ppb
Strontium	86-1	0.40	0.37	0.39	0.39	3.37	ppb
Strontium	88-1	0.39	0.40	0.41	0.40	1.63	ppb
Sulfur	34-1	-913.06	-813.90	-827.14	-851.36		ppb
Terbium	159-1				110		%
Terbium	159-2				112		%
Thallium	203-1	0.38	0.39	0.39	0.39	2.63	ppb
Thallium	205-1	0.38	0.39	0.38	0.38	1.26	ppb
Tin	118-1	0.37	0.39	0.38	0.38	1.53	ppb
Titanium	47-1	0.39	0.41	0.39	0.40	3.15	ppb
Uranium	238-1	0.37	0.37	0.37	0.37	0.69	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : SOIL MDL-5 Instrumnet Name : P8
Client Sample ID : SOIL MDL-5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:27:05 DataFile Name : 057AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.44	0.42	0.37	0.41	8.97	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				117		%
Zinc	66-2	1.34	1.19	1.25	1.26	5.95	ppb
Zirconium	90-1	0.37	0.39	0.39	0.38	2.33	ppb
Zirconium	91-1	0.40	0.37	0.39	0.39	3.60	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBS005 Instrumnet Name : P8
Client Sample ID : PBS005 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:33:53 DataFile Name : 059AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.35	0.20	-0.12	-0.09		ppb
Antimony	121-1	0.00	0.00	0.00	0.00	37.69	ppb
Arsenic	75-2	-0.01	-0.01	-0.01	-0.01		ppb
Barium	135-1	-0.01	0.00	-0.01	0.00		ppb
Barium	137-1	-0.01	0.00	-0.01	-0.01		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	232.91	ppb
Bismuth	209-1				107		%
Bismuth	209-2				113		%
Bromine	81-1						cps
Cadmium	108-1	0.01	-0.02	-0.03	-0.01		ppb
Cadmium	106-1	-0.80	-1.18	-1.06	-1.01		ppb
Cadmium	111-1	-0.06	-0.09	-0.08	-0.08		ppb
Calcium	43-1	-5.31	-4.70	-6.40	-5.47		ppb
Calcium	44-1	-6.38	-6.18	-6.79	-6.45		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.03	-0.02	-0.03		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.06	-0.06	-0.02	-0.05		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				112		%
Indium	115-1				113		%
Indium	115-2				111		%
Iron	54-2	-0.61	-0.22	-0.44	-0.42		ppb
Iron	56-2	-0.39	-0.35	-0.25	-0.33		ppb
Iron	57-2	-0.36	-0.15	-0.32	-0.28		ppb
Krypton	83-1						cps
Lead	206-1	0.00	-0.01	-0.01	-0.01		ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBS005 Instrumnet Name : P8
Client Sample ID : PBS005 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:33:53 DataFile Name : 059AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	-0.01	-0.01	-0.01	-0.01		ppb
Lead	208-1	0.00	-0.01	-0.01	-0.01		ppb
Lithium	6-1				104		%
Magnesium	24-2	-0.20	-0.25	-0.05	-0.17		ppb
Manganese	55-2	0.21	0.12	0.17	0.17	28.75	ppb
Molybdenum	94-1	0.01	0.01	0.01	0.01	6.44	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00	81.46	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00		ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.09	-0.04	-0.05	-0.06		ppb
Phosphorus	31-2	-113.10	-112.57	-109.60	-111.75		ppb
Potassium	39-2	4.75	7.68	5.63	6.02	24.97	ppb
Rhodium	103-1				112		%
Rhodium	103-2				113		%
Scandium	45-1				114		%
Scandium	45-2				112		%
Selenium	82-1	0.05	0.11	0.18	0.11	58.88	ppb
Selenium	77-2	0.00	0.00	0.26	0.09	173.21	ppb
Selenium	78-2	0.02	-0.42	0.03	-0.13		ppb
Silicon	28-1	-0.94	-0.92	-1.01	-0.95		ppb
Silver	107-1	0.01	0.01	0.00	0.01	26.22	ppb
Silver	109-1	0.00	0.01	0.01	0.01	23.30	ppb
Sodium	23-2	2.81	2.19	2.77	2.59	13.32	ppb
Strontium	86-1	0.00	0.00	-0.01	0.00		ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-840.46	-774.92	-804.92	-806.77		ppb
Terbium	159-1				112		%
Terbium	159-2				113		%
Thallium	203-1	0.00	0.01	0.01	0.01	9.96	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	18.81	ppb
Tin	118-1	-0.07	-0.06	-0.06	-0.06		ppb
Titanium	47-1	-0.02	-0.02	-0.01	-0.02		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :PBS005Instrumnet Name :P8

Client Sample ID :PBS005Dilution Factor :1

Date & Time Acquired :2025-04-01 16:33:53DataFile Name :059AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				113		%
Yttrium	89-2				117		%
Zinc	66-2	0.04	0.04	0.06	0.05	16.33	ppb
Zirconium	90-1	0.01	0.01	0.00	0.00	32.88	ppb
Zirconium	91-1	0.00	0.01	0.01	0.00	107.32	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV05 Instrumnet Name : P8
Client Sample ID : CCV05 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:40:38 DataFile Name : 061CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51813.37	52234.84	52235.71	52094.64	0.47	ppb
Antimony	121-1	489.37	495.89	489.32	491.53	0.77	ppb
Arsenic	75-2	489.31	482.64	490.15	487.37	0.84	ppb
Barium	135-1	2479.44	2459.93	2446.78	2462.05	0.67	ppb
Barium	137-1	2487.88	2499.71	2459.29	2482.29	0.84	ppb
Beryllium	9-1	542.80	534.80	538.34	538.65	0.74	ppb
Bismuth	209-1				90		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Cadmium	108-1	482.79	484.95	478.91	482.21	0.63	ppb
Cadmium	106-1	483.69	487.13	477.77	482.86	0.98	ppb
Cadmium	111-1	488.30	487.04	486.36	487.23	0.20	ppb
Calcium	43-1	253739.24	249343.56	251441.51	251508.10	0.87	ppb
Calcium	44-1	252938.42	245556.27	251931.33	250142.00	1.60	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	505.88	517.99	509.79	511.22	1.21	ppb
Cobalt	59-2	491.88	488.28	484.08	488.08	0.80	ppb
Copper	63-2	5005.01	5005.67	4962.49	4991.06	0.50	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				100		%
Holmium	165-2				106		%
Indium	115-1				94		%
Indium	115-2				94		%
Iron	54-2	123475.90	126562.25	125521.57	125186.57	1.25	ppb
Iron	56-2	125898.97	126129.80	125234.89	125754.55	0.37	ppb
Iron	57-2	125775.21	124781.55	123438.15	124664.97	0.94	ppb
Krypton	83-1						cps
Lead	206-1	2508.91	2500.69	2451.34	2486.98	1.25	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV05 Instrumnet Name : P8
Client Sample ID : CCV05 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:40:38 DataFile Name : 061CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2511.48	2491.47	2460.22	2487.72	1.04	ppb
Lead	208-1	2505.37	2507.67	2466.44	2493.16	0.93	ppb
Lithium	6-1				92		%
Magnesium	24-2	253689.22	255757.52	256702.36	255383.03	0.60	ppb
Manganese	55-2	5150.82	5195.41	5187.11	5177.78	0.46	ppb
Molybdenum	94-1	4966.26	4955.79	4978.34	4966.80	0.23	ppb
Molybdenum	95-1	5026.79	4904.41	5001.01	4977.40	1.30	ppb
Molybdenum	96-1	5045.00	4994.95	5060.30	5033.41	0.68	ppb
Molybdenum	97-1	5027.02	5025.56	5116.64	5056.41	1.03	ppb
Molybdenum	98-1	4983.42	4986.72	5079.39	5016.51	1.09	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	492.61	482.12	483.50	486.08	1.17	ppb
Phosphorus	31-2	10216.10	10269.61	10248.75	10244.82	0.26	ppb
Potassium	39-2	125049.23	126838.30	126456.12	126114.55	0.75	ppb
Rhodium	103-1				93		%
Rhodium	103-2				95		%
Scandium	45-1				104		%
Scandium	45-2				109		%
Selenium	82-1	468.32	473.81	474.50	472.21	0.72	ppb
Selenium	77-2	481.79	484.07	518.49	494.78	4.16	ppb
Selenium	78-2	491.63	487.11	498.73	492.49	1.19	ppb
Silicon	28-1	570.52	551.94	558.20	560.22	1.69	ppb
Silver	107-1	488.36	488.07	477.03	484.49	1.33	ppb
Silver	109-1	486.39	479.79	485.84	484.01	0.76	ppb
Sodium	23-2	249860.94	251535.92	248236.36	249877.74	0.66	ppb
Strontium	86-1	495.18	495.44	500.11	496.91	0.56	ppb
Strontium	88-1	503.93	492.11	506.92	500.99	1.56	ppb
Sulfur	34-1	10439.22	9746.94	9871.78	10019.31	3.68	ppb
Terbium	159-1				103		%
Terbium	159-2				106		%
Thallium	203-1	501.76	501.01	495.14	499.30	0.73	ppb
Thallium	205-1	506.12	505.01	502.39	504.50	0.38	ppb
Tin	118-1	488.89	496.10	492.15	492.38	0.73	ppb
Titanium	47-1	5056.13	5014.57	5010.95	5027.22	0.50	ppb
Uranium	238-1	507.35	514.81	510.41	510.86	0.73	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV05 Instrumnet Name : P8
Client Sample ID : CCV05 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:40:38 DataFile Name : 061CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	519.25	515.53	518.81	517.87	0.39	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				107		%
Zinc	66-2	5029.48	5118.97	5044.83	5064.43	0.94	ppb
Zirconium	90-1	499.83	499.10	500.51	499.81	0.14	ppb
Zirconium	91-1	502.35	493.65	506.49	500.83	1.31	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB05 Instrumnet Name : P8
Client Sample ID : CCB05 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:47:45 DataFile Name : 062CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.37	0.13	-0.01	0.16	117.26	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	18.41	ppb
Arsenic	75-2	0.01	-0.01	-0.01	0.00		ppb
Barium	135-1	0.01	0.00	0.00	0.00	87.28	ppb
Barium	137-1	0.00	0.00	0.01	0.00	33.32	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	11.47	ppb
Bismuth	209-1				108		%
Bismuth	209-2				113		%
Bromine	81-1						cps
Cadmium	108-1	-0.01	-0.01	0.01	0.00		ppb
Cadmium	106-1	-1.19	-1.21	-1.22	-1.21		ppb
Cadmium	111-1	-0.08	-0.09	-0.09	-0.09		ppb
Calcium	43-1	-5.45	-6.14	-5.97	-5.85		ppb
Calcium	44-1	-6.85	-6.91	-7.09	-6.95		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	-0.04	-0.02	-0.03		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.03	-0.03	0.01	-0.02		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				113		%
Indium	115-1				112		%
Indium	115-2				111		%
Iron	54-2	-0.14	0.14	0.06	0.02	757.23	ppb
Iron	56-2	0.06	0.08	0.32	0.15	93.31	ppb
Iron	57-2	0.45	0.45	0.19	0.36	40.15	ppb
Krypton	83-1						cps
Lead	206-1	0.03	0.02	0.02	0.02	19.40	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB05 Instrumnet Name : P8
Client Sample ID : CCB05 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:47:45 DataFile Name : 062CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.03	0.02	0.02	0.02	16.66	ppb
Lead	208-1	0.03	0.02	0.02	0.02	18.66	ppb
Lithium	6-1				106		%
Magnesium	24-2	0.82	0.86	0.74	0.81	7.53	ppb
Manganese	55-2	0.19	0.16	0.14	0.16	16.70	ppb
Molybdenum	94-1	0.07	0.07	0.07	0.07	1.32	ppb
Molybdenum	95-1	0.04	0.03	0.02	0.03	28.11	ppb
Molybdenum	96-1	0.05	0.03	0.03	0.04	20.35	ppb
Molybdenum	97-1	0.04	0.03	0.03	0.03	18.09	ppb
Molybdenum	98-1	0.04	0.03	0.03	0.03	16.88	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.07	-0.05	-0.04	-0.05		ppb
Phosphorus	31-2	-113.11	-110.09	-107.66	-110.29		ppb
Potassium	39-2	12.02	12.60	13.82	12.81	7.17	ppb
Rhodium	103-1				111		%
Rhodium	103-2				113		%
Scandium	45-1				112		%
Scandium	45-2				108		%
Selenium	82-1	-0.04	-0.05	0.01	-0.03		ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.28	-0.32	0.03	-0.01		ppb
Silicon	28-1	-0.95	-0.85	-0.93	-0.91		ppb
Silver	107-1	0.01	0.01	0.01	0.01	11.48	ppb
Silver	109-1	0.01	0.01	0.01	0.01	13.04	ppb
Sodium	23-2	14.13	13.45	15.31	14.30	6.56	ppb
Strontium	86-1	0.00	0.00	0.00	0.00		ppb
Strontium	88-1	0.00	0.00	0.00	0.00	47.42	ppb
Sulfur	34-1	-1099.37	-1080.71	-997.50	-1059.19		ppb
Terbium	159-1				111		%
Terbium	159-2				113		%
Thallium	203-1	0.01	0.01	0.01	0.01	9.91	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	8.61	ppb
Tin	118-1	-0.02	-0.03	-0.03	-0.03		ppb
Titanium	47-1	0.01	0.01	0.01	0.01	3.21	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	37.80	ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :CCB05Instrumnet Name :P8

Client Sample ID :CCB05Dilution Factor :1

Date & Time Acquired :2025-04-01 16:47:45DataFile Name :062CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	350.52	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				115		%
Zinc	66-2	0.18	0.05	0.14	0.12	56.25	ppb
Zirconium	90-1	0.02	0.02	0.03	0.02	17.64	ppb
Zirconium	91-1	0.01	0.02	0.02	0.02	28.05	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW004 Instrumnet Name : P8
Client Sample ID : PBW004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:51:53 DataFile Name : 063CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.19	-0.28	-0.25	-0.24		ppb
Antimony	121-1	0.01	0.01	0.01	0.01	18.33	ppb
Arsenic	75-2	-0.01	-0.01	0.00	-0.01		ppb
Barium	135-1	0.00	0.00	0.00	0.00	316.64	ppb
Barium	137-1	0.00	0.00	0.00	0.00		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	19.80	ppb
Bismuth	209-1				108		%
Bismuth	209-2				113		%
Bromine	81-1						cps
Cadmium	108-1	0.00	-0.02	0.00	-0.01		ppb
Cadmium	106-1	-0.92	-0.74	-0.97	-0.88		ppb
Cadmium	111-1	-0.07	-0.06	-0.07	-0.07		ppb
Calcium	43-1	-6.44	-6.25	-7.35	-6.68		ppb
Calcium	44-1	-8.37	-7.91	-7.73	-8.00		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.04	-0.04	-0.03	-0.03		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.04	-0.04	-0.02	-0.03		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				111		%
Holmium	165-2				114		%
Indium	115-1				113		%
Indium	115-2				111		%
Iron	54-2	-0.01	-0.32	0.13	-0.06		ppb
Iron	56-2	-0.33	-0.29	-0.16	-0.26		ppb
Iron	57-2	-0.15	-0.46	0.08	-0.18		ppb
Krypton	83-1						cps
Lead	206-1	0.01	0.01	0.01	0.01	24.50	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW004 Instrumnet Name : P8
Client Sample ID : PBW004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:51:53 DataFile Name : 063CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.01	0.00	0.02	0.01	72.97	ppb
Lead	208-1	0.01	0.01	0.01	0.01	14.60	ppb
Lithium	6-1				105		%
Magnesium	24-2	-0.09	0.06	-0.04	-0.02		ppb
Manganese	55-2	0.09	0.22	0.15	0.15	40.30	ppb
Molybdenum	94-1	0.03	0.03	0.03	0.03	5.14	ppb
Molybdenum	95-1	0.01	0.01	0.01	0.01	28.80	ppb
Molybdenum	96-1	0.02	0.01	0.01	0.01	38.62	ppb
Molybdenum	97-1	0.01	0.01	0.01	0.01	8.92	ppb
Molybdenum	98-1	0.01	0.01	0.01	0.01	23.28	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.09	-0.06	-0.05	-0.07		ppb
Phosphorus	31-2	-112.91	-111.77	-112.42	-112.37		ppb
Potassium	39-2	9.94	8.34	7.57	8.62	14.04	ppb
Rhodium	103-1				111		%
Rhodium	103-2				113		%
Scandium	45-1				114		%
Scandium	45-2				110		%
Selenium	82-1	0.05	-0.08	-0.05	-0.03		ppb
Selenium	77-2	0.00	0.00	0.26	0.09	173.21	ppb
Selenium	78-2	-0.58	-0.58	-0.44	-0.53		ppb
Silicon	28-1	-1.07	-1.13	-1.06	-1.09		ppb
Silver	107-1	0.01	0.00	0.00	0.01	5.96	ppb
Silver	109-1	0.00	0.00	0.00	0.00	5.79	ppb
Sodium	23-2	5.97	7.39	7.12	6.83	11.06	ppb
Strontium	86-1	0.00	-0.01	-0.01	-0.01		ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-1139.45	-1118.92	-1048.55	-1102.31		ppb
Terbium	159-1				111		%
Terbium	159-2				113		%
Thallium	203-1	0.01	0.01	0.01	0.01	9.49	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	5.64	ppb
Tin	118-1	-0.05	-0.06	-0.06	-0.06		ppb
Titanium	47-1	0.00	-0.01	-0.01	-0.01		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number :

LB135261

Operator :

Jaswal

Lab Sample ID :

PBW004

Instrumnet Name :

P8

Client Sample ID :

PBW004

Dilution Factor :

1

Date & Time Acquired :

2025-04-01 16:51:53

DataFile Name :

063CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	424.77	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				112		%
Yttrium	89-2				121		%
Zinc	66-2	0.08	0.08	0.22	0.13	63.89	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	24.80	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	10.94	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCSW004 Instrumnet Name : P8
Client Sample ID : LCSW004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:55:15 DataFile Name : 064LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	40.26	35.79	33.62	36.55	9.26	ppb
Antimony	121-1	3.44	3.44	3.47	3.45	0.57	ppb
Arsenic	75-2	1.78	1.59	1.40	1.59	11.99	ppb
Barium	135-1	17.17	16.93	17.16	17.09	0.79	ppb
Barium	137-1	17.47	17.25	17.33	17.35	0.64	ppb
Beryllium	9-1	1.84	1.81	1.91	1.86	2.79	ppb
Bismuth	209-1				109		%
Bismuth	209-2				114		%
Bromine	81-1						cps
Cadmium	108-1	1.71	1.79	1.86	1.79	4.17	ppb
Cadmium	106-1	0.62	0.75	0.64	0.67	10.68	ppb
Cadmium	111-1	1.69	1.71	1.73	1.71	1.12	ppb
Calcium	43-1	914.89	909.04	894.15	906.03	1.18	ppb
Calcium	44-1	956.09	935.48	948.33	946.64	1.10	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3.62	3.31	2.90	3.28	11.08	ppb
Cobalt	59-2	1.94	1.77	1.61	1.77	9.34	ppb
Copper	63-2	3.78	3.54	3.21	3.51	8.08	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				114		%
Indium	115-1				114		%
Indium	115-2				113		%
Iron	54-2	378.25	357.43	308.25	347.98	10.33	ppb
Iron	56-2	412.71	381.17	331.06	374.98	10.98	ppb
Iron	57-2	376.01	349.38	306.77	344.05	10.15	ppb
Krypton	83-1						cps
Lead	206-1	1.73	1.73	1.72	1.73	0.23	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCSW004 Instrumnet Name : P8
Client Sample ID : LCSW004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:55:15 DataFile Name : 064LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.72	1.77	1.73	1.74	1.51	ppb
Lead	208-1	1.74	1.75	1.72	1.74	0.91	ppb
Lithium	6-1				106		%
Magnesium	24-2	944.76	880.35	787.01	870.71	9.11	ppb
Manganese	55-2	1.47	1.34	1.17	1.33	11.23	ppb
Molybdenum	94-1	9.81	9.96	10.05	9.94	1.25	ppb
Molybdenum	95-1	8.38	8.49	8.33	8.40	0.94	ppb
Molybdenum	96-1	8.53	8.50	8.61	8.55	0.65	ppb
Molybdenum	97-1	8.61	8.55	8.62	8.59	0.39	ppb
Molybdenum	98-1	8.34	8.45	8.57	8.45	1.34	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.80	1.72	1.56	1.69	7.14	ppb
Phosphorus	31-2	-63.93	-66.81	-63.88	-64.88		ppb
Potassium	39-2	935.33	896.17	851.93	894.48	4.67	ppb
Rhodium	103-1				112		%
Rhodium	103-2				115		%
Scandium	45-1				114		%
Scandium	45-2				112		%
Selenium	82-1	8.70	9.07	9.03	8.94	2.27	ppb
Selenium	77-2	11.11	8.55	11.65	10.44	15.90	ppb
Selenium	78-2	9.02	7.01	6.41	7.48	18.28	ppb
Silicon	28-1	4.06	4.06	4.00	4.04	0.82	ppb
Silver	107-1	1.74	1.77	1.77	1.76	0.96	ppb
Silver	109-1	1.78	1.75	1.85	1.79	2.82	ppb
Sodium	23-2	991.10	954.99	881.99	942.69	5.90	ppb
Strontium	86-1	1.70	1.68	1.70	1.69	0.67	ppb
Strontium	88-1	1.71	1.75	1.72	1.73	1.12	ppb
Sulfur	34-1	-975.63	-948.66	-1019.22	-981.17		ppb
Terbium	159-1				112		%
Terbium	159-2				114		%
Thallium	203-1	1.69	1.71	1.63	1.68	2.38	ppb
Thallium	205-1	1.69	1.71	1.65	1.68	1.71	ppb
Tin	118-1	8.91	8.94	8.97	8.94	0.35	ppb
Titanium	47-1	8.90	9.07	8.89	8.95	1.17	ppb
Uranium	238-1	1.58	1.62	1.58	1.59	1.55	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCSW004 Instrumnet Name : P8
Client Sample ID : LCSW004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:55:15 DataFile Name : 064LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	9.37	8.69	7.85	8.64	8.80	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				114		%
Yttrium	89-2				122		%
Zinc	66-2	8.25	7.72	7.21	7.73	6.76	ppb
Zirconium	90-1	1.67	1.67	1.70	1.68	1.21	ppb
Zirconium	91-1	1.63	1.63	1.68	1.65	1.95	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBS004 Instrumnet Name : P8
Client Sample ID : PBS004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:58:36 DataFile Name : 065CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.35	-0.08	-0.27	-0.23		ppb
Antimony	121-1	0.00	0.00	0.00	0.00	12.06	ppb
Arsenic	75-2	-0.01	-0.01	-0.01	-0.01		ppb
Barium	135-1	0.00	0.00	-0.01	-0.01		ppb
Barium	137-1	-0.01	0.00	0.00	0.00		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	31.78	ppb
Bismuth	209-1				110		%
Bismuth	209-2				114		%
Bromine	81-1						cps
Cadmium	108-1	-0.01	0.00	0.00	0.00		ppb
Cadmium	106-1	-1.10	-0.95	-1.04	-1.03		ppb
Cadmium	111-1	-0.08	-0.07	-0.08	-0.08		ppb
Calcium	43-1	-7.46	-8.11	-7.22	-7.60		ppb
Calcium	44-1	-7.53	-7.95	-7.76	-7.75		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.04	-0.04	-0.04		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.06	-0.04	-0.02	-0.04		ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				110		%
Holmium	165-2				114		%
Indium	115-1				113		%
Indium	115-2				113		%
Iron	54-2	-0.40	-0.67	-0.33	-0.47		ppb
Iron	56-2	-0.38	-0.34	-0.15	-0.29		ppb
Iron	57-2	-0.69	-0.37	-0.30	-0.45		ppb
Krypton	83-1						cps
Lead	206-1	0.01	0.00	0.00	0.00	23.92	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBS004 Instrumnet Name : P8
Client Sample ID : PBS004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:58:36 DataFile Name : 065CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.00	0.00	0.00	0.00	1024.07	ppb
Lead	208-1	0.00	0.00	0.00	0.00	37.74	ppb
Lithium	6-1				105		%
Magnesium	24-2	-0.13	-0.13	-0.20	-0.15		ppb
Manganese	55-2	0.18	0.11	0.08	0.12	38.65	ppb
Molybdenum	94-1	0.02	0.02	0.02	0.02	7.44	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	80.59	ppb
Molybdenum	96-1	0.01	0.01	0.01	0.01	7.69	ppb
Molybdenum	97-1	0.00	0.01	0.00	0.00	131.83	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	63.54	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.06	-0.06	-0.02	-0.04		ppb
Phosphorus	31-2	-108.57	-115.21	-115.27	-113.02		ppb
Potassium	39-2	7.46	7.96	6.97	7.46	6.62	ppb
Rhodium	103-1				112		%
Rhodium	103-2				115		%
Scandium	45-1				114		%
Scandium	45-2				112		%
Selenium	82-1	-0.04	0.15	0.15	0.09	126.93	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.22	-0.30	-0.21	-0.24		ppb
Silicon	28-1	-0.94	-1.11	-1.12	-1.06		ppb
Silver	107-1	0.01	0.01	0.01	0.01	15.91	ppb
Silver	109-1	0.01	0.01	0.01	0.01	25.84	ppb
Sodium	23-2	4.27	4.51	4.18	4.32	3.99	ppb
Strontium	86-1	0.00	-0.01	0.00	0.00		ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-963.39	-1088.32	-1026.80	-1026.17		ppb
Terbium	159-1				112		%
Terbium	159-2				116		%
Thallium	203-1	0.01	0.01	0.01	0.01	18.25	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	3.69	ppb
Tin	118-1	-0.06	-0.06	-0.07	-0.06		ppb
Titanium	47-1	-0.01	-0.01	0.00	-0.01		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :PBS004Instrumnet Name :P8

Client Sample ID :PBS004Dilution Factor :1

Date & Time Acquired :2025-04-01 16:58:36DataFile Name :065CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	1389.83	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				114		%
Yttrium	89-2				124		%
Zinc	66-2	0.01	0.04	0.00	0.02	129.79	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	12.77	ppb
Zirconium	91-1	0.00	0.01	0.00	0.01	49.10	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCS004 Instrumnet Name : P8
Client Sample ID : LCS004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:05:18 DataFile Name : 067LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	42.49	42.36	38.48	41.11	5.54	ppb
Antimony	121-1	3.83	3.89	3.87	3.86	0.80	ppb
Arsenic	75-2	2.17	2.25	1.71	2.04	14.39	ppb
Barium	135-1	18.76	18.80	19.44	19.00	2.00	ppb
Barium	137-1	19.15	19.20	19.48	19.28	0.92	ppb
Beryllium	9-1	2.04	2.08	2.08	2.07	1.09	ppb
Bismuth	209-1				107		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Cadmium	108-1	1.86	1.97	2.04	1.96	4.49	ppb
Cadmium	106-1	0.72	0.90	1.07	0.90	19.37	ppb
Cadmium	111-1	1.92	1.96	1.96	1.95	1.27	ppb
Calcium	43-1	986.92	1004.60	1001.06	997.53	0.94	ppb
Calcium	44-1	1025.29	1027.43	1033.82	1028.85	0.43	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3.94	3.85	3.65	3.82	3.92	ppb
Cobalt	59-2	2.10	2.10	1.98	2.06	3.49	ppb
Copper	63-2	4.21	4.04	3.92	4.05	3.56	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				108		%
Holmium	165-2				110		%
Indium	115-1				110		%
Indium	115-2				109		%
Iron	54-2	423.81	412.00	392.27	409.36	3.89	ppb
Iron	56-2	454.61	438.59	418.10	437.10	4.19	ppb
Iron	57-2	415.32	410.42	383.24	402.99	4.29	ppb
Krypton	83-1						cps
Lead	206-1	1.83	1.87	1.88	1.86	1.55	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCS004 Instrumnet Name : P8
Client Sample ID : LCS004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:05:18 DataFile Name : 067LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.83	1.89	1.94	1.89	2.73	ppb
Lead	208-1	1.82	1.88	1.91	1.87	2.50	ppb
Lithium	6-1				106		%
Magnesium	24-2	1037.40	1016.32	969.98	1007.90	3.42	ppb
Manganese	55-2	2.14	2.08	1.97	2.06	3.96	ppb
Molybdenum	94-1	10.96	11.01	11.24	11.07	1.32	ppb
Molybdenum	95-1	9.29	9.33	9.41	9.34	0.66	ppb
Molybdenum	96-1	9.54	9.47	9.63	9.55	0.85	ppb
Molybdenum	97-1	9.47	9.40	9.52	9.46	0.60	ppb
Molybdenum	98-1	9.35	9.33	9.41	9.36	0.45	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.99	2.01	1.90	1.97	3.09	ppb
Phosphorus	31-2	-58.16	-56.65	-68.39	-61.07		ppb
Potassium	39-2	1023.44	1011.85	991.25	1008.85	1.62	ppb
Rhodium	103-1				109		%
Rhodium	103-2				111		%
Scandium	45-1				111		%
Scandium	45-2				110		%
Selenium	82-1	9.73	9.83	10.15	9.90	2.19	ppb
Selenium	77-2	11.45	8.08	9.13	9.55	18.06	ppb
Selenium	78-2	10.17	9.85	8.96	9.66	6.50	ppb
Silicon	28-1	2.75	4.38	4.29	3.81	24.06	ppb
Silver	107-1	1.92	1.98	2.01	1.97	2.44	ppb
Silver	109-1	1.97	1.99	1.99	1.98	0.60	ppb
Sodium	23-2	1144.25	1118.03	1076.29	1112.86	3.08	ppb
Strontium	86-1	1.89	1.89	1.93	1.91	1.28	ppb
Strontium	88-1	1.89	1.90	1.93	1.91	1.03	ppb
Sulfur	34-1	-890.15	-801.40	-742.82	-811.46		ppb
Terbium	159-1				109		%
Terbium	159-2				112		%
Thallium	203-1	3.62	3.70	3.78	3.70	2.23	ppb
Thallium	205-1	3.63	3.71	3.80	3.71	2.35	ppb
Tin	118-1	9.70	9.72	9.84	9.75	0.82	ppb
Titanium	47-1	2.35	2.35	2.45	2.39	2.47	ppb
Uranium	238-1	1.72	1.76	1.77	1.75	1.52	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCS004 Instrumnet Name : P8
Client Sample ID : LCS004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:05:18 DataFile Name : 067LCSE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	10.34	10.17	9.77	10.09	2.90	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				114		%
Zinc	66-2	11.57	11.38	11.18	11.38	1.73	ppb
Zirconium	90-1	1.85	1.81	1.89	1.85	2.05	ppb
Zirconium	91-1	1.81	1.79	1.86	1.82	2.08	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV06 Instrumnet Name : P8
Client Sample ID : CCV06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:08:36 DataFile Name : 068CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	52967.64	51877.98	52069.80	52305.14	1.11	ppb
Antimony	121-1	486.22	512.91	505.64	501.59	2.75	ppb
Arsenic	75-2	495.29	491.08	490.49	492.29	0.53	ppb
Barium	135-1	2511.06	2598.14	2579.87	2563.02	1.79	ppb
Barium	137-1	2511.29	2559.53	2613.10	2561.31	1.99	ppb
Beryllium	9-1	507.60	516.01	517.95	513.85	1.07	ppb
Bismuth	209-1				84		%
Bismuth	209-2				90		%
Bromine	81-1						cps
Cadmium	108-1	481.73	487.07	486.03	484.94	0.58	ppb
Cadmium	106-1	478.43	489.49	477.10	481.68	1.41	ppb
Cadmium	111-1	490.97	504.13	500.99	498.70	1.38	ppb
Calcium	43-1	251078.76	250508.45	255693.55	252426.92	1.13	ppb
Calcium	44-1	249181.07	250858.68	252499.18	250846.31	0.66	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	511.78	510.17	508.17	510.04	0.35	ppb
Cobalt	59-2	497.37	489.17	480.40	488.98	1.74	ppb
Copper	63-2	5130.38	4966.28	4937.51	5011.39	2.08	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				94		%
Holmium	165-2				99		%
Indium	115-1				88		%
Indium	115-2				88		%
Iron	54-2	126779.00	124550.70	124447.94	125259.21	1.05	ppb
Iron	56-2	126576.99	125678.97	125653.78	125969.91	0.42	ppb
Iron	57-2	127466.06	124408.74	124763.10	125545.97	1.33	ppb
Krypton	83-1						cps
Lead	206-1	2520.28	2530.72	2578.27	2543.09	1.22	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV06 Instrumnet Name : P8
Client Sample ID : CCV06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:08:36 DataFile Name : 068CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2501.44	2494.86	2552.39	2516.23	1.25	ppb
Lead	208-1	2514.34	2510.52	2537.50	2520.78	0.58	ppb
Lithium	6-1				91		%
Magnesium	24-2	260596.11	255960.16	252751.13	256435.80	1.54	ppb
Manganese	55-2	5222.41	5128.13	5142.36	5164.30	0.98	ppb
Molybdenum	94-1	5099.72	5073.24	5138.13	5103.70	0.64	ppb
Molybdenum	95-1	5057.75	5019.02	5125.22	5067.33	1.06	ppb
Molybdenum	96-1	5000.08	5039.36	5093.68	5044.37	0.93	ppb
Molybdenum	97-1	5073.86	5073.02	5133.39	5093.42	0.68	ppb
Molybdenum	98-1	5093.98	5083.00	5147.91	5108.29	0.68	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	492.86	491.30	486.60	490.25	0.66	ppb
Phosphorus	31-2	10396.75	10361.85	10052.47	10270.36	1.85	ppb
Potassium	39-2	130282.10	128707.57	126940.78	128643.48	1.30	ppb
Rhodium	103-1				86		%
Rhodium	103-2				89		%
Scandium	45-1				98		%
Scandium	45-2				101		%
Selenium	82-1	475.18	478.47	476.75	476.80	0.35	ppb
Selenium	77-2	475.98	493.28	496.64	488.63	2.27	ppb
Selenium	78-2	487.77	494.41	492.15	491.44	0.69	ppb
Silicon	28-1	550.47	557.75	563.36	557.19	1.16	ppb
Silver	107-1	488.60	492.41	481.82	487.61	1.10	ppb
Silver	109-1	487.15	500.58	496.59	494.77	1.39	ppb
Sodium	23-2	257211.42	253697.63	250910.74	253939.93	1.24	ppb
Strontium	86-1	496.06	505.69	509.96	503.91	1.41	ppb
Strontium	88-1	494.03	505.65	509.93	503.20	1.63	ppb
Sulfur	34-1	10148.83	9867.86	10254.88	10090.52	1.98	ppb
Terbium	159-1				95		%
Terbium	159-2				100		%
Thallium	203-1	508.49	507.16	519.19	511.61	1.29	ppb
Thallium	205-1	508.62	513.82	512.34	511.59	0.52	ppb
Tin	118-1	499.09	508.89	508.37	505.45	1.09	ppb
Titanium	47-1	4972.62	5089.00	5092.77	5051.46	1.35	ppb
Uranium	238-1	516.37	509.27	513.17	512.94	0.69	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV06 Instrumnet Name : P8
Client Sample ID : CCV06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:08:36 DataFile Name : 068CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	532.29	529.41	523.73	528.48	0.82	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				96		%
Yttrium	89-2				99		%
Zinc	66-2	5227.39	5101.42	5010.24	5113.02	2.13	ppb
Zirconium	90-1	510.05	507.06	514.80	510.63	0.76	ppb
Zirconium	91-1	504.22	509.58	516.80	510.20	1.24	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB06 Instrumnet Name : P8
Client Sample ID : CCB06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:11:25 DataFile Name : 069CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.33	0.32	0.19	0.28	29.05	ppb
Antimony	121-1	0.10	0.07	0.07	0.08	18.13	ppb
Arsenic	75-2	0.00	0.00	0.00	0.00		ppb
Barium	135-1	0.05	0.03	0.03	0.04	35.38	ppb
Barium	137-1	0.05	0.03	0.03	0.04	26.87	ppb
Beryllium	9-1	0.02	0.02	0.02	0.02	11.01	ppb
Bismuth	209-1				104		%
Bismuth	209-2				108		%
Bromine	81-1						cps
Cadmium	108-1	-0.01	-0.01	0.04	0.01	309.44	ppb
Cadmium	106-1	-1.28	-0.98	-1.47	-1.25		ppb
Cadmium	111-1	-0.08	-0.06	-0.10	-0.08		ppb
Calcium	43-1	-0.74	-3.33	-3.96	-2.67		ppb
Calcium	44-1	-1.64	-5.29	-4.73	-3.89		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.05	-0.04	-0.04	-0.04		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	21.00	ppb
Copper	63-2	0.01	0.03	0.03	0.03	46.35	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				108		%
Indium	115-1				108		%
Indium	115-2				105		%
Iron	54-2	0.52	1.37	0.75	0.88	49.99	ppb
Iron	56-2	1.06	1.02	1.04	1.04	1.77	ppb
Iron	57-2	1.43	1.12	0.71	1.09	33.35	ppb
Krypton	83-1						cps
Lead	206-1	0.10	0.08	0.08	0.09	15.79	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB06 Instrumnet Name : P8
Client Sample ID : CCB06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:11:25 DataFile Name : 069CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.11	0.08	0.08	0.09	18.31	ppb
Lead	208-1	0.11	0.08	0.08	0.09	17.80	ppb
Lithium	6-1				101		%
Magnesium	24-2	2.78	2.51	2.13	2.47	13.17	ppb
Manganese	55-2	0.23	0.22	0.20	0.22	6.11	ppb
Molybdenum	94-1	0.23	0.17	0.18	0.19	15.47	ppb
Molybdenum	95-1	0.15	0.11	0.10	0.12	23.11	ppb
Molybdenum	96-1	0.18	0.11	0.10	0.13	31.62	ppb
Molybdenum	97-1	0.16	0.11	0.10	0.12	28.94	ppb
Molybdenum	98-1	0.16	0.10	0.10	0.12	28.87	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.06	-0.03	-0.03	-0.04		ppb
Phosphorus	31-2	-114.52	-109.57	-111.20	-111.76		ppb
Potassium	39-2	28.39	26.20	25.22	26.60	6.11	ppb
Rhodium	103-1				107		%
Rhodium	103-2				108		%
Scandium	45-1				107		%
Scandium	45-2				102		%
Selenium	82-1	0.07	-0.05	0.21	0.08	170.25	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.61	-0.19	-0.36	0.02	2595.63	ppb
Silicon	28-1	-0.25	-0.62	-0.63	-0.50		ppb
Silver	107-1	0.05	0.03	0.03	0.04	25.41	ppb
Silver	109-1	0.05	0.04	0.03	0.04	26.02	ppb
Sodium	23-2	33.85	31.54	30.08	31.82	5.96	ppb
Strontium	86-1	0.01	0.00	-0.01	0.00	299.71	ppb
Strontium	88-1	0.01	0.01	0.01	0.01	19.59	ppb
Sulfur	34-1	-980.64	-1306.26	-1051.11	-1112.67		ppb
Terbium	159-1				107		%
Terbium	159-2				108		%
Thallium	203-1	0.04	0.03	0.03	0.03	10.86	ppb
Thallium	205-1	0.04	0.03	0.03	0.03	12.40	ppb
Tin	118-1	0.00	-0.02	-0.01	-0.01		ppb
Titanium	47-1	0.11	0.06	0.05	0.07	43.65	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	23.07	ppb

LB Number :LB135261Operator :Jaswal

Lab Sample ID :CCB06Instrumnet Name :P8

Client Sample ID :CCB06Dilution Factor :1

Date & Time Acquired :2025-04-01 17:11:25DataFile Name :069CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.01	0.00	99.01	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				105		%
Zinc	66-2	0.33	0.14	0.26	0.24	38.80	ppb
Zirconium	90-1	0.05	0.04	0.04	0.04	9.66	ppb
Zirconium	91-1	0.05	0.04	0.04	0.05	4.30	ppb

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P8
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:12:58 DataFile Name : 004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	250	273	297	273	8.54	cps
Antimony	121-1	130	73	103	102	27.73	cps
Arsenic	75-2	17	10	13	13	25.01	cps
Barium	135-1	167	220	220	202	15.23	cps
Barium	137-1	333	357	407	366	10.25	cps
Beryllium	9-1	40	41	33	38	12.25	cps
Bismuth	209-1	7053630	6957041	6951529	6987400	0.82	cps
Bismuth	209-2	2954776	2931734	2960138	2948883	0.51	cps
Bromine	81-1	18235	18115	18202	18184	0.34	cps
Cadmium	108-1	27	23	27	26	7.55	cps
Cadmium	106-1	6908	7072	7372	7117	3.30	cps
Cadmium	111-1	4854	4947	5168	4990	3.24	cps
Calcium	43-1	2350	2210	2147	2236	4.65	cps
Calcium	44-1	58689	58458	58656	58601	0.21	cps
Carbon	12-1	4983355	4783766	4714998	4827373	2.89	cps
Carbon	12-2	33976	34584	34510	34357	0.97	cps
Chlorine	35-1	220940	221373	221298	221204	0.10	cps
Chlorine	35-2	1147	1080	1123	1117	3.03	cps
Chromium	52-2	1890	1963	2204	2019	8.12	cps
Cobalt	59-2	123	97	177	132	30.81	cps
Copper	63-2	2410	2797	3424	2877	17.78	cps
Dysprosium	156-1	17	7	10	11	45.82	cps
Dysprosium	156-2	0	0	0	0	0.00	cps
Erbium	164-1	80	60	100	80	25.00	cps
Erbium	164-2	20	27	17	21	24.12	cps
Gadolinium	160-1	100	80	150	110	32.78	cps
Gadolinium	160-2	53	33	27	38	36.73	cps
Holmium	165-1	11578623	11249392	11436617	11421544	1.45	cps
Holmium	165-2	4036139	4093881	4107661	4079227	0.93	cps
Indium	115-1	9470836	9492989	9464796	9476207	0.16	cps
Indium	115-2	977901	984201	975954	979352	0.44	cps
Iron	54-2	953	1063	1110	1042	7.72	cps
Iron	56-2	11548	12626	14231	12801	10.54	cps
Iron	57-2	217	350	370	312	26.70	cps
Krypton	83-1	450	430	383	421	8.12	cps
Lead	206-1	1567	1597	1697	1620	4.20	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P8
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:12:58 DataFile Name : 004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1473	1540	1313	1442	8.08	cps
Lead	208-1	6607	6587	6331	6508	2.37	cps
Lithium	6-1	2368029	2442367	2357210	2389202	1.94	cps
Magnesium	24-2	297	400	413	370	17.26	cps
Manganese	55-2	3464	3524	3354	3447	2.50	cps
Molybdenum	94-1	470	500	463	478	4.09	cps
Molybdenum	95-1	247	250	260	252	2.75	cps
Molybdenum	96-1	263	310	300	291	8.44	cps
Molybdenum	97-1	133	160	127	140	12.60	cps
Molybdenum	98-1	317	293	367	326	11.51	cps
Neodymium	150-1	10	13	13	12	15.73	cps
Neodymium	150-2	0	3	3	2	86.60	cps
Nickel	60-2	1060	1083	1170	1105	5.25	cps
Phosphorus	31-2	107	110	110	109	1.77	cps
Potassium	39-2	17471	17240	17290	17334	0.70	cps
Rhodium	103-1	8969227	8816917	9126195	8970780	1.72	cps
Rhodium	103-2	3652275	3652240	3677147	3660554	0.39	cps
Scandium	45-1	5608102	5664451	5506701	5593085	1.43	cps
Scandium	45-2	122402	122059	123195	122552	0.48	cps
Selenium	82-1	10	-83	27	-16	-381.13	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	17	53	27	32	58.81	cps
Silicon	28-1	507485	503195	509537	506739	0.64	cps
Silver	107-1	137	143	147	142	3.58	cps
Silver	109-1	80	70	80	77	7.53	cps
Sodium	23-2	58932	59594	59066	59197	0.59	cps
Strontium	86-1	680	797	673	717	9.68	cps
Strontium	88-1	733	747	670	717	5.72	cps
Sulfur	34-1	754068	751872	752404	752781	0.15	cps
Terbium	159-1	11755459	11652576	11389673	11599236	1.63	cps
Terbium	159-2	3919718	3901087	3922711	3914505	0.30	cps
Thallium	203-1	147	127	117	130	11.75	cps
Thallium	205-1	313	353	397	354	11.76	cps
Tin	118-1	6772	7135	6858	6922	2.74	cps
Titanium	47-1	403	397	323	374	11.85	cps
Uranium	238-1	290	267	253	270	6.87	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S0 Instrumnet Name : P8
Client Sample ID : S0 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:12:58 DataFile Name : 004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	27	40	17	28	42.13	cps
Ytterbium	172-1	63	103	63	77	30.12	cps
Ytterbium	172-2	40	20	20	27	43.30	cps
Ytterbium	176-1	1760	1910	1907	1859	4.61	cps
Ytterbium	176-2	427	390	407	408	4.50	cps
Yttrium	89-1	16620647	16407149	16465107	16497634	0.67	cps
Yttrium	89-2	1238072	1235819	1229242	1234378	0.37	cps
Zinc	66-2	1863	2020	2204	2029	8.39	cps
Zirconium	90-1	1083	780	907	923	16.50	cps
Zirconium	91-1	223	203	210	212	4.80	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S2 Instrumnet Name : P8
Client Sample ID : S2 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:19:44 DataFile Name : 006CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2570	2337	1984	2297	12.86	cps
Antimony	121-1	75028	75302	75021	75117	0.21	cps
Arsenic	75-2	773	730	640	714	9.52	cps
Barium	135-1	84541	86128	85555	85408	0.94	cps
Barium	137-1	147437	147278	150431	148382	1.20	cps
Beryllium	9-1	7293	7364	7574	7410	1.97	cps
Bismuth	209-1	7054354	7043526	7076165	7058015	0.24	cps
Bismuth	209-2	3018760	2999226	2986531	3001506	0.54	cps
Bromine	81-1	17985	18179	17978	18047	0.63	cps
Cadmium	108-1	630	750	787	722	11.35	cps
Cadmium	106-1	7852	8026	8396	8091	3.43	cps
Cadmium	111-1	13495	13536	13439	13490	0.36	cps
Calcium	43-1	53539	54392	53516	53816	0.93	cps
Calcium	44-1	902746	900202	904515	902488	0.24	cps
Carbon	12-1	4953761	4813591	4753338	4840230	2.12	cps
Carbon	12-2	35072	34945	34544	34853	0.79	cps
Chlorine	35-1	257515	259690	261997	259734	0.86	cps
Chlorine	35-2	1250	1247	1240	1246	0.41	cps
Chromium	52-2	16309	15402	13296	15002	10.30	cps
Cobalt	59-2	14768	13113	11565	13148	12.18	cps
Copper	63-2	25246	23777	21059	23360	9.09	cps
Dysprosium	156-1	20	7	30	19	61.96	cps
Dysprosium	156-2	10	3	0	4	114.60	cps
Erbium	164-1	90	107	93	97	9.13	cps
Erbium	164-2	30	33	27	30	11.10	cps
Gadolinium	160-1	147	133	117	132	11.37	cps
Gadolinium	160-2	17	33	13	21	50.75	cps
Holmium	165-1	11541524	11159711	11427066	11376100	1.72	cps
Holmium	165-2	4112445	4119224	4208830	4146833	1.30	cps
Indium	115-1	9612319	9721852	9506363	9613511	1.12	cps
Indium	115-2	983209	991732	980857	985266	0.58	cps
Iron	54-2	17314	15141	13286	15247	13.22	cps
Iron	56-2	307582	270127	235347	271019	13.33	cps
Iron	57-2	7746	6625	6218	6863	11.53	cps
Krypton	83-1	393	463	420	426	8.30	cps
Lead	206-1	24213	24610	24276	24366	0.88	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S2 Instrumnet Name : P8
Client Sample ID : S2 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:19:44 DataFile Name : 006CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	20743	21117	20850	20904	0.92	cps
Lead	208-1	95565	96159	96437	96053	0.46	cps
Lithium	6-1	2466062	2393007	2415032	2424700	1.55	cps
Magnesium	24-2	210965	187512	161101	186526	13.37	cps
Manganese	55-2	7849	6738	6311	6966	11.39	cps
Molybdenum	94-1	74438	74816	74280	74511	0.37	cps
Molybdenum	95-1	89760	89405	91072	90079	0.97	cps
Molybdenum	96-1	98442	98761	98348	98517	0.22	cps
Molybdenum	97-1	54831	54717	55821	55123	1.10	cps
Molybdenum	98-1	142577	142944	142988	142836	0.16	cps
Neodymium	150-1	7	27	23	19	56.72	cps
Neodymium	150-2	7	10	3	7	50.03	cps
Nickel	60-2	4107	3954	3831	3964	3.50	cps
Phosphorus	31-2	1557	1290	1237	1361	12.60	cps
Potassium	39-2	152668	147400	135684	145250	5.99	cps
Rhodium	103-1	8998303	8996148	9042810	9012420	0.29	cps
Rhodium	103-2	3666365	3599995	3649510	3638623	0.95	cps
Scandium	45-1	5675188	5727552	5624326	5675688	0.91	cps
Scandium	45-2	120840	121592	120520	120984	0.45	cps
Selenium	82-1	2614	2704	2647	2655	1.71	cps
Selenium	77-2	37	27	47	37	27.27	cps
Selenium	78-2	210	153	177	180	15.82	cps
Silicon	28-1	696360	695688	699552	697200	0.30	cps
Silver	107-1	48588	48605	49910	49035	1.55	cps
Silver	109-1	46578	47120	46823	46840	0.58	cps
Sodium	23-2	479380	454795	412250	448808	7.57	cps
Strontium	86-1	12195	12382	12122	12233	1.10	cps
Strontium	88-1	100602	100049	100958	100536	0.46	cps
Sulfur	34-1	768418	772881	769685	770328	0.30	cps
Terbium	159-1	11847536	11831416	11816693	11831882	0.13	cps
Terbium	159-2	4012129	3955686	3942182	3969999	0.93	cps
Thallium	203-1	32654	33012	33069	32912	0.68	cps
Thallium	205-1	78314	78214	78707	78412	0.33	cps
Tin	118-1	170929	170237	169238	170135	0.50	cps
Titanium	47-1	24788	25342	25019	25050	1.11	cps
Uranium	238-1	97386	98206	97802	97798	0.42	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S2 Instrumnet Name : P8
Client Sample ID : S2 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:19:44 DataFile Name : 006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	27991	25015	21349	24785	13.42	cps
Ytterbium	172-1	63	87	57	69	22.87	cps
Ytterbium	172-2	50	30	27	36	35.49	cps
Ytterbium	176-1	2040	2097	1920	2019	4.47	cps
Ytterbium	176-2	377	413	363	384	6.73	cps
Yttrium	89-1	16525139	16755299	16664495	16648311	0.70	cps
Yttrium	89-2	1247776	1250262	1238618	1245552	0.49	cps
Zinc	66-2	8309	7769	7409	7829	5.79	cps
Zirconium	90-1	63674	66109	65218	65000	1.90	cps
Zirconium	91-1	14414	14524	14528	14489	0.45	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S3 Instrumnet Name : P8
Client Sample ID : S3 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:23:06 DataFile Name : 007CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	119384	119263	114503	117717	2.36	cps
Antimony	121-1	2042023	2056255	2025862	2041380	0.74	cps
Arsenic	75-2	40177	39686	37480	39114	3.67	cps
Barium	135-1	2422660	2376854	2395570	2398361	0.96	cps
Barium	137-1	4114632	4148061	4089818	4117504	0.71	cps
Beryllium	9-1	382130	383343	382804	382759	0.16	cps
Bismuth	209-1	7226014	7143125	7047063	7138734	1.25	cps
Bismuth	209-2	2989902	2980953	3004508	2991788	0.40	cps
Bromine	81-1	18272	17474	17544	17764	2.49	cps
Cadmium	108-1	39239	41098	40423	40253	2.34	cps
Cadmium	106-1	62893	63833	63766	63497	0.83	cps
Cadmium	111-1	510132	506392	509935	508820	0.41	cps
Calcium	43-1	565513	569079	566251	566948	0.33	cps
Calcium	44-1	9066468	9028500	8866585	8987184	1.18	cps
Carbon	12-1	4882202	4822891	4728799	4811297	1.61	cps
Carbon	12-2	34373	33849	34143	34122	0.77	cps
Chlorine	35-1	255639	259289	259718	258215	0.87	cps
Chlorine	35-2	1263	1157	1223	1215	4.44	cps
Chromium	52-2	407245	406779	384854	399626	3.20	cps
Cobalt	59-2	769135	765436	735432	756668	2.44	cps
Copper	63-2	6704660	6702418	6447953	6618344	2.23	cps
Dysprosium	156-1	53	87	70	70	23.81	cps
Dysprosium	156-2	13	13	3	10	57.75	cps
Erbium	164-1	117	117	107	113	5.09	cps
Erbium	164-2	40	50	43	44	11.46	cps
Gadolinium	160-1	123	133	157	138	12.41	cps
Gadolinium	160-2	43	27	20	30	40.05	cps
Holmium	165-1	11476140	11485139	11805609	11588963	1.62	cps
Holmium	165-2	4145214	4206410	4184558	4178727	0.74	cps
Indium	115-1	9559922	9520581	9424706	9501736	0.73	cps
Indium	115-2	970974	980566	968818	973453	0.64	cps
Iron	54-2	839396	827629	795875	820967	2.74	cps
Iron	56-2	15524702	15525849	14671180	15240577	3.24	cps
Iron	57-2	385006	383413	368494	378971	2.40	cps
Krypton	83-1	450	393	417	420	6.78	cps
Lead	206-1	7256628	7332545	7214135	7267769	0.83	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S3 Instrumnet Name : P8
Client Sample ID : S3 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:23:06 DataFile Name : 007CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	6331240	6243844	6385744	6320276	1.13	cps
Lead	208-1	28878821	28809238	28974166	28887408	0.29	cps
Lithium	6-1	2477872	2500461	2421490	2466608	1.65	cps
Magnesium	24-2	2244854	2194858	2158421	2199378	1.97	cps
Manganese	55-2	1925454	1917605	1796570	1879876	3.84	cps
Molybdenum	94-1	6728686	6827922	6803788	6786799	0.76	cps
Molybdenum	95-1	9789327	9735688	9739287	9754767	0.31	cps
Molybdenum	96-1	10797852	10764509	10664299	10742220	0.65	cps
Molybdenum	97-1	6073660	6120856	6065242	6086586	0.49	cps
Molybdenum	98-1	15625319	15749469	15963694	15779494	1.08	cps
Neodymium	150-1	180	110	117	136	28.50	cps
Neodymium	150-2	7	3	17	9	78.08	cps
Nickel	60-2	212957	213870	205314	210713	2.23	cps
Phosphorus	31-2	6271	6435	5715	6140	6.15	cps
Potassium	39-2	768085	768338	750082	762168	1.37	cps
Rhodium	103-1	8986433	8904543	9029116	8973364	0.71	cps
Rhodium	103-2	3613122	3710700	3629557	3651126	1.43	cps
Scandium	45-1	5610979	5551655	5527978	5563537	0.77	cps
Scandium	45-2	119773	119837	118295	119302	0.73	cps
Selenium	82-1	29054	30070	29555	29560	1.72	cps
Selenium	77-2	540	493	567	533	6.96	cps
Selenium	78-2	1833	1833	1903	1857	2.18	cps
Silicon	28-1	5426754	5493747	5471054	5463852	0.62	cps
Silver	107-1	2628279	2644071	2653960	2642104	0.49	cps
Silver	109-1	2495926	2573933	2586552	2552137	1.92	cps
Sodium	23-2	4523660	4448306	4480232	4484066	0.84	cps
Strontium	86-1	596033	606034	601664	601244	0.83	cps
Strontium	88-1	5259109	5382013	5458326	5366483	1.87	cps
Sulfur	34-1	885307	889393	879430	884710	0.57	cps
Terbium	159-1	11930674	11916911	12063748	11970444	0.68	cps
Terbium	159-2	4043863	4069211	3996235	4036436	0.92	cps
Thallium	203-1	1791813	1850183	1837535	1826511	1.68	cps
Thallium	205-1	4301681	4438131	4343235	4361016	1.60	cps
Tin	118-1	1575269	1638954	1629071	1614431	2.12	cps
Titanium	47-1	2529296	2541734	2466127	2512386	1.61	cps
Uranium	238-1	5358400	5442357	5450886	5417214	0.94	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S3 Instrumnet Name : P8
Client Sample ID : S3 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:23:06 DataFile Name : 007CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	305038	305097	290007	300047	2.90	cps
Ytterbium	172-1	90	123	120	111	16.52	cps
Ytterbium	172-2	67	43	43	51	26.37	cps
Ytterbium	176-1	10418	9807	10207	10144	3.06	cps
Ytterbium	176-2	3250	3380	3254	3295	2.25	cps
Yttrium	89-1	16523478	16764739	16667406	16651874	0.73	cps
Yttrium	89-2	1236388	1236241	1231546	1234725	0.22	cps
Zinc	66-2	749126	746788	716680	737531	2.45	cps
Zirconium	90-1	3343977	3349220	3289205	3327467	1.00	cps
Zirconium	91-1	726155	724062	717207	722475	0.65	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S4 Instrumnet Name : P8
Client Sample ID : S4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:26:06 DataFile Name : 008CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	288493	287008	284418	286640	0.72	cps
Antimony	121-1	5021757	4971077	5029701	5007512	0.64	cps
Arsenic	75-2	97981	96729	95531	96747	1.27	cps
Barium	135-1	5846746	5934408	5754817	5845324	1.54	cps
Barium	137-1	9852487	10273302	10188432	10104741	2.20	cps
Beryllium	9-1	917151	918884	916753	917596	0.12	cps
Bismuth	209-1	7074289	6995387	6984091	7017922	0.70	cps
Bismuth	209-2	2921642	3011683	2894913	2942746	2.08	cps
Bromine	81-1	17841	18212	17351	17801	2.43	cps
Cadmium	108-1	99439	100614	100248	100100	0.60	cps
Cadmium	106-1	146973	145740	144952	145888	0.70	cps
Cadmium	111-1	1246098	1243498	1256459	1248685	0.55	cps
Calcium	43-1	1376421	1386008	1371269	1377899	0.54	cps
Calcium	44-1	22264791	22025866	22113918	22134858	0.55	cps
Carbon	12-1	4843787	4757699	4712561	4771349	1.40	cps
Carbon	12-2	34868	34788	35085	34914	0.44	cps
Chlorine	35-1	254650	256877	257651	256392	0.61	cps
Chlorine	35-2	1267	1047	1277	1197	10.86	cps
Chromium	52-2	986710	977540	975816	980022	0.60	cps
Cobalt	59-2	1941564	1888544	1887322	1905810	1.63	cps
Copper	63-2	16228210	16235560	16109726	16191166	0.44	cps
Dysprosium	156-1	133	90	113	112	19.33	cps
Dysprosium	156-2	27	23	20	23	14.29	cps
Erbium	164-1	170	157	163	163	4.08	cps
Erbium	164-2	63	40	23	42	47.59	cps
Gadolinium	160-1	180	203	230	204	12.24	cps
Gadolinium	160-2	40	33	43	39	13.09	cps
Holmium	165-1	11631829	11618385	11744652	11664956	0.59	cps
Holmium	165-2	4115659	4104835	4080748	4100414	0.44	cps
Indium	115-1	9512498	9509527	9363897	9461974	0.90	cps
Indium	115-2	950924	944233	950552	948570	0.40	cps
Iron	54-2	2113158	2052153	2069816	2078376	1.51	cps
Iron	56-2	37443422	37643069	37545484	37543992	0.27	cps
Iron	57-2	926098	926064	933677	928613	0.47	cps
Krypton	83-1	440	407	463	437	6.52	cps
Lead	206-1	17981266	17870469	18109827	17987188	0.67	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S4 Instrumnet Name : P8
Client Sample ID : S4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:26:06 DataFile Name : 008CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	15389504	15634148	15362058	15461903	0.97	cps
Lead	208-1	70758636	71914369	70932636	71201880	0.88	cps
Lithium	6-1	2398985	2383220	2432946	2405050	1.06	cps
Magnesium	24-2	5256056	5253354	5283278	5264229	0.31	cps
Manganese	55-2	4644867	4564388	4593647	4600967	0.89	cps
Molybdenum	94-1	16776278	16353468	16753147	16627631	1.43	cps
Molybdenum	95-1	24269622	23733212	23917277	23973370	1.14	cps
Molybdenum	96-1	26316591	26329190	26006683	26217488	0.70	cps
Molybdenum	97-1	15052526	14869415	14817668	14913203	0.83	cps
Molybdenum	98-1	39507817	38707018	39159794	39124876	1.03	cps
Neodymium	150-1	350	377	370	366	3.80	cps
Neodymium	150-2	13	17	10	13	25.01	cps
Nickel	60-2	511244	512658	511039	511647	0.17	cps
Phosphorus	31-2	15018	14971	15061	15017	0.30	cps
Potassium	39-2	1873440	1855674	1835041	1854718	1.04	cps
Rhodium	103-1	8753397	8842065	8784627	8793363	0.51	cps
Rhodium	103-2	3587497	3588425	3532854	3569592	0.89	cps
Scandium	45-1	5543388	5535627	5586671	5555228	0.50	cps
Scandium	45-2	117495	117159	116474	117043	0.44	cps
Selenium	82-1	71386	72632	71879	71966	0.87	cps
Selenium	77-2	1347	1310	1207	1288	5.64	cps
Selenium	78-2	4664	4621	4297	4527	4.43	cps
Silicon	28-1	12509808	12519532	12665096	12564812	0.69	cps
Silver	107-1	6409569	6466944	6348795	6408436	0.92	cps
Silver	109-1	6129379	6129816	6112445	6123880	0.16	cps
Sodium	23-2	10816811	10860324	10718969	10798702	0.67	cps
Strontium	86-1	1515424	1545054	1523066	1527848	1.01	cps
Strontium	88-1	13234097	13298779	13106571	13213149	0.74	cps
Sulfur	34-1	996523	973051	992632	987402	1.27	cps
Terbium	159-1	11968316	11763873	11961426	11897872	0.98	cps
Terbium	159-2	3982238	3972840	4019410	3991496	0.62	cps
Thallium	203-1	4490717	4544996	4647182	4560965	1.74	cps
Thallium	205-1	10509959	10530600	10714459	10585006	1.06	cps
Tin	118-1	3962808	3995072	3970386	3976088	0.42	cps
Titanium	47-1	6056730	6157172	6108675	6107526	0.82	cps
Uranium	238-1	13260632	13508230	13281546	13350136	1.03	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S4 Instrumnet Name : P8
Client Sample ID : S4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:26:06 DataFile Name : 008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	740941	737363	743825	740710	0.44	cps
Ytterbium	172-1	150	140	157	149	5.64	cps
Ytterbium	172-2	80	33	53	56	42.15	cps
Ytterbium	176-1	22703	22513	22823	22680	0.69	cps
Ytterbium	176-2	7516	7292	7309	7372	1.69	cps
Yttrium	89-1	16672768	16522985	16267497	16487750	1.24	cps
Yttrium	89-2	1225986	1208790	1207580	1214119	0.85	cps
Zinc	66-2	1872694	1878884	1884886	1878821	0.32	cps
Zirconium	90-1	8182054	8133505	8160039	8158532	0.30	cps
Zirconium	91-1	1867339	1813886	1843500	1841575	1.45	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S5 Instrumnet Name : P8
Client Sample ID : S5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:28:57 DataFile Name : 009CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	555838	556937	555631	556136	0.13	cps
Antimony	121-1	9638193	9707532	9599098	9648274	0.57	cps
Arsenic	75-2	188496	189380	190840	189572	0.62	cps
Barium	135-1	11525821	11472561	11460944	11486442	0.30	cps
Barium	137-1	19495197	19677460	19811603	19661420	0.81	cps
Beryllium	9-1	1708444	1701785	1718025	1709418	0.48	cps
Bismuth	209-1	6895632	6860940	6795251	6850607	0.74	cps
Bismuth	209-2	2831087	2827125	2835641	2831285	0.15	cps
Bromine	81-1	18743	18699	18993	18812	0.84	cps
Cadmium	108-1	191771	193133	194956	193287	0.83	cps
Cadmium	106-1	278176	277850	277538	277855	0.11	cps
Cadmium	111-1	2533273	2476861	2487203	2499112	1.20	cps
Calcium	43-1	2641190	2603252	2634583	2626342	0.77	cps
Calcium	44-1	43605409	43146013	42128261	42959894	1.76	cps
Carbon	12-1	4838121	4839756	4811394	4829757	0.33	cps
Carbon	12-2	35757	36071	36081	35969	0.51	cps
Chlorine	35-1	257563	259109	263178	259950	1.12	cps
Chlorine	35-2	1150	1290	1227	1222	5.74	cps
Chromium	52-2	1940187	1929743	1996580	1955503	1.84	cps
Cobalt	59-2	3710850	3662138	3645140	3672709	0.93	cps
Copper	63-2	31171618	31161263	31410413	31247765	0.45	cps
Dysprosium	156-1	260	193	227	227	14.71	cps
Dysprosium	156-2	43	37	37	39	9.89	cps
Erbium	164-1	247	217	200	221	10.70	cps
Erbium	164-2	67	80	60	69	14.78	cps
Gadolinium	160-1	180	263	210	218	19.38	cps
Gadolinium	160-2	60	57	60	59	3.26	cps
Holmium	165-1	11513276	11403154	11327044	11414491	0.82	cps
Holmium	165-2	4068667	4001578	4095636	4055294	1.19	cps
Indium	115-1	9240785	8941180	9024550	9068838	1.71	cps
Indium	115-2	905481	896351	908831	903554	0.71	cps
Iron	54-2	3992423	3978731	4001932	3991029	0.29	cps
Iron	56-2	72209932	71937727	72738737	72295466	0.56	cps
Iron	57-2	1859562	1863964	1857198	1860241	0.18	cps
Krypton	83-1	473	440	430	448	5.07	cps
Lead	206-1	34751614	35394424	34478733	34874924	1.35	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S5 Instrumnet Name : P8
Client Sample ID : S5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:28:57 DataFile Name : 009CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	30187174	30615361	29967584	30256706	1.09	cps
Lead	208-1	139209359	140267302	137958614	139145092	0.83	cps
Lithium	6-1	2325669	2372463	2323384	2340506	1.18	cps
Magnesium	24-2	10160544	10257847	10202205	10206865	0.48	cps
Manganese	55-2	8832043	8833418	8906503	8857321	0.48	cps
Molybdenum	94-1	32569522	32260545	32434107	32421391	0.48	cps
Molybdenum	95-1	46984549	46797724	46502961	46761745	0.52	cps
Molybdenum	96-1	51689606	51354724	51328126	51457485	0.39	cps
Molybdenum	97-1	29771092	28850105	29222179	29281125	1.58	cps
Molybdenum	98-1	77504086	75185381	76484521	76391329	1.52	cps
Neodymium	150-1	660	640	670	657	2.33	cps
Neodymium	150-2	37	20	27	28	30.20	cps
Nickel	60-2	983723	978357	978185	980088	0.32	cps
Phosphorus	31-2	29303	29203	29624	29376	0.75	cps
Potassium	39-2	3545055	3542447	3591005	3559503	0.77	cps
Rhodium	103-1	8684993	8457484	8439218	8527232	1.61	cps
Rhodium	103-2	3431372	3387738	3437306	3418805	0.79	cps
Scandium	45-1	5509115	5331731	5313317	5384721	2.01	cps
Scandium	45-2	115166	113974	113793	114311	0.65	cps
Selenium	82-1	141817	139386	138097	139767	1.35	cps
Selenium	77-2	2524	2567	2624	2571	1.95	cps
Selenium	78-2	8339	8489	8926	8585	3.55	cps
Silicon	28-1	23636682	23300968	23571604	23503085	0.76	cps
Silver	107-1	12413148	12537420	12538279	12496282	0.58	cps
Silver	109-1	11633867	11822947	11705828	11720881	0.81	cps
Sodium	23-2	20732503	20856551	20650522	20746525	0.50	cps
Strontium	86-1	3051318	2982097	3058442	3030619	1.39	cps
Strontium	88-1	25713530	25980715	25796017	25830088	0.53	cps
Sulfur	34-1	1283969	1239189	1260125	1261095	1.78	cps
Terbium	159-1	11884472	11766883	11496709	11716021	1.70	cps
Terbium	159-2	3884316	3889462	3845885	3873221	0.61	cps
Thallium	203-1	8714514	8594834	8614478	8641275	0.74	cps
Thallium	205-1	20664283	20754004	20641930	20686739	0.29	cps
Tin	118-1	7599281	7583841	7542792	7575305	0.39	cps
Titanium	47-1	12173824	11990208	11663405	11942479	2.16	cps
Uranium	238-1	26531255	26424466	26073061	26342928	0.91	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S5 Instrumnet Name : P8
Client Sample ID : S5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:28:57 DataFile Name : 009CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1466224	1446849	1477873	1463649	1.07	cps
Ytterbium	172-1	200	267	187	218	19.68	cps
Ytterbium	172-2	100	107	100	102	3.77	cps
Ytterbium	176-1	43046	41753	41903	42234	1.68	cps
Ytterbium	176-2	14632	13994	14758	14461	2.83	cps
Yttrium	89-1	16311707	16030052	16098323	16146694	0.91	cps
Yttrium	89-2	1182126	1172115	1192057	1182099	0.84	cps
Zinc	66-2	3572745	3585543	3589407	3582565	0.24	cps
Zirconium	90-1	16255929	16152914	16021885	16143576	0.73	cps
Zirconium	91-1	3607408	3658676	3551860	3605981	1.48	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S6 Instrumnet Name : P8
Client Sample ID : S6 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:31:45 DataFile Name : 010CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1113587	1102861	1083114	1099854	1.41	cps
Antimony	121-1	19808978	19604176	19394984	19602713	1.06	cps
Arsenic	75-2	380046	379818	379694	379853	0.05	cps
Barium	135-1	23134125	23280498	23179588	23198070	0.32	cps
Barium	137-1	39719373	40142229	39860604	39907402	0.54	cps
Beryllium	9-1	3261114	3265050	3312059	3279408	0.86	cps
Bismuth	209-1	6768709	6732512	6683866	6728362	0.63	cps
Bismuth	209-2	2824346	2833689	2824267	2827434	0.19	cps
Bromine	81-1	19360	18976	18829	19055	1.44	cps
Cadmium	108-1	380311	383803	383036	382383	0.48	cps
Cadmium	106-1	544240	548435	543270	545315	0.50	cps
Cadmium	111-1	4966644	4968806	4920034	4951828	0.56	cps
Calcium	43-1	5217218	5282171	5338212	5279200	1.15	cps
Calcium	44-1	85207452	86689555	85934295	85943768	0.86	cps
Carbon	12-1	5086696	5078528	5035356	5066860	0.54	cps
Carbon	12-2	38604	38831	38744	38726	0.30	cps
Chlorine	35-1	281543	284995	288948	285162	1.30	cps
Chlorine	35-2	1387	1367	1293	1349	3.64	cps
Chromium	52-2	3874266	3869340	3872308	3871971	0.06	cps
Cobalt	59-2	7150535	7197200	7194788	7180841	0.37	cps
Copper	63-2	60907664	61274939	61417259	61199954	0.43	cps
Dysprosium	156-1	363	403	427	398	8.05	cps
Dysprosium	156-2	80	73	97	83	14.43	cps
Erbium	164-1	357	340	337	344	3.11	cps
Erbium	164-2	127	93	143	121	21.02	cps
Gadolinium	160-1	337	337	297	323	7.14	cps
Gadolinium	160-2	123	70	83	92	30.10	cps
Holmium	165-1	11237363	11628101	11379332	11414932	1.73	cps
Holmium	165-2	4077294	4061703	4059505	4066168	0.24	cps
Indium	115-1	8883578	9069630	8872981	8942063	1.24	cps
Indium	115-2	874426	873773	882615	876938	0.56	cps
Iron	54-2	7731429	7966638	7802077	7833381	1.54	cps
Iron	56-2	144022505	143157795	142631008	143270436	0.49	cps
Iron	57-2	3654975	3627344	3610898	3631072	0.61	cps
Krypton	83-1	507	403	397	436	14.16	cps
Lead	206-1	68800061	69196082	69964774	69320306	0.85	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S6 Instrumnet Name : P8
Client Sample ID : S6 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:31:45 DataFile Name : 010CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	59141401	59609667	59557394	59436154	0.43	cps
Lead	208-1	272871379	273883214	275303366	274019320	0.45	cps
Lithium	6-1	2296769	2226030	2292752	2271850	1.75	cps
Magnesium	24-2	20436030	20335973	20017605	20263202	1.08	cps
Manganese	55-2	17540999	17655998	17394133	17530377	0.75	cps
Molybdenum	94-1	65399149	66278982	65903181	65860437	0.67	cps
Molybdenum	95-1	94762039	94987595	94584575	94778070	0.21	cps
Molybdenum	96-1	103157335	102787982	103561952	103169090	0.38	cps
Molybdenum	97-1	58006111	58532551	59703347	58747336	1.48	cps
Molybdenum	98-1	152150271	152485711	155002151	153212711	1.02	cps
Neodymium	150-1	1287	1337	1327	1317	2.01	cps
Neodymium	150-2	63	70	73	69	7.39	cps
Nickel	60-2	2049834	2028176	2011983	2029998	0.94	cps
Phosphorus	31-2	58196	57406	56968	57523	1.08	cps
Potassium	39-2	7164648	7091393	7015243	7090428	1.05	cps
Rhodium	103-1	8274291	8414488	8526357	8405045	1.50	cps
Rhodium	103-2	3402808	3363392	3399290	3388496	0.64	cps
Scandium	45-1	5378985	5403813	5349962	5377587	0.50	cps
Scandium	45-2	116172	117821	116487	116827	0.75	cps
Selenium	82-1	280328	282974	281922	281741	0.47	cps
Selenium	77-2	5288	5148	5168	5201	1.46	cps
Selenium	78-2	17468	17007	17000	17158	1.56	cps
Silicon	28-1	46199573	46690411	46270789	46386924	0.57	cps
Silver	107-1	24337489	24472399	24422810	24410899	0.28	cps
Silver	109-1	22970237	23136010	23084551	23063600	0.37	cps
Sodium	23-2	41824956	41743929	41287749	41618878	0.70	cps
Strontium	86-1	6010761	5993191	6099928	6034627	0.95	cps
Strontium	88-1	51865844	52210474	52499309	52191876	0.61	cps
Sulfur	34-1	1861396	1885132	1862823	1869784	0.71	cps
Terbium	159-1	11667626	11747717	11921371	11778905	1.10	cps
Terbium	159-2	3975924	3924864	3863348	3921379	1.44	cps
Thallium	203-1	17505139	17558089	17674075	17579101	0.49	cps
Thallium	205-1	41223961	41107724	41719957	41350547	0.79	cps
Tin	118-1	15491851	15733798	15298443	15508031	1.41	cps
Titanium	47-1	23803544	24312359	23799620	23971841	1.23	cps
Uranium	238-1	52207249	52107149	52191103	52168500	0.10	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S6 Instrumnet Name : P8
Client Sample ID : S6 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:31:45 DataFile Name : 010CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2885786	2914660	2909779	2903408	0.53	cps
Ytterbium	172-1	423	410	360	398	8.39	cps
Ytterbium	172-2	107	167	123	132	23.42	cps
Ytterbium	176-1	84404	84813	85035	84751	0.38	cps
Ytterbium	176-2	28898	28537	28828	28755	0.67	cps
Yttrium	89-1	16177170	16432428	16337939	16315846	0.79	cps
Yttrium	89-2	1183741	1183370	1189505	1185539	0.29	cps
Zinc	66-2	7183730	7053175	7076237	7104381	0.98	cps
Zirconium	90-1	32577582	32970283	32887920	32811928	0.63	cps
Zirconium	91-1	7276102	7245225	7282516	7267947	0.27	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S7 Instrumnet Name : P8
Client Sample ID : S7 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:34:30 DataFile Name : 011CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2202842	2213737	2240745	2219108	0.88	cps
Antimony	121-1	38866095	39155734	39536601	39186143	0.86	cps
Arsenic	75-2	762312	764162	764053	763509	0.14	cps
Barium	135-1	46142239	46181106	46641986	46321777	0.60	cps
Barium	137-1	79541717	79338705	79403594	79428005	0.13	cps
Beryllium	9-1	6320655	6393782	6330495	6348311	0.63	cps
Bismuth	209-1	6483456	6523834	6545900	6517730	0.49	cps
Bismuth	209-2	2786599	2778813	2823775	2796395	0.86	cps
Bromine	81-1	19283	19484	18833	19200	1.74	cps
Cadmium	108-1	749839	749075	749446	749453	0.05	cps
Cadmium	106-1	1046574	1061159	1067953	1058562	1.03	cps
Cadmium	111-1	9471686	9546372	9610715	9542924	0.73	cps
Calcium	43-1	10492139	10501512	10437201	10476950	0.33	cps
Calcium	44-1	169985561	171659571	173164391	171603174	0.93	cps
Carbon	12-1	5580709	5623749	5597154	5600537	0.39	cps
Carbon	12-2	44240	45176	45022	44813	1.12	cps
Chlorine	35-1	310577	316965	321498	316347	1.73	cps
Chlorine	35-2	1490	1527	1670	1562	6.09	cps
Chromium	52-2	7760871	7681598	7869189	7770553	1.21	cps
Cobalt	59-2	14353748	14510755	14490454	14451652	0.59	cps
Copper	63-2	121013472	120654872	122423388	121363910	0.77	cps
Dysprosium	156-1	903	797	913	871	7.42	cps
Dysprosium	156-2	147	180	130	152	16.72	cps
Erbium	164-1	637	660	657	651	1.94	cps
Erbium	164-2	177	193	190	187	4.72	cps
Gadolinium	160-1	540	610	513	554	9.00	cps
Gadolinium	160-2	193	163	173	177	8.65	cps
Holmium	165-1	11391215	11596787	11487784	11491929	0.89	cps
Holmium	165-2	4183247	4082115	4069480	4111614	1.52	cps
Indium	115-1	8335615	8527016	8669169	8510600	1.97	cps
Indium	115-2	818905	818453	812720	816693	0.42	cps
Iron	54-2	16035144	15891613	15970645	15965800	0.45	cps
Iron	56-2	290771122	288116442	285258082	288048549	0.96	cps
Iron	57-2	7321167	7352869	7328923	7334320	0.23	cps
Krypton	83-1	523	503	473	500	5.03	cps
Lead	206-1	133685838	138011548	136980858	136226081	1.66	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S7 Instrumnet Name : P8
Client Sample ID : S7 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:34:30 DataFile Name : 011CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	115557862	119336272	119253032	118049055	1.83	cps
Lead	208-1	534125322	547457509	547115119	542899316	1.40	cps
Lithium	6-1	2204119	2225299	2288693	2239371	1.97	cps
Magnesium	24-2	40622103	39905255	40014386	40180581	0.96	cps
Manganese	55-2	35642015	35652015	35827132	35707054	0.29	cps
Molybdenum	94-1	130756811	132283031	131867425	131635756	0.60	cps
Molybdenum	95-1	189572571	189778284	191174957	190175271	0.46	cps
Molybdenum	96-1	204910904	209661264	207854030	207475399	1.16	cps
Molybdenum	97-1	117094422	117540275	117094758	117243152	0.22	cps
Molybdenum	98-1	305091815	302334842	304539849	303988835	0.48	cps
Neodymium	150-1	2437	2284	2500	2407	4.63	cps
Neodymium	150-2	153	153	140	149	5.17	cps
Nickel	60-2	4037595	4006815	4038615	4027675	0.45	cps
Phosphorus	31-2	117023	114288	114383	115232	1.35	cps
Potassium	39-2	14384439	14318389	14253823	14318883	0.46	cps
Rhodium	103-1	8160354	8182391	8144157	8162300	0.24	cps
Rhodium	103-2	3339500	3321175	3301169	3320615	0.58	cps
Scandium	45-1	5349737	5438717	5386199	5391551	0.83	cps
Scandium	45-2	120496	120530	120543	120523	0.02	cps
Selenium	82-1	550110	547580	555256	550982	0.71	cps
Selenium	77-2	9927	10100	10137	10055	1.12	cps
Selenium	78-2	34913	35425	34997	35112	0.78	cps
Silicon	28-1	90714745	90443932	89342312	90166996	0.81	cps
Silver	107-1	47902386	47398884	48400153	47900474	1.05	cps
Silver	109-1	45257038	45521524	45616648	45465070	0.41	cps
Sodium	23-2	82706175	82413519	82880789	82666828	0.29	cps
Strontium	86-1	11915084	12034111	12061581	12003592	0.65	cps
Strontium	88-1	102852905	105399942	104419132	104223993	1.23	cps
Sulfur	34-1	3088305	3077384	3094614	3086768	0.28	cps
Terbium	159-1	11528767	11930873	11703854	11721165	1.72	cps
Terbium	159-2	4020980	3991052	3913404	3975145	1.40	cps
Thallium	203-1	33610987	34666248	34811985	34363073	1.91	cps
Thallium	205-1	79765502	82394392	81759019	81306304	1.69	cps
Tin	118-1	30159385	30929307	31034532	30707741	1.56	cps
Titanium	47-1	48113244	47507708	47426753	47682568	0.79	cps
Uranium	238-1	104341758	103924435	103858188	104041461	0.25	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S7 Instrumnet Name : P8
Client Sample ID : S7 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:34:30 DataFile Name : 011CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	5845538	5918347	5943452	5902445	0.86	cps
Ytterbium	172-1	750	710	680	713	4.92	cps
Ytterbium	172-2	287	387	307	327	16.20	cps
Ytterbium	176-1	169727	167723	167906	168452	0.66	cps
Ytterbium	176-2	58911	57206	56969	57695	1.84	cps
Yttrium	89-1	16285671	16516357	16375866	16392631	0.71	cps
Yttrium	89-2	1192285	1182714	1178933	1184644	0.58	cps
Zinc	66-2	14222468	14137899	14099382	14153250	0.44	cps
Zirconium	90-1	65386414	66430981	64966586	65594660	1.15	cps
Zirconium	91-1	14623441	14645254	14617495	14628730	0.10	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S8 Instrumnet Name : P8
Client Sample ID : S8 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:37:21 DataFile Name : 012CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	11304660	10914687	11113702	11111016	1.76	cps
Antimony	121-1	16203	15319	14705	15409	4.89	cps
Arsenic	75-2	497	403	407	436	12.16	cps
Barium	135-1	15993	15886	15739	15873	0.80	cps
Barium	137-1	28326	28153	27758	28079	1.04	cps
Beryllium	9-1	499	373	399	424	15.74	cps
Bismuth	209-1	5496590	5447982	5364546	5436372	1.23	cps
Bismuth	209-2	2442359	2432754	2464239	2446451	0.66	cps
Bromine	81-1	18876	18582	19540	19000	2.58	cps
Cadmium	108-1	233	223	253	237	6.45	cps
Cadmium	106-1	6395	6315	6332	6347	0.67	cps
Cadmium	111-1	5510	5337	5408	5418	1.60	cps
Calcium	43-1	47105468	47346603	47012423	47154831	0.37	cps
Calcium	44-1	770525695	775194388	772647188	772789091	0.30	cps
Carbon	12-1	4821280	4675807	4631090	4709393	2.11	cps
Carbon	12-2	47175	46590	47122	46962	0.69	cps
Chlorine	35-1	235051	235423	235755	235410	0.15	cps
Chlorine	35-2	1417	1150	1397	1321	11.24	cps
Chromium	52-2	46820	47987	45512	46773	2.65	cps
Cobalt	59-2	29180	28990	28993	29054	0.37	cps
Copper	63-2	24004	23633	23867	23834	0.79	cps
Dysprosium	156-1	1147	1333	1233	1238	7.55	cps
Dysprosium	156-2	403	433	360	399	9.24	cps
Erbium	164-1	1400	1447	1457	1435	2.11	cps
Erbium	164-2	517	510	440	489	8.69	cps
Gadolinium	160-1	1150	1170	1033	1118	6.60	cps
Gadolinium	160-2	477	520	420	472	10.62	cps
Holmium	165-1	10252261	10243372	10190827	10228820	0.32	cps
Holmium	165-2	3913469	3859125	3883970	3885521	0.70	cps
Indium	115-1	7904412	7976392	7835957	7905587	0.89	cps
Indium	115-2	892219	891116	892501	891945	0.08	cps
Iron	54-2	74648822	74568642	74649292	74622252	0.06	cps
Iron	56-2	1382652513	1377210113	1367213953	1375692193	0.57	cps
Iron	57-2	35007573	35071558	34494288	34857806	0.91	cps
Krypton	83-1	473	553	503	510	7.92	cps
Lead	206-1	58705	57771	57728	58068	0.95	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S8 Instrumnet Name : P8
Client Sample ID : S8 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:37:21 DataFile Name : 012CAL.S.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	50802	50404	49009	50072	1.88	cps
Lead	208-1	234568	230463	225740	230257	1.92	cps
Lithium	6-1	2018613	2044404	2027314	2030110	0.65	cps
Magnesium	24-2	199226050	198048750	195141370	197472057	1.06	cps
Manganese	55-2	19851	19183	18592	19209	3.28	cps
Molybdenum	94-1	23613	23123	22051	22929	3.49	cps
Molybdenum	95-1	23874	23710	24068	23884	0.75	cps
Molybdenum	96-1	34907	34797	33517	34407	2.25	cps
Molybdenum	97-1	14184	13056	13280	13507	4.42	cps
Molybdenum	98-1	35088	33083	33397	33856	3.19	cps
Neodymium	150-1	653	637	567	619	7.43	cps
Neodymium	150-2	153	170	173	166	6.47	cps
Nickel	60-2	13443	13423	13313	13393	0.52	cps
Phosphorus	31-2	120	113	157	130	17.95	cps
Potassium	39-2	72757171	73786776	71875031	72806326	1.31	cps
Rhodium	103-1	6967229	7154697	6893924	7005284	1.92	cps
Rhodium	103-2	2991877	2962787	3020932	2991865	0.97	cps
Scandium	45-1	4985087	4903868	4894170	4927709	1.01	cps
Scandium	45-2	116316	116645	116592	116517	0.15	cps
Selenium	82-1	303	263	353	307	14.70	cps
Selenium	77-2	3	10	7	7	50.03	cps
Selenium	78-2	47	50	63	53	16.53	cps
Silicon	28-1	896621	1045293	990559	977491	7.69	cps
Silver	107-1	4641	4014	3801	4152	10.52	cps
Silver	109-1	4117	3764	3157	3679	13.20	cps
Sodium	23-2	398408941	401671687	396943407	399008012	0.61	cps
Strontium	86-1	34833	34867	34620	34773	0.39	cps
Strontium	88-1	301225	300396	296764	299462	0.79	cps
Sulfur	34-1	569938	568491	567562	568664	0.21	cps
Terbium	159-1	10582815	10571663	10269286	10474588	1.70	cps
Terbium	159-2	3787526	3737160	3797581	3774089	0.86	cps
Thallium	203-1	2624	2117	1897	2212	16.85	cps
Thallium	205-1	5588	4718	4377	4894	12.76	cps
Tin	118-1	10000	9273	9343	9539	4.21	cps
Titanium	47-1	3881	3550	3727	3719	4.44	cps
Uranium	238-1	4504	3667	3631	3934	12.56	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : S8 Instrumnet Name : P8
Client Sample ID : S8 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 11:37:21 DataFile Name : 012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1470	1643	1463	1526	6.69	cps
Ytterbium	172-1	2204	2014	2350	2189	7.71	cps
Ytterbium	172-2	990	940	1037	989	4.89	cps
Ytterbium	176-1	3064	2860	2947	2957	3.45	cps
Ytterbium	176-2	920	890	1007	939	6.45	cps
Yttrium	89-1	14812709	14740704	14641858	14731757	0.58	cps
Yttrium	89-2	1203001	1199384	1211646	1204677	0.52	cps
Zinc	66-2	27580	27590	27440	27537	0.31	cps
Zirconium	90-1	28095	27734	27147	27659	1.73	cps
Zirconium	91-1	6001	6118	6241	6120	1.96	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICV01 Instrumnet Name : P8
Client Sample ID : ICV01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:05:25 DataFile Name : 014ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	60599	61305	61569	61158	0.82	cps
Antimony	121-1	8256518	8095785	8137617	8163307	1.02	cps
Arsenic	75-2	166503	166659	165449	166204	0.40	cps
Barium	135-1	944237	937310	940318	940621	0.37	cps
Barium	137-1	1710337	1679148	1714989	1701491	1.15	cps
Beryllium	9-1	719327	718723	716445	718165	0.21	cps
Bismuth	209-1	7105951	7309801	7178853	7198202	1.43	cps
Bismuth	209-2	3108249	3057492	3066717	3077486	0.88	cps
Bromine	81-1	20595	20095	20201	20297	1.30	cps
Cadmium	108-1	145162	142980	144401	144181	0.77	cps
Cadmium	106-1	216803	216242	217563	216869	0.31	cps
Cadmium	111-1	1089056	1079076	1093705	1087279	0.69	cps
Calcium	43-1	258320	258006	258444	258257	0.09	cps
Calcium	44-1	4072335	4026525	4094238	4064366	0.85	cps
Carbon	12-1	5811502	5637914	5565049	5671488	2.23	cps
Carbon	12-2	41104	39981	40763	40616	1.42	cps
Chlorine	35-1	273462	280004	281094	278187	1.48	cps
Chlorine	35-2	1307	1357	1383	1349	2.89	cps
Chromium	52-2	847284	844721	843303	845103	0.24	cps
Cobalt	59-2	1636898	1657034	1689407	1661113	1.59	cps
Copper	63-2	1253985	1251036	1255056	1253359	0.17	cps
Dysprosium	156-1	60	73	50	61	19.15	cps
Dysprosium	156-2	17	27	20	21	24.12	cps
Erbium	164-1	90	93	110	98	10.96	cps
Erbium	164-2	40	30	27	32	21.53	cps
Gadolinium	160-1	167	167	120	151	17.83	cps
Gadolinium	160-2	33	40	43	39	13.09	cps
Holmium	165-1	11969104	12048134	11836336	11951191	0.90	cps
Holmium	165-2	4278911	4274626	4243483	4265673	0.45	cps
Indium	115-1	9705214	9747501	9719752	9724155	0.22	cps
Indium	115-2	959651	966443	953097	959730	0.70	cps
Iron	54-2	696049	691134	691367	692850	0.40	cps
Iron	56-2	12653395	12641589	12507726	12600903	0.64	cps
Iron	57-2	310796	307290	310914	309666	0.67	cps
Krypton	83-1	443	420	433	432	2.71	cps
Lead	206-1	6283181	6144921	6163098	6197067	1.21	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICV01 Instrumnet Name : P8
Client Sample ID : ICV01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:05:25 DataFile Name : 014ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5170482	5055134	5087716	5104444	1.16	cps
Lead	208-1	24124520	23743214	23832729	23900154	0.83	cps
Lithium	6-1	2362134	2444152	2433050	2413112	1.84	cps
Magnesium	24-2	523826	520663	514958	519815	0.86	cps
Manganese	55-2	368334	366807	367015	367385	0.23	cps
Molybdenum	94-1	69979144	68945759	69801439	69575447	0.79	cps
Molybdenum	95-1	101443952	100234702	101783058	101153904	0.80	cps
Molybdenum	96-1	109607502	110003748	110220715	109943988	0.28	cps
Molybdenum	97-1	62596436	62450879	62031267	62359527	0.47	cps
Molybdenum	98-1	165134301	161279861	162949218	163121126	1.18	cps
Neodymium	150-1	67	100	77	81	21.09	cps
Neodymium	150-2	10	3	10	8	49.52	cps
Nickel	60-2	440261	438047	440384	439564	0.30	cps
Phosphorus	31-2	150	73	153	126	36.05	cps
Potassium	39-2	625099	623711	623757	624189	0.13	cps
Rhodium	103-1	9317712	9406658	9248283	9324218	0.85	cps
Rhodium	103-2	3773517	3826446	3787450	3795804	0.72	cps
Scandium	45-1	5909105	6015249	5921245	5948533	0.98	cps
Scandium	45-2	129066	131195	130041	130101	0.82	cps
Selenium	82-1	122057	121468	119249	120924	1.22	cps
Selenium	77-2	2180	2284	2200	2221	2.47	cps
Selenium	78-2	7899	7682	7662	7748	1.69	cps
Silicon	28-1	9072501	9124000	9162643	9119715	0.50	cps
Silver	107-1	2657213	2724659	2679841	2687238	1.28	cps
Silver	109-1	2555251	2532144	2512642	2533346	0.84	cps
Sodium	23-2	1929880	1896735	1897785	1908133	0.99	cps
Strontium	86-1	6420972	6373656	6415292	6403307	0.40	cps
Strontium	88-1	54926026	55614443	55588621	55376363	0.70	cps
Sulfur	34-1	673009	660984	651798	661931	1.61	cps
Terbium	159-1	12073666	12345091	12204401	12207719	1.11	cps
Terbium	159-2	4069940	4138081	4086784	4098268	0.87	cps
Thallium	203-1	7581045	7460584	7397489	7479706	1.25	cps
Thallium	205-1	17683598	17382568	17605412	17557193	0.89	cps
Tin	118-1	16624615	16321654	16422812	16456360	0.94	cps
Titanium	47-1	25491682	25278121	25383798	25384534	0.42	cps
Uranium	238-1	58820452	59477499	58734511	59010821	0.69	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICV01 Instrumnet Name : P8
Client Sample ID : ICV01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:05:25 DataFile Name : 014ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	623393	617679	613240	618104	0.82	cps
Ytterbium	172-1	353	313	303	323	8.18	cps
Ytterbium	172-2	143	157	93	131	25.47	cps
Ytterbium	176-1	83928	83807	84334	84023	0.33	cps
Ytterbium	176-2	28474	28902	28988	28788	0.96	cps
Yttrium	89-1	17317063	17600116	17640724	17519301	1.01	cps
Yttrium	89-2	1295014	1309774	1298515	1301101	0.59	cps
Zinc	66-2	283711	281936	282518	282722	0.32	cps
Zirconium	90-1	33590568	33781416	33946056	33772680	0.53	cps
Zirconium	91-1	7493046	7414344	7464286	7457225	0.53	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LLICV Instrumnet Name : P8
Client Sample ID : LLICV Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:10:13 DataFile Name : 015LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3114	3117	2594	2941	10.24	cps
Antimony	121-1	86079	87578	86810	86822	0.86	cps
Arsenic	75-2	893	1013	870	926	8.31	cps
Barium	135-1	100636	100019	101174	100610	0.57	cps
Barium	137-1	175664	176691	177026	176461	0.40	cps
Beryllium	9-1	7766	7996	7884	7882	1.46	cps
Bismuth	209-1	7327099	7356670	7383836	7355868	0.39	cps
Bismuth	209-2	3200932	3172942	3136180	3170018	1.02	cps
Bromine	81-1	20705	20285	21039	20676	1.83	cps
Cadmium	108-1	900	857	930	896	4.12	cps
Cadmium	106-1	8339	7832	7766	7979	3.93	cps
Cadmium	111-1	16455	16041	15769	16089	2.15	cps
Calcium	43-1	65237	65160	64829	65075	0.33	cps
Calcium	44-1	1075825	1085005	1084201	1081677	0.47	cps
Carbon	12-1	4838427	4634848	4540765	4671347	3.26	cps
Carbon	12-2	32466	33157	32680	32768	1.08	cps
Chlorine	35-1	201751	201648	202460	201953	0.22	cps
Chlorine	35-2	1030	993	1093	1039	4.87	cps
Chromium	52-2	20598	19780	18936	19772	4.20	cps
Cobalt	59-2	18142	17748	16480	17456	4.98	cps
Copper	63-2	30459	28759	27921	29046	4.45	cps
Dysprosium	156-1	13	20	40	24	56.78	cps
Dysprosium	156-2	7	3	7	6	34.70	cps
Erbium	164-1	90	93	80	88	7.90	cps
Erbium	164-2	20	43	57	40	46.40	cps
Gadolinium	160-1	117	107	103	109	6.37	cps
Gadolinium	160-2	40	10	27	26	58.81	cps
Holmium	165-1	11828218	11830753	12052137	11903703	1.08	cps
Holmium	165-2	4407732	4424153	4297346	4376411	1.58	cps
Indium	115-1	10026172	10167497	10201573	10131747	0.92	cps
Indium	115-2	1045522	1045860	1041272	1044218	0.24	cps
Iron	54-2	20498	19243	18535	19426	5.12	cps
Iron	56-2	357082	350116	327801	345000	4.43	cps
Iron	57-2	9360	8226	8036	8540	8.38	cps
Krypton	83-1	430	363	483	426	14.13	cps
Lead	206-1	32263	31324	31642	31743	1.50	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LLICV Instrumnet Name : P8
Client Sample ID : LLICV Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:10:13 DataFile Name : 015LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	27589	27476	27666	27577	0.35	cps
Lead	208-1	126852	125601	126589	126347	0.52	cps
Lithium	6-1	2396220	2360569	2325377	2360722	1.50	cps
Magnesium	24-2	255954	242858	232236	243683	4.88	cps
Manganese	55-2	8062	7859	7509	7810	3.59	cps
Molybdenum	94-1	89056	88838	88180	88691	0.51	cps
Molybdenum	95-1	107707	106538	107421	107222	0.57	cps
Molybdenum	96-1	119004	119052	119431	119162	0.20	cps
Molybdenum	97-1	66810	65956	66994	66586	0.83	cps
Molybdenum	98-1	170048	170679	172309	171012	0.68	cps
Neodymium	150-1	10	27	27	21	45.58	cps
Neodymium	150-2	7	3	3	4	43.40	cps
Nickel	60-2	5421	5418	5671	5503	2.64	cps
Phosphorus	31-2	293	353	260	302	15.65	cps
Potassium	39-2	191228	186653	180051	185977	3.02	cps
Rhodium	103-1	9468962	9385664	9430259	9428295	0.44	cps
Rhodium	103-2	3917093	3917198	3911702	3915331	0.08	cps
Scandium	45-1	5930872	5950339	5961973	5947728	0.26	cps
Scandium	45-2	130899	130011	130869	130593	0.39	cps
Selenium	82-1	3194	3237	3124	3185	1.80	cps
Selenium	77-2	77	33	67	59	38.54	cps
Selenium	78-2	237	257	197	230	13.28	cps
Silicon	28-1	722148	678679	671491	690773	3.97	cps
Silver	107-1	53514	53236	54631	53793	1.37	cps
Silver	109-1	50482	51743	51268	51165	1.24	cps
Sodium	23-2	578465	570819	545106	564796	3.09	cps
Strontium	86-1	14297	14491	14034	14274	1.61	cps
Strontium	88-1	120817	120259	120612	120563	0.23	cps
Sulfur	34-1	679001	684799	674291	679363	0.77	cps
Terbium	159-1	12507866	12487594	12328427	12441296	0.79	cps
Terbium	159-2	4227498	4180673	4197206	4201792	0.57	cps
Thallium	203-1	38413	38684	38654	38584	0.38	cps
Thallium	205-1	89305	88576	90741	89541	1.23	cps
Tin	118-1	178444	179771	179781	179332	0.43	cps
Titanium	47-1	29687	29323	29273	29428	0.77	cps
Uranium	238-1	113956	114642	116262	114953	1.03	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LLICV Instrumnet Name : P8
Client Sample ID : LLICV Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:10:13 DataFile Name : 015LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	35086	33954	31358	33466	5.71	cps
Ytterbium	172-1	63	70	80	71	11.80	cps
Ytterbium	172-2	43	33	37	38	13.48	cps
Ytterbium	176-1	1673	1790	1610	1691	5.40	cps
Ytterbium	176-2	453	403	477	444	8.43	cps
Yttrium	89-1	17502635	17504904	17584294	17530611	0.27	cps
Yttrium	89-2	1332621	1321305	1324177	1326034	0.44	cps
Zinc	66-2	9677	9530	9206	9471	2.54	cps
Zirconium	90-1	74129	73877	74980	74329	0.78	cps
Zirconium	91-1	16727	16620	16830	16726	0.63	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICB01 Instrumnet Name : P8
Client Sample ID : ICB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:13:39 DataFile Name : 016CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	327	380	350	352	7.59	cps
Antimony	121-1	243	300	250	264	11.71	cps
Arsenic	75-2	20	10	10	13	43.30	cps
Barium	135-1	140	177	193	170	16.05	cps
Barium	137-1	370	337	313	340	8.38	cps
Beryllium	9-1	46	38	30	38	21.21	cps
Bismuth	209-1	7291918	7287990	7181452	7253787	0.86	cps
Bismuth	209-2	3126482	3160622	3172469	3153191	0.76	cps
Bromine	81-1	19771	19774	20021	19855	0.72	cps
Cadmium	108-1	27	30	23	27	12.51	cps
Cadmium	106-1	6425	6442	6605	6490	1.53	cps
Cadmium	111-1	4499	4525	4634	4552	1.57	cps
Calcium	43-1	2280	2384	2250	2305	3.04	cps
Calcium	44-1	64339	63573	64340	64084	0.69	cps
Carbon	12-1	4905857	4775498	4771517	4817624	1.59	cps
Carbon	12-2	35159	34110	35279	34849	1.85	cps
Chlorine	35-1	254389	259428	259293	257704	1.11	cps
Chlorine	35-2	1280	1293	1057	1210	10.99	cps
Chromium	52-2	1563	2104	2267	1978	18.61	cps
Cobalt	59-2	93	130	130	118	17.98	cps
Copper	63-2	2727	3174	3771	3224	16.24	cps
Dysprosium	156-1	30	27	7	21	59.77	cps
Dysprosium	156-2	7	0	3	3	100.05	cps
Erbium	164-1	57	113	93	88	32.74	cps
Erbium	164-2	57	23	23	34	55.89	cps
Gadolinium	160-1	107	93	103	101	6.86	cps
Gadolinium	160-2	30	17	43	30	44.43	cps
Holmium	165-1	11747426	12111441	11937717	11932195	1.53	cps
Holmium	165-2	4382168	4422048	4333680	4379298	1.01	cps
Indium	115-1	9879372	10072524	10092683	10014859	1.18	cps
Indium	115-2	1042628	1040669	1035275	1039524	0.37	cps
Iron	54-2	1047	1233	1290	1190	10.70	cps
Iron	56-2	13076	14878	17020	14991	13.17	cps
Iron	57-2	373	350	463	396	15.13	cps
Krypton	83-1	443	397	380	407	8.07	cps
Lead	206-1	1753	1743	1827	1775	2.56	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICB01 Instrumnet Name : P8
Client Sample ID : ICB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:13:39 DataFile Name : 016CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1533	1537	1563	1545	1.06	cps
Lead	208-1	7328	6994	7281	7201	2.51	cps
Lithium	6-1	2348550	2467877	2318105	2378177	3.33	cps
Magnesium	24-2	537	530	587	551	5.62	cps
Manganese	55-2	4467	4321	3854	4214	7.60	cps
Molybdenum	94-1	1023	1020	1047	1030	1.41	cps
Molybdenum	95-1	757	650	460	622	24.15	cps
Molybdenum	96-1	867	743	810	807	7.65	cps
Molybdenum	97-1	440	353	290	361	20.85	cps
Molybdenum	98-1	1017	907	963	962	5.72	cps
Neodymium	150-1	17	27	27	23	24.74	cps
Neodymium	150-2	20	3	7	10	88.20	cps
Nickel	60-2	807	1147	1320	1091	23.93	cps
Phosphorus	31-2	77	157	97	110	37.85	cps
Potassium	39-2	18645	19166	19427	19079	2.08	cps
Rhodium	103-1	9425289	9482952	9535715	9481319	0.58	cps
Rhodium	103-2	3833744	3977443	3858651	3889946	1.97	cps
Scandium	45-1	5882074	5920922	5933314	5912103	0.45	cps
Scandium	45-2	129392	129635	129972	129666	0.22	cps
Selenium	82-1	-37	63	27	18	284.58	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	20	30	30	27	21.65	cps
Silicon	28-1	605680	611771	607605	608352	0.51	cps
Silver	107-1	580	530	483	531	9.10	cps
Silver	109-1	420	383	397	400	4.64	cps
Sodium	23-2	63531	64163	64599	64098	0.84	cps
Strontium	86-1	740	847	780	789	6.83	cps
Strontium	88-1	1117	1073	1107	1099	2.06	cps
Sulfur	34-1	679436	677912	679941	679096	0.16	cps
Terbium	159-1	12213613	12345472	12526869	12361985	1.27	cps
Terbium	159-2	4246696	4195819	4176019	4206178	0.87	cps
Thallium	203-1	353	333	297	328	8.77	cps
Thallium	205-1	907	760	867	844	8.98	cps
Tin	118-1	23851	24118	23757	23909	0.78	cps
Titanium	47-1	460	467	473	467	1.43	cps
Uranium	238-1	350	390	407	382	7.62	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICB01 Instrumnet Name : P8
Client Sample ID : ICB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:13:39 DataFile Name : 016CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	7	23	13	14	58.06	cps
Ytterbium	172-1	83	60	63	69	18.32	cps
Ytterbium	172-2	40	30	13	28	48.51	cps
Ytterbium	176-1	1667	1693	1587	1649	3.37	cps
Ytterbium	176-2	417	413	320	383	14.32	cps
Yttrium	89-1	17581548	17401469	17450284	17477767	0.53	cps
Yttrium	89-2	1326491	1327158	1316716	1323455	0.44	cps
Zinc	66-2	2177	2367	2380	2308	4.93	cps
Zirconium	90-1	1507	1663	1710	1627	6.55	cps
Zirconium	91-1	300	287	323	303	6.12	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICSA01 Instrumnet Name : P8
Client Sample ID : ICSA01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:17:02 DataFile Name : 017ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	11217366	10989634	10876501	11027833	1.57	cps
Antimony	121-1	41309	41627	41717	41551	0.52	cps
Arsenic	75-2	233	267	327	276	17.16	cps
Barium	135-1	12976	13103	12983	13021	0.55	cps
Barium	137-1	22081	22455	22419	22318	0.92	cps
Beryllium	9-1	1965	2029	2004	1999	1.63	cps
Bismuth	209-1	6509235	6489925	6580748	6526636	0.73	cps
Bismuth	209-2	2727642	2771599	2777532	2758924	0.99	cps
Bromine	81-1	24001	24849	23737	24195	2.40	cps
Cadmium	108-1	10948	11145	11068	11053	0.90	cps
Cadmium	106-1	6448	6455	6228	6377	2.02	cps
Cadmium	111-1	9623	9643	9131	9466	3.06	cps
Calcium	43-1	10861588	10690657	10846041	10799428	0.88	cps
Calcium	44-1	176060697	176431557	176395711	176295988	0.12	cps
Carbon	12-1	54935013	55735159	55253706	55307959	0.73	cps
Carbon	12-2	420907	421512	416425	419614	0.66	cps
Chlorine	35-1	140814931	148419534	150416954	146550473	3.46	cps
Chlorine	35-2	751435	756591	749226	752417	0.50	cps
Chromium	52-2	161011	161210	159630	160617	0.54	cps
Cobalt	59-2	17548	17157	16687	17130	2.52	cps
Copper	63-2	88778	88342	88537	88552	0.25	cps
Dysprosium	156-1	200	113	187	167	28.00	cps
Dysprosium	156-2	63	53	67	61	11.36	cps
Erbium	164-1	217	233	290	247	15.59	cps
Erbium	164-2	63	77	50	63	21.06	cps
Gadolinium	160-1	230	233	267	243	8.33	cps
Gadolinium	160-2	67	57	60	61	8.33	cps
Holmium	165-1	11291469	11424017	11437994	11384493	0.71	cps
Holmium	165-2	4083703	4122438	4116176	4107439	0.51	cps
Indium	115-1	9243880	9443036	9500710	9395875	1.43	cps
Indium	115-2	942294	947247	952856	947466	0.56	cps
Iron	54-2	32177370	32827739	32526713	32510607	1.00	cps
Iron	56-2	601012698	601946364	590798965	597919342	1.03	cps
Iron	57-2	15248666	15366930	15090654	15235417	0.91	cps
Krypton	83-1	370	420	480	423	13.01	cps
Lead	206-1	124911	123740	123034	123895	0.77	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICSA01 Instrumnet Name : P8
Client Sample ID : ICSA01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:17:02 DataFile Name : 017ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	100194	98306	95025	97842	2.67	cps
Lead	208-1	471458	462314	458749	464174	1.41	cps
Lithium	6-1	2204297	2137011	2196294	2179201	1.69	cps
Magnesium	24-2	42270263	41318114	40669499	41419292	1.94	cps
Manganese	55-2	29120	29327	29030	29159	0.52	cps
Molybdenum	94-1	21251144	21227513	21202861	21227173	0.11	cps
Molybdenum	95-1	37419600	37181647	37589827	37397025	0.55	cps
Molybdenum	96-1	40456617	39716671	40600568	40257952	1.18	cps
Molybdenum	97-1	23527660	23497676	23442695	23489344	0.18	cps
Molybdenum	98-1	61084227	60369902	60727692	60727274	0.59	cps
Neodymium	150-1	167	157	177	167	6.00	cps
Neodymium	150-2	47	50	27	41	30.69	cps
Nickel	60-2	21924	22394	21874	22064	1.30	cps
Phosphorus	31-2	638780	637095	633965	636613	0.38	cps
Potassium	39-2	31107320	31024987	31014397	31048901	0.16	cps
Rhodium	103-1	8335882	8386212	8478877	8400324	0.86	cps
Rhodium	103-2	3386495	3421518	3415882	3407965	0.55	cps
Scandium	45-1	5818412	5760744	5686753	5755303	1.15	cps
Scandium	45-2	126225	127355	124977	126185	0.94	cps
Selenium	82-1	130	50	-23	52	146.85	cps
Selenium	77-2	3	0	7	3	100.05	cps
Selenium	78-2	30	37	23	30	22.23	cps
Silicon	28-1	949278	945751	930839	941956	1.04	cps
Silver	107-1	2237	2084	1727	2016	12.98	cps
Silver	109-1	2364	1867	1707	1979	17.30	cps
Sodium	23-2	92085595	92018072	88966075	91023248	1.96	cps
Strontium	86-1	407338	406810	404173	406107	0.42	cps
Strontium	88-1	3628693	3655293	3676186	3653391	0.65	cps
Sulfur	34-1	13380580	13636632	13420937	13479383	1.02	cps
Terbium	159-1	11804726	11925252	11812014	11847331	0.57	cps
Terbium	159-2	3974573	3933204	3976307	3961362	0.62	cps
Thallium	203-1	2594	2800	2970	2788	6.77	cps
Thallium	205-1	6145	6969	7005	6706	7.25	cps
Tin	118-1	24465	24102	24368	24312	0.77	cps
Titanium	47-1	10405025	10218464	10103364	10242284	1.49	cps
Uranium	238-1	1883	1907	1807	1866	2.80	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICSA01 Instrumnet Name : P8
Client Sample ID : ICSA01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:17:02 DataFile Name : 017ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	907	917	800	874	7.40	cps
Ytterbium	172-1	120	113	127	120	5.55	cps
Ytterbium	172-2	57	67	40	54	24.75	cps
Ytterbium	176-1	1560	1803	1420	1595	12.17	cps
Ytterbium	176-2	380	390	353	374	5.06	cps
Yttrium	89-1	16828883	17027481	16998518	16951627	0.63	cps
Yttrium	89-2	1254296	1258730	1259952	1257659	0.24	cps
Zinc	66-2	16934	16309	15906	16383	3.16	cps
Zirconium	90-1	2227	2477	2700	2468	9.60	cps
Zirconium	91-1	547	670	657	624	10.84	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICSAB01 Instrumnet Name : P8
Client Sample ID : ICSAB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:20:14 DataFile Name : 018ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	11436717	11399002	10786651	11207457	3.26	cps
Antimony	121-1	843609	853277	842166	846350	0.71	cps
Arsenic	75-2	17027	17147	16456	16877	2.19	cps
Barium	135-1	198837	200980	201301	200373	0.67	cps
Barium	137-1	346669	350950	349947	349189	0.64	cps
Beryllium	9-1	139762	139132	138898	139264	0.32	cps
Bismuth	209-1	6475462	6588566	6565152	6543060	0.91	cps
Bismuth	209-2	2799904	2823538	2767499	2796980	1.01	cps
Bromine	81-1	23864	23733	24508	24035	1.73	cps
Cadmium	108-1	28189	28406	27491	28029	1.71	cps
Cadmium	106-1	34750	34523	34767	34680	0.39	cps
Cadmium	111-1	203152	205130	206309	204864	0.78	cps
Calcium	43-1	11208784	11479449	11201144	11296459	1.40	cps
Calcium	44-1	181601144	185920451	182419977	183313857	1.25	cps
Carbon	12-1	57425959	58868396	59059242	58451199	1.53	cps
Carbon	12-2	452722	447263	438544	446177	1.60	cps
Chlorine	35-1	151563874	159203514	158254991	156340793	2.66	cps
Chlorine	35-2	779516	784169	772630	778771	0.75	cps
Chromium	52-2	333388	326645	320543	326859	1.97	cps
Cobalt	59-2	323927	321808	314584	320107	1.53	cps
Copper	63-2	325689	322694	314904	321096	1.73	cps
Dysprosium	156-1	187	153	147	162	13.21	cps
Dysprosium	156-2	43	57	60	53	16.54	cps
Erbium	164-1	257	193	247	232	14.66	cps
Erbium	164-2	70	70	103	81	23.72	cps
Gadolinium	160-1	200	317	290	269	22.74	cps
Gadolinium	160-2	67	80	70	72	9.61	cps
Holmium	165-1	11639929	11601874	11555243	11599015	0.37	cps
Holmium	165-2	4165385	4137696	4144161	4149080	0.35	cps
Indium	115-1	9478557	9243211	9272945	9331571	1.37	cps
Indium	115-2	950058	949523	945649	948410	0.25	cps
Iron	54-2	33550402	33513840	32102776	33055673	2.50	cps
Iron	56-2	623224724	615239991	590544791	609669835	2.79	cps
Iron	57-2	15466848	15693978	15062009	15407612	2.08	cps
Krypton	83-1	423	363	473	420	13.11	cps
Lead	206-1	669995	663966	669499	667820	0.50	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICSAB01 Instrumnet Name : P8
Client Sample ID : ICSAB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:20:14 DataFile Name : 018ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	559362	560185	557600	559049	0.24	cps
Lead	208-1	2581301	2576443	2585697	2581147	0.18	cps
Lithium	6-1	2166215	2277821	2254346	2232794	2.64	cps
Magnesium	24-2	42402192	42533217	41161112	42032174	1.80	cps
Manganese	55-2	98242	98483	93933	96886	2.64	cps
Molybdenum	94-1	23257430	23707253	23986134	23650272	1.55	cps
Molybdenum	95-1	39543110	39825699	40217189	39861999	0.85	cps
Molybdenum	96-1	42865593	42808134	42639359	42771029	0.27	cps
Molybdenum	97-1	24715275	24549797	24453081	24572718	0.54	cps
Molybdenum	98-1	63690539	63570892	63376776	63546069	0.25	cps
Neodymium	150-1	173	167	207	182	11.76	cps
Neodymium	150-2	53	40	27	40	33.33	cps
Nickel	60-2	104013	103852	98971	102279	2.80	cps
Phosphorus	31-2	650697	650148	633783	644876	1.49	cps
Potassium	39-2	31576527	31952200	31346350	31625026	0.97	cps
Rhodium	103-1	8536558	8451036	8327940	8438511	1.24	cps
Rhodium	103-2	3461600	3453303	3477265	3464056	0.35	cps
Scandium	45-1	5689349	5814160	5640017	5714509	1.57	cps
Scandium	45-2	127462	127368	127156	127329	0.12	cps
Selenium	82-1	11869	12299	11762	11977	2.37	cps
Selenium	77-2	200	253	250	234	12.74	cps
Selenium	78-2	850	773	690	771	10.38	cps
Silicon	28-1	1748722	1742923	1757554	1749733	0.42	cps
Silver	107-1	909287	911025	905136	908483	0.33	cps
Silver	109-1	857610	868294	871243	865716	0.83	cps
Sodium	23-2	92690085	93725102	91015875	92477021	1.48	cps
Strontium	86-1	1017333	1012498	1014014	1014615	0.24	cps
Strontium	88-1	9161496	9039677	9213345	9138173	0.98	cps
Sulfur	34-1	13810346	13868885	13816716	13831982	0.23	cps
Terbium	159-1	11895914	11884544	11939250	11906569	0.24	cps
Terbium	159-2	4016290	4010012	3924134	3983479	1.29	cps
Thallium	203-1	676120	681969	687612	681900	0.84	cps
Thallium	205-1	1626916	1671638	1628176	1642243	1.55	cps
Tin	118-1	1620418	1600264	1602380	1607687	0.69	cps
Titanium	47-1	10641102	10763182	10564545	10656277	0.94	cps
Uranium	238-1	5278621	5418993	5423875	5373830	1.54	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : ICSAB01 Instrumnet Name : P8
Client Sample ID : ICSAB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:20:14 DataFile Name : 018ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	125363	126563	123242	125056	1.34	cps
Ytterbium	172-1	113	110	117	113	2.94	cps
Ytterbium	172-2	27	53	70	50	43.71	cps
Ytterbium	176-1	9624	9937	9664	9741	1.75	cps
Ytterbium	176-2	3454	3117	3214	3262	5.32	cps
Yttrium	89-1	16959851	16993501	17049191	17000848	0.27	cps
Yttrium	89-2	1283995	1268226	1271537	1274586	0.65	cps
Zinc	66-2	43185	42851	42744	42927	0.54	cps
Zirconium	90-1	3452284	3445642	3418803	3438910	0.52	cps
Zirconium	91-1	734472	741759	735948	737393	0.52	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV01 Instrumnet Name : P8
Client Sample ID : CCV01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:24:40 DataFile Name : 019CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5841855	5786788	5840403	5823015	0.54	cps
Antimony	121-1	18178288	18246543	18203096	18209309	0.19	cps
Arsenic	75-2	373993	373281	376311	374528	0.42	cps
Barium	135-1	21615181	22011060	21963016	21863085	0.99	cps
Barium	137-1	37837739	37824344	38123754	37928612	0.45	cps
Beryllium	9-1	3025984	3063264	3005208	3031485	0.97	cps
Bismuth	209-1	6192886	6180104	6081970	6151653	0.99	cps
Bismuth	209-2	2635156	2633619	2573519	2614098	1.34	cps
Bromine	81-1	20151	20518	20442	20370	0.95	cps
Cadmium	108-1	348463	350266	349402	349377	0.26	cps
Cadmium	106-1	500328	496830	498924	498694	0.35	cps
Cadmium	111-1	4494424	4531987	4469290	4498567	0.70	cps
Calcium	43-1	25863925	26006455	25680128	25850169	0.63	cps
Calcium	44-1	421743407	425337980	415983487	421021625	1.12	cps
Carbon	12-1	5277291	5199694	5141473	5206153	1.31	cps
Carbon	12-2	44678	44581	44955	44738	0.43	cps
Chlorine	35-1	3471460	3273113	3112640	3285738	5.47	cps
Chlorine	35-2	13883	12989	12249	13040	6.28	cps
Chromium	52-2	3850815	3883544	3959677	3898012	1.43	cps
Cobalt	59-2	7057702	7013829	7033172	7034901	0.31	cps
Copper	63-2	57710131	56812187	57398814	57307044	0.80	cps
Dysprosium	156-1	997	1050	937	994	5.70	cps
Dysprosium	156-2	227	237	230	231	2.20	cps
Erbium	164-1	997	963	940	967	2.95	cps
Erbium	164-2	320	260	320	300	11.55	cps
Gadolinium	160-1	707	750	790	749	5.57	cps
Gadolinium	160-2	280	293	327	300	8.01	cps
Holmium	165-1	11108873	11266234	11204451	11193186	0.71	cps
Holmium	165-2	4068760	4043546	4073341	4061882	0.39	cps
Indium	115-1	8739774	8543462	8711527	8664921	1.22	cps
Indium	115-2	874968	874211	872491	873890	0.15	cps
Iron	54-2	37991579	38119957	38013354	38041630	0.18	cps
Iron	56-2	689060283	692875216	697287083	693074194	0.59	cps
Iron	57-2	17691588	17504190	17744789	17646856	0.72	cps
Krypton	83-1	533	440	457	477	10.44	cps
Lead	206-1	63671169	62625497	63102624	63133097	0.83	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV01 Instrumnet Name : P8
Client Sample ID : CCV01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:24:40 DataFile Name : 019CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	54824671	53533493	54373398	54243854	1.21	cps
Lead	208-1	250164471	247823311	248367113	248784965	0.49	cps
Lithium	6-1	2113870	2152057	2088016	2117981	1.52	cps
Magnesium	24-2	99324152	99111799	98442592	98959514	0.46	cps
Manganese	55-2	17808708	17954041	18027711	17930154	0.62	cps
Molybdenum	94-1	63894016	62985551	63671859	63517142	0.75	cps
Molybdenum	95-1	90573055	92303645	90888249	91254983	1.01	cps
Molybdenum	96-1	99541879	99835855	98601185	99326306	0.65	cps
Molybdenum	97-1	57409392	56714037	56573089	56898840	0.79	cps
Molybdenum	98-1	150875508	147718841	147563564	148719304	1.26	cps
Neodymium	150-1	1587	1533	1500	1540	2.84	cps
Neodymium	150-2	173	180	167	173	3.85	cps
Nickel	60-2	1973091	1943708	1923157	1946652	1.29	cps
Phosphorus	31-2	58969	59585	58862	59139	0.66	cps
Potassium	39-2	37395151	37360435	37562592	37439393	0.29	cps
Rhodium	103-1	7998729	7782950	7971287	7917655	1.48	cps
Rhodium	103-2	3205919	3243270	3255697	3234962	0.80	cps
Scandium	45-1	5462464	5496989	5458281	5472578	0.39	cps
Scandium	45-2	122799	123175	123179	123051	0.18	cps
Selenium	82-1	275056	274186	273516	274253	0.28	cps
Selenium	77-2	5598	5111	5391	5367	4.55	cps
Selenium	78-2	17738	18446	18038	18074	1.96	cps
Silicon	28-1	46980396	46673281	46471781	46708486	0.55	cps
Silver	107-1	21579034	21993889	21547029	21706651	1.15	cps
Silver	109-1	20317186	20829729	20520743	20555886	1.26	cps
Sodium	23-2	212118150	209167450	208462750	209916117	0.92	cps
Strontium	86-1	5774849	5741633	5799960	5772147	0.51	cps
Strontium	88-1	49795738	49869856	50639553	50101715	0.93	cps
Sulfur	34-1	1915694	1877189	1861406	1884763	1.48	cps
Terbium	159-1	11386917	11588115	11381115	11452049	1.03	cps
Terbium	159-2	3855629	3933459	3907784	3898958	1.02	cps
Thallium	203-1	16056903	16102992	15823427	15994441	0.94	cps
Thallium	205-1	37755289	37655630	37395905	37602275	0.49	cps
Tin	118-1	14507667	14430769	14467665	14468700	0.27	cps
Titanium	47-1	23944623	23580742	24041742	23855702	1.02	cps
Uranium	238-1	48381163	49067619	47967891	48472224	1.15	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV01 Instrumnet Name : P8
Client Sample ID : CCV01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:24:40 DataFile Name : 019CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3024474	2986638	3045618	3018910	0.99	cps
Ytterbium	172-1	1293	1303	1363	1320	2.87	cps
Ytterbium	172-2	583	597	527	569	6.53	cps
Ytterbium	176-1	81352	79917	80315	80528	0.92	cps
Ytterbium	176-2	27956	27946	27369	27757	1.21	cps
Yttrium	89-1	16328811	15693019	16433283	16151704	2.48	cps
Yttrium	89-2	1227968	1224270	1219493	1223910	0.35	cps
Zinc	66-2	6791979	6781009	6820819	6797936	0.30	cps
Zirconium	90-1	31878182	31033086	32238962	31716743	1.95	cps
Zirconium	91-1	6959095	7053535	7087934	7033521	0.95	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB01 Instrumnet Name : P8
Client Sample ID : CCB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:30:06 DataFile Name : 020CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	370	287	337	331	12.67	cps
Antimony	121-1	1537	1260	1290	1362	11.15	cps
Arsenic	75-2	27	17	10	18	47.19	cps
Barium	135-1	443	380	467	430	10.43	cps
Barium	137-1	767	713	773	751	4.38	cps
Beryllium	9-1	117	75	82	91	24.81	cps
Bismuth	209-1	7205101	7288830	7387120	7293684	1.25	cps
Bismuth	209-2	3094372	3137560	3141226	3124386	0.83	cps
Bromine	81-1	20148	20168	20515	20277	1.02	cps
Cadmium	108-1	33	20	33	29	26.64	cps
Cadmium	106-1	6878	6422	6892	6731	3.98	cps
Cadmium	111-1	4975	4571	4874	4807	4.37	cps
Calcium	43-1	2384	2404	2210	2332	4.56	cps
Calcium	44-1	65261	63794	63911	64322	1.27	cps
Carbon	12-1	5015624	4848462	4759863	4874650	2.66	cps
Carbon	12-2	34577	34500	33916	34331	1.05	cps
Chlorine	35-1	1185733	1149289	1103951	1146324	3.57	cps
Chlorine	35-2	4798	4681	4441	4640	3.92	cps
Chromium	52-2	1573	1810	2127	1837	15.12	cps
Cobalt	59-2	200	197	203	200	1.67	cps
Copper	63-2	3514	4254	4828	4198	15.69	cps
Dysprosium	156-1	23	10	27	20	44.10	cps
Dysprosium	156-2	13	0	20	11	91.66	cps
Erbium	164-1	77	63	87	76	15.50	cps
Erbium	164-2	17	23	13	18	28.64	cps
Gadolinium	160-1	123	130	117	123	5.40	cps
Gadolinium	160-2	30	23	23	26	15.07	cps
Holmium	165-1	12069034	12020272	12076527	12055278	0.25	cps
Holmium	165-2	4340662	4315522	4320620	4325601	0.31	cps
Indium	115-1	9981931	10028134	10183717	10064594	1.05	cps
Indium	115-2	1028815	1030006	1020820	1026547	0.49	cps
Iron	54-2	1377	1377	1587	1447	8.38	cps
Iron	56-2	20485	21944	22454	21628	4.73	cps
Iron	57-2	503	507	550	520	5.01	cps
Krypton	83-1	413	370	383	389	5.71	cps
Lead	206-1	3864	3847	4017	3910	2.40	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB01 Instrumnet Name : P8
Client Sample ID : CCB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:30:06 DataFile Name : 020CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3461	3414	3587	3487	2.57	cps
Lead	208-1	15754	15410	16194	15786	2.49	cps
Lithium	6-1	2492083	2430192	2418245	2446840	1.62	cps
Magnesium	24-2	1537	1597	1437	1523	5.31	cps
Manganese	55-2	4637	4381	4127	4382	5.82	cps
Molybdenum	94-1	2167	1833	2034	2011	8.34	cps
Molybdenum	95-1	2217	1663	1390	1757	23.98	cps
Molybdenum	96-1	2550	1987	1923	2154	16.02	cps
Molybdenum	97-1	1307	1013	1097	1139	13.27	cps
Molybdenum	98-1	3267	2537	2387	2730	17.25	cps
Neodymium	150-1	17	13	7	12	41.65	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	843	1097	1247	1062	19.19	cps
Phosphorus	31-2	120	123	110	118	5.89	cps
Potassium	39-2	25513	25683	25406	25534	0.55	cps
Rhodium	103-1	9485107	9370718	9563782	9473203	1.02	cps
Rhodium	103-2	3852402	3950208	3893131	3898581	1.26	cps
Scandium	45-1	5928458	5903715	5939111	5923762	0.31	cps
Scandium	45-2	125845	125202	125939	125662	0.32	cps
Selenium	82-1	-20	10	40	10	300.00	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	13	27	17	19	36.75	cps
Silicon	28-1	592603	590091	586556	589750	0.52	cps
Silver	107-1	1093	940	840	958	13.32	cps
Silver	109-1	947	803	907	886	8.35	cps
Sodium	23-2	87148	88342	87923	87804	0.69	cps
Strontium	86-1	710	800	717	742	6.76	cps
Strontium	88-1	1473	1363	1307	1381	6.14	cps
Sulfur	34-1	683025	684806	693549	687127	0.82	cps
Terbium	159-1	12235499	12413505	12291528	12313510	0.74	cps
Terbium	159-2	4263156	4173921	4225801	4220959	1.06	cps
Thallium	203-1	1667	1700	1643	1670	1.71	cps
Thallium	205-1	3984	3991	4004	3993	0.26	cps
Tin	118-1	21580	21096	20168	20948	3.43	cps
Titanium	47-1	747	613	600	653	12.41	cps
Uranium	238-1	863	773	767	801	6.74	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB01 Instrumnet Name : P8
Client Sample ID : CCB01 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:30:06 DataFile Name : 020CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	67	57	53	59	11.79	cps
Ytterbium	172-1	83	90	110	94	14.70	cps
Ytterbium	172-2	33	27	17	26	32.81	cps
Ytterbium	176-1	1587	1667	1807	1687	6.60	cps
Ytterbium	176-2	373	390	317	360	10.68	cps
Yttrium	89-1	17321158	17500546	17627320	17483008	0.88	cps
Yttrium	89-2	1300479	1294563	1301193	1298745	0.28	cps
Zinc	66-2	2177	2217	2247	2214	1.59	cps
Zirconium	90-1	2377	2624	2690	2564	6.44	cps
Zirconium	91-1	500	473	563	512	9.02	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CRI Instrumnet Name : P8
Client Sample ID : CRI Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:33:47 DataFile Name : 021LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3097	3160	2937	3065	3.76	cps
Antimony	121-1	87558	87874	86951	87461	0.54	cps
Arsenic	75-2	967	827	883	892	7.89	cps
Barium	135-1	101577	101479	102071	101709	0.31	cps
Barium	137-1	176692	175168	176987	176282	0.55	cps
Beryllium	9-1	7682	7965	7860	7835	1.83	cps
Bismuth	209-1	7254432	7405414	7337868	7332571	1.03	cps
Bismuth	209-2	3135077	3098847	3114931	3116285	0.58	cps
Bromine	81-1	20592	21273	20849	20905	1.65	cps
Cadmium	108-1	870	903	967	913	5.38	cps
Cadmium	106-1	8269	8333	7996	8199	2.18	cps
Cadmium	111-1	16351	16055	15835	16080	1.61	cps
Calcium	43-1	63677	64561	65562	64600	1.46	cps
Calcium	44-1	1068851	1082480	1069642	1073658	0.71	cps
Carbon	12-1	4861916	4742163	4613242	4739107	2.62	cps
Carbon	12-2	32903	32442	32543	32629	0.74	cps
Chlorine	35-1	728230	707055	685019	706768	3.06	cps
Chlorine	35-2	3077	3087	2980	3048	1.93	cps
Chromium	52-2	20078	19590	18382	19350	4.51	cps
Cobalt	59-2	17911	17304	16626	17281	3.72	cps
Copper	63-2	29771	29280	27720	28924	3.70	cps
Dysprosium	156-1	13	17	27	19	36.75	cps
Dysprosium	156-2	3	3	7	4	43.40	cps
Erbium	164-1	73	60	90	74	20.19	cps
Erbium	164-2	23	23	17	21	18.21	cps
Gadolinium	160-1	103	137	130	123	14.30	cps
Gadolinium	160-2	40	37	20	32	33.25	cps
Holmium	165-1	12033221	11783680	11885428	11900776	1.05	cps
Holmium	165-2	4391329	4257115	4287981	4312142	1.63	cps
Indium	115-1	10201196	10090051	9920931	10070726	1.40	cps
Indium	115-2	1020949	1032077	1026268	1026431	0.54	cps
Iron	54-2	20004	19760	18752	19506	3.40	cps
Iron	56-2	360684	353248	327888	347273	4.95	cps
Iron	57-2	8893	8749	8596	8746	1.70	cps
Krypton	83-1	480	420	467	456	6.92	cps
Lead	206-1	32023	33146	32538	32569	1.73	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CRI Instrumnet Name : P8
Client Sample ID : CRI Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:33:47 DataFile Name : 021LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	28689	29166	28956	28937	0.83	cps
Lead	208-1	129667	132336	131186	131063	1.02	cps
Lithium	6-1	2390753	2401291	2416472	2402839	0.54	cps
Magnesium	24-2	251392	246681	231776	243283	4.21	cps
Manganese	55-2	8012	7882	7522	7806	3.25	cps
Molybdenum	94-1	86865	88466	87845	87725	0.92	cps
Molybdenum	95-1	105113	107055	106417	106195	0.93	cps
Molybdenum	96-1	118056	116483	118029	117523	0.77	cps
Molybdenum	97-1	67647	65785	65567	66333	1.72	cps
Molybdenum	98-1	169964	170079	168607	169550	0.48	cps
Neodymium	150-1	20	17	10	16	32.73	cps
Neodymium	150-2	0	0	10	3	173.21	cps
Nickel	60-2	5348	5478	5194	5340	2.66	cps
Phosphorus	31-2	350	283	310	314	10.67	cps
Potassium	39-2	194276	191844	184801	190307	2.59	cps
Rhodium	103-1	9491572	9448837	9431667	9457359	0.33	cps
Rhodium	103-2	3937151	3861311	3844369	3880944	1.27	cps
Scandium	45-1	5830749	5919757	5980064	5910190	1.27	cps
Scandium	45-2	127167	127563	127721	127483	0.22	cps
Selenium	82-1	3140	3184	3224	3183	1.31	cps
Selenium	77-2	60	60	53	58	6.67	cps
Selenium	78-2	203	220	177	200	10.93	cps
Silicon	28-1	625025	638337	622986	628783	1.33	cps
Silver	107-1	53142	53845	54270	53752	1.06	cps
Silver	109-1	50208	50924	51385	50839	1.17	cps
Sodium	23-2	592026	581963	561013	578334	2.74	cps
Strontium	86-1	14141	14327	13990	14153	1.19	cps
Strontium	88-1	119899	120142	119916	119986	0.11	cps
Sulfur	34-1	713508	712584	718146	714746	0.42	cps
Terbium	159-1	12291836	12443405	12329116	12354786	0.64	cps
Terbium	159-2	4152734	4163811	4133610	4150052	0.37	cps
Thallium	203-1	39446	38547	39109	39034	1.16	cps
Thallium	205-1	92010	93597	91866	92491	1.04	cps
Tin	118-1	182918	189686	180087	184230	2.68	cps
Titanium	47-1	28645	28689	29290	28875	1.25	cps
Uranium	238-1	114409	116152	116391	115651	0.94	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CRI Instrumnet Name : P8
Client Sample ID : CRI Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:33:47 DataFile Name : 021LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	34114	34221	31715	33350	4.25	cps
Ytterbium	172-1	73	100	90	88	15.35	cps
Ytterbium	172-2	30	37	27	31	16.37	cps
Ytterbium	176-1	1597	1683	1703	1661	3.41	cps
Ytterbium	176-2	330	350	437	372	15.23	cps
Yttrium	89-1	17562766	17306093	17338855	17402571	0.80	cps
Yttrium	89-2	1301098	1307386	1299612	1302699	0.32	cps
Zinc	66-2	9193	9773	9020	9329	4.23	cps
Zirconium	90-1	73703	75211	74615	74510	1.02	cps
Zirconium	91-1	16600	16577	16413	16530	0.62	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-02 Instrumnet Name : P8
Client Sample ID : PT-TM1-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:46:37 DataFile Name : 022AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	336306	338622	335480	336803	0.48	cps
Antimony	121-1	11807144	11676515	11557206	11680288	1.07	cps
Arsenic	75-2	500352	501594	502586	501511	0.22	cps
Barium	135-1	6815354	6542417	6587951	6648574	2.20	cps
Barium	137-1	11695132	11477504	11338103	11503580	1.56	cps
Beryllium	9-1	2403830	2427788	2432344	2421321	0.63	cps
Bismuth	209-1	7316095	7201524	7312714	7276778	0.90	cps
Bismuth	209-2	3103597	3131548	3137954	3124367	0.58	cps
Bromine	81-1	20385	20525	20529	20480	0.40	cps
Cadmium	108-1	462746	467583	458556	462962	0.98	cps
Cadmium	106-1	624806	621262	632687	626252	0.93	cps
Cadmium	111-1	7109632	7297172	7146964	7184590	1.38	cps
Calcium	43-1	19677	20041	20672	20130	2.50	cps
Calcium	44-1	218528	223595	221906	221343	1.17	cps
Carbon	12-1	5183885	4984272	4976186	5048114	2.33	cps
Carbon	12-2	36806	36194	35717	36239	1.51	cps
Chlorine	35-1	390337	382776	382006	385040	1.20	cps
Chlorine	35-2	1810	1653	1837	1767	5.61	cps
Chromium	52-2	1988238	1944445	1944689	1959124	1.29	cps
Cobalt	59-2	10819809	10524692	10547322	10630608	1.55	cps
Copper	63-2	8839770	8912000	8721338	8824369	1.09	cps
Dysprosium	156-1	107	77	110	98	18.77	cps
Dysprosium	156-2	13	10	13	12	15.73	cps
Erbium	164-1	123	117	120	120	2.78	cps
Erbium	164-2	33	43	27	34	24.35	cps
Gadolinium	160-1	113	113	173	133	25.98	cps
Gadolinium	160-2	47	27	17	30	50.91	cps
Holmium	165-1	12051054	11873858	12163803	12029571	1.22	cps
Holmium	165-2	4334400	4325016	4297604	4319007	0.44	cps
Indium	115-1	9952930	10113110	10181675	10082572	1.16	cps
Indium	115-2	1036244	1037414	1038653	1037437	0.12	cps
Iron	54-2	1297136	1305377	1299514	1300676	0.33	cps
Iron	56-2	23757619	23703689	23874260	23778522	0.37	cps
Iron	57-2	574225	569304	571916	571815	0.43	cps
Krypton	83-1	380	440	483	434	11.94	cps
Lead	206-1	30883405	31043656	31125790	31017617	0.40	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-02 Instrumnet Name : P8
Client Sample ID : PT-TM1-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:46:37 DataFile Name : 022AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	25827649	26180094	26215165	26074303	0.82	cps
Lead	208-1	120576394	121308851	121771091	121218778	0.50	cps
Lithium	6-1	2303258	2345138	2356855	2335084	1.21	cps
Magnesium	24-2	453	547	513	504	9.38	cps
Manganese	55-2	6336566	6306817	6282061	6308482	0.43	cps
Molybdenum	94-1	5660137	5775646	5522452	5652745	2.24	cps
Molybdenum	95-1	10029764	10102870	9743098	9958577	1.91	cps
Molybdenum	96-1	10577939	10789134	10499738	10622270	1.41	cps
Molybdenum	97-1	6173366	6160494	6059521	6131127	1.02	cps
Molybdenum	98-1	15907647	15958580	15647437	15837888	1.05	cps
Neodymium	150-1	357	360	390	369	4.98	cps
Neodymium	150-2	20	17	10	16	32.73	cps
Nickel	60-2	2527597	2461488	2494915	2494667	1.33	cps
Phosphorus	31-2	137	120	117	124	8.61	cps
Potassium	39-2	21610	21423	21953	21662	1.24	cps
Rhodium	103-1	9425514	9404312	9265558	9365128	0.93	cps
Rhodium	103-2	3877396	3841376	3916638	3878470	0.97	cps
Scandium	45-1	6007530	6012737	6106376	6042214	0.92	cps
Scandium	45-2	131135	131757	131441	131444	0.24	cps
Selenium	82-1	517950	526388	529155	524498	1.11	cps
Selenium	77-2	10140	9980	10381	10167	1.98	cps
Selenium	78-2	34609	34198	34957	34588	1.10	cps
Silicon	28-1	9922122	9900058	9836584	9886255	0.45	cps
Silver	107-1	42882038	42774044	43291539	42982540	0.64	cps
Silver	109-1	40623394	40892588	40769884	40761955	0.33	cps
Sodium	23-2	138177	137917	138499	138198	0.21	cps
Strontium	86-1	3728779	3809543	3767475	3768599	1.07	cps
Strontium	88-1	32338855	32694837	32814834	32616175	0.76	cps
Sulfur	34-1	680270	664467	646438	663725	2.55	cps
Terbium	159-1	12204583	12269134	12103929	12192549	0.68	cps
Terbium	159-2	4159067	4113719	4143665	4138817	0.56	cps
Thallium	203-1	8341323	8328110	8352933	8340789	0.15	cps
Thallium	205-1	19545198	19971491	19853523	19790070	1.11	cps
Tin	118-1	5875	5981	5508	5788	4.29	cps
Titanium	47-1	1957	2127	1890	1991	6.13	cps
Uranium	238-1	657	707	630	664	5.86	cps

LB Number :LB135261Operator :Jaswal

Lab Sample ID :Q1503-02Instrumnet Name :P8

Client Sample ID :PT-TM1-WPDilution Factor :1

Date & Time Acquired :2025-04-01 13:46:37DataFile Name :022AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	9615666	9621764	9661559	9632997	0.26	cps
Ytterbium	172-1	87	100	103	97	9.12	cps
Ytterbium	172-2	40	33	33	36	10.83	cps
Ytterbium	176-1	1683	1740	1620	1681	3.57	cps
Ytterbium	176-2	447	417	417	427	4.06	cps
Yttrium	89-1	17616761	17761988	18007904	17795551	1.11	cps
Yttrium	89-2	1325621	1308799	1323110	1319177	0.69	cps
Zinc	66-2	1622911	1626273	1592838	1614008	1.14	cps
Zirconium	90-1	31669	30931	31860	31487	1.56	cps
Zirconium	91-1	10721	10821	10704	10749	0.59	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-04 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:49:30 DataFile Name : 023AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	12048	12205	12142	12132	0.65	cps
Antimony	121-1	1363	1303	1260	1309	3.96	cps
Arsenic	75-2	13	20	10	14	35.26	cps
Barium	135-1	2647	2454	2837	2646	7.25	cps
Barium	137-1	3917	4224	3921	4021	4.38	cps
Beryllium	9-1	138	141	125	135	6.12	cps
Bismuth	209-1	7226463	7332845	7341972	7300427	0.88	cps
Bismuth	209-2	3119721	3151930	3099399	3123683	0.85	cps
Bromine	81-1	21810	22164	21447	21807	1.65	cps
Cadmium	108-1	220	193	210	208	6.48	cps
Cadmium	106-1	6868	7012	7195	7025	2.33	cps
Cadmium	111-1	4994	5033	5166	5064	1.79	cps
Calcium	43-1	2450	2447	2540	2479	2.14	cps
Calcium	44-1	83095	84073	85586	84251	1.49	cps
Carbon	12-1	4720606	4617545	4493266	4610472	2.47	cps
Carbon	12-2	33438	33204	32817	33153	0.95	cps
Chlorine	35-1	28045152	30729491	31839419	30204687	6.46	cps
Chlorine	35-2	162521	162616	160587	161908	0.71	cps
Chromium	52-2	2127	2100	2250	2159	3.71	cps
Cobalt	59-2	1447	1253	1250	1317	8.55	cps
Copper	63-2	3334	3447	3581	3454	3.58	cps
Dysprosium	156-1	87	107	83	92	13.69	cps
Dysprosium	156-2	17	20	20	19	10.18	cps
Erbium	164-1	150	203	247	200	24.21	cps
Erbium	164-2	60	53	67	60	11.12	cps
Gadolinium	160-1	163	207	153	174	16.25	cps
Gadolinium	160-2	33	33	37	34	5.60	cps
Holmium	165-1	11820412	12003431	11958305	11927383	0.80	cps
Holmium	165-2	4333587	4358709	4380690	4357662	0.54	cps
Indium	115-1	8935204	9172680	9087149	9065011	1.33	cps
Indium	115-2	845744	863107	862010	856954	1.13	cps
Iron	54-2	1533	1560	1567	1553	1.14	cps
Iron	56-2	21570	22197	22234	22000	1.70	cps
Iron	57-2	613	593	570	592	3.66	cps
Krypton	83-1	410	510	413	444	12.78	cps
Lead	206-1	12046	14662	14375	13694	10.48	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-04 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:49:30 DataFile Name : 023AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	10264	12336	12196	11599	9.98	cps
Lead	208-1	47949	56535	57023	53836	9.48	cps
Lithium	6-1	2389157	2449201	2295934	2378097	3.25	cps
Magnesium	24-2	793	923	920	879	8.43	cps
Manganese	55-2	4621	4321	4337	4426	3.81	cps
Molybdenum	94-1	50481	50769	49688	50313	1.11	cps
Molybdenum	95-1	887	823	830	847	4.11	cps
Molybdenum	96-1	9216	9226	9113	9185	0.68	cps
Molybdenum	97-1	663	453	413	510	26.33	cps
Molybdenum	98-1	1410	1253	1390	1351	6.31	cps
Neodymium	150-1	123	113	117	118	4.32	cps
Neodymium	150-2	30	33	20	28	24.98	cps
Nickel	60-2	2607	2577	2457	2547	3.12	cps
Phosphorus	31-2	130	100	103	111	14.80	cps
Potassium	39-2	24548	25486	25052	25028	1.88	cps
Rhodium	103-1	9555788	9785452	9417416	9586219	1.94	cps
Rhodium	103-2	3945762	4031281	3919036	3965360	1.48	cps
Scandium	45-1	6067318	6174697	6103976	6115331	0.89	cps
Scandium	45-2	132631	134004	134603	133746	0.76	cps
Selenium	82-1	-7	-67	20	-18	-249.66	cps
Selenium	77-2	7	0	0	2	173.21	cps
Selenium	78-2	30	23	40	31	26.97	cps
Silicon	28-1	42953561	42586517	42542311	42694130	0.53	cps
Silver	107-1	5041	3634	3027	3901	26.49	cps
Silver	109-1	4524	3250	2634	3469	27.79	cps
Sodium	23-2	311632	310976	304927	309179	1.20	cps
Strontium	86-1	1170	1237	1230	1212	3.03	cps
Strontium	88-1	5024	4728	4607	4786	4.48	cps
Sulfur	34-1	610015	600229	592053	600766	1.50	cps
Terbium	159-1	12399525	12380594	12293613	12357911	0.46	cps
Terbium	159-2	4172662	4250419	4213703	4212261	0.92	cps
Thallium	203-1	1640	1697	1737	1691	2.87	cps
Thallium	205-1	3974	4057	4247	4093	3.42	cps
Tin	118-1	56459694	57064319	56343181	56622398	0.68	cps
Titanium	47-1	1259241	1250912	1268085	1259413	0.68	cps
Uranium	238-1	457	507	430	464	8.38	cps

LB Number :LB135261Operator :Jaswal

Lab Sample ID :Q1503-04Instrumnet Name :P8

Client Sample ID :PT-SNTI-WPDilution Factor :1

Date & Time Acquired :2025-04-01 13:49:30DataFile Name :023AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	220	250	230	233	6.55	cps
Ytterbium	172-1	157	133	140	143	8.38	cps
Ytterbium	172-2	60	40	37	46	27.70	cps
Ytterbium	176-1	2097	2004	1990	2030	2.86	cps
Ytterbium	176-2	447	443	480	457	4.44	cps
Yttrium	89-1	18278918	18060748	17795902	18045189	1.34	cps
Yttrium	89-2	1334269	1347932	1341381	1341194	0.51	cps
Zinc	66-2	2247	2107	2447	2267	7.54	cps
Zirconium	90-1	138382	134599	136847	136609	1.39	cps
Zirconium	91-1	30367	30647	29952	30322	1.15	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-06 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:52:50 DataFile Name : 024AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	213	203	267	228	14.95	cps
Antimony	121-1	1543	1033	773	1117	35.08	cps
Arsenic	75-2	23	27	23	24	7.89	cps
Barium	135-1	2567	2300	2237	2368	7.40	cps
Barium	137-1	4314	4244	4044	4201	3.34	cps
Beryllium	9-1	82	88	62	77	17.02	cps
Bismuth	209-1	8841728	8399023	8337359	8526037	3.23	cps
Bismuth	209-2	3585620	3627132	3689223	3633991	1.43	cps
Bromine	81-1	26321	26899	27794	27005	2.75	cps
Cadmium	108-1	57	27	50	44	35.44	cps
Cadmium	106-1	7615	7809	7572	7666	1.64	cps
Cadmium	111-1	5761	5821	5566	5716	2.34	cps
Calcium	43-1	8208413	7822775	7708639	7913276	3.31	cps
Calcium	44-1	131237101	128124071	125488761	128283311	2.24	cps
Carbon	12-1	4661452	4622674	4594914	4626347	0.72	cps
Carbon	12-2	34460	34828	34323	34537	0.76	cps
Chlorine	35-1	19284065	23474452	25162117	22640211	13.37	cps
Chlorine	35-2	132637	129425	126622	129561	2.32	cps
Chromium	52-2	927	850	1320	1032	24.43	cps
Cobalt	59-2	127	160	153	147	12.03	cps
Copper	63-2	3370	3417	3887	3558	8.03	cps
Dysprosium	156-1	37	47	43	42	12.06	cps
Dysprosium	156-2	20	20	13	18	21.66	cps
Erbium	164-1	117	140	163	140	16.67	cps
Erbium	164-2	43	47	27	39	27.55	cps
Gadolinium	160-1	163	137	153	151	8.92	cps
Gadolinium	160-2	57	37	40	44	24.11	cps
Holmium	165-1	15005698	14699646	13999861	14568401	3.54	cps
Holmium	165-2	5142791	5048401	5099106	5096766	0.93	cps
Indium	115-1	12516876	11978388	11975095	12156787	2.57	cps
Indium	115-2	1223170	1214694	1208743	1215535	0.60	cps
Iron	54-2	680	697	1003	793	22.95	cps
Iron	56-2	11918	11822	14614	12785	12.40	cps
Iron	57-2	520	700	837	686	23.17	cps
Krypton	83-1	447	410	400	419	5.87	cps
Lead	206-1	19351	17585	14959	17298	12.78	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-06 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:52:50 DataFile Name : 024AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	16734	15139	12646	14840	13.88	cps
Lead	208-1	76405	69112	59618	68378	12.31	cps
Lithium	6-1	2988767	2875857	2905289	2923304	2.00	cps
Magnesium	24-2	10134583	10266654	10838241	10413159	3.59	cps
Manganese	55-2	773	633	917	774	18.29	cps
Molybdenum	94-1	2584	2514	2384	2494	4.07	cps
Molybdenum	95-1	4091	3827	3794	3904	4.16	cps
Molybdenum	96-1	4277	4017	3884	4060	4.93	cps
Molybdenum	97-1	2324	2314	2377	2338	1.46	cps
Molybdenum	98-1	6038	6221	5918	6059	2.52	cps
Neodymium	150-1	63	60	47	57	15.56	cps
Neodymium	150-2	10	17	7	11	45.82	cps
Nickel	60-2	1247	1250	1430	1309	8.01	cps
Phosphorus	31-2	83	83	63	77	15.06	cps
Potassium	39-2	8741049	8891175	9463380	9031868	4.22	cps
Rhodium	103-1	11382814	11012118	10954089	11116340	2.09	cps
Rhodium	103-2	4448863	4406104	4421506	4425491	0.49	cps
Scandium	45-1	7731582	7373991	7098672	7401415	4.29	cps
Scandium	45-2	157138	158786	155359	157095	1.09	cps
Selenium	82-1	63	33	77	58	38.41	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	37	13	27	26	45.82	cps
Silicon	28-1	351317	334491	326212	337340	3.79	cps
Silver	107-1	770	643	620	678	11.91	cps
Silver	109-1	617	643	467	576	16.55	cps
Sodium	23-2	62567024	62937742	66297159	63933975	3.21	cps
Strontium	86-1	84795	82350	80151	82432	2.82	cps
Strontium	88-1	740964	713050	696419	716811	3.14	cps
Sulfur	34-1	602028	659447	689690	650388	6.85	cps
Terbium	159-1	15578817	14574876	14607878	14920524	3.82	cps
Terbium	159-2	4898717	4953025	4896199	4915980	0.65	cps
Thallium	203-1	4788	3097	2727	3537	31.06	cps
Thallium	205-1	11355	7816	6228	8466	31.00	cps
Tin	118-1	5738	4734	4064	4845	17.39	cps
Titanium	47-1	353	377	413	381	7.94	cps
Uranium	238-1	257	250	253	253	1.31	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-06 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:52:50 DataFile Name : 024AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	47	33	63	48	31.46	cps
Ytterbium	172-1	93	107	77	92	16.30	cps
Ytterbium	172-2	33	20	43	32	36.33	cps
Ytterbium	176-1	1817	1767	1813	1799	1.55	cps
Ytterbium	176-2	380	390	377	382	1.82	cps
Yttrium	89-1	22339472	21354855	21015290	21569872	3.19	cps
Yttrium	89-2	1690547	1683898	1649845	1674763	1.30	cps
Zinc	66-2	3897	3937	4064	3966	2.19	cps
Zirconium	90-1	747	750	710	736	3.02	cps
Zirconium	91-1	163	177	110	150	23.52	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-02 Instrumnet Name : P8
Client Sample ID : PT-TM1-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:56:08 DataFile Name : 025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	339075	341797	339779	340217	0.42	cps
Antimony	121-1	12239354	12340751	12111265	12230456	0.94	cps
Arsenic	75-2	517317	514863	513262	515147	0.40	cps
Barium	135-1	6938888	6847622	6839662	6875391	0.80	cps
Barium	137-1	12026406	11852136	11838779	11905774	0.88	cps
Beryllium	9-1	2575941	2506174	2490003	2524039	1.81	cps
Bismuth	209-1	7374709	7293071	7496374	7388052	1.38	cps
Bismuth	209-2	3163421	3203948	3163323	3176897	0.74	cps
Bromine	81-1	22108	22318	21610	22012	1.65	cps
Cadmium	108-1	477431	483591	480595	480539	0.64	cps
Cadmium	106-1	654152	665290	660290	659911	0.85	cps
Cadmium	111-1	7493956	7572177	7652300	7572811	1.05	cps
Calcium	43-1	19784	19877	19610	19757	0.69	cps
Calcium	44-1	227166	225197	224654	225673	0.59	cps
Carbon	12-1	5083533	4941331	4872257	4965707	2.17	cps
Carbon	12-2	35757	35570	35169	35498	0.85	cps
Chlorine	35-1	2678123	2474475	2247800	2466800	8.73	cps
Chlorine	35-2	9193	8809	8216	8739	5.63	cps
Chromium	52-2	2007851	2019056	2010170	2012359	0.29	cps
Cobalt	59-2	10942474	10985389	11016675	10981513	0.34	cps
Copper	63-2	9160262	9149368	9140298	9149976	0.11	cps
Dysprosium	156-1	80	130	93	101	25.61	cps
Dysprosium	156-2	3	10	10	8	49.52	cps
Erbium	164-1	147	127	100	124	18.81	cps
Erbium	164-2	30	33	27	30	11.10	cps
Gadolinium	160-1	97	130	167	131	26.70	cps
Gadolinium	160-2	17	10	37	21	65.74	cps
Holmium	165-1	12158826	12338777	12200811	12232804	0.77	cps
Holmium	165-2	4471847	4468134	4455906	4465296	0.19	cps
Indium	115-1	10480535	10230884	10313930	10341783	1.23	cps
Indium	115-2	1044536	1050205	1053575	1049439	0.44	cps
Iron	54-2	1312928	1326298	1323213	1320813	0.53	cps
Iron	56-2	23846170	24257031	24130321	24077841	0.87	cps
Iron	57-2	584612	582709	585289	584203	0.23	cps
Krypton	83-1	447	440	413	433	4.07	cps
Lead	206-1	31942386	32052889	32666562	32220612	1.21	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-02 Instrumnet Name : P8
Client Sample ID : PT-TM1-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:56:08 DataFile Name : 025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	26932775	26882220	27481954	27098983	1.23	cps
Lead	208-1	125627029	124524613	127303611	125818418	1.11	cps
Lithium	6-1	2564063	2443338	2422012	2476471	3.09	cps
Magnesium	24-2	637	573	560	590	6.94	cps
Manganese	55-2	6308792	6435261	6441565	6395206	1.17	cps
Molybdenum	94-1	5884037	5808094	5776795	5822975	0.95	cps
Molybdenum	95-1	10394492	10283140	10118656	10265429	1.35	cps
Molybdenum	96-1	10883964	11008833	10868322	10920373	0.71	cps
Molybdenum	97-1	6349587	6372729	6304130	6342149	0.55	cps
Molybdenum	98-1	16955445	16709849	16328013	16664436	1.90	cps
Neodymium	150-1	447	510	453	470	7.40	cps
Neodymium	150-2	17	20	17	18	10.81	cps
Nickel	60-2	2547459	2590920	2560279	2566220	0.87	cps
Phosphorus	31-2	107	117	100	108	7.78	cps
Potassium	39-2	23826	23910	23272	23669	1.46	cps
Rhodium	103-1	9705804	9602903	9408118	9572275	1.58	cps
Rhodium	103-2	3953954	3941562	3924829	3940115	0.37	cps
Scandium	45-1	6045718	6014154	6100889	6053587	0.73	cps
Scandium	45-2	131424	131311	131801	131512	0.20	cps
Selenium	82-1	548541	548067	550720	549109	0.26	cps
Selenium	77-2	10621	10614	10394	10543	1.22	cps
Selenium	78-2	35595	36049	35348	35664	1.00	cps
Silicon	28-1	10025394	10019584	9993748	10012909	0.17	cps
Silver	107-1	44024534	45154443	44325773	44501583	1.31	cps
Silver	109-1	42137622	42407261	42340759	42295214	0.33	cps
Sodium	23-2	146550	147203	146412	146722	0.29	cps
Strontium	86-1	3778486	3829289	3873283	3827019	1.24	cps
Strontium	88-1	33270711	33094520	33722260	33362497	0.97	cps
Sulfur	34-1	835279	777158	737128	783188	6.30	cps
Terbium	159-1	12623678	12657404	12573524	12618202	0.33	cps
Terbium	159-2	4247827	4219177	4300329	4255778	0.97	cps
Thallium	203-1	8732437	8657733	8831125	8740432	1.00	cps
Thallium	205-1	20496045	20475969	20945488	20639167	1.29	cps
Tin	118-1	6822	6712	6472	6668	2.69	cps
Titanium	47-1	2000	2147	1990	2046	4.29	cps
Uranium	238-1	703	637	690	677	5.21	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-02 Instrumnet Name : P8
Client Sample ID : PT-TM1-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:56:08 DataFile Name : 025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	9770349	9675699	9797591	9747880	0.66	cps
Ytterbium	172-1	103	100	60	88	27.47	cps
Ytterbium	172-2	40	30	33	34	14.78	cps
Ytterbium	176-1	1763	1853	1870	1829	3.14	cps
Ytterbium	176-2	317	403	417	379	14.33	cps
Yttrium	89-1	17842661	17873022	18049942	17921875	0.62	cps
Yttrium	89-2	1329007	1337488	1343256	1336584	0.54	cps
Zinc	66-2	1664810	1679260	1669688	1671253	0.44	cps
Zirconium	90-1	32287	30634	30664	31195	3.03	cps
Zirconium	91-1	11155	11034	10884	11024	1.23	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-04 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:59:02 DataFile Name : 026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	12669	12923	12842	12811	1.01	cps
Antimony	121-1	1417	1390	1320	1376	3.63	cps
Arsenic	75-2	27	40	33	33	20.00	cps
Barium	135-1	2824	2424	2580	2609	7.73	cps
Barium	137-1	4354	4487	4107	4316	4.47	cps
Beryllium	9-1	149	161	146	152	5.37	cps
Bismuth	209-1	7442959	7488127	7375218	7435434	0.76	cps
Bismuth	209-2	3215341	3161884	3210492	3195906	0.93	cps
Bromine	81-1	23179	23076	22628	22961	1.28	cps
Cadmium	108-1	193	230	190	204	10.86	cps
Cadmium	106-1	7442	7432	7769	7548	2.54	cps
Cadmium	111-1	5321	5348	5529	5399	2.09	cps
Calcium	43-1	2367	2237	2257	2287	3.06	cps
Calcium	44-1	82143	82769	83537	82816	0.84	cps
Carbon	12-1	4712437	4599267	4595575	4635760	1.43	cps
Carbon	12-2	32746	32479	32155	32460	0.91	cps
Chlorine	35-1	30205470	33360518	34268338	32611442	6.54	cps
Chlorine	35-2	168431	169122	168246	168600	0.27	cps
Chromium	52-2	2064	2070	2164	2099	2.66	cps
Cobalt	59-2	1283	1343	1290	1306	2.52	cps
Copper	63-2	3490	3487	3981	3653	7.77	cps
Dysprosium	156-1	123	67	130	107	32.62	cps
Dysprosium	156-2	23	17	27	22	22.91	cps
Erbium	164-1	177	140	103	140	26.19	cps
Erbium	164-2	77	40	53	57	32.76	cps
Gadolinium	160-1	203	173	203	193	8.96	cps
Gadolinium	160-2	47	37	67	50	30.55	cps
Holmium	165-1	12404674	12140441	12294221	12279779	1.08	cps
Holmium	165-2	4410762	4420127	4412775	4414554	0.11	cps
Indium	115-1	9029327	8979269	9042576	9017057	0.37	cps
Indium	115-2	847882	852102	864104	854696	0.98	cps
Iron	54-2	1457	1560	1490	1502	3.51	cps
Iron	56-2	22241	21647	22081	21990	1.40	cps
Iron	57-2	513	537	517	522	2.42	cps
Krypton	83-1	360	400	427	396	8.48	cps
Lead	206-1	10508	12519	12059	11695	9.01	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-04 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:59:02 DataFile Name : 026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	9063	10518	10421	10001	8.13	cps
Lead	208-1	42017	49651	47695	46454	8.54	cps
Lithium	6-1	2363470	2376814	2354706	2364996	0.47	cps
Magnesium	24-2	940	937	947	941	0.54	cps
Manganese	55-2	4394	4434	4624	4484	2.74	cps
Molybdenum	94-1	51485	51284	50926	51232	0.55	cps
Molybdenum	95-1	757	710	817	761	7.03	cps
Molybdenum	96-1	9800	9530	9567	9632	1.52	cps
Molybdenum	97-1	503	473	457	478	4.95	cps
Molybdenum	98-1	1317	1193	1100	1203	9.03	cps
Neodymium	150-1	103	123	110	112	9.07	cps
Neodymium	150-2	47	20	13	27	66.16	cps
Nickel	60-2	2517	2477	2604	2532	2.56	cps
Phosphorus	31-2	113	110	73	99	22.45	cps
Potassium	39-2	24825	25085	24778	24896	0.66	cps
Rhodium	103-1	9741657	9752832	9805299	9766596	0.35	cps
Rhodium	103-2	4010435	3995855	3962040	3989444	0.62	cps
Scandium	45-1	6163778	6139484	6101422	6134895	0.51	cps
Scandium	45-2	133594	132944	133294	133277	0.24	cps
Selenium	82-1	127	37	7	57	110.20	cps
Selenium	77-2	3	3	0	2	86.60	cps
Selenium	78-2	23	60	33	39	48.75	cps
Silicon	28-1	44181794	44255066	44132741	44189867	0.14	cps
Silver	107-1	4801	3514	3017	3777	24.37	cps
Silver	109-1	4587	3484	2784	3618	25.13	cps
Sodium	23-2	316528	312650	306172	311783	1.68	cps
Strontium	86-1	1093	1213	1203	1170	5.69	cps
Strontium	88-1	4844	4941	4838	4874	1.19	cps
Sulfur	34-1	633414	622782	617648	624615	1.29	cps
Terbium	159-1	12820959	12460377	12415554	12565630	1.77	cps
Terbium	159-2	4255656	4257773	4123591	4212340	1.82	cps
Thallium	203-1	1757	1880	1697	1778	5.26	cps
Thallium	205-1	4281	4141	4261	4227	1.79	cps
Tin	118-1	58485331	59544729	59670329	59233463	1.10	cps
Titanium	47-1	1328990	1305206	1279681	1304625	1.89	cps
Uranium	238-1	403	420	457	427	6.40	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-04 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 13:59:02 DataFile Name : 026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	277	197	250	241	16.89	cps
Ytterbium	172-1	97	153	107	119	25.44	cps
Ytterbium	172-2	63	63	37	54	28.27	cps
Ytterbium	176-1	2127	2144	2164	2145	0.86	cps
Ytterbium	176-2	440	530	450	473	10.42	cps
Yttrium	89-1	17904600	17937856	18237849	18026768	1.02	cps
Yttrium	89-2	1333051	1345246	1335017	1337772	0.49	cps
Zinc	66-2	2210	2287	2210	2236	1.98	cps
Zirconium	90-1	139164	140955	139163	139760	0.74	cps
Zirconium	91-1	31095	30938	30848	30960	0.40	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-06 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:02:20 DataFile Name : 027AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	180	200	290	223	26.24	cps
Antimony	121-1	737	610	553	633	14.82	cps
Arsenic	75-2	40	30	20	30	33.33	cps
Barium	135-1	2547	2494	2287	2442	5.62	cps
Barium	137-1	4164	4084	3897	4048	3.38	cps
Beryllium	9-1	86	71	103	87	18.46	cps
Bismuth	209-1	8910427	8662406	8314453	8629095	3.47	cps
Bismuth	209-2	3685931	3603084	3566973	3618662	1.69	cps
Bromine	81-1	26923	27454	28813	27730	3.52	cps
Cadmium	108-1	63	77	60	67	13.23	cps
Cadmium	106-1	7919	7986	7656	7853	2.22	cps
Cadmium	111-1	5916	5886	5590	5797	3.11	cps
Calcium	43-1	8261869	8113903	7816335	8064036	2.81	cps
Calcium	44-1	134664968	131427271	129497958	131863399	1.98	cps
Carbon	12-1	4637723	4576306	4696835	4636955	1.30	cps
Carbon	12-2	35058	34250	34263	34524	1.34	cps
Chlorine	35-1	21644566	25231211	27065111	24646963	11.19	cps
Chlorine	35-2	139760	133627	130260	134549	3.58	cps
Chromium	52-2	787	970	1283	1013	24.79	cps
Cobalt	59-2	170	127	147	148	14.67	cps
Copper	63-2	3487	3457	4147	3697	10.55	cps
Dysprosium	156-1	60	43	53	52	16.07	cps
Dysprosium	156-2	23	10	13	16	44.60	cps
Erbium	164-1	127	100	123	117	12.46	cps
Erbium	164-2	27	40	63	43	42.82	cps
Gadolinium	160-1	203	173	137	171	19.51	cps
Gadolinium	160-2	20	20	53	31	61.85	cps
Holmium	165-1	15085370	14524414	14333371	14647718	2.67	cps
Holmium	165-2	5328394	5183798	5127645	5213279	1.99	cps
Indium	115-1	12625369	12128909	11981338	12245205	2.76	cps
Indium	115-2	1250530	1237006	1225491	1237676	1.01	cps
Iron	54-2	767	700	837	768	8.90	cps
Iron	56-2	11728	11838	13997	12521	10.22	cps
Iron	57-2	700	697	723	707	2.06	cps
Krypton	83-1	430	493	430	451	8.11	cps
Lead	206-1	14932	12987	11772	13230	12.05	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-06 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:02:20 DataFile Name : 027AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	12603	11021	9540	11055	13.85	cps
Lead	208-1	57917	50642	45512	51357	12.14	cps
Lithium	6-1	2983770	2907449	2811054	2900758	2.98	cps
Magnesium	24-2	10334212	10709561	11179117	10740963	3.94	cps
Manganese	55-2	673	687	917	759	18.03	cps
Molybdenum	94-1	2650	2384	2477	2504	5.41	cps
Molybdenum	95-1	4064	3741	3701	3835	5.20	cps
Molybdenum	96-1	4304	3977	3874	4052	5.54	cps
Molybdenum	97-1	2347	2294	2440	2360	3.15	cps
Molybdenum	98-1	6085	6045	5655	5928	4.01	cps
Neodymium	150-1	80	73	53	69	20.15	cps
Neodymium	150-2	7	10	13	10	33.30	cps
Nickel	60-2	1300	1327	1627	1418	12.79	cps
Phosphorus	31-2	67	80	77	74	9.32	cps
Potassium	39-2	8798454	9400370	9570265	9256363	4.38	cps
Rhodium	103-1	11617518	11252714	10999171	11289801	2.75	cps
Rhodium	103-2	4530601	4438554	4413350	4460835	1.38	cps
Scandium	45-1	7544850	7390370	7271075	7402098	1.85	cps
Scandium	45-2	161348	161269	156991	159869	1.56	cps
Selenium	82-1	53	-40	47	20	260.31	cps
Selenium	77-2	3	3	0	2	86.60	cps
Selenium	78-2	37	30	13	27	45.08	cps
Silicon	28-1	357754	339961	331170	342962	3.95	cps
Silver	107-1	827	733	883	814	9.30	cps
Silver	109-1	750	620	587	652	13.23	cps
Sodium	23-2	64092902	65626589	67096532	65605341	2.29	cps
Strontium	86-1	84272	82589	80272	82378	2.44	cps
Strontium	88-1	748956	714509	709887	724451	2.95	cps
Sulfur	34-1	607266	666417	689143	654275	6.46	cps
Terbium	159-1	15872182	15072667	14784361	15243070	3.70	cps
Terbium	159-2	5029614	4946510	4915342	4963822	1.19	cps
Thallium	203-1	3067	2100	1787	2318	28.79	cps
Thallium	205-1	7165	4958	4231	5451	28.04	cps
Tin	118-1	4374	3794	3307	3825	13.96	cps
Titanium	47-1	323	377	350	350	7.62	cps
Uranium	238-1	300	260	237	266	12.06	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-06 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WP Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:02:20 DataFile Name : 027AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	70	47	53	57	21.21	cps
Ytterbium	172-1	123	93	73	97	26.04	cps
Ytterbium	172-2	43	33	27	34	24.35	cps
Ytterbium	176-1	1964	1680	1917	1853	8.20	cps
Ytterbium	176-2	353	370	427	383	10.03	cps
Yttrium	89-1	22546491	21557384	21588814	21897563	2.57	cps
Yttrium	89-2	1757308	1708038	1662260	1709202	2.78	cps
Zinc	66-2	3881	3911	4304	4032	5.86	cps
Zirconium	90-1	770	697	640	702	9.28	cps
Zirconium	91-1	157	150	117	141	15.19	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-02DLX2 Instrumnet Name : P8
Client Sample ID : PT-TM1-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:05:40 DataFile Name : 028AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	162400	162783	162304	162495	0.16	cps
Antimony	121-1	5861794	5860604	5888770	5870389	0.27	cps
Arsenic	75-2	244896	243179	243021	243699	0.43	cps
Barium	135-1	3377837	3432730	3343328	3384632	1.33	cps
Barium	137-1	5800842	5895090	5647070	5781001	2.17	cps
Beryllium	9-1	1250892	1219382	1219829	1230034	1.47	cps
Bismuth	209-1	7386632	7299404	7473429	7386488	1.18	cps
Bismuth	209-2	3178106	3186425	3172765	3179099	0.22	cps
Bromine	81-1	21340	21647	21306	21431	0.88	cps
Cadmium	108-1	227818	226524	229725	228022	0.71	cps
Cadmium	106-1	314478	318456	320921	317952	1.02	cps
Cadmium	111-1	3634060	3630027	3655197	3639761	0.37	cps
Calcium	43-1	10734	10597	10964	10765	1.72	cps
Calcium	44-1	146089	142326	142262	143559	1.53	cps
Carbon	12-1	5180259	5080081	4819917	5026752	3.70	cps
Carbon	12-2	34758	34507	34110	34458	0.95	cps
Chlorine	35-1	2723331	2518263	2334308	2525301	7.71	cps
Chlorine	35-2	9270	9346	8623	9080	4.38	cps
Chromium	52-2	908221	898883	903903	903669	0.52	cps
Cobalt	59-2	5246662	5368865	5312306	5309277	1.15	cps
Copper	63-2	4378922	4408096	4441665	4409561	0.71	cps
Dysprosium	156-1	67	67	63	66	2.94	cps
Dysprosium	156-2	3	0	10	4	114.60	cps
Erbium	164-1	97	97	107	100	5.77	cps
Erbium	164-2	40	20	20	27	43.30	cps
Gadolinium	160-1	87	133	93	104	24.17	cps
Gadolinium	160-2	30	13	27	23	37.81	cps
Holmium	165-1	12341862	12013348	12123196	12159469	1.38	cps
Holmium	165-2	4411981	4376367	4377125	4388491	0.46	cps
Indium	115-1	10080906	9959467	10337885	10126086	1.91	cps
Indium	115-2	1035390	1033552	1036431	1035124	0.14	cps
Iron	54-2	633817	633218	635313	634116	0.17	cps
Iron	56-2	11593934	11466428	11578575	11546312	0.60	cps
Iron	57-2	278693	279590	280993	279759	0.41	cps
Krypton	83-1	453	377	390	407	10.07	cps
Lead	206-1	15652859	15339747	15772823	15588476	1.43	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-02DLX2 Instrumnet Name : P8
Client Sample ID : PT-TM1-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:05:40 DataFile Name : 028AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	13181800	12829881	13117143	13042941	1.44	cps
Lead	208-1	61293457	59588817	61433666	60771980	1.69	cps
Lithium	6-1	2480116	2400331	2471425	2450624	1.79	cps
Magnesium	24-2	813	790	813	806	1.67	cps
Manganese	55-2	3126780	3101770	3092907	3107152	0.57	cps
Molybdenum	94-1	2809671	2872561	2818390	2833541	1.20	cps
Molybdenum	95-1	4872498	5050625	4912183	4945102	1.89	cps
Molybdenum	96-1	5256021	5425385	5360015	5347140	1.60	cps
Molybdenum	97-1	3055406	3112077	3089893	3085792	0.93	cps
Molybdenum	98-1	7693795	8021531	7944917	7886748	2.17	cps
Neodymium	150-1	237	277	190	234	18.50	cps
Neodymium	150-2	7	13	3	8	65.47	cps
Nickel	60-2	1132058	1138319	1141438	1137271	0.42	cps
Phosphorus	31-2	100	137	117	118	15.59	cps
Potassium	39-2	23452	22828	22995	23092	1.40	cps
Rhodium	103-1	9376071	9574748	9506084	9485635	1.06	cps
Rhodium	103-2	3902058	3884923	3930710	3905897	0.59	cps
Scandium	45-1	6119906	5951251	6054869	6042009	1.41	cps
Scandium	45-2	127529	126525	128578	127544	0.81	cps
Selenium	82-1	265023	261201	266463	264229	1.03	cps
Selenium	77-2	4971	5001	4958	4976	0.45	cps
Selenium	78-2	16790	16917	16440	16716	1.48	cps
Silicon	28-1	5104811	5114636	5020368	5079938	1.02	cps
Silver	107-1	21543282	21371067	21654083	21522811	0.66	cps
Silver	109-1	20228527	20373561	20504901	20368996	0.68	cps
Sodium	23-2	111871	112248	112146	112088	0.17	cps
Strontium	86-1	1880525	1850779	1888328	1873211	1.06	cps
Strontium	88-1	15925880	15691919	16174009	15930603	1.51	cps
Sulfur	34-1	847958	820937	793494	820796	3.32	cps
Terbium	159-1	12486561	12416587	12580614	12494587	0.66	cps
Terbium	159-2	4214816	4242207	4236167	4231063	0.34	cps
Thallium	203-1	4267404	4154663	4284096	4235388	1.66	cps
Thallium	205-1	9931109	9869149	10074407	9958221	1.06	cps
Tin	118-1	7082	6528	6822	6811	4.07	cps
Titanium	47-1	1217	1317	1303	1279	4.25	cps
Uranium	238-1	483	577	557	539	9.12	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-02DLX2 Instrumnet Name : P8
Client Sample ID : PT-TM1-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:05:40 DataFile Name : 028AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	4672973	4605402	4607895	4628757	0.83	cps
Ytterbium	172-1	107	97	87	97	10.34	cps
Ytterbium	172-2	43	47	23	38	33.41	cps
Ytterbium	176-1	1727	1720	1667	1705	1.93	cps
Ytterbium	176-2	333	290	303	309	7.18	cps
Yttrium	89-1	17929978	17618932	17968842	17839251	1.08	cps
Yttrium	89-2	1317092	1305241	1315692	1312675	0.49	cps
Zinc	66-2	756183	751260	749275	752240	0.47	cps
Zirconium	90-1	15716	16413	15839	15989	2.33	cps
Zirconium	91-1	5842	5715	5251	5602	5.55	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-04DLX2 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:08:36 DataFile Name : 029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6848	6832	6395	6692	3.84	cps
Antimony	121-1	817	843	827	829	1.63	cps
Arsenic	75-2	10	20	30	20	50.00	cps
Barium	135-1	1627	1480	1423	1510	6.95	cps
Barium	137-1	2527	2494	2444	2488	1.69	cps
Beryllium	9-1	136	116	100	118	15.38	cps
Bismuth	209-1	7264869	7204202	7371113	7280061	1.16	cps
Bismuth	209-2	3158218	3165885	3230795	3184966	1.25	cps
Bromine	81-1	22071	21560	21780	21804	1.18	cps
Cadmium	108-1	140	113	153	136	15.02	cps
Cadmium	106-1	7192	6682	6955	6943	3.68	cps
Cadmium	111-1	5113	4785	4911	4936	3.36	cps
Calcium	43-1	2467	2354	2434	2418	2.41	cps
Calcium	44-1	73731	73249	74411	73797	0.79	cps
Carbon	12-1	4727139	4643826	4509999	4626988	2.37	cps
Carbon	12-2	33094	32583	32503	32726	0.98	cps
Chlorine	35-1	14998455	16295012	17032956	16108808	6.39	cps
Chlorine	35-2	81715	82359	82041	82038	0.39	cps
Chromium	52-2	1960	2087	2117	2055	4.05	cps
Cobalt	59-2	690	750	640	693	7.94	cps
Copper	63-2	4604	4407	4781	4597	4.06	cps
Dysprosium	156-1	70	50	43	54	25.49	cps
Dysprosium	156-2	7	7	47	20	115.45	cps
Erbium	164-1	113	137	107	119	13.25	cps
Erbium	164-2	43	53	13	37	56.78	cps
Gadolinium	160-1	183	127	173	161	18.77	cps
Gadolinium	160-2	13	20	37	23	51.52	cps
Holmium	165-1	12077537	12161526	12154051	12131038	0.38	cps
Holmium	165-2	4421992	4399069	4440464	4420508	0.47	cps
Indium	115-1	9606180	9634909	9814328	9685139	1.16	cps
Indium	115-2	945338	945817	948880	946678	0.20	cps
Iron	54-2	1223	1307	1247	1259	3.41	cps
Iron	56-2	17798	17291	18248	17779	2.70	cps
Iron	57-2	490	487	477	484	1.43	cps
Krypton	83-1	427	357	427	403	10.02	cps
Lead	206-1	6625	8363	9237	8075	16.46	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-04DLX2 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:08:36 DataFile Name : 029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5531	7245	7802	6860	17.26	cps
Lead	208-1	26171	33167	35629	31656	15.50	cps
Lithium	6-1	2386788	2448189	2420092	2418357	1.27	cps
Magnesium	24-2	843	757	737	779	7.28	cps
Manganese	55-2	4671	4397	4277	4449	4.53	cps
Molybdenum	94-1	24983	25180	25540	25234	1.12	cps
Molybdenum	95-1	763	583	647	664	13.74	cps
Molybdenum	96-1	4701	4704	4831	4745	1.56	cps
Molybdenum	97-1	433	357	300	363	18.42	cps
Molybdenum	98-1	1020	897	907	941	7.28	cps
Neodymium	150-1	53	50	47	50	6.66	cps
Neodymium	150-2	23	13	7	14	58.06	cps
Nickel	60-2	1740	1643	1953	1779	8.92	cps
Phosphorus	31-2	157	83	103	114	33.13	cps
Potassium	39-2	23002	22835	22955	22930	0.38	cps
Rhodium	103-1	9627268	9381563	9630240	9546357	1.50	cps
Rhodium	103-2	3963965	3995663	3927909	3962513	0.86	cps
Scandium	45-1	6049676	6029284	6063093	6047351	0.28	cps
Scandium	45-2	131165	131730	132312	131736	0.44	cps
Selenium	82-1	-10	113	10	38	175.22	cps
Selenium	77-2	3	0	10	4	114.60	cps
Selenium	78-2	17	27	30	24	28.38	cps
Silicon	28-1	21320271	21403273	21041604	21255050	0.89	cps
Silver	107-1	3731	2667	2350	2916	24.80	cps
Silver	109-1	3394	2270	2054	2573	27.97	cps
Sodium	23-2	188818	190621	186080	188506	1.21	cps
Strontium	86-1	920	933	1043	966	7.01	cps
Strontium	88-1	3230	2820	3004	3018	6.81	cps
Sulfur	34-1	687130	673472	669589	676730	1.36	cps
Terbium	159-1	12541611	12381682	12432870	12452055	0.66	cps
Terbium	159-2	4240455	4207973	4295639	4248022	1.04	cps
Thallium	203-1	1460	1360	1293	1371	6.12	cps
Thallium	205-1	3204	3324	3027	3185	4.69	cps
Tin	118-1	28806202	28905196	28751790	28821063	0.27	cps
Titanium	47-1	617874	618859	619573	618769	0.14	cps
Uranium	238-1	320	353	393	356	10.33	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-04DLX2 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:08:36 DataFile Name : 029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	137	133	163	144	11.38	cps
Ytterbium	172-1	133	137	117	129	8.31	cps
Ytterbium	172-2	43	37	50	43	15.38	cps
Ytterbium	176-1	1970	1927	1927	1941	1.29	cps
Ytterbium	176-2	420	407	343	390	10.50	cps
Yttrium	89-1	17846986	17708617	17865653	17807086	0.48	cps
Yttrium	89-2	1316155	1325520	1334219	1325298	0.68	cps
Zinc	66-2	2494	2650	2717	2620	4.38	cps
Zirconium	90-1	67110	67603	67479	67398	0.38	cps
Zirconium	91-1	14628	15352	15272	15084	2.63	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-06DLX2 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:11:57 DataFile Name : 030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	397	363	300	353	13.90	cps
Antimony	121-1	367	297	250	304	19.29	cps
Arsenic	75-2	3	20	7	10	88.20	cps
Barium	135-1	1163	1260	1137	1187	5.47	cps
Barium	137-1	2057	2030	1930	2006	3.33	cps
Beryllium	9-1	65	78	64	69	11.40	cps
Bismuth	209-1	7699111	7286016	7462504	7482543	2.77	cps
Bismuth	209-2	3325173	3264068	3272524	3287255	1.01	cps
Bromine	81-1	24852	26208	26161	25740	2.99	cps
Cadmium	108-1	20	3	23	16	68.90	cps
Cadmium	106-1	7085	6995	7049	7043	0.64	cps
Cadmium	111-1	5079	5021	5031	5044	0.62	cps
Calcium	43-1	3426169	3432972	3456843	3438661	0.47	cps
Calcium	44-1	56568197	55575031	54948104	55697111	1.47	cps
Carbon	12-1	4560885	4495190	4365434	4473837	2.22	cps
Carbon	12-2	32750	33191	32910	32950	0.68	cps
Chlorine	35-1	11630199	12752153	13250007	12544120	6.61	cps
Chlorine	35-2	67516	67211	67332	67353	0.23	cps
Chromium	52-2	1303	1443	1567	1438	9.16	cps
Cobalt	59-2	140	120	137	132	8.10	cps
Copper	63-2	2980	2880	3070	2977	3.19	cps
Dysprosium	156-1	33	27	40	33	20.00	cps
Dysprosium	156-2	10	10	7	9	21.63	cps
Erbium	164-1	100	90	127	106	17.96	cps
Erbium	164-2	37	37	30	34	11.18	cps
Gadolinium	160-1	103	137	107	116	15.89	cps
Gadolinium	160-2	37	17	60	38	57.40	cps
Holmium	165-1	12490260	12594249	12360724	12481745	0.94	cps
Holmium	165-2	4636540	4652149	4598525	4629071	0.60	cps
Indium	115-1	10680626	10756566	10404682	10613958	1.74	cps
Indium	115-2	1114019	1107285	1106383	1109229	0.38	cps
Iron	54-2	763	833	950	849	11.11	cps
Iron	56-2	12209	11575	14502	12762	12.07	cps
Iron	57-2	497	470	473	480	3.03	cps
Krypton	83-1	453	470	417	447	6.11	cps
Lead	206-1	5638	6855	7502	6665	14.20	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-06DLX2 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:11:57 DataFile Name : 030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4761	5771	6762	5765	17.36	cps
Lead	208-1	21967	27268	30070	26435	15.57	cps
Lithium	6-1	2526837	2556624	2545408	2542956	0.59	cps
Magnesium	24-2	4470094	4516803	4450124	4479007	0.76	cps
Manganese	55-2	2720	2570	2710	2667	3.15	cps
Molybdenum	94-1	1470	1427	1420	1439	1.89	cps
Molybdenum	95-1	1953	1937	1777	1889	5.16	cps
Molybdenum	96-1	2260	2030	1970	2087	7.34	cps
Molybdenum	97-1	1173	1080	1267	1173	7.96	cps
Molybdenum	98-1	3100	2864	2984	2983	3.97	cps
Neodymium	150-1	37	43	60	47	25.75	cps
Neodymium	150-2	0	7	7	4	86.60	cps
Nickel	60-2	1023	933	1080	1012	7.31	cps
Phosphorus	31-2	77	100	93	90	13.35	cps
Potassium	39-2	3850336	3835653	3865984	3850658	0.39	cps
Rhodium	103-1	9986389	9993341	9805178	9928302	1.07	cps
Rhodium	103-2	4199711	4067722	4075476	4114303	1.80	cps
Scandium	45-1	6439238	6494815	6388671	6440908	0.82	cps
Scandium	45-2	141307	141478	142081	141622	0.29	cps
Selenium	82-1	-50	-3	-80	-44	-86.94	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	37	30	33	33	10.01	cps
Silicon	28-1	440004	425546	411286	425612	3.37	cps
Silver	107-1	707	657	623	662	6.33	cps
Silver	109-1	620	610	617	616	0.83	cps
Sodium	23-2	27380459	27606837	27723255	27570183	0.63	cps
Strontium	86-1	36330	36123	36862	36439	1.05	cps
Strontium	88-1	311838	310819	306422	309693	0.93	cps
Sulfur	34-1	676285	721923	751061	716423	5.26	cps
Terbium	159-1	13366149	13298242	13013291	13225894	1.42	cps
Terbium	159-2	4589751	4425149	4423579	4479493	2.13	cps
Thallium	203-1	1127	907	957	997	11.57	cps
Thallium	205-1	2520	2334	2437	2430	3.85	cps
Tin	118-1	5441	4848	4848	5045	6.79	cps
Titanium	47-1	387	463	337	396	16.13	cps
Uranium	238-1	267	207	173	216	21.94	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1503-06DLX2 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:11:57 DataFile Name : 030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	57	53	50	53	6.25	cps
Ytterbium	172-1	67	87	83	79	13.58	cps
Ytterbium	172-2	33	50	23	36	37.90	cps
Ytterbium	176-1	1860	1720	1690	1757	5.17	cps
Ytterbium	176-2	310	383	400	364	13.14	cps
Yttrium	89-1	18932637	18649962	18724286	18768962	0.78	cps
Yttrium	89-2	1502891	1509850	1503718	1505486	0.25	cps
Zinc	66-2	3097	2910	2990	2999	3.12	cps
Zirconium	90-1	940	917	920	926	1.36	cps
Zirconium	91-1	193	183	163	180	8.49	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV02 Instrumnet Name : P8
Client Sample ID : CCV02 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:20:16 DataFile Name : 032CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6341329	6487779	6435954	6421687	1.16	cps
Antimony	121-1	19264888	19037926	19240418	19181077	0.65	cps
Arsenic	75-2	408025	410707	407614	408782	0.41	cps
Barium	135-1	23262427	22949209	22923860	23045165	0.82	cps
Barium	137-1	39876983	39600789	39503358	39660376	0.49	cps
Beryllium	9-1	3348182	3270916	3364772	3327956	1.51	cps
Bismuth	209-1	6184931	6198788	6179869	6187863	0.16	cps
Bismuth	209-2	2758431	2762571	2749147	2756716	0.25	cps
Bromine	81-1	22899	23790	23710	23466	2.10	cps
Cadmium	108-1	365479	370042	365381	366968	0.73	cps
Cadmium	106-1	517336	521772	518926	519345	0.43	cps
Cadmium	111-1	4717137	4653788	4669697	4680207	0.70	cps
Calcium	43-1	27596722	27913565	27367852	27626046	0.99	cps
Calcium	44-1	454052513	453832433	449982873	452622607	0.51	cps
Carbon	12-1	5400257	5527675	5495935	5474622	1.21	cps
Carbon	12-2	47058	47333	47393	47261	0.38	cps
Chlorine	35-1	749513	744441	727609	740521	1.55	cps
Chlorine	35-2	3654	3550	3467	3557	2.63	cps
Chromium	52-2	4250085	4303887	4350587	4301520	1.17	cps
Cobalt	59-2	7581879	7676678	7731371	7663309	0.99	cps
Copper	63-2	64888114	65343961	65794164	65342080	0.69	cps
Dysprosium	156-1	823	943	1007	924	10.07	cps
Dysprosium	156-2	297	223	237	252	15.49	cps
Erbium	164-1	900	923	873	899	2.78	cps
Erbium	164-2	250	330	360	313	18.15	cps
Gadolinium	160-1	687	647	653	662	3.24	cps
Gadolinium	160-2	270	293	300	288	5.47	cps
Holmium	165-1	11330001	11366127	11267630	11321253	0.44	cps
Holmium	165-2	4257447	4329376	4289495	4292106	0.84	cps
Indium	115-1	8724395	8678234	8726763	8709797	0.31	cps
Indium	115-2	916270	922534	917775	918860	0.36	cps
Iron	54-2	41826968	41618893	42455036	41966965	1.04	cps
Iron	56-2	769136655	761123322	774322495	768194157	0.87	cps
Iron	57-2	19142502	19291374	19455421	19296432	0.81	cps
Krypton	83-1	543	413	480	479	13.58	cps
Lead	206-1	65393802	65371006	65044086	65269631	0.30	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV02 Instrumnet Name : P8
Client Sample ID : CCV02 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:20:16 DataFile Name : 032CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	56108288	56503681	55913403	56175124	0.54	cps
Lead	208-1	258062361	257664854	258797493	258174903	0.22	cps
Lithium	6-1	2200906	2218267	2264373	2227849	1.47	cps
Magnesium	24-2	111702305	110957078	110975015	111211466	0.38	cps
Manganese	55-2	19724703	19932393	20218446	19958514	1.24	cps
Molybdenum	94-1	66292342	67251529	68000009	67181293	1.27	cps
Molybdenum	95-1	97576899	96202782	97211579	96997086	0.73	cps
Molybdenum	96-1	105917972	104819638	105274358	105337323	0.52	cps
Molybdenum	97-1	59085956	60072497	59445682	59534712	0.84	cps
Molybdenum	98-1	153761511	157657801	155485088	155634800	1.25	cps
Neodymium	150-1	1627	1583	1757	1656	5.45	cps
Neodymium	150-2	177	140	157	158	11.64	cps
Nickel	60-2	2125761	2116654	2129474	2123963	0.31	cps
Phosphorus	31-2	64864	66552	65664	65693	1.28	cps
Potassium	39-2	41382236	41251377	41226104	41286572	0.20	cps
Rhodium	103-1	8088596	8086945	8100257	8091933	0.09	cps
Rhodium	103-2	3470841	3366752	3382452	3406682	1.65	cps
Scandium	45-1	5856039	5764098	5716632	5778923	1.23	cps
Scandium	45-2	132484	131448	131925	131952	0.39	cps
Selenium	82-1	273247	272953	269671	271957	0.73	cps
Selenium	77-2	5591	5584	5428	5534	1.67	cps
Selenium	78-2	18799	18629	19383	18937	2.09	cps
Silicon	28-1	53020119	53440469	53233609	53231399	0.39	cps
Silver	107-1	23269361	23167662	23008315	23148446	0.57	cps
Silver	109-1	22137891	21697346	21502037	21779091	1.50	cps
Sodium	23-2	222233083	226701443	223359997	224098174	1.04	cps
Strontium	86-1	6092222	6185508	6053144	6110291	1.11	cps
Strontium	88-1	53548643	53944343	52644124	53379036	1.25	cps
Sulfur	34-1	1997732	2003968	1988403	1996701	0.39	cps
Terbium	159-1	11438359	11664362	11600100	11567607	1.01	cps
Terbium	159-2	4012658	4139942	4122405	4091668	1.69	cps
Thallium	203-1	16474189	16461934	16420477	16452200	0.17	cps
Thallium	205-1	38810574	38808507	38593544	38737541	0.32	cps
Tin	118-1	15109987	15167026	15005882	15094298	0.54	cps
Titanium	47-1	25582727	25835319	25639460	25685835	0.52	cps
Uranium	238-1	49963668	50146456	50302586	50137570	0.34	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV02 Instrumnet Name : P8
Client Sample ID : CCV02 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:20:16 DataFile Name : 032CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3290692	3300604	3341037	3310777	0.81	cps
Ytterbium	172-1	1280	1350	1377	1336	3.74	cps
Ytterbium	172-2	587	530	640	586	9.39	cps
Ytterbium	176-1	82328	82978	81573	82293	0.85	cps
Ytterbium	176-2	30181	29877	29356	29805	1.40	cps
Yttrium	89-1	16517409	16785117	16716089	16672872	0.83	cps
Yttrium	89-2	1304908	1298995	1302505	1302136	0.23	cps
Zinc	66-2	7771288	7842490	7849131	7820970	0.55	cps
Zirconium	90-1	33364015	33818760	33612549	33598441	0.68	cps
Zirconium	91-1	7542277	7571635	7535378	7549763	0.26	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB02 Instrumnet Name : P8
Client Sample ID : CCB02 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:28:25 DataFile Name : 033CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	410	400	423	411	2.85	cps
Antimony	121-1	1067	1080	997	1048	4.27	cps
Arsenic	75-2	3	27	7	12	103.26	cps
Barium	135-1	293	317	303	304	3.84	cps
Barium	137-1	527	417	460	468	11.85	cps
Beryllium	9-1	88	104	103	98	9.13	cps
Bismuth	209-1	7503195	7406391	7378521	7429369	0.88	cps
Bismuth	209-2	3275914	3265132	3304318	3281788	0.62	cps
Bromine	81-1	21183	21386	21103	21224	0.69	cps
Cadmium	108-1	17	27	23	22	22.91	cps
Cadmium	106-1	7172	6835	6718	6908	3.41	cps
Cadmium	111-1	5109	4876	4790	4925	3.35	cps
Calcium	43-1	1933	2047	1910	1963	3.72	cps
Calcium	44-1	55871	56259	54513	55548	1.65	cps
Carbon	12-1	5011503	4811641	4642918	4822021	3.83	cps
Carbon	12-2	32767	33261	32145	32724	1.71	cps
Chlorine	35-1	413583	411406	406118	410369	0.94	cps
Chlorine	35-2	1813	1903	1900	1872	2.73	cps
Chromium	52-2	1747	1810	2127	1895	10.75	cps
Cobalt	59-2	157	150	147	151	3.37	cps
Copper	63-2	3160	3094	3784	3346	11.38	cps
Dysprosium	156-1	13	13	17	14	13.35	cps
Dysprosium	156-2	3	3	7	4	43.40	cps
Erbium	164-1	87	67	80	78	13.09	cps
Erbium	164-2	20	37	40	32	33.25	cps
Gadolinium	160-1	117	103	117	112	6.86	cps
Gadolinium	160-2	20	23	30	24	20.83	cps
Holmium	165-1	12434574	12530151	12357364	12440696	0.70	cps
Holmium	165-2	4528795	4560991	4617477	4569088	0.98	cps
Indium	115-1	10548898	10297226	10342750	10396291	1.29	cps
Indium	115-2	1068306	1080176	1069527	1072670	0.61	cps
Iron	54-2	1253	1073	1257	1195	8.78	cps
Iron	56-2	15705	15715	16623	16015	3.29	cps
Iron	57-2	357	463	347	389	16.63	cps
Krypton	83-1	423	433	417	424	1.98	cps
Lead	206-1	2900	2887	2767	2851	2.58	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB02 Instrumnet Name : P8
Client Sample ID : CCB02 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:28:25 DataFile Name : 033CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2477	2350	2517	2448	3.55	cps
Lead	208-1	11285	10962	10999	11082	1.60	cps
Lithium	6-1	2522903	2558680	2519658	2533747	0.85	cps
Magnesium	24-2	880	873	1017	923	8.76	cps
Manganese	55-2	4441	4431	4294	4388	1.87	cps
Molybdenum	94-1	1390	1517	1493	1467	4.60	cps
Molybdenum	95-1	1193	937	930	1020	14.72	cps
Molybdenum	96-1	1250	1147	1110	1169	6.21	cps
Molybdenum	97-1	693	583	557	611	11.86	cps
Molybdenum	98-1	1847	1390	1420	1552	16.46	cps
Neodymium	150-1	17	20	13	17	20.01	cps
Neodymium	150-2	7	0	3	3	100.05	cps
Nickel	60-2	857	937	1080	958	11.82	cps
Phosphorus	31-2	103	103	90	99	7.78	cps
Potassium	39-2	23546	23706	23666	23639	0.35	cps
Rhodium	103-1	9921930	9695707	9690632	9769423	1.35	cps
Rhodium	103-2	4051654	4079711	4024052	4051806	0.69	cps
Scandium	45-1	6065086	6176901	6011319	6084435	1.39	cps
Scandium	45-2	129948	129514	131626	130363	0.86	cps
Selenium	82-1	0	20	-23	-1	-1948.75	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	40	37	43	40	8.32	cps
Silicon	28-1	512847	524532	513714	517031	1.26	cps
Silver	107-1	850	717	747	771	9.07	cps
Silver	109-1	677	697	607	660	7.16	cps
Sodium	23-2	78651	78272	78335	78419	0.26	cps
Strontium	86-1	700	720	673	698	3.36	cps
Strontium	88-1	1123	967	1003	1031	7.95	cps
Sulfur	34-1	697168	698829	701066	699021	0.28	cps
Terbium	159-1	12629263	12744767	12652672	12675567	0.48	cps
Terbium	159-2	4377520	4370075	4271697	4339764	1.36	cps
Thallium	203-1	783	790	817	797	2.21	cps
Thallium	205-1	1900	1720	2047	1889	8.66	cps
Tin	118-1	10171	10174	10551	10298	2.12	cps
Titanium	47-1	487	463	497	482	3.55	cps
Uranium	238-1	437	457	437	443	2.60	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB02 Instrumnet Name : P8
Client Sample ID : CCB02 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:28:25 DataFile Name : 033CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	27	37	70	44	51.04	cps
Ytterbium	172-1	43	53	90	62	39.49	cps
Ytterbium	172-2	40	33	20	31	32.73	cps
Ytterbium	176-1	1657	1683	1590	1643	2.93	cps
Ytterbium	176-2	350	383	380	371	4.95	cps
Yttrium	89-1	18490344	18049696	18067639	18202560	1.37	cps
Yttrium	89-2	1341728	1357138	1350393	1349753	0.57	cps
Zinc	66-2	2200	2197	2417	2271	5.55	cps
Zirconium	90-1	2374	2464	2774	2537	8.27	cps
Zirconium	91-1	463	470	693	542	24.14	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-02DLX2 Instrumnet Name : P8
Client Sample ID : PT-TM1-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:31:47 DataFile Name : 034AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	172590	175110	170247	172649	1.41	cps
Antimony	121-1	6057250	6093110	6151397	6100585	0.78	cps
Arsenic	75-2	259103	257899	256726	257909	0.46	cps
Barium	135-1	3496639	3445332	3481939	3474637	0.76	cps
Barium	137-1	5921272	5934594	5922107	5925991	0.13	cps
Beryllium	9-1	1265984	1290944	1242542	1266490	1.91	cps
Bismuth	209-1	7458692	7435942	7499052	7464562	0.43	cps
Bismuth	209-2	3187982	3236117	3221393	3215164	0.77	cps
Bromine	81-1	20689	20775	21510	20991	2.15	cps
Cadmium	108-1	237521	240117	235138	237592	1.05	cps
Cadmium	106-1	325340	328923	330634	328299	0.82	cps
Cadmium	111-1	3787254	3882259	3773787	3814433	1.55	cps
Calcium	43-1	10831	11305	11338	11158	2.54	cps
Calcium	44-1	141427	142107	139472	141002	0.97	cps
Carbon	12-1	4920228	4907219	4844654	4890701	0.83	cps
Carbon	12-2	34033	34881	33725	34213	1.75	cps
Chlorine	35-1	382383	383419	380629	382144	0.37	cps
Chlorine	35-2	1957	2000	1813	1923	5.08	cps
Chromium	52-2	956934	954345	951793	954357	0.27	cps
Cobalt	59-2	5530117	5576467	5590624	5565736	0.57	cps
Copper	63-2	4689980	4646106	4608662	4648249	0.88	cps
Dysprosium	156-1	50	70	50	57	20.38	cps
Dysprosium	156-2	10	10	10	10	0.00	cps
Erbium	164-1	113	133	110	119	10.62	cps
Erbium	164-2	27	23	20	23	14.29	cps
Gadolinium	160-1	110	120	110	113	5.09	cps
Gadolinium	160-2	37	37	20	31	30.93	cps
Holmium	165-1	12448514	12258389	12418559	12375154	0.83	cps
Holmium	165-2	4535981	4511358	4458160	4501833	0.88	cps
Indium	115-1	10474382	10303770	10350757	10376303	0.85	cps
Indium	115-2	1068321	1077162	1074771	1073418	0.43	cps
Iron	54-2	663096	665409	661866	663457	0.27	cps
Iron	56-2	12208806	12364639	12138959	12237468	0.94	cps
Iron	57-2	298588	296854	295357	296933	0.54	cps
Krypton	83-1	440	387	397	408	6.95	cps
Lead	206-1	16123923	16359681	15970849	16151484	1.21	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-02DLX2 Instrumnet Name : P8
Client Sample ID : PT-TM1-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:31:47 DataFile Name : 034AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	13552160	13493007	13502266	13515811	0.24	cps
Lead	208-1	62829648	63298207	63218722	63115526	0.40	cps
Lithium	6-1	2492573	2495411	2520681	2502888	0.62	cps
Magnesium	24-2	710	597	697	668	9.28	cps
Manganese	55-2	3310377	3387333	3290550	3329420	1.54	cps
Molybdenum	94-1	2948877	3004262	2931472	2961537	1.28	cps
Molybdenum	95-1	5164725	5213196	5180953	5186291	0.48	cps
Molybdenum	96-1	5589255	5533886	5578118	5567086	0.53	cps
Molybdenum	97-1	3221518	3260571	3221761	3234617	0.69	cps
Molybdenum	98-1	8222774	8343626	8261371	8275924	0.75	cps
Neodymium	150-1	227	237	247	237	4.23	cps
Neodymium	150-2	3	7	7	6	34.70	cps
Nickel	60-2	1186303	1197959	1188463	1190908	0.52	cps
Phosphorus	31-2	87	113	120	107	16.53	cps
Potassium	39-2	23773	24591	23670	24011	2.10	cps
Rhodium	103-1	9937537	9708359	9709923	9785273	1.35	cps
Rhodium	103-2	4088533	4088375	4005359	4060756	1.18	cps
Scandium	45-1	6243131	6164733	6176382	6194748	0.68	cps
Scandium	45-2	132403	133339	132453	132732	0.40	cps
Selenium	82-1	270063	272482	276186	272910	1.13	cps
Selenium	77-2	5431	5348	5274	5351	1.47	cps
Selenium	78-2	18135	17398	17678	17737	2.10	cps
Silicon	28-1	5209452	5338083	5203631	5250389	1.45	cps
Silver	107-1	22221997	22633289	22488984	22448090	0.93	cps
Silver	109-1	21239902	21356221	21426544	21340889	0.44	cps
Sodium	23-2	110087	111736	112150	111325	0.98	cps
Strontium	86-1	1960549	1942521	1973745	1958938	0.80	cps
Strontium	88-1	16770408	16899237	16964519	16878054	0.59	cps
Sulfur	34-1	678712	662638	656959	666103	1.69	cps
Terbium	159-1	12883897	12888993	12740778	12837889	0.66	cps
Terbium	159-2	4385878	4454036	4405313	4415076	0.80	cps
Thallium	203-1	4410109	4432450	4398733	4413764	0.39	cps
Thallium	205-1	10347987	10276143	10227411	10283847	0.59	cps
Tin	118-1	5981	5845	6141	5989	2.48	cps
Titanium	47-1	1360	1267	1130	1252	9.24	cps
Uranium	238-1	510	483	460	484	5.16	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-02DLX2 Instrumnet Name : P8
Client Sample ID : PT-TM1-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:31:47 DataFile Name : 034AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	4962768	4952575	4886265	4933870	0.84	cps
Ytterbium	172-1	103	100	87	97	9.12	cps
Ytterbium	172-2	27	23	37	29	24.03	cps
Ytterbium	176-1	1653	1683	1513	1617	5.61	cps
Ytterbium	176-2	343	380	390	371	6.62	cps
Yttrium	89-1	18489867	18065945	18040288	18198700	1.39	cps
Yttrium	89-2	1370873	1469960	1357302	1399378	4.39	cps
Zinc	66-2	800874	797781	790208	796288	0.69	cps
Zirconium	90-1	18980	18452	18319	18584	1.88	cps
Zirconium	91-1	5818	6005	5898	5907	1.59	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-04DLX2 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:34:45 DataFile Name : 035AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7379	6955	6518	6951	6.19	cps
Antimony	121-1	1130	977	957	1021	9.29	cps
Arsenic	75-2	13	13	27	18	43.33	cps
Barium	135-1	1413	1443	1453	1437	1.45	cps
Barium	137-1	2354	2347	2230	2310	3.00	cps
Beryllium	9-1	138	116	132	129	8.73	cps
Bismuth	209-1	7619544	7520981	7590677	7577068	0.67	cps
Bismuth	209-2	3265507	3316066	3281256	3287610	0.79	cps
Bromine	81-1	21219	21927	22548	21898	3.04	cps
Cadmium	108-1	127	140	123	130	6.78	cps
Cadmium	106-1	6938	6958	7025	6974	0.65	cps
Cadmium	111-1	5038	5003	4975	5005	0.64	cps
Calcium	43-1	2507	2374	2394	2425	2.97	cps
Calcium	44-1	71453	71530	70498	71160	0.81	cps
Carbon	12-1	4719433	4597202	4530334	4615656	2.08	cps
Carbon	12-2	32603	32653	32650	32635	0.09	cps
Chlorine	35-1	14620880	15839421	16579059	15679787	6.31	cps
Chlorine	35-2	82024	81350	79487	80954	1.62	cps
Chromium	52-2	2224	2107	2180	2170	2.72	cps
Cobalt	59-2	767	647	653	689	9.79	cps
Copper	63-2	3360	3497	3510	3456	2.40	cps
Dysprosium	156-1	73	30	50	51	42.43	cps
Dysprosium	156-2	17	7	13	12	41.65	cps
Erbium	164-1	147	127	163	146	12.61	cps
Erbium	164-2	40	43	47	43	7.70	cps
Gadolinium	160-1	190	170	163	174	7.95	cps
Gadolinium	160-2	47	37	37	40	14.43	cps
Holmium	165-1	12033624	12488846	12460471	12327647	2.07	cps
Holmium	165-2	4542520	4588625	4535223	4555456	0.64	cps
Indium	115-1	9955804	10018450	9892173	9955476	0.63	cps
Indium	115-2	973354	986874	979563	979930	0.69	cps
Iron	54-2	1330	1320	1363	1338	1.70	cps
Iron	56-2	17334	18025	18135	17831	2.43	cps
Iron	57-2	403	407	457	422	7.08	cps
Krypton	83-1	343	377	443	388	13.13	cps
Lead	206-1	5525	6822	7349	6565	14.30	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-04DLX2 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:34:45 DataFile Name : 035AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4658	5875	6555	5696	16.88	cps
Lead	208-1	21714	26591	29026	25777	14.44	cps
Lithium	6-1	2543426	2514014	2494462	2517300	0.98	cps
Magnesium	24-2	740	743	713	732	2.25	cps
Manganese	55-2	4551	4477	4451	4493	1.15	cps
Molybdenum	94-1	26054	26535	27180	26590	2.12	cps
Molybdenum	95-1	730	660	723	704	5.48	cps
Molybdenum	96-1	5051	5371	5114	5179	3.27	cps
Molybdenum	97-1	443	377	357	392	11.57	cps
Molybdenum	98-1	1170	1080	1010	1087	7.38	cps
Neodymium	150-1	40	53	87	60	40.07	cps
Neodymium	150-2	13	23	17	18	28.64	cps
Nickel	60-2	1760	1737	1710	1736	1.44	cps
Phosphorus	31-2	107	123	127	119	9.01	cps
Potassium	39-2	24584	24628	24100	24437	1.20	cps
Rhodium	103-1	9855890	9740858	9865552	9820767	0.71	cps
Rhodium	103-2	4148165	4146992	4064449	4119869	1.17	cps
Scandium	45-1	6283986	6334216	6296968	6305056	0.41	cps
Scandium	45-2	133493	135623	135558	134891	0.90	cps
Selenium	82-1	153	47	13	71	102.85	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	33	27	30	30	11.10	cps
Silicon	28-1	22275670	22208331	22422946	22302315	0.49	cps
Silver	107-1	4001	3074	2387	3154	25.68	cps
Silver	109-1	3654	2484	2347	2828	25.40	cps
Sodium	23-2	195717	193835	190361	193304	1.41	cps
Strontium	86-1	1050	903	893	949	9.24	cps
Strontium	88-1	3134	3234	3030	3133	3.25	cps
Sulfur	34-1	636193	625819	616816	626276	1.55	cps
Terbium	159-1	13052456	12897551	12947034	12965681	0.61	cps
Terbium	159-2	4399035	4388834	4338797	4375555	0.74	cps
Thallium	203-1	1430	1567	1697	1565	8.52	cps
Thallium	205-1	3504	3437	3834	3592	5.92	cps
Tin	118-1	28816515	29609737	29854825	29427026	1.84	cps
Titanium	47-1	629646	634916	639771	634778	0.80	cps
Uranium	238-1	347	330	337	338	2.48	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-04DLX2 Instrumnet Name : P8
Client Sample ID : PT-SNTI-WPDL Dilution Factor : 2
Date & Time Acquired : 2025-04-01 14:34:45 DataFile Name : 035AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	150	127	120	132	11.91	cps
Ytterbium	172-1	93	150	97	113	28.06	cps
Ytterbium	172-2	67	33	67	56	34.65	cps
Ytterbium	176-1	1853	1867	1840	1853	0.72	cps
Ytterbium	176-2	363	433	383	393	9.17	cps
Yttrium	89-1	18389409	18359459	18444161	18397676	0.23	cps
Yttrium	89-2	1469772	1475588	1441829	1462396	1.23	cps
Zinc	66-2	2514	2497	2487	2499	0.54	cps
Zirconium	90-1	71623	70460	70410	70831	0.97	cps
Zirconium	91-1	15632	16076	15629	15779	1.63	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-06DLX5 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WPDL Dilution Factor : 5
Date & Time Acquired : 2025-04-01 14:38:29 DataFile Name : 036AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	747	567	577	630	16.06	cps
Antimony	121-1	453	417	333	401	15.33	cps
Arsenic	75-2	3	13	17	11	62.48	cps
Barium	135-1	613	533	620	589	8.19	cps
Barium	137-1	953	1053	1067	1024	6.05	cps
Beryllium	9-1	74	57	85	72	19.29	cps
Bismuth	209-1	7520238	7449155	7589661	7519685	0.93	cps
Bismuth	209-2	3266295	3292768	3336192	3298418	1.07	cps
Bromine	81-1	23496	23947	23907	23784	1.05	cps
Cadmium	108-1	27	3	23	18	71.00	cps
Cadmium	106-1	6595	6815	6918	6776	2.44	cps
Cadmium	111-1	4704	4845	4917	4822	2.24	cps
Calcium	43-1	1352600	1349240	1402663	1368168	2.19	cps
Calcium	44-1	22304860	22196681	21946250	22149264	0.83	cps
Carbon	12-1	4751488	4595616	4549859	4632321	2.28	cps
Carbon	12-2	32696	31751	32496	32314	1.54	cps
Chlorine	35-1	5025156	5357367	5442481	5275001	4.18	cps
Chlorine	35-2	26491	26194	27042	26576	1.62	cps
Chromium	52-2	1620	1710	1863	1731	7.11	cps
Cobalt	59-2	80	137	123	113	26.14	cps
Copper	63-2	2880	2754	2944	2859	3.38	cps
Dysprosium	156-1	20	37	13	23	51.52	cps
Dysprosium	156-2	3	0	3	2	86.60	cps
Erbium	164-1	87	93	90	90	3.70	cps
Erbium	164-2	33	27	23	28	18.33	cps
Gadolinium	160-1	107	93	120	107	12.50	cps
Gadolinium	160-2	23	20	40	28	38.58	cps
Holmium	165-1	12693646	12798149	12609236	12700344	0.75	cps
Holmium	165-2	4621800	4652980	4627119	4633966	0.36	cps
Indium	115-1	10688261	10819886	10459609	10655919	1.71	cps
Indium	115-2	1106654	1105167	1106063	1105961	0.07	cps
Iron	54-2	1020	903	997	973	6.34	cps
Iron	56-2	12059	13725	12446	12743	6.85	cps
Iron	57-2	443	337	420	400	14.02	cps
Krypton	83-1	383	403	453	413	8.72	cps
Lead	206-1	3474	3927	3937	3779	7.01	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : Q1504-06DLX5 Instrumnet Name : P8
Client Sample ID : PT-MIN2-WPDL Dilution Factor : 5
Date & Time Acquired : 2025-04-01 14:38:29 DataFile Name : 036AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3294	3471	3517	3427	3.44	cps
Lead	208-1	14390	15057	16224	15224	6.10	cps
Lithium	6-1	2535309	2567548	2474784	2525880	1.86	cps
Magnesium	24-2	1814985	1810957	1795269	1807070	0.58	cps
Manganese	55-2	3704	3711	3701	3705	0.14	cps
Molybdenum	94-1	1107	1003	1003	1038	5.75	cps
Molybdenum	95-1	1070	973	973	1006	5.55	cps
Molybdenum	96-1	1150	1250	1043	1148	9.01	cps
Molybdenum	97-1	580	577	600	586	2.15	cps
Molybdenum	98-1	1580	1533	1453	1522	4.21	cps
Neodymium	150-1	17	20	20	19	10.18	cps
Neodymium	150-2	10	10	7	9	21.63	cps
Nickel	60-2	1030	983	1010	1008	2.32	cps
Phosphorus	31-2	130	113	130	124	7.73	cps
Potassium	39-2	1534545	1546050	1539683	1540093	0.37	cps
Rhodium	103-1	9806846	10026639	9944036	9925840	1.12	cps
Rhodium	103-2	4107908	4127669	3995243	4076940	1.75	cps
Scandium	45-1	6578967	6334132	6310483	6407861	2.32	cps
Scandium	45-2	138604	138991	138883	138826	0.14	cps
Selenium	82-1	33	90	70	64	44.59	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	37	20	37	31	30.93	cps
Silicon	28-1	468906	470494	457761	465720	1.49	cps
Silver	107-1	620	657	580	619	6.20	cps
Silver	109-1	613	500	550	554	10.24	cps
Sodium	23-2	10770437	10808494	10768567	10782499	0.21	cps
Strontium	86-1	14514	14981	14551	14682	1.77	cps
Strontium	88-1	124274	121654	120175	122034	1.70	cps
Sulfur	34-1	633197	658282	684855	658778	3.92	cps
Terbium	159-1	12988340	13134397	12971767	13031501	0.69	cps
Terbium	159-2	4473763	4395513	4475825	4448367	1.03	cps
Thallium	203-1	1327	1263	1280	1290	2.55	cps
Thallium	205-1	3164	3267	2997	3143	4.34	cps
Tin	118-1	6138	6031	5878	6016	2.17	cps
Titanium	47-1	437	420	497	451	8.94	cps
Uranium	238-1	203	203	233	213	8.12	cps

LB Number :

LB135261

Operator :

Jaswal

Lab Sample ID :

Q1504-06DLX5

Instrumnet Name :

P8

Client Sample ID :

PT-MIN2-WPDL

Dilution Factor :

5

Date & Time Acquired :

2025-04-01 14:38:29

DataFile Name :

036AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	57	30	57	48	32.23	cps
Ytterbium	172-1	80	83	80	81	2.37	cps
Ytterbium	172-2	27	20	43	30	40.05	cps
Ytterbium	176-1	1600	1667	1670	1646	2.40	cps
Ytterbium	176-2	383	267	360	337	18.34	cps
Yttrium	89-1	18707675	18581576	18582316	18623855	0.39	cps
Yttrium	89-2	1507513	1513730	1490962	1504068	0.78	cps
Zinc	66-2	2597	2680	2704	2660	2.11	cps
Zirconium	90-1	1010	983	1037	1010	2.64	cps
Zirconium	91-1	217	193	203	204	5.72	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167397BL Instrumnet Name : P8
Client Sample ID : PB167397BL Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:42:27 DataFile Name : 037CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	283	230	203	239	17.05	cps
Antimony	121-1	320	293	310	308	4.38	cps
Arsenic	75-2	17	7	10	11	45.82	cps
Barium	135-1	200	167	143	170	16.75	cps
Barium	137-1	327	283	263	291	11.12	cps
Beryllium	9-1	62	54	76	64	16.82	cps
Bismuth	209-1	7635767	7474719	7573712	7561399	1.07	cps
Bismuth	209-2	3337532	3296532	3280566	3304877	0.89	cps
Bromine	81-1	22041	21994	22031	22022	0.11	cps
Cadmium	108-1	7	7	27	13	86.58	cps
Cadmium	106-1	6792	6902	6925	6873	1.04	cps
Cadmium	111-1	4810	4900	4872	4861	0.95	cps
Calcium	43-1	1950	1780	1950	1893	5.18	cps
Calcium	44-1	54670	55255	56279	55402	1.47	cps
Carbon	12-1	4796849	4701081	4487500	4661810	3.40	cps
Carbon	12-2	32890	31861	32609	32454	1.64	cps
Chlorine	35-1	739035	703355	669391	703927	4.95	cps
Chlorine	35-2	2857	2907	2760	2841	2.62	cps
Chromium	52-2	1813	1740	2417	1990	18.67	cps
Cobalt	59-2	93	117	127	112	15.25	cps
Copper	63-2	2637	2890	3167	2898	9.15	cps
Dysprosium	156-1	13	7	23	14	58.06	cps
Dysprosium	156-2	3	3	0	2	86.60	cps
Erbium	164-1	77	43	97	72	37.31	cps
Erbium	164-2	20	17	20	19	10.18	cps
Gadolinium	160-1	120	123	90	111	16.52	cps
Gadolinium	160-2	33	30	20	28	24.98	cps
Holmium	165-1	12360981	12388420	12285019	12344807	0.43	cps
Holmium	165-2	4536036	4518063	4513150	4522416	0.27	cps
Indium	115-1	10850938	10533723	10489990	10624884	1.85	cps
Indium	115-2	1080751	1087439	1075713	1081301	0.54	cps
Iron	54-2	807	1097	990	964	15.21	cps
Iron	56-2	12109	11898	12739	12249	3.57	cps
Iron	57-2	233	310	313	286	15.85	cps
Krypton	83-1	390	397	383	390	1.71	cps
Lead	206-1	2140	2164	2160	2155	0.59	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167397BL Instrumnet Name : P8
Client Sample ID : PB167397BL Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:42:27 DataFile Name : 037CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1840	1797	1823	1820	1.20	cps
Lead	208-1	8284	8081	8194	8187	1.25	cps
Lithium	6-1	2491707	2488421	2517927	2499351	0.65	cps
Magnesium	24-2	360	320	330	337	6.18	cps
Manganese	55-2	4211	4321	4247	4260	1.32	cps
Molybdenum	94-1	737	777	677	730	6.90	cps
Molybdenum	95-1	393	280	313	329	17.71	cps
Molybdenum	96-1	490	493	487	490	0.68	cps
Molybdenum	97-1	193	207	177	192	7.82	cps
Molybdenum	98-1	473	457	403	444	8.23	cps
Neodymium	150-1	10	3	7	7	50.03	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	787	980	983	917	12.28	cps
Phosphorus	31-2	143	157	107	136	19.10	cps
Potassium	39-2	22274	22231	22524	22343	0.71	cps
Rhodium	103-1	9991898	9927109	9867169	9928725	0.63	cps
Rhodium	103-2	4078486	4079676	4077681	4078615	0.02	cps
Scandium	45-1	6216858	6335212	6237180	6263083	1.01	cps
Scandium	45-2	135263	135125	133826	134738	0.59	cps
Selenium	82-1	50	-23	-3	8	487.49	cps
Selenium	77-2	7	0	0	2	173.21	cps
Selenium	78-2	43	30	30	34	22.34	cps
Silicon	28-1	480702	476346	475561	477537	0.58	cps
Silver	107-1	517	573	530	540	5.49	cps
Silver	109-1	390	433	430	418	5.77	cps
Sodium	23-2	73159	73189	72753	73034	0.33	cps
Strontium	86-1	697	670	680	682	1.97	cps
Strontium	88-1	657	790	757	734	9.45	cps
Sulfur	34-1	748509	751288	752478	750758	0.27	cps
Terbium	159-1	13011241	12751059	12730533	12830944	1.22	cps
Terbium	159-2	4430404	4454474	4398214	4427697	0.64	cps
Thallium	203-1	977	887	847	903	7.37	cps
Thallium	205-1	2207	2187	2247	2214	1.38	cps
Tin	118-1	6479	5981	5915	6125	5.03	cps
Titanium	47-1	383	373	430	396	7.65	cps
Uranium	238-1	160	193	163	172	10.66	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167397BL Instrumnet Name : P8
Client Sample ID : PB167397BL Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:42:27 DataFile Name : 037CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	27	30	43	33	26.45	cps
Ytterbium	172-1	83	73	73	77	7.53	cps
Ytterbium	172-2	20	17	20	19	10.18	cps
Ytterbium	176-1	1747	1737	1613	1699	4.37	cps
Ytterbium	176-2	297	360	333	330	9.64	cps
Yttrium	89-1	18404918	18664468	18318736	18462708	0.97	cps
Yttrium	89-2	1370151	1484418	1445148	1433239	4.05	cps
Zinc	66-2	1933	2104	2254	2097	7.64	cps
Zirconium	90-1	1440	1307	1383	1377	4.86	cps
Zirconium	91-1	320	290	267	292	9.15	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167399BL Instrumnet Name : P8
Client Sample ID : PB167399BL Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:45:49 DataFile Name : 038CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	200	233	297	243	20.18	cps
Antimony	121-1	243	263	257	254	4.00	cps
Arsenic	75-2	7	13	13	11	34.61	cps
Barium	135-1	200	187	163	183	10.12	cps
Barium	137-1	303	253	280	279	8.97	cps
Beryllium	9-1	49	55	66	57	15.65	cps
Bismuth	209-1	7542773	7562474	7666530	7590593	0.88	cps
Bismuth	209-2	3275067	3307433	3329608	3304036	0.83	cps
Bromine	81-1	22318	22011	21433	21921	2.05	cps
Cadmium	108-1	27	23	17	22	22.91	cps
Cadmium	106-1	7135	7035	7522	7231	3.56	cps
Cadmium	111-1	5029	4952	5317	5099	3.78	cps
Calcium	43-1	1840	1817	1693	1783	4.42	cps
Calcium	44-1	55336	55316	55824	55492	0.52	cps
Carbon	12-1	4820066	4773598	4611706	4735123	2.31	cps
Carbon	12-2	33124	32733	32326	32728	1.22	cps
Chlorine	35-1	494636	479206	472146	481996	2.39	cps
Chlorine	35-2	2180	1940	2154	2091	6.29	cps
Chromium	52-2	1813	1997	1990	1933	5.38	cps
Cobalt	59-2	133	143	133	137	4.22	cps
Copper	63-2	2744	2700	3157	2867	8.79	cps
Dysprosium	156-1	7	10	13	10	33.30	cps
Dysprosium	156-2	0	0	0	0	0.00	cps
Erbium	164-1	90	77	97	88	11.60	cps
Erbium	164-2	30	23	37	30	22.23	cps
Gadolinium	160-1	133	87	133	118	22.88	cps
Gadolinium	160-2	20	20	30	23	24.74	cps
Holmium	165-1	12434023	12476651	12254991	12388555	0.95	cps
Holmium	165-2	4459582	4618881	4587830	4555431	1.85	cps
Indium	115-1	10593955	10533302	10605232	10577496	0.37	cps
Indium	115-2	1084613	1088375	1095633	1089540	0.51	cps
Iron	54-2	927	853	1013	931	8.60	cps
Iron	56-2	11798	12362	12976	12379	4.76	cps
Iron	57-2	323	270	297	297	8.99	cps
Krypton	83-1	457	357	420	411	12.31	cps
Lead	206-1	1697	1803	1737	1746	3.09	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167399BL Instrumnet Name : P8
Client Sample ID : PB167399BL Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:45:49 DataFile Name : 038CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1617	1547	1647	1603	3.20	cps
Lead	208-1	7001	7104	7151	7085	1.08	cps
Lithium	6-1	2558700	2539858	2509997	2536185	0.97	cps
Magnesium	24-2	317	333	323	324	2.59	cps
Manganese	55-2	4461	4294	4224	4326	2.81	cps
Molybdenum	94-1	757	780	717	751	4.26	cps
Molybdenum	95-1	267	290	327	294	10.27	cps
Molybdenum	96-1	423	463	413	433	6.11	cps
Molybdenum	97-1	177	167	143	162	10.54	cps
Molybdenum	98-1	440	430	403	424	4.47	cps
Neodymium	150-1	7	10	17	11	45.82	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	853	990	963	936	7.74	cps
Phosphorus	31-2	120	137	93	117	18.74	cps
Potassium	39-2	21970	22170	22354	22165	0.87	cps
Rhodium	103-1	9849685	9825980	10013883	9896516	1.03	cps
Rhodium	103-2	4070767	4090178	4173176	4111374	1.32	cps
Scandium	45-1	6220843	6305571	6214851	6247088	0.81	cps
Scandium	45-2	135946	134293	136067	135435	0.73	cps
Selenium	82-1	30	40	30	33	17.32	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	33	33	30	32	5.97	cps
Silicon	28-1	474130	473926	468124	472060	0.72	cps
Silver	107-1	393	380	437	403	7.35	cps
Silver	109-1	317	353	350	340	5.96	cps
Sodium	23-2	72335	70797	71367	71499	1.09	cps
Strontium	86-1	727	667	773	722	7.40	cps
Strontium	88-1	707	637	717	687	6.35	cps
Sulfur	34-1	754860	754961	753785	754535	0.09	cps
Terbium	159-1	12922646	12726344	12999999	12882997	1.10	cps
Terbium	159-2	4428981	4377465	4402283	4402910	0.59	cps
Thallium	203-1	703	650	653	669	4.47	cps
Thallium	205-1	1507	1573	1473	1518	3.36	cps
Tin	118-1	5768	6181	5865	5938	3.64	cps
Titanium	47-1	367	403	373	381	5.12	cps
Uranium	238-1	180	123	173	159	19.49	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167399BL Instrumnet Name : P8
Client Sample ID : PB167399BL Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:45:49 DataFile Name : 038CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	30	13	20	21	39.75	cps
Ytterbium	172-1	63	77	50	63	21.06	cps
Ytterbium	172-2	37	30	30	32	11.95	cps
Ytterbium	176-1	1643	1640	1840	1708	6.71	cps
Ytterbium	176-2	307	363	350	340	8.71	cps
Yttrium	89-1	18608565	18792245	18359294	18586702	1.17	cps
Yttrium	89-2	1463637	1379473	1516121	1453077	4.74	cps
Zinc	66-2	2027	2174	2020	2074	4.18	cps
Zirconium	90-1	1243	1303	1427	1325	7.06	cps
Zirconium	91-1	283	307	293	294	3.98	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167397BS Instrumnet Name : P8
Client Sample ID : PB167397BS Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:49:13 DataFile Name : 039LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1313047	1346956	1325656	1328553	1.29	cps
Antimony	121-1	21415607	21023613	21180205	21206475	0.93	cps
Arsenic	75-2	430409	430406	426104	428973	0.58	cps
Barium	135-1	25510119	24947501	25342502	25266707	1.14	cps
Barium	137-1	43271853	43559926	43483161	43438313	0.34	cps
Beryllium	9-1	3500898	3587380	3499157	3529145	1.43	cps
Bismuth	209-1	7010886	7035864	7066608	7037786	0.40	cps
Bismuth	209-2	2974172	3076849	3023313	3024778	1.70	cps
Bromine	81-1	21270	21346	21650	21422	0.94	cps
Cadmium	108-1	415509	413907	415014	414810	0.20	cps
Cadmium	106-1	586690	583507	583655	584617	0.31	cps
Cadmium	111-1	5373997	5438969	5362089	5391685	0.77	cps
Calcium	43-1	6108803	6001778	6129099	6079893	1.13	cps
Calcium	44-1	98084272	98632859	98925622	98547584	0.43	cps
Carbon	12-1	5416388	5407071	5361628	5395029	0.54	cps
Carbon	12-2	40512	40135	40228	40292	0.49	cps
Chlorine	35-1	439452	444595	443254	442434	0.60	cps
Chlorine	35-2	2090	2090	2013	2065	2.14	cps
Chromium	52-2	4538224	4507656	4587193	4544358	0.88	cps
Cobalt	59-2	8371672	8367724	8330921	8356772	0.27	cps
Copper	63-2	69696349	70267374	69778107	69913943	0.44	cps
Dysprosium	156-1	490	457	443	463	5.19	cps
Dysprosium	156-2	110	53	100	88	34.46	cps
Erbium	164-1	323	370	347	347	6.73	cps
Erbium	164-2	110	103	130	114	12.13	cps
Gadolinium	160-1	347	353	293	331	9.93	cps
Gadolinium	160-2	127	123	110	120	7.35	cps
Holmium	165-1	12405225	12213189	12338391	12318935	0.79	cps
Holmium	165-2	4391015	4446245	4407289	4414850	0.64	cps
Indium	115-1	9823554	9540450	9698076	9687360	1.46	cps
Indium	115-2	969355	965501	959445	964767	0.52	cps
Iron	54-2	9255487	9375817	9164617	9265307	1.14	cps
Iron	56-2	168873921	170572224	169331314	169592486	0.52	cps
Iron	57-2	4267391	4251122	4294748	4271087	0.52	cps
Krypton	83-1	410	457	443	437	5.51	cps
Lead	206-1	73573607	73544089	74231069	73782922	0.53	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167397BS Instrumnet Name : P8
Client Sample ID : PB167397BS Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:49:13 DataFile Name : 039LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	63446132	64064991	63077364	63529496	0.79	cps
Lead	208-1	290894771	292821984	290773894	291496883	0.39	cps
Lithium	6-1	2386788	2368092	2433426	2396102	1.40	cps
Magnesium	24-2	24272751	24664618	24158854	24365408	1.09	cps
Manganese	55-2	20605879	21165503	21044547	20938643	1.41	cps
Molybdenum	94-1	72885271	72006776	72979366	72623804	0.74	cps
Molybdenum	95-1	105451828	106178342	105807998	105812723	0.34	cps
Molybdenum	96-1	115615488	117000688	115250675	115955617	0.80	cps
Molybdenum	97-1	65435214	65090557	65443301	65323024	0.31	cps
Molybdenum	98-1	169112137	166738611	171686017	169178922	1.46	cps
Neodymium	150-1	1383	1453	1417	1418	2.47	cps
Neodymium	150-2	110	77	90	92	18.19	cps
Nickel	60-2	2391279	2337299	2377853	2368810	1.19	cps
Phosphorus	31-2	68320	67751	66997	67689	0.98	cps
Potassium	39-2	8743773	8643660	8504096	8630510	1.39	cps
Rhodium	103-1	9259544	8991924	9099258	9116909	1.48	cps
Rhodium	103-2	3838750	3763593	3769754	3790699	1.10	cps
Scandium	45-1	6079500	6180508	6169013	6143007	0.90	cps
Scandium	45-2	136571	136498	135289	136120	0.53	cps
Selenium	82-1	300312	301201	305143	302219	0.85	cps
Selenium	77-2	5921	5921	5825	5889	0.95	cps
Selenium	78-2	20001	19854	20011	19955	0.44	cps
Silicon	28-1	56775941	57307527	57480702	57188057	0.64	cps
Silver	107-1	26788471	26924935	26887428	26866945	0.26	cps
Silver	109-1	25734289	25669884	25606900	25670358	0.25	cps
Sodium	23-2	49553729	50301953	49006731	49620804	1.31	cps
Strontium	86-1	6774201	6709547	6656652	6713467	0.88	cps
Strontium	88-1	58016469	58148276	57535394	57900046	0.56	cps
Sulfur	34-1	2176607	2183164	2153863	2171211	0.71	cps
Terbium	159-1	12620414	12640106	12566470	12608997	0.30	cps
Terbium	159-2	4214925	4285474	4324508	4274969	1.30	cps
Thallium	203-1	18222279	18791164	18624202	18545882	1.58	cps
Thallium	205-1	43191646	43967429	43567084	43575387	0.89	cps
Tin	118-1	16924594	16443967	16783150	16717237	1.48	cps
Titanium	47-1	27274019	27607900	27737574	27539831	0.87	cps
Uranium	238-1	54257283	54460429	54524409	54414040	0.26	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167397BS Instrumnet Name : P8
Client Sample ID : PB167397BS Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:49:13 DataFile Name : 039LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3500646	3435508	3432971	3456375	1.11	cps
Ytterbium	172-1	370	400	400	390	4.44	cps
Ytterbium	172-2	187	160	180	176	7.91	cps
Ytterbium	176-1	86823	88216	87934	87657	0.84	cps
Ytterbium	176-2	30338	30585	30121	30348	0.77	cps
Yttrium	89-1	18204791	17821740	17919945	17982159	1.11	cps
Yttrium	89-2	1330245	1335965	1332199	1332803	0.22	cps
Zinc	66-2	8152466	8163108	8067843	8127806	0.64	cps
Zirconium	90-1	36340344	35373740	35991902	35901995	1.36	cps
Zirconium	91-1	8156626	8117832	8068633	8114364	0.54	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167399BS Instrumnet Name : P8
Client Sample ID : PB167399BS Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:51:57 DataFile Name : 040LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1354340	1305103	1321110	1326851	1.89	cps
Antimony	121-1	21351261	21481518	21173328	21335369	0.73	cps
Arsenic	75-2	429407	433391	427153	429984	0.73	cps
Barium	135-1	25355893	25469281	24769990	25198388	1.49	cps
Barium	137-1	43308674	43917523	43685916	43637371	0.70	cps
Beryllium	9-1	3562760	3622651	3536902	3574104	1.23	cps
Bismuth	209-1	7006743	7134213	6962064	7034340	1.27	cps
Bismuth	209-2	3056665	3106613	3054950	3072742	0.96	cps
Bromine	81-1	21363	21573	21680	21539	0.75	cps
Cadmium	108-1	410692	411367	409793	410617	0.19	cps
Cadmium	106-1	577083	587054	584704	582947	0.89	cps
Cadmium	111-1	5392880	5474070	5310978	5392643	1.51	cps
Calcium	43-1	6055221	6175991	6199416	6143542	1.26	cps
Calcium	44-1	99171562	99753785	100194229	99706525	0.51	cps
Carbon	12-1	5428265	5416363	5430107	5424912	0.14	cps
Carbon	12-2	40228	39837	39981	40015	0.49	cps
Chlorine	35-1	401261	402863	402459	402194	0.21	cps
Chlorine	35-2	1823	1897	1907	1876	2.43	cps
Chromium	52-2	4439277	4553951	4524176	4505801	1.32	cps
Cobalt	59-2	8305632	8283497	8430742	8339957	0.95	cps
Copper	63-2	70176254	69383541	70802867	70120887	1.01	cps
Dysprosium	156-1	463	497	480	480	3.47	cps
Dysprosium	156-2	77	63	80	73	12.03	cps
Erbium	164-1	357	373	357	362	2.66	cps
Erbium	164-2	137	117	110	121	11.46	cps
Gadolinium	160-1	253	423	320	332	25.78	cps
Gadolinium	160-2	130	77	120	109	26.03	cps
Holmium	165-1	12376409	12306471	12467046	12383308	0.65	cps
Holmium	165-2	4463553	4534669	4504450	4500891	0.79	cps
Indium	115-1	9815126	9758637	9874915	9816226	0.59	cps
Indium	115-2	971671	980815	963214	971900	0.91	cps
Iron	54-2	9229465	9299638	9246232	9258445	0.40	cps
Iron	56-2	168405904	168843637	167544521	168264687	0.39	cps
Iron	57-2	4221109	4258379	4267793	4249094	0.58	cps
Krypton	83-1	377	430	430	412	7.47	cps
Lead	206-1	73452654	73944832	73673694	73690393	0.33	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167399BS Instrumnet Name : P8
Client Sample ID : PB167399BS Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:51:57 DataFile Name : 040LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	63185772	64253319	62739001	63392697	1.23	cps
Lead	208-1	290224797	293692046	289869476	291262106	0.73	cps
Lithium	6-1	2426613	2420280	2406132	2417675	0.43	cps
Magnesium	24-2	24694425	24141585	24048768	24294926	1.44	cps
Manganese	55-2	20887729	20896371	20851076	20878392	0.12	cps
Molybdenum	94-1	71900854	72223177	73088357	72404129	0.85	cps
Molybdenum	95-1	104340165	105644665	104074962	104686597	0.80	cps
Molybdenum	96-1	114521905	116546442	114075515	115047954	1.14	cps
Molybdenum	97-1	65139054	64868444	65883689	65297062	0.81	cps
Molybdenum	98-1	168836694	167887978	171363884	169362852	1.06	cps
Neodymium	150-1	1453	1517	1453	1475	2.48	cps
Neodymium	150-2	87	97	87	90	6.41	cps
Nickel	60-2	2362715	2369704	2362524	2364981	0.17	cps
Phosphorus	31-2	68715	67459	66374	67516	1.73	cps
Potassium	39-2	8743168	8745041	8719307	8735838	0.16	cps
Rhodium	103-1	9089230	9099032	9325863	9171375	1.46	cps
Rhodium	103-2	3829211	3863149	3743272	3811878	1.62	cps
Scandium	45-1	6189827	6213054	6265488	6222790	0.62	cps
Scandium	45-2	135612	136669	135192	135824	0.56	cps
Selenium	82-1	304746	306836	302578	304720	0.70	cps
Selenium	77-2	5765	5798	5828	5797	0.55	cps
Selenium	78-2	19794	19524	19948	19755	1.09	cps
Silicon	28-1	56824447	56918276	56274079	56672267	0.61	cps
Silver	107-1	26762426	27065693	26859262	26895794	0.58	cps
Silver	109-1	25601091	25476815	25357638	25478515	0.48	cps
Sodium	23-2	50410758	49131621	49523518	49688632	1.32	cps
Strontium	86-1	6716157	6681331	6900353	6765947	1.74	cps
Strontium	88-1	58083579	59186387	59235304	58835090	1.11	cps
Sulfur	34-1	2135092	2105956	2119774	2120274	0.69	cps
Terbium	159-1	12704060	12494521	12799980	12666187	1.23	cps
Terbium	159-2	4251623	4339654	4305529	4298936	1.03	cps
Thallium	203-1	18718707	18394557	18346572	18486612	1.09	cps
Thallium	205-1	43511643	43332043	43727496	43523727	0.45	cps
Tin	118-1	16679560	16821466	16878416	16793147	0.61	cps
Titanium	47-1	27021054	27557215	27924205	27500825	1.65	cps
Uranium	238-1	54648739	55698864	55417381	55254995	0.98	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PB167399BS Instrumnet Name : P8
Client Sample ID : PB167399BS Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:51:57 DataFile Name : 040LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3424721	3430463	3411130	3422105	0.29	cps
Ytterbium	172-1	360	417	353	377	9.24	cps
Ytterbium	172-2	180	183	150	171	10.73	cps
Ytterbium	176-1	87950	87826	88309	88029	0.28	cps
Ytterbium	176-2	30656	30950	30331	30646	1.01	cps
Yttrium	89-1	18089283	18272931	18695981	18352732	1.70	cps
Yttrium	89-2	1331675	1472448	1322118	1375414	6.12	cps
Zinc	66-2	8232672	8187342	8221978	8213997	0.29	cps
Zirconium	90-1	35824349	36351568	36770436	36315451	1.31	cps
Zirconium	91-1	8011194	8134329	8111693	8085739	0.81	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV03 Instrumnet Name : P8
Client Sample ID : CCV03 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:54:42 DataFile Name : 041CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6633960	6529637	6594442	6586013	0.80	cps
Antimony	121-1	19442057	19698589	19652938	19597861	0.70	cps
Arsenic	75-2	415227	412627	412006	413287	0.41	cps
Barium	135-1	23245505	23686560	23600368	23510811	0.99	cps
Barium	137-1	40462813	40756287	40203489	40474196	0.68	cps
Beryllium	9-1	3316091	3321163	3282737	3306664	0.63	cps
Bismuth	209-1	6365465	6269012	6309059	6314512	0.77	cps
Bismuth	209-2	2831777	2814727	2778635	2808380	0.97	cps
Bromine	81-1	22461	22435	23249	22715	2.04	cps
Cadmium	108-1	368119	374299	372413	371610	0.85	cps
Cadmium	106-1	524425	533493	530765	529561	0.88	cps
Cadmium	111-1	4790766	4802002	4799958	4797575	0.12	cps
Calcium	43-1	28133930	28208049	27833964	28058648	0.71	cps
Calcium	44-1	461111033	461481900	457645313	460079415	0.46	cps
Carbon	12-1	5355252	5413183	5430933	5399789	0.73	cps
Carbon	12-2	46724	47129	46958	46937	0.43	cps
Chlorine	35-1	371667	376800	377738	375402	0.87	cps
Chlorine	35-2	1960	2017	1933	1970	2.16	cps
Chromium	52-2	4399167	4398747	4361045	4386320	0.50	cps
Cobalt	59-2	7841119	7878665	7973513	7897765	0.86	cps
Copper	63-2	66696877	66842187	67094869	66877978	0.30	cps
Dysprosium	156-1	957	993	947	966	2.54	cps
Dysprosium	156-2	257	263	250	257	2.60	cps
Erbium	164-1	1050	910	973	978	7.17	cps
Erbium	164-2	380	340	260	327	18.70	cps
Gadolinium	160-1	763	897	730	797	11.07	cps
Gadolinium	160-2	293	280	257	277	6.71	cps
Holmium	165-1	11769832	11521964	11541450	11611082	1.19	cps
Holmium	165-2	4344375	4284046	4339184	4322535	0.77	cps
Indium	115-1	9046595	8903802	9113568	9021322	1.19	cps
Indium	115-2	941281	939119	935919	938773	0.29	cps
Iron	54-2	42576161	42675243	42368384	42539929	0.37	cps
Iron	56-2	784370388	778184255	785254015	782602886	0.49	cps
Iron	57-2	19824792	19668164	20034332	19842429	0.93	cps
Krypton	83-1	460	463	520	481	7.01	cps
Lead	206-1	65567012	65629356	66676389	65957586	0.94	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV03 Instrumnet Name : P8
Client Sample ID : CCV03 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:54:42 DataFile Name : 041CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	57104949	57374767	57906244	57461987	0.71	cps
Lead	208-1	261893103	262599278	264565738	263019373	0.53	cps
Lithium	6-1	2241075	2187614	2245186	2224625	1.44	cps
Magnesium	24-2	112562512	115066735	113641645	113756964	1.10	cps
Manganese	55-2	20389073	20172392	20347522	20302996	0.57	cps
Molybdenum	94-1	67884089	68369286	68583236	68278870	0.52	cps
Molybdenum	95-1	97620182	99669355	99019319	98769619	1.06	cps
Molybdenum	96-1	107498115	107962238	108670838	108043731	0.55	cps
Molybdenum	97-1	60326679	60108037	61063884	60499534	0.83	cps
Molybdenum	98-1	156872474	157951571	160138458	158320834	1.05	cps
Neodymium	150-1	1613	1667	1630	1637	1.67	cps
Neodymium	150-2	177	137	123	146	19.07	cps
Nickel	60-2	2153403	2166619	2199873	2173298	1.10	cps
Phosphorus	31-2	66752	67225	66418	66798	0.61	cps
Potassium	39-2	41763595	41833250	41787342	41794729	0.08	cps
Rhodium	103-1	8312612	8195686	8278114	8262137	0.73	cps
Rhodium	103-2	3525940	3546331	3507335	3526535	0.55	cps
Scandium	45-1	5774217	5869428	5965145	5869597	1.63	cps
Scandium	45-2	135458	135434	134468	135120	0.42	cps
Selenium	82-1	275375	278751	274785	276303	0.77	cps
Selenium	77-2	5491	5461	5434	5462	0.52	cps
Selenium	78-2	19193	19824	19467	19495	1.62	cps
Silicon	28-1	53035611	54220043	53771459	53675704	1.11	cps
Silver	107-1	23369305	23714028	23556050	23546461	0.73	cps
Silver	109-1	22543603	22374351	22389483	22435812	0.42	cps
Sodium	23-2	226495990	226610883	230462943	227856605	0.99	cps
Strontium	86-1	6210436	6138309	6158719	6169155	0.60	cps
Strontium	88-1	54309328	54745429	54076791	54377183	0.62	cps
Sulfur	34-1	1983169	2034882	2054947	2024333	1.83	cps
Terbium	159-1	11700246	11880700	11845596	11808847	0.81	cps
Terbium	159-2	4155107	4180235	4195837	4177060	0.49	cps
Thallium	203-1	16563964	16744275	16700551	16669596	0.56	cps
Thallium	205-1	38945076	39218034	39430371	39197827	0.62	cps
Tin	118-1	15200763	15184294	15578386	15321148	1.46	cps
Titanium	47-1	25610997	25709122	25848234	25722784	0.46	cps
Uranium	238-1	51814259	51637249	52116071	51855860	0.47	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV03 Instrumnet Name : P8
Client Sample ID : CCV03 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:54:42 DataFile Name : 041CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3398948	3391989	3396485	3395807	0.10	cps
Ytterbium	172-1	1423	1477	1240	1380	9.00	cps
Ytterbium	172-2	600	607	563	590	3.96	cps
Ytterbium	176-1	84096	84867	81955	83639	1.80	cps
Ytterbium	176-2	29994	29510	29904	29803	0.86	cps
Yttrium	89-1	17038467	17081739	16806334	16975514	0.87	cps
Yttrium	89-2	1329739	1327412	1321382	1326178	0.33	cps
Zinc	66-2	7920592	7873452	7939117	7911054	0.43	cps
Zirconium	90-1	33997336	34702400	33958103	34219280	1.22	cps
Zirconium	91-1	7556948	7773989	7589408	7640115	1.53	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB03 Instrumnet Name : P8
Client Sample ID : CCB03 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:58:48 DataFile Name : 042CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	420	443	390	418	6.40	cps
Antimony	121-1	3287	2647	2424	2786	16.09	cps
Arsenic	75-2	13	20	33	22	45.83	cps
Barium	135-1	580	563	563	569	1.69	cps
Barium	137-1	1057	947	963	989	6.00	cps
Beryllium	9-1	228	234	225	229	1.89	cps
Bismuth	209-1	7674387	7628261	7651441	7651363	0.30	cps
Bismuth	209-2	3370923	3393513	3365010	3376482	0.45	cps
Bromine	81-1	21694	21744	21436	21625	0.76	cps
Cadmium	108-1	57	20	27	34	56.70	cps
Cadmium	106-1	7232	7035	7009	7092	1.72	cps
Cadmium	111-1	5236	5191	5111	5179	1.23	cps
Calcium	43-1	2267	2003	2074	2115	6.45	cps
Calcium	44-1	59020	57832	57538	58130	1.35	cps
Carbon	12-1	4769097	4742370	4639466	4716977	1.45	cps
Carbon	12-2	32426	32075	31811	32104	0.96	cps
Chlorine	35-1	316215	319983	316692	317630	0.65	cps
Chlorine	35-2	1563	1577	1493	1545	2.90	cps
Chromium	52-2	1917	1913	2077	1969	4.74	cps
Cobalt	59-2	200	243	207	217	10.77	cps
Copper	63-2	3864	4017	4221	4034	4.44	cps
Dysprosium	156-1	10	20	10	13	43.30	cps
Dysprosium	156-2	7	7	10	8	24.71	cps
Erbium	164-1	90	93	107	97	9.13	cps
Erbium	164-2	33	20	10	21	55.45	cps
Gadolinium	160-1	140	87	130	119	23.84	cps
Gadolinium	160-2	30	47	27	34	31.11	cps
Holmium	165-1	12663489	12418265	12752271	12611342	1.37	cps
Holmium	165-2	4663970	4770404	4619546	4684640	1.65	cps
Indium	115-1	10788202	10869229	10515903	10724445	1.73	cps
Indium	115-2	1109622	1105277	1100737	1105212	0.40	cps
Iron	54-2	1470	1440	1530	1480	3.10	cps
Iron	56-2	20518	20985	21670	21058	2.75	cps
Iron	57-2	450	583	520	518	12.88	cps
Krypton	83-1	390	423	410	408	4.11	cps
Lead	206-1	5625	5024	5131	5260	6.09	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB03 Instrumnet Name : P8
Client Sample ID : CCB03 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:58:48 DataFile Name : 042CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4708	4531	4284	4507	4.72	cps
Lead	208-1	22168	20720	20460	21116	4.36	cps
Lithium	6-1	2613601	2579786	2541704	2578364	1.40	cps
Magnesium	24-2	1667	1503	1510	1560	5.93	cps
Manganese	55-2	4554	4367	4361	4427	2.48	cps
Molybdenum	94-1	3430	3234	3367	3344	3.00	cps
Molybdenum	95-1	2944	2530	2527	2667	8.99	cps
Molybdenum	96-1	3514	3077	2914	3168	9.79	cps
Molybdenum	97-1	1857	1607	1420	1628	13.46	cps
Molybdenum	98-1	4631	3744	3747	4041	12.65	cps
Neodymium	150-1	7	20	17	14	48.02	cps
Neodymium	150-2	7	0	3	3	100.05	cps
Nickel	60-2	890	1120	1277	1096	17.75	cps
Phosphorus	31-2	117	113	157	129	18.71	cps
Potassium	39-2	27419	27226	27373	27339	0.37	cps
Rhodium	103-1	10052117	10168000	9805785	10008634	1.85	cps
Rhodium	103-2	4166910	4202913	4128054	4165959	0.90	cps
Scandium	45-1	6266232	6368012	6344826	6326357	0.84	cps
Scandium	45-2	133665	134203	134711	134193	0.39	cps
Selenium	82-1	-60	53	133	42	230.06	cps
Selenium	77-2	7	0	7	4	86.60	cps
Selenium	78-2	23	30	50	34	40.30	cps
Silicon	28-1	578034	559034	549259	562109	2.60	cps
Silver	107-1	1980	1873	1737	1863	6.55	cps
Silver	109-1	1853	1727	1563	1715	8.48	cps
Sodium	23-2	90086	90723	88262	89690	1.42	cps
Strontium	86-1	933	873	747	851	11.20	cps
Strontium	88-1	1877	1717	1553	1716	9.42	cps
Sulfur	34-1	694378	694027	696987	695131	0.23	cps
Terbium	159-1	12957606	13292803	12840633	13030347	1.80	cps
Terbium	159-2	4432247	4500826	4507961	4480345	0.93	cps
Thallium	203-1	1430	1333	1593	1452	9.05	cps
Thallium	205-1	3584	3240	3297	3374	5.46	cps
Tin	118-1	10364	10684	10711	10586	1.82	cps
Titanium	47-1	877	790	837	834	5.20	cps
Uranium	238-1	1283	1123	980	1129	13.44	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB03 Instrumnet Name : P8
Client Sample ID : CCB03 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 14:58:48 DataFile Name : 042CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	63	73	70	69	7.39	cps
Ytterbium	172-1	83	77	97	86	11.90	cps
Ytterbium	172-2	43	27	33	34	24.35	cps
Ytterbium	176-1	1693	1760	1600	1685	4.77	cps
Ytterbium	176-2	227	340	353	307	22.70	cps
Yttrium	89-1	18727707	18604553	18798397	18710219	0.52	cps
Yttrium	89-2	1490671	1501996	1509647	1500771	0.64	cps
Zinc	66-2	2457	2530	2594	2527	2.71	cps
Zirconium	90-1	4391	4721	4724	4612	4.15	cps
Zirconium	91-1	990	973	1027	997	2.74	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : 200.8 MDL-6 Instrumnet Name : P8
Client Sample ID : 200.8 MDL-6 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:33:41 DataFile Name : 043AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2574	2340	2174	2362	8.51	cps
Antimony	121-1	17581	17408	16880	17290	2.11	cps
Arsenic	75-2	367	357	333	352	4.86	cps
Barium	135-1	20736	19601	20038	20125	2.84	cps
Barium	137-1	34768	35363	35490	35207	1.09	cps
Beryllium	9-1	3149	3042	3187	3126	2.41	cps
Bismuth	209-1	7499873	7501632	7491156	7497553	0.07	cps
Bismuth	209-2	3288963	3224251	3270395	3261203	1.02	cps
Bromine	81-1	21754	22064	21810	21876	0.76	cps
Cadmium	108-1	343	380	410	378	8.84	cps
Cadmium	106-1	7082	7275	7052	7136	1.70	cps
Cadmium	111-1	9098	9171	8920	9063	1.42	cps
Calcium	43-1	25686	25262	26054	25667	1.54	cps
Calcium	44-1	437889	440100	437212	438400	0.34	cps
Carbon	12-1	4665640	4457122	4380632	4501131	3.28	cps
Carbon	12-2	31263	31063	31193	31173	0.33	cps
Chlorine	35-1	245328	242898	241803	243343	0.74	cps
Chlorine	35-2	1160	1230	1360	1250	8.12	cps
Chromium	52-2	5868	5631	5598	5699	2.58	cps
Cobalt	59-2	7382	6955	6251	6863	8.32	cps
Copper	63-2	15048	14538	14214	14600	2.88	cps
Dysprosium	156-1	23	23	17	21	18.21	cps
Dysprosium	156-2	7	3	3	4	43.40	cps
Erbium	164-1	57	70	50	59	17.29	cps
Erbium	164-2	23	30	10	21	48.24	cps
Gadolinium	160-1	107	120	140	122	13.73	cps
Gadolinium	160-2	37	27	40	34	20.14	cps
Holmium	165-1	12320337	12592486	11993862	12302228	2.44	cps
Holmium	165-2	4533117	4545974	4528204	4535765	0.20	cps
Indium	115-1	10436886	10607461	10520758	10521702	0.81	cps
Indium	115-2	1091596	1090288	1080956	1087613	0.53	cps
Iron	54-2	9363	9457	8693	9171	4.54	cps
Iron	56-2	167831	161368	153223	160807	4.55	cps
Iron	57-2	3954	4091	3777	3941	3.99	cps
Krypton	83-1	463	413	433	437	5.76	cps
Lead	206-1	13334	13797	13868	13666	2.12	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : 200.8 MDL-6 Instrumnet Name : P8
Client Sample ID : 200.8 MDL-6 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:33:41 DataFile Name : 043AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	11525	11922	12069	11839	2.38	cps
Lead	208-1	53882	55661	54802	54782	1.62	cps
Lithium	6-1	2506982	2462452	2468107	2479180	0.98	cps
Magnesium	24-2	99181	94443	89774	94466	4.98	cps
Manganese	55-2	7999	7672	7322	7664	4.42	cps
Molybdenum	94-1	15626	15422	16116	15721	2.27	cps
Molybdenum	95-1	8813	8506	8599	8639	1.82	cps
Molybdenum	96-1	10531	10631	10984	10715	2.22	cps
Molybdenum	97-1	5434	5358	5248	5347	1.76	cps
Molybdenum	98-1	13877	13667	13787	13777	0.77	cps
Neodymium	150-1	7	10	20	12	56.76	cps
Neodymium	150-2	3	7	13	8	65.47	cps
Nickel	60-2	3100	3060	2937	3033	2.81	cps
Phosphorus	31-2	193	200	163	186	10.52	cps
Potassium	39-2	65889	64443	63187	64507	2.10	cps
Rhodium	103-1	9857210	10142453	9837503	9945722	1.72	cps
Rhodium	103-2	4144857	4015441	4081269	4080522	1.59	cps
Scandium	45-1	6378987	6295676	6343746	6339469	0.66	cps
Scandium	45-2	138840	139207	138829	138958	0.15	cps
Selenium	82-1	1483	1664	1700	1616	7.18	cps
Selenium	77-2	23	37	20	27	33.08	cps
Selenium	78-2	147	110	150	136	16.37	cps
Silicon	28-1	498866	492051	488711	493210	1.05	cps
Silver	107-1	21403	21647	21687	21579	0.71	cps
Silver	109-1	20582	20589	20876	20682	0.81	cps
Sodium	23-2	270050	265273	258370	264565	2.22	cps
Strontium	86-1	6362	6045	6095	6167	2.76	cps
Strontium	88-1	47470	47036	47072	47193	0.51	cps
Sulfur	34-1	745462	747255	744912	745876	0.16	cps
Terbium	159-1	12820506	12931966	12702645	12818373	0.89	cps
Terbium	159-2	4346060	4325749	4373615	4348474	0.55	cps
Thallium	203-1	14772	14955	15126	14951	1.18	cps
Thallium	205-1	36007	36003	35475	35828	0.85	cps
Tin	118-1	20178	20342	20018	20179	0.80	cps
Titanium	47-1	2740	2714	2860	2771	2.82	cps
Uranium	238-1	43514	43511	43745	43590	0.31	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : 200.8 MDL-6 Instrumnet Name : P8
Client Sample ID : 200.8 MDL-6 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:33:41 DataFile Name : 043AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2914	2680	2680	2758	4.89	cps
Ytterbium	172-1	83	77	73	78	6.55	cps
Ytterbium	172-2	20	20	23	21	9.11	cps
Ytterbium	176-1	1680	1573	1657	1637	3.43	cps
Ytterbium	176-2	437	377	417	410	7.45	cps
Yttrium	89-1	18406036	18108608	18497531	18337392	1.11	cps
Yttrium	89-2	1491112	1381890	1498075	1457026	4.47	cps
Zinc	66-2	4121	4057	3941	4040	2.26	cps
Zirconium	90-1	28923	29672	29441	29345	1.31	cps
Zirconium	91-1	6458	6605	6352	6472	1.97	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : 200.8 MDL-7 Instrumnet Name : P8
Client Sample ID : 200.8 MDL-7 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:37:04 DataFile Name : 044AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2437	2217	2424	2359	5.23	cps
Antimony	121-1	17528	17505	17007	17347	1.70	cps
Arsenic	75-2	400	367	353	373	6.44	cps
Barium	135-1	19494	19711	19631	19612	0.56	cps
Barium	137-1	34561	35126	34481	34722	1.01	cps
Beryllium	9-1	3070	3049	3185	3101	2.36	cps
Bismuth	209-1	7276849	7332415	7366559	7325274	0.62	cps
Bismuth	209-2	3272642	3233476	3250053	3252057	0.60	cps
Bromine	81-1	21700	22218	22385	22101	1.61	cps
Cadmium	108-1	347	317	290	318	8.92	cps
Cadmium	106-1	7229	6828	7069	7042	2.86	cps
Cadmium	111-1	9365	8709	9049	9041	3.63	cps
Calcium	43-1	25907	25683	25503	25697	0.79	cps
Calcium	44-1	444786	438956	439109	440950	0.75	cps
Carbon	12-1	4524593	4303662	4250059	4359438	3.34	cps
Carbon	12-2	31173	30709	30712	30865	0.87	cps
Chlorine	35-1	242745	242634	241600	242327	0.26	cps
Chlorine	35-2	1230	1143	1183	1186	3.66	cps
Chromium	52-2	5791	5548	5558	5632	2.45	cps
Cobalt	59-2	7279	7112	7005	7132	1.93	cps
Copper	63-2	14387	14437	13907	14244	2.06	cps
Dysprosium	156-1	13	3	20	12	68.66	cps
Dysprosium	156-2	7	3	0	3	100.05	cps
Erbium	164-1	80	70	47	66	26.09	cps
Erbium	164-2	40	33	40	38	10.19	cps
Gadolinium	160-1	103	110	93	102	8.21	cps
Gadolinium	160-2	17	27	20	21	24.12	cps
Holmium	165-1	12378447	12148504	12174107	12233686	1.03	cps
Holmium	165-2	4500885	4444177	4556115	4500392	1.24	cps
Indium	115-1	10508819	10457982	10264652	10410484	1.24	cps
Indium	115-2	1077375	1071426	1081078	1076626	0.45	cps
Iron	54-2	9550	9136	8706	9131	4.62	cps
Iron	56-2	164165	161476	153024	159555	3.64	cps
Iron	57-2	3977	4271	3771	4006	6.27	cps
Krypton	83-1	403	340	467	403	15.70	cps
Lead	206-1	13567	13350	13284	13400	1.11	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : 200.8 MDL-7 Instrumnet Name : P8
Client Sample ID : 200.8 MDL-7 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:37:04 DataFile Name : 044AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	12126	12046	12059	12077	0.36	cps
Lead	208-1	54355	54148	53650	54051	0.67	cps
Lithium	6-1	2434083	2453020	2416753	2434619	0.75	cps
Magnesium	24-2	99799	96872	91220	95964	4.54	cps
Manganese	55-2	7719	7479	6985	7394	5.06	cps
Molybdenum	94-1	15619	15812	15582	15671	0.79	cps
Molybdenum	95-1	8429	8523	8233	8395	1.76	cps
Molybdenum	96-1	10904	10691	11185	10927	2.27	cps
Molybdenum	97-1	5364	5504	5318	5396	1.80	cps
Molybdenum	98-1	13567	13473	13897	13646	1.63	cps
Neodymium	150-1	17	17	33	22	43.28	cps
Neodymium	150-2	0	10	0	3	173.21	cps
Nickel	60-2	3007	2894	2914	2938	2.06	cps
Phosphorus	31-2	143	243	183	190	26.49	cps
Potassium	39-2	64698	64996	62786	64160	1.87	cps
Rhodium	103-1	9944974	9741831	9708863	9798556	1.30	cps
Rhodium	103-2	4062348	4051742	4118200	4077430	0.88	cps
Scandium	45-1	6407393	6250232	6163947	6273857	1.97	cps
Scandium	45-2	136437	137897	137019	137118	0.54	cps
Selenium	82-1	1654	1643	1630	1642	0.71	cps
Selenium	77-2	43	17	17	26	60.23	cps
Selenium	78-2	100	133	77	103	27.56	cps
Silicon	28-1	492243	487310	485138	488230	0.75	cps
Silver	107-1	21861	21410	22151	21807	1.71	cps
Silver	109-1	21116	20772	20616	20835	1.23	cps
Sodium	23-2	269378	265014	255982	263458	2.59	cps
Strontium	86-1	6005	6198	5851	6018	2.89	cps
Strontium	88-1	47591	46624	47467	47227	1.11	cps
Sulfur	34-1	757986	761003	762571	760520	0.31	cps
Terbium	159-1	12465509	12683080	12470948	12539846	0.99	cps
Terbium	159-2	4298577	4306716	4287901	4297731	0.22	cps
Thallium	203-1	15126	14735	14361	14741	2.59	cps
Thallium	205-1	36003	36244	36164	36137	0.34	cps
Tin	118-1	20302	20359	20025	20228	0.88	cps
Titanium	47-1	2810	2710	2574	2698	4.40	cps
Uranium	238-1	43257	43447	43210	43305	0.29	cps

LB Number :LB135261Operator :Jaswal

Lab Sample ID :200.8 MDL-7Instrumnet Name :P8

Client Sample ID :200.8 MDL-7Dilution Factor :1

Date & Time Acquired :2025-04-01 15:37:04DataFile Name :044AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2744	2820	2600	2721	4.10	cps
Ytterbium	172-1	70	73	53	66	16.35	cps
Ytterbium	172-2	7	23	27	19	56.72	cps
Ytterbium	176-1	1660	1593	1633	1629	2.06	cps
Ytterbium	176-2	370	450	370	397	11.64	cps
Yttrium	89-1	18034581	18320150	18395560	18250097	1.04	cps
Yttrium	89-2	1377110	1510583	1377997	1421897	5.40	cps
Zinc	66-2	3804	3727	3817	3783	1.28	cps
Zirconium	90-1	29034	29124	29912	29356	1.65	cps
Zirconium	91-1	6365	6408	6618	6464	2.10	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW06 Instrumnet Name : P8
Client Sample ID : PBW06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:40:36 DataFile Name : 045AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	290	267	240	266	9.42	cps
Antimony	121-1	173	147	193	171	13.68	cps
Arsenic	75-2	10	3	7	7	50.03	cps
Barium	135-1	190	250	190	210	16.50	cps
Barium	137-1	277	303	300	293	4.95	cps
Beryllium	9-1	51	45	30	42	25.92	cps
Bismuth	209-1	7426112	7390208	7448451	7421590	0.40	cps
Bismuth	209-2	3234639	3254823	3360220	3283227	2.05	cps
Bromine	81-1	22408	22431	22328	22389	0.24	cps
Cadmium	108-1	27	13	20	20	33.35	cps
Cadmium	106-1	6902	6848	7045	6932	1.47	cps
Cadmium	111-1	4853	4808	4938	4866	1.35	cps
Calcium	43-1	1987	1817	1640	1815	9.55	cps
Calcium	44-1	55051	55286	54590	54976	0.64	cps
Carbon	12-1	4548240	4401875	4351823	4433979	2.30	cps
Carbon	12-2	31170	30923	30996	31029	0.41	cps
Chlorine	35-1	239850	236071	238862	238261	0.82	cps
Chlorine	35-2	1180	1273	1243	1232	3.87	cps
Chromium	52-2	1933	1860	1977	1923	3.07	cps
Cobalt	59-2	107	117	97	107	9.37	cps
Copper	63-2	2530	2600	2970	2700	8.76	cps
Dysprosium	156-1	10	7	20	12	56.76	cps
Dysprosium	156-2	3	10	3	6	69.34	cps
Erbium	164-1	80	93	87	87	7.69	cps
Erbium	164-2	23	20	47	30	48.44	cps
Gadolinium	160-1	113	80	130	108	23.62	cps
Gadolinium	160-2	27	33	17	26	32.81	cps
Holmium	165-1	12379623	12106446	12387869	12291313	1.30	cps
Holmium	165-2	4457938	4475929	4554157	4496008	1.14	cps
Indium	115-1	10412427	10404757	10505514	10440899	0.54	cps
Indium	115-2	1088902	1078864	1080165	1082644	0.50	cps
Iron	54-2	1017	1040	1010	1022	1.54	cps
Iron	56-2	11388	11948	13400	12245	8.48	cps
Iron	57-2	337	277	273	296	12.06	cps
Krypton	83-1	397	417	430	414	4.05	cps
Lead	206-1	1620	1523	1640	1595	3.91	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW06 Instrumnet Name : P8
Client Sample ID : PBW06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:40:36 DataFile Name : 045AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1423	1387	1430	1413	1.65	cps
Lead	208-1	6281	6234	6547	6354	2.66	cps
Lithium	6-1	2415376	2470089	2439769	2441745	1.12	cps
Magnesium	24-2	327	337	397	353	10.72	cps
Manganese	55-2	4431	4347	4437	4405	1.14	cps
Molybdenum	94-1	657	750	687	698	6.83	cps
Molybdenum	95-1	293	337	293	308	8.13	cps
Molybdenum	96-1	420	367	367	384	8.01	cps
Molybdenum	97-1	183	163	190	179	7.76	cps
Molybdenum	98-1	440	350	453	414	13.56	cps
Neodymium	150-1	3	20	13	12	68.66	cps
Neodymium	150-2	0	3	7	3	100.05	cps
Nickel	60-2	930	970	1000	967	3.63	cps
Phosphorus	31-2	137	107	103	116	15.89	cps
Potassium	39-2	22087	22281	21343	21903	2.26	cps
Rhodium	103-1	9992576	9924728	9791483	9902929	1.03	cps
Rhodium	103-2	4105931	4136771	4048066	4096922	1.10	cps
Scandium	45-1	6217475	6232885	6255495	6235285	0.31	cps
Scandium	45-2	138563	137937	137819	138107	0.29	cps
Selenium	82-1	10	-13	7	1	1137.33	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	30	23	33	29	17.63	cps
Silicon	28-1	473055	469292	495124	479157	2.91	cps
Silver	107-1	527	437	400	454	14.34	cps
Silver	109-1	357	353	330	347	4.19	cps
Sodium	23-2	68490	70057	69823	69456	1.22	cps
Strontium	86-1	793	760	757	770	2.63	cps
Strontium	88-1	770	810	650	743	11.20	cps
Sulfur	34-1	771299	769001	766325	768875	0.32	cps
Terbium	159-1	12621738	12556389	12575084	12584403	0.27	cps
Terbium	159-2	4341516	4355257	4282098	4326290	0.90	cps
Thallium	203-1	303	337	373	338	10.37	cps
Thallium	205-1	820	793	850	821	3.45	cps
Tin	118-1	5498	5818	5658	5658	2.83	cps
Titanium	47-1	393	333	340	356	9.25	cps
Uranium	238-1	187	220	220	209	9.21	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW06 Instrumnet Name : P8
Client Sample ID : PBW06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:40:36 DataFile Name : 045AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	20	27	27	24	15.75	cps
Ytterbium	172-1	80	97	83	87	10.18	cps
Ytterbium	172-2	7	23	20	17	52.90	cps
Ytterbium	176-1	1683	1700	1410	1598	10.19	cps
Ytterbium	176-2	310	327	387	341	11.82	cps
Yttrium	89-1	18702658	18315545	18717231	18578478	1.23	cps
Yttrium	89-2	1481300	1481786	1491997	1485028	0.41	cps
Zinc	66-2	2364	2334	2337	2345	0.70	cps
Zirconium	90-1	1397	1377	1400	1391	0.91	cps
Zirconium	91-1	270	283	317	290	8.29	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW07 Instrumnet Name : P8
Client Sample ID : PBW07 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:43:58 DataFile Name : 046AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	257	293	280	277	6.71	cps
Antimony	121-1	193	157	207	186	13.95	cps
Arsenic	75-2	13	7	13	11	34.61	cps
Barium	135-1	127	177	190	164	20.30	cps
Barium	137-1	293	257	307	286	9.07	cps
Beryllium	9-1	43	51	42	46	10.27	cps
Bismuth	209-1	7496785	7552487	7258771	7436014	2.10	cps
Bismuth	209-2	3257465	3245046	3145464	3215992	1.91	cps
Bromine	81-1	22254	22024	22485	22254	1.04	cps
Cadmium	108-1	20	17	37	24	43.83	cps
Cadmium	106-1	6662	6912	6402	6658	3.83	cps
Cadmium	111-1	4669	4867	4499	4678	3.93	cps
Calcium	43-1	1793	1793	1813	1800	0.64	cps
Calcium	44-1	54988	54777	55142	54969	0.33	cps
Carbon	12-1	4553411	4405889	4396721	4452007	1.98	cps
Carbon	12-2	30879	30849	31237	30988	0.70	cps
Chlorine	35-1	237816	237696	236383	237299	0.34	cps
Chlorine	35-2	1260	1030	1140	1143	10.06	cps
Chromium	52-2	1860	1847	1860	1856	0.41	cps
Cobalt	59-2	83	130	100	104	22.64	cps
Copper	63-2	2487	2567	2924	2659	8.74	cps
Dysprosium	156-1	20	3	20	14	66.64	cps
Dysprosium	156-2	7	3	3	4	43.40	cps
Erbium	164-1	90	93	90	91	2.11	cps
Erbium	164-2	30	23	27	27	12.51	cps
Gadolinium	160-1	97	133	103	111	17.58	cps
Gadolinium	160-2	17	27	13	19	36.75	cps
Holmium	165-1	12425979	12075003	12077317	12192766	1.66	cps
Holmium	165-2	4561952	4530513	4471810	4521425	1.01	cps
Indium	115-1	10655672	10456074	10655247	10588998	1.09	cps
Indium	115-2	1084612	1077942	1078220	1080258	0.35	cps
Iron	54-2	1073	1057	1120	1083	3.03	cps
Iron	56-2	11521	12349	13039	12303	6.18	cps
Iron	57-2	320	283	323	309	7.19	cps
Krypton	83-1	423	467	433	441	5.14	cps
Lead	206-1	1487	1527	1627	1547	4.66	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW07 Instrumnet Name : P8
Client Sample ID : PBW07 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:43:58 DataFile Name : 046AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1370	1233	1420	1341	7.21	cps
Lead	208-1	6111	6014	6384	6170	3.11	cps
Lithium	6-1	2487899	2435669	2517165	2480244	1.66	cps
Magnesium	24-2	317	317	383	339	11.36	cps
Manganese	55-2	4404	4671	4154	4410	5.86	cps
Molybdenum	94-1	743	580	633	652	12.77	cps
Molybdenum	95-1	297	283	280	287	3.08	cps
Molybdenum	96-1	453	380	357	397	12.72	cps
Molybdenum	97-1	153	147	137	146	5.76	cps
Molybdenum	98-1	330	353	370	351	5.72	cps
Neodymium	150-1	20	7	20	16	49.47	cps
Neodymium	150-2	0	7	0	2	173.21	cps
Nickel	60-2	950	1117	1097	1054	8.63	cps
Phosphorus	31-2	80	113	100	98	17.16	cps
Potassium	39-2	21186	21242	21536	21321	0.88	cps
Rhodium	103-1	9854777	9908600	9777979	9847119	0.67	cps
Rhodium	103-2	4024297	4101467	4106561	4077442	1.13	cps
Scandium	45-1	6379969	6276098	6350847	6335638	0.85	cps
Scandium	45-2	138550	138399	136067	137672	1.01	cps
Selenium	82-1	-23	-47	-13	-28	-61.59	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	13	20	17	17	20.01	cps
Silicon	28-1	545190	471730	465780	494233	8.95	cps
Silver	107-1	267	320	327	304	10.80	cps
Silver	109-1	250	273	227	250	9.33	cps
Sodium	23-2	68104	68895	69799	68933	1.23	cps
Strontium	86-1	710	687	827	741	10.12	cps
Strontium	88-1	737	737	703	726	2.65	cps
Sulfur	34-1	765343	771769	770038	769050	0.43	cps
Terbium	159-1	12787976	12766254	12645455	12733229	0.60	cps
Terbium	159-2	4431153	4373870	4372173	4392399	0.76	cps
Thallium	203-1	290	317	413	340	19.09	cps
Thallium	205-1	743	903	783	810	10.28	cps
Tin	118-1	5835	5948	5631	5805	2.77	cps
Titanium	47-1	353	323	390	356	9.39	cps
Uranium	238-1	153	200	147	167	17.43	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW07 Instrumnet Name : P8
Client Sample ID : PBW07 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:43:58 DataFile Name : 046AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	27	20	33	27	24.99	cps
Ytterbium	172-1	67	67	77	70	8.25	cps
Ytterbium	172-2	33	47	20	33	40.01	cps
Ytterbium	176-1	1400	1660	1780	1613	12.04	cps
Ytterbium	176-2	267	300	300	289	6.66	cps
Yttrium	89-1	18176716	18518518	18147243	18280826	1.13	cps
Yttrium	89-2	1510548	1501387	1375571	1462502	5.16	cps
Zinc	66-2	2297	2467	2604	2456	6.26	cps
Zirconium	90-1	1350	1557	1397	1435	7.56	cps
Zirconium	91-1	260	237	267	254	6.19	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW Instrumnet Name : P8
Client Sample ID : PBW Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:47:22 DataFile Name : 047CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	270	190	177	212	23.79	cps
Antimony	121-1	190	203	177	190	7.02	cps
Arsenic	75-2	10	10	13	11	17.30	cps
Barium	135-1	197	163	187	182	9.39	cps
Barium	137-1	320	393	290	334	15.89	cps
Beryllium	9-1	52	52	43	49	10.25	cps
Bismuth	209-1	7449135	7443506	7349555	7414066	0.75	cps
Bismuth	209-2	3272623	3259928	3236768	3256440	0.56	cps
Bromine	81-1	21437	21583	21096	21372	1.17	cps
Cadmium	108-1	7	10	17	11	45.82	cps
Cadmium	106-1	6712	6755	6598	6688	1.21	cps
Cadmium	111-1	4717	4755	4650	4707	1.12	cps
Calcium	43-1	1843	1820	1737	1800	3.12	cps
Calcium	44-1	54657	54988	54268	54638	0.66	cps
Carbon	12-1	4932749	4813417	4753702	4833289	1.89	cps
Carbon	12-2	33695	33258	33638	33530	0.71	cps
Chlorine	35-1	264339	265842	263738	264640	0.41	cps
Chlorine	35-2	1270	1247	1340	1286	3.78	cps
Chromium	52-2	1793	1957	2087	1946	7.56	cps
Cobalt	59-2	100	123	103	109	11.59	cps
Copper	63-2	2450	2880	3020	2784	10.67	cps
Dysprosium	156-1	13	7	3	8	65.47	cps
Dysprosium	156-2	10	7	3	7	50.03	cps
Erbium	164-1	70	87	97	84	15.95	cps
Erbium	164-2	30	33	20	28	24.98	cps
Gadolinium	160-1	87	123	80	97	24.14	cps
Gadolinium	160-2	20	20	13	18	21.66	cps
Holmium	165-1	12048446	12264798	12516542	12276595	1.91	cps
Holmium	165-2	4547784	4474987	4488989	4503920	0.86	cps
Indium	115-1	10664693	10525476	10399146	10529772	1.26	cps
Indium	115-2	1082758	1084422	1083433	1083538	0.08	cps
Iron	54-2	967	1087	1067	1040	6.18	cps
Iron	56-2	11645	12159	13113	12305	6.05	cps
Iron	57-2	273	217	367	286	26.53	cps
Krypton	83-1	367	333	393	364	8.25	cps
Lead	206-1	1533	1410	1467	1470	4.20	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW Instrumnet Name : P8
Client Sample ID : PBW Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:47:22 DataFile Name : 047CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1337	1273	1297	1302	2.46	cps
Lead	208-1	5954	5807	5964	5908	1.48	cps
Lithium	6-1	2520681	2561883	2462494	2515019	1.99	cps
Magnesium	24-2	287	357	377	340	13.90	cps
Manganese	55-2	4287	4354	4097	4246	3.14	cps
Molybdenum	94-1	633	690	617	647	5.94	cps
Molybdenum	95-1	280	273	263	272	3.08	cps
Molybdenum	96-1	343	357	360	353	2.50	cps
Molybdenum	97-1	197	137	137	157	22.11	cps
Molybdenum	98-1	380	393	377	383	2.30	cps
Neodymium	150-1	13	10	13	12	15.73	cps
Neodymium	150-2	0	7	0	2	173.21	cps
Nickel	60-2	857	967	1030	951	9.22	cps
Phosphorus	31-2	117	143	110	123	14.30	cps
Potassium	39-2	21342	21045	21226	21205	0.71	cps
Rhodium	103-1	9854517	10018384	9905593	9926165	0.84	cps
Rhodium	103-2	4155218	4160522	4162027	4159256	0.09	cps
Scandium	45-1	6397414	6393246	6357092	6382584	0.35	cps
Scandium	45-2	136864	137100	139694	137886	1.14	cps
Selenium	82-1	73	10	-30	18	293.07	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	20	37	27	28	30.20	cps
Silicon	28-1	546707	473832	471905	497481	8.57	cps
Silver	107-1	250	253	253	252	0.76	cps
Silver	109-1	213	230	183	209	11.32	cps
Sodium	23-2	67615	67873	68543	68011	0.70	cps
Strontium	86-1	773	707	767	749	4.90	cps
Strontium	88-1	640	627	723	663	7.90	cps
Sulfur	34-1	768682	764661	767611	766985	0.27	cps
Terbium	159-1	12698692	12501556	12579072	12593107	0.79	cps
Terbium	159-2	4442996	4427174	4258247	4376139	2.34	cps
Thallium	203-1	313	277	303	298	6.37	cps
Thallium	205-1	840	803	807	817	2.48	cps
Tin	118-1	5531	5815	5491	5612	3.14	cps
Titanium	47-1	387	300	383	357	13.77	cps
Uranium	238-1	150	190	187	176	12.64	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW Instrumnet Name : P8
Client Sample ID : PBW Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:47:22 DataFile Name : 047CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	20	47	37	34	39.11	cps
Ytterbium	172-1	60	57	70	62	11.15	cps
Ytterbium	172-2	30	33	37	33	10.01	cps
Ytterbium	176-1	1673	1530	1490	1565	6.16	cps
Ytterbium	176-2	347	333	300	327	7.36	cps
Yttrium	89-1	18387073	18282338	18573631	18414348	0.80	cps
Yttrium	89-2	1385394	1479234	1515388	1460005	4.60	cps
Zinc	66-2	2067	2014	2207	2096	4.77	cps
Zirconium	90-1	1233	1273	1280	1262	2.00	cps
Zirconium	91-1	270	230	273	258	9.36	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCSW Instrumnet Name : P8
Client Sample ID : LCSW Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:50:44 DataFile Name : 048LCSW.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1357518	1347227	1325481	1343409	1.22	cps
Antimony	121-1	21035057	21326009	21041934	21134333	0.79	cps
Arsenic	75-2	424768	427689	427043	426500	0.36	cps
Barium	135-1	24936925	25032565	24866634	24945375	0.33	cps
Barium	137-1	42760303	42822066	42411270	42664546	0.52	cps
Beryllium	9-1	3556604	3550899	3533694	3547066	0.34	cps
Bismuth	209-1	7003948	6971484	6965230	6980221	0.30	cps
Bismuth	209-2	3084793	3000428	3039575	3041598	1.39	cps
Bromine	81-1	21199	21450	21276	21309	0.60	cps
Cadmium	108-1	406994	403893	401453	404113	0.69	cps
Cadmium	106-1	577101	573448	574333	574960	0.33	cps
Cadmium	111-1	5235770	5271055	5259875	5255567	0.34	cps
Calcium	43-1	6112784	5977138	6149731	6079884	1.49	cps
Calcium	44-1	99097562	97916459	99052352	98688791	0.68	cps
Carbon	12-1	5379526	5401628	5504012	5428389	1.22	cps
Carbon	12-2	40492	40887	39914	40431	1.21	cps
Chlorine	35-1	315469	322741	320142	319451	1.15	cps
Chlorine	35-2	1593	1590	1597	1593	0.21	cps
Chromium	52-2	4550641	4498502	4539110	4529418	0.60	cps
Cobalt	59-2	8359845	8435994	8369871	8388570	0.49	cps
Copper	63-2	70129111	70331169	69685181	70048487	0.47	cps
Dysprosium	156-1	537	443	503	494	9.57	cps
Dysprosium	156-2	73	83	60	72	16.21	cps
Erbium	164-1	310	360	400	357	12.64	cps
Erbium	164-2	107	100	133	113	15.57	cps
Gadolinium	160-1	323	270	253	282	12.96	cps
Gadolinium	160-2	83	97	77	86	11.90	cps
Holmium	165-1	12148431	11985119	12175209	12102920	0.85	cps
Holmium	165-2	4386508	4434719	4333421	4384883	1.16	cps
Indium	115-1	9744129	9650369	9551364	9648621	1.00	cps
Indium	115-2	965950	957014	955939	959634	0.57	cps
Iron	54-2	9146535	9287451	9142177	9192054	0.90	cps
Iron	56-2	168890877	167313898	167115538	167773438	0.58	cps
Iron	57-2	4265331	4250719	4248016	4254689	0.22	cps
Krypton	83-1	390	433	403	409	5.43	cps
Lead	206-1	71545812	71285312	72122966	71651363	0.60	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCSW Instrumnet Name : P8
Client Sample ID : LCSW Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:50:44 DataFile Name : 048LCSW.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	61851129	61709776	61429186	61663364	0.35	cps
Lead	208-1	285675756	285072352	283286146	284678085	0.44	cps
Lithium	6-1	2386235	2354925	2429618	2390259	1.57	cps
Magnesium	24-2	24544832	24673102	24224450	24480795	0.94	cps
Manganese	55-2	20967860	20890257	20806112	20888076	0.39	cps
Molybdenum	94-1	70824944	72319646	70778534	71307708	1.23	cps
Molybdenum	95-1	103169615	104889495	102919782	103659631	1.03	cps
Molybdenum	96-1	112855578	115422208	112732115	113669967	1.34	cps
Molybdenum	97-1	64105036	65087206	64259899	64484047	0.82	cps
Molybdenum	98-1	166581581	169139637	165424858	167048692	1.14	cps
Neodymium	150-1	1330	1343	1453	1376	4.92	cps
Neodymium	150-2	77	73	67	72	7.05	cps
Nickel	60-2	2368857	2375866	2369514	2371412	0.16	cps
Phosphorus	31-2	67714	68889	67345	67983	1.19	cps
Potassium	39-2	8718615	8656686	8567970	8647757	0.88	cps
Rhodium	103-1	9149552	9208363	9269520	9209145	0.65	cps
Rhodium	103-2	3748156	3765991	3816627	3776924	0.94	cps
Scandium	45-1	6271158	6192648	6159329	6207712	0.92	cps
Scandium	45-2	135740	135165	135165	135357	0.25	cps
Selenium	82-1	298057	297551	295259	296956	0.50	cps
Selenium	77-2	5604	5705	5568	5626	1.26	cps
Selenium	78-2	19220	19681	19594	19498	1.26	cps
Silicon	28-1	57864367	57140477	56444896	57149914	1.24	cps
Silver	107-1	26294290	26717663	26504505	26505486	0.80	cps
Silver	109-1	25182743	25078350	24955350	25072148	0.45	cps
Sodium	23-2	50299991	50622021	49792784	50238265	0.83	cps
Strontium	86-1	6600700	6488333	6587929	6558987	0.94	cps
Strontium	88-1	57381896	57163436	57058252	57201195	0.29	cps
Sulfur	34-1	2194199	2181199	2109794	2161731	2.10	cps
Terbium	159-1	12404475	12663135	12566634	12544748	1.04	cps
Terbium	159-2	4261915	4228028	4227553	4239165	0.46	cps
Thallium	203-1	17994101	18079379	18253533	18109004	0.73	cps
Thallium	205-1	43045741	42847036	42937304	42943360	0.23	cps
Tin	118-1	16598384	16819922	16650330	16689545	0.69	cps
Titanium	47-1	27521420	27389904	27358536	27423287	0.32	cps
Uranium	238-1	54184408	53925089	52676838	53595445	1.50	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCSW Instrumnet Name : P8
Client Sample ID : LCSW Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:50:44 DataFile Name : 048LCSW.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3431369	3445019	3422852	3433080	0.33	cps
Ytterbium	172-1	353	397	443	398	11.32	cps
Ytterbium	172-2	147	197	177	173	14.52	cps
Ytterbium	176-1	84378	86021	84458	84952	1.09	cps
Ytterbium	176-2	29673	29650	29991	29771	0.64	cps
Yttrium	89-1	18045370	18117194	17855045	18005870	0.75	cps
Yttrium	89-2	1328920	1321617	1323187	1324575	0.29	cps
Zinc	66-2	8095183	8090146	8037728	8074352	0.39	cps
Zirconium	90-1	35851447	35777153	35131319	35586639	1.11	cps
Zirconium	91-1	7958522	7983856	7856036	7932804	0.85	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV04 Instrumnet Name : P8
Client Sample ID : CCV04 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:53:29 DataFile Name : 049CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6556646	6607610	6510013	6558090	0.74	cps
Antimony	121-1	19250476	19301903	19187374	19246584	0.30	cps
Arsenic	75-2	407452	405393	408855	407233	0.43	cps
Barium	135-1	23022512	23457114	22979057	23152894	1.14	cps
Barium	137-1	39197630	40081998	40315913	39865180	1.48	cps
Beryllium	9-1	3238857	3272735	3277391	3262994	0.64	cps
Bismuth	209-1	6303997	6214268	6186925	6235063	0.98	cps
Bismuth	209-2	2786776	2754331	2727800	2756302	1.07	cps
Bromine	81-1	21216	22325	23487	22342	5.08	cps
Cadmium	108-1	359281	363719	359152	360717	0.72	cps
Cadmium	106-1	514418	514074	512772	513755	0.17	cps
Cadmium	111-1	4680583	4728730	4689148	4699487	0.55	cps
Calcium	43-1	27006896	27422160	27712940	27380665	1.30	cps
Calcium	44-1	440011727	453827700	452875820	448905082	1.72	cps
Carbon	12-1	5223687	5239240	5277655	5246861	0.53	cps
Carbon	12-2	45858	46323	45875	46018	0.57	cps
Chlorine	35-1	297783	303261	305316	302120	1.29	cps
Chlorine	35-2	1747	1617	1553	1639	6.01	cps
Chromium	52-2	4352653	4423705	4276458	4350939	1.69	cps
Cobalt	59-2	7676579	7735946	7729322	7713949	0.42	cps
Copper	63-2	65654724	65431779	66050289	65712264	0.48	cps
Dysprosium	156-1	913	917	917	916	0.21	cps
Dysprosium	156-2	247	227	287	253	12.06	cps
Erbium	164-1	930	1010	1003	981	4.52	cps
Erbium	164-2	313	337	297	316	6.37	cps
Gadolinium	160-1	773	753	607	711	12.80	cps
Gadolinium	160-2	303	263	297	288	7.45	cps
Holmium	165-1	11368589	11464533	11440455	11424526	0.44	cps
Holmium	165-2	4302666	4302481	4275346	4293498	0.37	cps
Indium	115-1	8813298	8774259	8894014	8827190	0.69	cps
Indium	115-2	921780	926073	924549	924134	0.24	cps
Iron	54-2	42253395	42149832	42237089	42213439	0.13	cps
Iron	56-2	774798948	767689589	764415909	768968149	0.69	cps
Iron	57-2	19539874	19663545	19352268	19518562	0.80	cps
Krypton	83-1	450	463	543	486	10.40	cps
Lead	206-1	64675457	64851119	64497457	64674678	0.27	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV04 Instrumnet Name : P8
Client Sample ID : CCV04 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:53:29 DataFile Name : 049CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	55875919	56820411	56806546	56500959	0.96	cps
Lead	208-1	258662344	260716798	258016341	259131828	0.54	cps
Lithium	6-1	2169574	2143637	2205194	2172802	1.42	cps
Magnesium	24-2	113979428	113982195	111541032	113167552	1.24	cps
Manganese	55-2	20117144	19954654	20022778	20031526	0.41	cps
Molybdenum	94-1	66194727	67352432	67322564	66956575	0.99	cps
Molybdenum	95-1	95192752	98526512	97660895	97126720	1.78	cps
Molybdenum	96-1	104110328	107415502	106716305	106080712	1.64	cps
Molybdenum	97-1	60019582	60562244	61192136	60591321	0.97	cps
Molybdenum	98-1	156350814	157240428	157158544	156916595	0.31	cps
Neodymium	150-1	1427	1653	1620	1567	7.81	cps
Neodymium	150-2	180	113	123	139	25.89	cps
Nickel	60-2	2107831	2122934	2143575	2124780	0.84	cps
Phosphorus	31-2	65882	65875	66729	66162	0.74	cps
Potassium	39-2	41702017	41778568	42016184	41832256	0.39	cps
Rhodium	103-1	8203767	8121234	8130931	8151977	0.55	cps
Rhodium	103-2	3496010	3482673	3538402	3505695	0.83	cps
Scandium	45-1	5760996	5870172	5756884	5796017	1.11	cps
Scandium	45-2	134041	133422	134028	133830	0.26	cps
Selenium	82-1	268538	273900	269157	270532	1.08	cps
Selenium	77-2	5701	5314	5618	5544	3.67	cps
Selenium	78-2	18723	18813	18856	18797	0.36	cps
Silicon	28-1	52945618	52893003	52338756	52725792	0.64	cps
Silver	107-1	22928860	23270786	22754818	22984822	1.14	cps
Silver	109-1	21974175	22020316	21796985	21930492	0.54	cps
Sodium	23-2	226080257	229382463	226544523	227335748	0.79	cps
Strontium	86-1	6093568	6115573	6144952	6118031	0.42	cps
Strontium	88-1	53616461	53923133	53115096	53551563	0.76	cps
Sulfur	34-1	2002293	1985631	2004248	1997390	0.51	cps
Terbium	159-1	11920665	11638196	11824490	11794450	1.22	cps
Terbium	159-2	4104813	4164012	4174377	4147734	0.90	cps
Thallium	203-1	16558764	16318115	16371280	16416053	0.77	cps
Thallium	205-1	38896947	38778649	38355062	38676886	0.74	cps
Tin	118-1	15368384	14878316	15216203	15154301	1.66	cps
Titanium	47-1	25313020	25342700	25424702	25360141	0.23	cps
Uranium	238-1	50071158	50810663	50474186	50452002	0.73	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV04 Instrumnet Name : P8
Client Sample ID : CCV04 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 15:53:29 DataFile Name : 049CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3333291	3324211	3428861	3362121	1.72	cps
Ytterbium	172-1	1407	1217	1223	1282	8.41	cps
Ytterbium	172-2	590	593	593	592	0.32	cps
Ytterbium	176-1	80289	82200	82549	81679	1.49	cps
Ytterbium	176-2	29303	28995	29717	29338	1.23	cps
Yttrium	89-1	16949818	16822830	16823751	16865466	0.43	cps
Yttrium	89-2	1303516	1298611	1304870	1302332	0.25	cps
Zinc	66-2	7774945	7851270	7903206	7843140	0.82	cps
Zirconium	90-1	33576029	33705917	33936760	33739569	0.54	cps
Zirconium	91-1	7400982	7614759	7444396	7486712	1.51	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB04 Instrumnet Name : P8
Client Sample ID : CCB04 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:01:58 DataFile Name : 050CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	433	287	287	336	25.24	cps
Antimony	121-1	1327	1067	1153	1182	11.20	cps
Arsenic	75-2	13	30	17	20	44.10	cps
Barium	135-1	277	300	290	289	4.05	cps
Barium	137-1	570	487	493	517	8.96	cps
Beryllium	9-1	99	88	109	99	10.70	cps
Bismuth	209-1	7507007	7565484	7729424	7600638	1.52	cps
Bismuth	209-2	3296670	3328465	3315140	3313425	0.48	cps
Bromine	81-1	21700	21453	21383	21512	0.77	cps
Cadmium	108-1	10	37	43	30	58.79	cps
Cadmium	106-1	6832	6838	6632	6767	1.74	cps
Cadmium	111-1	4862	4858	4682	4801	2.14	cps
Calcium	43-1	1957	1813	2050	1940	6.15	cps
Calcium	44-1	53797	52743	52465	53001	1.33	cps
Carbon	12-1	4563718	4440124	4370927	4458257	2.19	cps
Carbon	12-2	30963	30986	30862	30937	0.21	cps
Chlorine	35-1	227696	228408	229094	228399	0.31	cps
Chlorine	35-2	1113	1190	1027	1110	7.36	cps
Chromium	52-2	1753	1757	1923	1811	5.37	cps
Cobalt	59-2	150	120	167	146	16.25	cps
Copper	63-2	2787	2984	3250	3007	7.74	cps
Dysprosium	156-1	13	20	7	13	49.99	cps
Dysprosium	156-2	7	0	7	4	86.60	cps
Erbium	164-1	87	73	83	81	8.56	cps
Erbium	164-2	30	27	33	30	11.10	cps
Gadolinium	160-1	97	100	90	96	5.33	cps
Gadolinium	160-2	10	13	30	18	60.28	cps
Holmium	165-1	12461701	12341789	12329061	12377517	0.59	cps
Holmium	165-2	4580072	4528887	4630297	4579752	1.11	cps
Indium	115-1	10558728	10604785	10630404	10597972	0.34	cps
Indium	115-2	1089073	1081103	1081574	1083917	0.41	cps
Iron	54-2	1163	1103	1130	1132	2.65	cps
Iron	56-2	14781	16976	16613	16123	7.30	cps
Iron	57-2	417	397	383	399	4.21	cps
Krypton	83-1	457	397	410	421	7.48	cps
Lead	206-1	3000	2877	2804	2894	3.44	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB04 Instrumnet Name : P8
Client Sample ID : CCB04 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:01:58 DataFile Name : 050CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2550	2597	2407	2518	3.93	cps
Lead	208-1	11846	11269	11119	11411	3.36	cps
Lithium	6-1	2532857	2536780	2509246	2526294	0.59	cps
Magnesium	24-2	913	860	810	861	6.00	cps
Manganese	55-2	4544	4577	4241	4454	4.17	cps
Molybdenum	94-1	1523	1807	1780	1703	9.19	cps
Molybdenum	95-1	1190	1013	1113	1106	8.01	cps
Molybdenum	96-1	1450	1267	1343	1353	6.80	cps
Molybdenum	97-1	650	670	550	623	10.31	cps
Molybdenum	98-1	1827	1450	1513	1597	12.63	cps
Neodymium	150-1	17	3	13	11	62.48	cps
Neodymium	150-2	0	3	0	1	173.21	cps
Nickel	60-2	903	947	1033	961	6.89	cps
Phosphorus	31-2	107	117	143	122	15.51	cps
Potassium	39-2	22528	23052	22574	22718	1.28	cps
Rhodium	103-1	10001700	9835400	10134736	9990612	1.50	cps
Rhodium	103-2	4197575	4098667	4035499	4110580	1.99	cps
Scandium	45-1	6379450	6294863	6183623	6285979	1.56	cps
Scandium	45-2	133621	133927	136299	134615	1.09	cps
Selenium	82-1	-13	13	-37	-12	-204.68	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	33	27	10	23	51.50	cps
Silicon	28-1	483576	478087	490712	484125	1.31	cps
Silver	107-1	843	667	713	741	12.35	cps
Silver	109-1	603	553	563	573	4.61	cps
Sodium	23-2	76914	76392	76094	76467	0.54	cps
Strontium	86-1	780	660	747	729	8.50	cps
Strontium	88-1	1093	1020	1027	1047	3.87	cps
Sulfur	34-1	697980	694663	700934	697859	0.45	cps
Terbium	159-1	12849500	12940670	13047525	12945898	0.77	cps
Terbium	159-2	4450825	4440806	4390531	4427387	0.73	cps
Thallium	203-1	790	623	650	688	13.02	cps
Thallium	205-1	1720	1710	1517	1649	6.95	cps
Tin	118-1	7272	7914	7019	7402	6.24	cps
Titanium	47-1	533	530	503	522	3.15	cps
Uranium	238-1	477	420	493	463	8.30	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB04 Instrumnet Name : P8
Client Sample ID : CCB04 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:01:58 DataFile Name : 050CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	43	50	40	44	11.46	cps
Ytterbium	172-1	93	67	53	71	28.64	cps
Ytterbium	172-2	23	33	30	29	17.63	cps
Ytterbium	176-1	1617	1490	1487	1531	4.84	cps
Ytterbium	176-2	303	327	307	312	4.04	cps
Yttrium	89-1	18419803	18708448	18681359	18603203	0.86	cps
Yttrium	89-2	1498921	1479164	1468770	1482285	1.03	cps
Zinc	66-2	2240	2480	2497	2406	5.97	cps
Zirconium	90-1	2344	2894	3010	2749	12.95	cps
Zirconium	91-1	617	540	790	649	19.74	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : WATER MDL-4 Instrumnet Name : P8
Client Sample ID : WATER MDL-4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:05:19 DataFile Name : 051AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2507	2560	2334	2467	4.80	cps
Antimony	121-1	17979	17905	17758	17881	0.63	cps
Arsenic	75-2	283	350	310	314	10.67	cps
Barium	135-1	20098	20669	20389	20385	1.40	cps
Barium	137-1	35904	35242	35480	35542	0.94	cps
Beryllium	9-1	3108	3126	2924	3053	3.66	cps
Bismuth	209-1	7444894	7501671	7491332	7479299	0.40	cps
Bismuth	209-2	3315633	3335285	3259771	3303563	1.19	cps
Bromine	81-1	20882	21470	21837	21396	2.25	cps
Cadmium	108-1	353	363	337	351	3.84	cps
Cadmium	106-1	7479	7532	7332	7448	1.39	cps
Cadmium	111-1	9495	9209	9281	9328	1.60	cps
Calcium	43-1	24825	25142	25182	25050	0.78	cps
Calcium	44-1	437423	431450	433770	434214	0.69	cps
Carbon	12-1	4475466	4350394	4294602	4373487	2.12	cps
Carbon	12-2	30435	30194	30582	30404	0.64	cps
Chlorine	35-1	223628	223248	223722	223533	0.11	cps
Chlorine	35-2	1093	1010	1123	1076	5.46	cps
Chromium	52-2	5418	5811	5715	5648	3.63	cps
Cobalt	59-2	7078	7252	6495	6942	5.71	cps
Copper	63-2	15519	15081	14928	15176	2.02	cps
Dysprosium	156-1	30	30	20	27	21.65	cps
Dysprosium	156-2	3	0	3	2	86.60	cps
Erbium	164-1	110	70	113	98	24.66	cps
Erbium	164-2	37	13	40	30	48.44	cps
Gadolinium	160-1	97	117	100	104	10.26	cps
Gadolinium	160-2	27	10	23	20	44.10	cps
Holmium	165-1	12460507	12435346	12844028	12579960	1.82	cps
Holmium	165-2	4590601	4657376	4618715	4622231	0.73	cps
Indium	115-1	10632826	10796530	10457458	10628938	1.60	cps
Indium	115-2	1084201	1086927	1082232	1084453	0.22	cps
Iron	54-2	9397	9370	8746	9171	4.01	cps
Iron	56-2	165755	161118	152826	159900	4.10	cps
Iron	57-2	4171	3927	3911	4003	3.64	cps
Krypton	83-1	413	493	470	459	8.97	cps
Lead	206-1	14738	14338	14628	14568	1.42	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : WATER MDL-4 Instrumnet Name : P8
Client Sample ID : WATER MDL-4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:05:19 DataFile Name : 051AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	12606	12286	12880	12591	2.36	cps
Lead	208-1	58776	57240	57744	57920	1.35	cps
Lithium	6-1	2423858	2484957	2505083	2471299	1.71	cps
Magnesium	24-2	97785	93219	87745	92916	5.41	cps
Manganese	55-2	7692	7916	7309	7639	4.02	cps
Molybdenum	94-1	15869	15796	15936	15867	0.44	cps
Molybdenum	95-1	8986	9076	8806	8956	1.54	cps
Molybdenum	96-1	11255	11225	11391	11290	0.79	cps
Molybdenum	97-1	5424	5755	5628	5602	2.97	cps
Molybdenum	98-1	14031	14611	13920	14187	2.62	cps
Neodymium	150-1	7	13	27	16	65.47	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	2917	2970	2904	2930	1.20	cps
Phosphorus	31-2	150	160	107	139	20.41	cps
Potassium	39-2	64945	63663	63017	63875	1.54	cps
Rhodium	103-1	9822261	9925649	9984512	9910807	0.83	cps
Rhodium	103-2	4114314	4086940	4075948	4092401	0.48	cps
Scandium	45-1	6203216	6261825	6278933	6247991	0.64	cps
Scandium	45-2	134193	134663	135726	134861	0.58	cps
Selenium	82-1	1647	1447	1470	1521	7.19	cps
Selenium	77-2	33	20	20	24	31.49	cps
Selenium	78-2	130	110	117	119	8.57	cps
Silicon	28-1	500613	494958	489539	495037	1.12	cps
Silver	107-1	20842	21877	22275	21665	3.41	cps
Silver	109-1	20666	20799	21093	20853	1.05	cps
Sodium	23-2	265379	262908	255676	261321	1.93	cps
Strontium	86-1	6215	5835	6115	6055	3.25	cps
Strontium	88-1	48571	47383	47052	47669	1.68	cps
Sulfur	34-1	713135	716760	719177	716357	0.42	cps
Terbium	159-1	12860017	13194506	12714014	12922846	1.91	cps
Terbium	159-2	4451518	4364491	4417156	4411055	0.99	cps
Thallium	203-1	15423	14885	15743	15350	2.82	cps
Thallium	205-1	36491	36715	37120	36775	0.87	cps
Tin	118-1	20562	21440	20919	20974	2.11	cps
Titanium	47-1	2647	2677	2660	2661	0.56	cps
Uranium	238-1	43738	43842	43989	43856	0.29	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : WATER MDL-4 Instrumnet Name : P8
Client Sample ID : WATER MDL-4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:05:19 DataFile Name : 051AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2677	2637	2547	2620	2.54	cps
Ytterbium	172-1	73	50	77	67	21.80	cps
Ytterbium	172-2	33	33	37	34	5.60	cps
Ytterbium	176-1	1607	1600	1633	1613	1.09	cps
Ytterbium	176-2	250	343	290	294	15.90	cps
Yttrium	89-1	18397402	18600753	18623992	18540716	0.67	cps
Yttrium	89-2	1469568	1505162	1468589	1481106	1.41	cps
Zinc	66-2	5058	5138	4804	5000	3.48	cps
Zirconium	90-1	29301	29692	30179	29724	1.48	cps
Zirconium	91-1	6715	6688	6908	6771	1.77	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : WATER MDL-5 Instrumnet Name : P8
Client Sample ID : WATER MDL-5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:08:43 DataFile Name : 052AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3017	2764	2750	2844	5.29	cps
Antimony	121-1	17251	17882	17234	17456	2.11	cps
Arsenic	75-2	337	413	347	366	11.40	cps
Barium	135-1	21404	20826	21050	21093	1.38	cps
Barium	137-1	36292	36690	36332	36438	0.60	cps
Beryllium	9-1	3107	3129	3045	3094	1.42	cps
Bismuth	209-1	7361614	7456328	7354051	7390664	0.77	cps
Bismuth	209-2	3217923	3300376	3299450	3272583	1.45	cps
Bromine	81-1	21433	21767	21770	21657	0.89	cps
Cadmium	108-1	353	353	387	364	5.28	cps
Cadmium	106-1	7035	7285	7032	7117	2.04	cps
Cadmium	111-1	8735	9140	9096	8990	2.47	cps
Calcium	43-1	25730	26264	26161	26051	1.09	cps
Calcium	44-1	442802	441157	443831	442596	0.30	cps
Carbon	12-1	4503367	4479282	4382870	4455173	1.43	cps
Carbon	12-2	31450	30311	30963	30908	1.85	cps
Chlorine	35-1	228018	228530	227198	227916	0.29	cps
Chlorine	35-2	1140	1097	1070	1102	3.21	cps
Chromium	52-2	5745	5868	5544	5719	2.85	cps
Cobalt	59-2	7499	7159	6472	7043	7.43	cps
Copper	63-2	17114	16933	17351	17133	1.22	cps
Dysprosium	156-1	20	17	20	19	10.18	cps
Dysprosium	156-2	10	7	7	8	24.71	cps
Erbium	164-1	70	107	87	88	20.92	cps
Erbium	164-2	20	37	17	24	43.83	cps
Gadolinium	160-1	103	113	150	122	20.10	cps
Gadolinium	160-2	33	30	27	30	11.10	cps
Holmium	165-1	12308436	12521997	12174786	12335073	1.42	cps
Holmium	165-2	4513316	4547045	4477518	4512626	0.77	cps
Indium	115-1	10517003	10486854	10444983	10482947	0.35	cps
Indium	115-2	1078082	1072587	1069734	1073468	0.40	cps
Iron	54-2	9543	9857	9253	9551	3.16	cps
Iron	56-2	173359	167443	163299	168034	3.01	cps
Iron	57-2	4354	4117	4277	4250	2.84	cps
Krypton	83-1	417	420	440	426	2.97	cps
Lead	206-1	14845	14338	14722	14635	1.81	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : WATER MDL-5 Instrumnet Name : P8
Client Sample ID : WATER MDL-5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:08:43 DataFile Name : 052AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	13167	12987	12803	12986	1.40	cps
Lead	208-1	58745	58258	58652	58552	0.44	cps
Lithium	6-1	2510070	2509277	2474116	2497821	0.82	cps
Magnesium	24-2	95503	94624	90582	93570	2.80	cps
Manganese	55-2	7996	7759	7869	7874	1.50	cps
Molybdenum	94-1	15926	16266	16283	16158	1.25	cps
Molybdenum	95-1	8813	8966	8623	8801	1.96	cps
Molybdenum	96-1	10988	10861	11531	11127	3.20	cps
Molybdenum	97-1	5228	5655	5695	5526	4.68	cps
Molybdenum	98-1	14418	13974	14254	14215	1.58	cps
Neodymium	150-1	30	20	7	19	61.96	cps
Neodymium	150-2	7	3	7	6	34.70	cps
Nickel	60-2	3394	3500	3477	3457	1.62	cps
Phosphorus	31-2	177	117	127	140	22.96	cps
Potassium	39-2	65719	65086	64520	65108	0.92	cps
Rhodium	103-1	9860373	9963066	10011675	9945038	0.78	cps
Rhodium	103-2	4041153	4041800	4077681	4053545	0.52	cps
Scandium	45-1	6196339	6221840	6290610	6236263	0.78	cps
Scandium	45-2	135524	133782	133479	134262	0.82	cps
Selenium	82-1	1587	1603	1473	1555	4.55	cps
Selenium	77-2	33	23	33	30	19.25	cps
Selenium	78-2	100	167	143	137	24.75	cps
Silicon	28-1	490060	487518	488583	488720	0.26	cps
Silver	107-1	21640	21443	22268	21784	1.98	cps
Silver	109-1	21560	20886	21487	21311	1.74	cps
Sodium	23-2	268379	265369	259930	264560	1.62	cps
Strontium	86-1	6215	6261	5948	6141	2.75	cps
Strontium	88-1	49099	48604	47688	48464	1.48	cps
Sulfur	34-1	734580	737620	737261	736487	0.23	cps
Terbium	159-1	12466488	12602735	12887524	12652249	1.70	cps
Terbium	159-2	4486701	4344965	4354910	4395525	1.80	cps
Thallium	203-1	15583	15436	15443	15487	0.54	cps
Thallium	205-1	36364	36715	36157	36412	0.77	cps
Tin	118-1	22342	22879	22646	22622	1.19	cps
Titanium	47-1	2737	2700	2807	2748	1.97	cps
Uranium	238-1	43481	43310	43491	43427	0.23	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : WATER MDL-5 Instrumnet Name : P8
Client Sample ID : WATER MDL-5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:08:43 DataFile Name : 052AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2894	2780	2497	2724	7.50	cps
Ytterbium	172-1	60	70	37	56	30.79	cps
Ytterbium	172-2	40	23	20	28	38.58	cps
Ytterbium	176-1	1563	1573	1653	1597	3.09	cps
Ytterbium	176-2	250	343	290	294	15.90	cps
Yttrium	89-1	18589668	18562020	18201995	18451228	1.17	cps
Yttrium	89-2	1458907	1366248	1466926	1430694	3.91	cps
Zinc	66-2	7999	7806	8036	7947	1.56	cps
Zirconium	90-1	29925	30022	30052	30000	0.22	cps
Zirconium	91-1	6505	6705	6665	6625	1.60	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW005 Instrumnet Name : P8
Client Sample ID : PBW005 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:16:57 DataFile Name : 054AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	223	270	277	257	11.32	cps
Antimony	121-1	313	287	253	284	10.57	cps
Arsenic	75-2	10	10	3	8	49.52	cps
Barium	135-1	180	207	197	194	6.93	cps
Barium	137-1	267	377	347	330	17.23	cps
Beryllium	9-1	68	43	62	57	22.91	cps
Bismuth	209-1	7447122	7486993	7454881	7462999	0.28	cps
Bismuth	209-2	3248634	3263536	3305087	3272419	0.89	cps
Bromine	81-1	21533	21490	22138	21720	1.67	cps
Cadmium	108-1	7	20	20	16	49.47	cps
Cadmium	106-1	6735	6665	6352	6584	3.10	cps
Cadmium	111-1	4747	4708	4465	4640	3.29	cps
Calcium	43-1	1890	1663	1807	1787	6.42	cps
Calcium	44-1	52793	51870	51983	52215	0.96	cps
Carbon	12-1	4701444	4507521	4400859	4536608	3.36	cps
Carbon	12-2	31541	30953	30685	31059	1.41	cps
Chlorine	35-1	220085	221305	220761	220717	0.28	cps
Chlorine	35-2	1140	1033	1007	1060	6.66	cps
Chromium	52-2	1780	1893	1890	1855	3.48	cps
Cobalt	59-2	80	97	120	99	20.32	cps
Copper	63-2	2634	2737	2867	2746	4.26	cps
Dysprosium	156-1	17	20	3	13	66.16	cps
Dysprosium	156-2	0	10	3	4	114.60	cps
Erbium	164-1	117	73	87	92	24.07	cps
Erbium	164-2	33	37	20	30	29.40	cps
Gadolinium	160-1	117	100	113	110	8.02	cps
Gadolinium	160-2	20	30	33	28	24.98	cps
Holmium	165-1	12603910	12531657	12353947	12496505	1.03	cps
Holmium	165-2	4474784	4586704	4540303	4533930	1.24	cps
Indium	115-1	10638760	10726819	10746810	10704130	0.54	cps
Indium	115-2	1075033	1071698	1081109	1075947	0.44	cps
Iron	54-2	927	963	933	941	2.08	cps
Iron	56-2	11191	12075	13160	12142	8.12	cps
Iron	57-2	320	250	300	290	12.43	cps
Krypton	83-1	407	447	420	424	4.80	cps
Lead	206-1	1873	1727	1880	1827	4.74	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW005 Instrumnet Name : P8
Client Sample ID : PBW005 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:16:57 DataFile Name : 054AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1560	1537	1530	1542	1.02	cps
Lead	208-1	7164	7014	7241	7140	1.62	cps
Lithium	6-1	2411255	2487701	2519408	2472788	2.25	cps
Magnesium	24-2	360	330	330	340	5.09	cps
Manganese	55-2	4497	4321	4311	4376	2.40	cps
Molybdenum	94-1	833	827	770	810	4.30	cps
Molybdenum	95-1	350	297	250	299	16.74	cps
Molybdenum	96-1	427	493	470	463	7.30	cps
Molybdenum	97-1	183	163	163	170	6.79	cps
Molybdenum	98-1	347	430	437	404	12.40	cps
Neodymium	150-1	23	10	20	18	39.03	cps
Neodymium	150-2	3	0	3	2	86.60	cps
Nickel	60-2	917	1043	1013	991	6.68	cps
Phosphorus	31-2	117	133	73	108	28.74	cps
Potassium	39-2	21653	21212	21189	21351	1.22	cps
Rhodium	103-1	10098119	10027542	9954394	10026685	0.72	cps
Rhodium	103-2	4092383	4108801	4107506	4102897	0.22	cps
Scandium	45-1	6401484	6441188	6410214	6417629	0.33	cps
Scandium	45-2	133375	136094	135232	134900	1.03	cps
Selenium	82-1	3	-13	0	-3	-264.48	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	50	23	27	33	43.59	cps
Silicon	28-1	468382	459797	460049	462743	1.06	cps
Silver	107-1	473	443	407	441	7.57	cps
Silver	109-1	303	370	283	319	14.23	cps
Sodium	23-2	69628	68228	69863	69240	1.28	cps
Strontium	86-1	783	767	713	754	4.85	cps
Strontium	88-1	730	643	727	700	7.01	cps
Sulfur	34-1	730428	730974	728738	730047	0.16	cps
Terbium	159-1	12682971	12725619	12760070	12722887	0.30	cps
Terbium	159-2	4401334	4327738	4419820	4382964	1.11	cps
Thallium	203-1	397	453	390	413	8.42	cps
Thallium	205-1	1043	1050	907	1000	8.09	cps
Tin	118-1	5591	5765	5568	5641	1.91	cps
Titanium	47-1	390	413	370	391	5.54	cps
Uranium	238-1	183	157	157	166	9.30	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW005 Instrumnet Name : P8
Client Sample ID : PBW005 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:16:57 DataFile Name : 054AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	33	40	33	36	10.83	cps
Ytterbium	172-1	70	57	53	60	14.70	cps
Ytterbium	172-2	17	37	27	27	37.50	cps
Ytterbium	176-1	1630	1653	1640	1641	0.71	cps
Ytterbium	176-2	297	327	297	307	5.65	cps
Yttrium	89-1	18526248	18457713	18527547	18503836	0.22	cps
Yttrium	89-2	1467912	1367421	1452991	1429441	3.79	cps
Zinc	66-2	2230	2480	2437	2382	5.61	cps
Zirconium	90-1	1650	1593	1670	1638	2.43	cps
Zirconium	91-1	337	347	343	342	1.49	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : SOIL MDL-4 Instrumnet Name : P8
Client Sample ID : SOIL MDL-4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:23:43 DataFile Name : 056AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2524	2640	2130	2431	10.99	cps
Antimony	121-1	17351	17234	17725	17437	1.47	cps
Arsenic	75-2	377	327	300	334	11.64	cps
Barium	135-1	20272	20365	20579	20405	0.77	cps
Barium	137-1	35486	35456	35159	35367	0.51	cps
Beryllium	9-1	3029	3225	3046	3100	3.50	cps
Bismuth	209-1	7334467	7668641	7458165	7487091	2.26	cps
Bismuth	209-2	3312262	3276269	3340055	3309529	0.97	cps
Bromine	81-1	21557	21286	21557	21467	0.73	cps
Cadmium	108-1	313	403	383	367	12.89	cps
Cadmium	106-1	7262	7249	7235	7249	0.18	cps
Cadmium	111-1	9111	9039	9134	9095	0.54	cps
Calcium	43-1	25626	25403	25352	25460	0.57	cps
Calcium	44-1	434357	441989	439873	438740	0.90	cps
Carbon	12-1	4587613	4426248	4422656	4478839	2.10	cps
Carbon	12-2	31250	30766	30929	30982	0.80	cps
Chlorine	35-1	226282	226304	225624	226070	0.17	cps
Chlorine	35-2	1037	1060	1083	1060	2.20	cps
Chromium	52-2	5521	5378	5588	5496	1.95	cps
Cobalt	59-2	7242	7005	6588	6945	4.77	cps
Copper	63-2	15218	14731	14157	14702	3.61	cps
Dysprosium	156-1	17	10	23	17	39.99	cps
Dysprosium	156-2	3	0	7	3	100.05	cps
Erbium	164-1	73	73	77	74	2.59	cps
Erbium	164-2	13	50	30	31	59.02	cps
Gadolinium	160-1	83	103	137	108	25.00	cps
Gadolinium	160-2	27	27	13	22	34.66	cps
Holmium	165-1	12655629	12549583	12622936	12609383	0.43	cps
Holmium	165-2	4557870	4542833	4587867	4562857	0.50	cps
Indium	115-1	10631680	10801975	10615962	10683206	0.97	cps
Indium	115-2	1089439	1082585	1087902	1086642	0.33	cps
Iron	54-2	9373	9356	8886	9205	3.00	cps
Iron	56-2	164413	160909	151822	159048	4.09	cps
Iron	57-2	4041	4061	3777	3959	3.99	cps
Krypton	83-1	473	453	430	452	4.80	cps
Lead	206-1	13447	13964	13874	13762	2.01	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : SOIL MDL-4 Instrumnet Name : P8
Client Sample ID : SOIL MDL-4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:23:43 DataFile Name : 056AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	11719	12156	12243	12039	2.33	cps
Lead	208-1	54843	54949	55577	55123	0.72	cps
Lithium	6-1	2533587	2565430	2440385	2513134	2.59	cps
Magnesium	24-2	99228	94779	89479	94495	5.17	cps
Manganese	55-2	7612	7539	7279	7476	2.34	cps
Molybdenum	94-1	16103	15649	15429	15727	2.19	cps
Molybdenum	95-1	8523	8733	8643	8633	1.22	cps
Molybdenum	96-1	10684	11018	11051	10918	1.86	cps
Molybdenum	97-1	5474	5294	5088	5285	3.66	cps
Molybdenum	98-1	13840	13717	13477	13678	1.35	cps
Neodymium	150-1	43	20	10	24	69.97	cps
Neodymium	150-2	7	7	3	6	34.70	cps
Nickel	60-2	3004	3047	3037	3029	0.75	cps
Phosphorus	31-2	203	153	163	173	15.26	cps
Potassium	39-2	63813	62046	62083	62647	1.61	cps
Rhodium	103-1	9897113	10089985	10012544	9999881	0.97	cps
Rhodium	103-2	4212785	4136928	4162955	4170889	0.92	cps
Scandium	45-1	6380727	6412965	6431322	6408338	0.40	cps
Scandium	45-2	137305	136938	137863	137369	0.34	cps
Selenium	82-1	1410	1533	1577	1507	5.74	cps
Selenium	77-2	27	40	27	31	24.74	cps
Selenium	78-2	130	93	143	122	21.19	cps
Silicon	28-1	491449	486139	482500	486696	0.92	cps
Silver	107-1	21300	21620	21934	21618	1.47	cps
Silver	109-1	20345	20816	20489	20550	1.17	cps
Sodium	23-2	266194	260693	255456	260781	2.06	cps
Strontium	86-1	6238	6155	6075	6156	1.33	cps
Strontium	88-1	48534	47072	47239	47615	1.68	cps
Sulfur	34-1	732764	728609	729205	730193	0.31	cps
Terbium	159-1	12791948	12927434	12984007	12901129	0.77	cps
Terbium	159-2	4425860	4426499	4428178	4426846	0.03	cps
Thallium	203-1	15296	15186	14892	15124	1.38	cps
Thallium	205-1	36007	35850	35766	35874	0.34	cps
Tin	118-1	20883	20809	21010	20901	0.48	cps
Titanium	47-1	2970	2867	2657	2831	5.64	cps
Uranium	238-1	43578	43591	43357	43509	0.30	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : SOIL MDL-4 Instrumnet Name : P8
Client Sample ID : SOIL MDL-4 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:23:43 DataFile Name : 056AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2877	2974	2560	2804	7.71	cps
Ytterbium	172-1	47	60	67	58	17.62	cps
Ytterbium	172-2	50	37	27	38	30.98	cps
Ytterbium	176-1	1483	1540	1517	1513	1.88	cps
Ytterbium	176-2	267	320	380	322	17.60	cps
Yttrium	89-1	18607792	18652051	18300694	18520179	1.03	cps
Yttrium	89-2	1498433	1470652	1458318	1475801	1.39	cps
Zinc	66-2	4307	4457	4321	4362	1.90	cps
Zirconium	90-1	29157	29825	29321	29434	1.18	cps
Zirconium	91-1	6108	6585	6518	6404	4.03	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : SOIL MDL-5 Instrumnet Name : P8
Client Sample ID : SOIL MDL-5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:27:05 DataFile Name : 057AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2574	2600	2357	2510	5.32	cps
Antimony	121-1	17097	17575	17388	17353	1.39	cps
Arsenic	75-2	387	403	263	351	21.78	cps
Barium	135-1	20282	19868	20319	20156	1.24	cps
Barium	137-1	35346	35804	35557	35569	0.64	cps
Beryllium	9-1	3094	3026	3077	3066	1.17	cps
Bismuth	209-1	7558233	7300088	7378012	7412111	1.79	cps
Bismuth	209-2	3289850	3304989	3272898	3289246	0.49	cps
Bromine	81-1	21667	21333	20929	21310	1.73	cps
Cadmium	108-1	387	337	350	358	7.24	cps
Cadmium	106-1	7375	7222	7155	7251	1.56	cps
Cadmium	111-1	9340	8877	9178	9131	2.57	cps
Calcium	43-1	25499	25556	26030	25695	1.13	cps
Calcium	44-1	438547	436523	436975	437348	0.24	cps
Carbon	12-1	4621865	4495875	4427099	4514946	2.19	cps
Carbon	12-2	31216	31647	31614	31493	0.76	cps
Chlorine	35-1	226325	226535	224947	225936	0.38	cps
Chlorine	35-2	1110	1197	1047	1118	6.74	cps
Chromium	52-2	5458	5514	5501	5491	0.54	cps
Cobalt	59-2	7282	7329	6545	7052	6.23	cps
Copper	63-2	14868	14938	14451	14752	1.79	cps
Dysprosium	156-1	17	27	7	17	59.99	cps
Dysprosium	156-2	7	3	7	6	34.70	cps
Erbium	164-1	87	93	63	81	19.42	cps
Erbium	164-2	27	40	20	29	35.25	cps
Gadolinium	160-1	130	113	113	119	8.09	cps
Gadolinium	160-2	27	13	30	23	37.81	cps
Holmium	165-1	12140111	12434170	12538655	12370979	1.67	cps
Holmium	165-2	4561822	4590084	4505946	4552617	0.94	cps
Indium	115-1	10535142	10306500	10481335	10440992	1.14	cps
Indium	115-2	1077773	1081966	1077209	1078983	0.24	cps
Iron	54-2	9350	9066	8676	9031	3.75	cps
Iron	56-2	163644	160317	152461	158807	3.62	cps
Iron	57-2	4041	3841	3904	3928	2.60	cps
Krypton	83-1	437	380	477	431	11.27	cps
Lead	206-1	13827	13704	13991	13841	1.04	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : SOIL MDL-5 Instrumnet Name : P8
Client Sample ID : SOIL MDL-5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:27:05 DataFile Name : 057AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	11909	11775	12196	11960	1.80	cps
Lead	208-1	54826	54515	55280	54874	0.70	cps
Lithium	6-1	2467126	2464705	2413550	2448461	1.24	cps
Magnesium	24-2	96137	95027	91397	94187	2.63	cps
Manganese	55-2	7809	7792	7705	7769	0.71	cps
Molybdenum	94-1	15906	16079	15676	15887	1.28	cps
Molybdenum	95-1	8296	8459	8553	8436	1.54	cps
Molybdenum	96-1	10698	10934	10888	10840	1.16	cps
Molybdenum	97-1	5254	5618	5348	5407	3.49	cps
Molybdenum	98-1	13860	13917	13804	13860	0.41	cps
Neodymium	150-1	33	23	10	22	52.68	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	3147	3084	2870	3034	4.78	cps
Phosphorus	31-2	147	190	187	174	13.82	cps
Potassium	39-2	65169	64557	61945	63890	2.68	cps
Rhodium	103-1	10221545	9909990	9859452	9996996	1.96	cps
Rhodium	103-2	4107121	4092016	4105370	4101502	0.20	cps
Scandium	45-1	6387014	6280631	6288393	6318679	0.94	cps
Scandium	45-2	135609	136689	137652	136650	0.75	cps
Selenium	82-1	1377	1730	1553	1553	11.37	cps
Selenium	77-2	27	33	30	30	11.10	cps
Selenium	78-2	123	157	87	122	28.65	cps
Silicon	28-1	518133	498917	490760	502603	2.80	cps
Silver	107-1	21263	21781	21433	21492	1.23	cps
Silver	109-1	20295	20312	20656	20421	1.00	cps
Sodium	23-2	266923	264330	257332	262862	1.89	cps
Strontium	86-1	6161	5895	6028	6028	2.21	cps
Strontium	88-1	46758	48106	48180	47681	1.68	cps
Sulfur	34-1	737347	738520	737634	737834	0.08	cps
Terbium	159-1	12955774	12716462	12708520	12793585	1.10	cps
Terbium	159-2	4371845	4435623	4321771	4376413	1.30	cps
Thallium	203-1	15032	15266	15249	15182	0.86	cps
Thallium	205-1	35733	35358	35502	35531	0.53	cps
Tin	118-1	20449	20425	20375	20416	0.18	cps
Titanium	47-1	2654	2700	2567	2640	2.56	cps
Uranium	238-1	44347	43253	43865	43822	1.25	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : SOIL MDL-5 Instrumnet Name : P8
Client Sample ID : SOIL MDL-5 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:27:05 DataFile Name : 057AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2940	2887	2520	2783	8.22	cps
Ytterbium	172-1	73	80	77	77	4.35	cps
Ytterbium	172-2	23	50	43	39	35.69	cps
Ytterbium	176-1	1573	1533	1613	1573	2.54	cps
Ytterbium	176-2	220	257	323	267	19.65	cps
Yttrium	89-1	18294361	18542103	18254987	18363817	0.85	cps
Yttrium	89-2	1483727	1481940	1384431	1450033	3.92	cps
Zinc	66-2	4394	4187	4321	4301	2.44	cps
Zirconium	90-1	28449	29788	29648	29295	2.51	cps
Zirconium	91-1	6758	6392	6505	6552	2.87	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBS005 Instrumnet Name : P8
Client Sample ID : PBS005 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:33:53 DataFile Name : 059AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	260	330	290	293	11.97	cps
Antimony	121-1	213	163	183	187	13.48	cps
Arsenic	75-2	3	10	3	6	69.34	cps
Barium	135-1	153	210	170	178	16.38	cps
Barium	137-1	307	333	307	316	4.88	cps
Beryllium	9-1	47	51	32	44	22.97	cps
Bismuth	209-1	7514727	7511893	7506889	7511170	0.05	cps
Bismuth	209-2	3346718	3347112	3286657	3326829	1.05	cps
Bromine	81-1	22345	22378	22214	22312	0.39	cps
Cadmium	108-1	37	13	7	19	83.40	cps
Cadmium	106-1	6928	6645	6735	6770	2.14	cps
Cadmium	111-1	4851	4675	4750	4759	1.85	cps
Calcium	43-1	1903	1970	1790	1888	4.82	cps
Calcium	44-1	54121	54322	53934	54126	0.36	cps
Carbon	12-1	4611491	4532225	4404535	4516084	2.31	cps
Carbon	12-2	31494	31637	31888	31673	0.63	cps
Chlorine	35-1	213139	214547	215121	214269	0.48	cps
Chlorine	35-2	930	1077	1000	1002	7.32	cps
Chromium	52-2	1847	1977	2127	1983	7.07	cps
Cobalt	59-2	120	83	103	102	17.96	cps
Copper	63-2	2360	2424	2930	2571	12.15	cps
Dysprosium	156-1	10	13	23	16	44.60	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	100	73	70	81	20.27	cps
Erbium	164-2	33	33	37	34	5.60	cps
Gadolinium	160-1	103	87	120	103	16.13	cps
Gadolinium	160-2	20	20	20	20	0.00	cps
Holmium	165-1	12567380	12418871	12357088	12447780	0.87	cps
Holmium	165-2	4595385	4584044	4512448	4563959	0.99	cps
Indium	115-1	10763755	10787079	10659566	10736800	0.63	cps
Indium	115-2	1084613	1084137	1082691	1083814	0.09	cps
Iron	54-2	950	1083	1013	1016	6.57	cps
Iron	56-2	11758	12035	12746	12180	4.18	cps
Iron	57-2	290	323	297	303	5.81	cps
Krypton	83-1	430	397	410	412	4.07	cps
Lead	206-1	1603	1577	1480	1553	4.18	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBS005 Instrumnet Name : P8
Client Sample ID : PBS005 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:33:53 DataFile Name : 059AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1353	1400	1337	1363	2.41	cps
Lead	208-1	6444	6194	6347	6328	1.99	cps
Lithium	6-1	2420395	2487513	2517927	2475278	2.02	cps
Magnesium	24-2	320	297	390	336	14.48	cps
Manganese	55-2	4718	4321	4557	4532	4.41	cps
Molybdenum	94-1	713	710	693	706	1.52	cps
Molybdenum	95-1	267	220	267	251	10.73	cps
Molybdenum	96-1	380	333	400	371	9.22	cps
Molybdenum	97-1	177	140	137	151	14.69	cps
Molybdenum	98-1	337	367	367	357	4.86	cps
Neodymium	150-1	7	3	37	16	118.03	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	827	1027	1000	951	11.42	cps
Phosphorus	31-2	90	93	113	99	12.76	cps
Potassium	39-2	20965	21933	21349	21416	2.28	cps
Rhodium	103-1	9989378	10075909	10167374	10077554	0.88	cps
Rhodium	103-2	4169133	4121508	4146800	4145814	0.57	cps
Scandium	45-1	6386172	6362145	6460556	6402958	0.80	cps
Scandium	45-2	136773	136581	137311	136889	0.28	cps
Selenium	82-1	13	50	97	53	78.30	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	37	20	40	32	33.25	cps
Silicon	28-1	478584	478324	476671	477860	0.22	cps
Silver	107-1	540	457	390	462	16.26	cps
Silver	109-1	283	383	410	359	18.61	cps
Sodium	23-2	68697	68027	68938	68554	0.69	cps
Strontium	86-1	797	767	690	751	7.32	cps
Strontium	88-1	743	743	820	769	5.76	cps
Sulfur	34-1	747265	753463	760930	753886	0.91	cps
Terbium	159-1	12795610	13088486	13001704	12961933	1.16	cps
Terbium	159-2	4388086	4441335	4399802	4409741	0.63	cps
Thallium	203-1	327	367	340	344	5.91	cps
Thallium	205-1	740	640	753	711	8.71	cps
Tin	118-1	5414	5761	5791	5656	3.70	cps
Titanium	47-1	333	330	363	342	5.36	cps
Uranium	238-1	123	193	183	167	22.71	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBS005 Instrumnet Name : P8
Client Sample ID : PBS005 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:33:53 DataFile Name : 059AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	27	27	23	26	7.55	cps
Ytterbium	172-1	70	73	73	72	2.66	cps
Ytterbium	172-2	37	37	40	38	5.09	cps
Ytterbium	176-1	1660	1520	1633	1605	4.63	cps
Ytterbium	176-2	320	260	363	314	16.50	cps
Yttrium	89-1	18512712	18648104	18549652	18570156	0.38	cps
Yttrium	89-2	1379502	1470267	1487825	1445865	4.02	cps
Zinc	66-2	2337	2327	2364	2342	0.81	cps
Zirconium	90-1	1473	1427	1257	1386	8.23	cps
Zirconium	91-1	227	377	323	309	24.62	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV05 Instrumnet Name : P8
Client Sample ID : CCV05 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:40:38 DataFile Name : 061CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6580453	6587112	6661211	6609592	0.68	cps
Antimony	121-1	19390950	19614767	19567516	19524411	0.60	cps
Arsenic	75-2	412550	410261	415321	412711	0.61	cps
Barium	135-1	23236380	23013082	23141655	23130372	0.48	cps
Barium	137-1	40004801	40124361	39909650	40012937	0.27	cps
Beryllium	9-1	3393022	3339942	3369073	3367346	0.79	cps
Bismuth	209-1	6294147	6301808	6332082	6309346	0.32	cps
Bismuth	209-2	2807375	2779660	2812184	2799740	0.63	cps
Bromine	81-1	21570	23239	22926	22578	3.93	cps
Cadmium	108-1	368276	369272	368685	368744	0.14	cps
Cadmium	106-1	525012	527768	523458	525413	0.42	cps
Cadmium	111-1	4761719	4741092	4786515	4763109	0.48	cps
Calcium	43-1	27906092	28098214	28097990	28034098	0.40	cps
Calcium	44-1	455854847	453453820	461339606	456882758	0.88	cps
Carbon	12-1	5306438	5387901	5366245	5353528	0.79	cps
Carbon	12-2	46115	46232	46266	46205	0.17	cps
Chlorine	35-1	275369	277254	278394	277006	0.55	cps
Chlorine	35-2	1523	1433	1477	1478	3.05	cps
Chromium	52-2	4388133	4461391	4440147	4429890	0.85	cps
Cobalt	59-2	7938478	7824650	7844406	7869178	0.77	cps
Copper	63-2	68087481	67615372	67785144	67829332	0.35	cps
Dysprosium	156-1	1013	1083	920	1006	8.15	cps
Dysprosium	156-2	217	253	250	240	8.45	cps
Erbium	164-1	977	900	1067	981	8.50	cps
Erbium	164-2	300	323	340	321	6.26	cps
Gadolinium	160-1	677	577	673	642	8.84	cps
Gadolinium	160-2	293	277	327	299	8.52	cps
Holmium	165-1	11368552	11474818	11590708	11478026	0.97	cps
Holmium	165-2	4312696	4307672	4351671	4324013	0.56	cps
Indium	115-1	8790989	8943946	8881361	8872098	0.87	cps
Indium	115-2	920607	921003	927825	923145	0.44	cps
Iron	54-2	42270463	43020911	43146421	42812598	1.11	cps
Iron	56-2	793793055	789630175	792834095	792085775	0.28	cps
Iron	57-2	20097881	19798239	19805079	19900400	0.86	cps
Krypton	83-1	487	470	450	469	3.92	cps
Lead	206-1	65737606	65602007	64616401	65318671	0.94	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV05 Instrumnet Name : P8
Client Sample ID : CCV05 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:40:38 DataFile Name : 061CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	56910032	56525232	56084421	56506562	0.73	cps
Lead	208-1	261210379	261768834	258701586	260560267	0.63	cps
Lithium	6-1	2191401	2189398	2193999	2191599	0.11	cps
Magnesium	24-2	114652142	114770288	116488165	115303532	0.89	cps
Manganese	55-2	20463106	20494403	20691508	20549672	0.60	cps
Molybdenum	94-1	67964464	68429487	67494661	67962871	0.69	cps
Molybdenum	95-1	99303619	97755175	97873585	98310793	0.88	cps
Molybdenum	96-1	108729112	108616188	108042215	108462505	0.34	cps
Molybdenum	97-1	61337977	61870146	61849424	61685849	0.49	cps
Molybdenum	98-1	157905568	159427561	159446228	158926452	0.56	cps
Neodymium	150-1	1607	1360	1493	1487	8.31	cps
Neodymium	150-2	140	107	173	140	23.81	cps
Nickel	60-2	2216405	2153885	2184327	2184872	1.43	cps
Phosphorus	31-2	66006	65878	66485	66123	0.48	cps
Potassium	39-2	41599259	41896054	42239041	41911451	0.76	cps
Rhodium	103-1	8248692	8330686	8318173	8299184	0.53	cps
Rhodium	103-2	3517451	3496098	3440369	3484639	1.14	cps
Scandium	45-1	5740716	5882130	5833008	5818618	1.23	cps
Scandium	45-2	133362	132419	133907	133229	0.56	cps
Selenium	82-1	269881	275498	270895	272092	1.10	cps
Selenium	77-2	5398	5468	5838	5568	4.25	cps
Selenium	78-2	19000	18980	19370	19116	1.15	cps
Silicon	28-1	55372134	54906093	55058978	55112401	0.43	cps
Silver	107-1	23819655	23764035	23481915	23688535	0.76	cps
Silver	109-1	22485899	22142134	22667787	22431940	1.19	cps
Sodium	23-2	228385437	228291717	227828490	228168548	0.13	cps
Strontium	86-1	6192832	6251640	6196219	6213564	0.53	cps
Strontium	88-1	54629823	53826209	54441011	54299014	0.77	cps
Sulfur	34-1	2070637	2033672	2032421	2045576	1.06	cps
Terbium	159-1	11866902	11846068	11976313	11896427	0.59	cps
Terbium	159-2	4095999	4154596	4172808	4141134	0.97	cps
Thallium	203-1	16585113	16580539	16465003	16543551	0.41	cps
Thallium	205-1	39553185	39514047	39498033	39521755	0.07	cps
Tin	118-1	15212565	15409736	15455311	15359204	0.84	cps
Titanium	47-1	25713940	26130781	25893869	25912864	0.81	cps
Uranium	238-1	50582861	51388908	51193911	51055226	0.82	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV05 Instrumnet Name : P8
Client Sample ID : CCV05 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:40:38 DataFile Name : 061CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3409661	3361349	3420730	3397247	0.93	cps
Ytterbium	172-1	1433	1403	1343	1393	3.29	cps
Ytterbium	172-2	580	623	617	607	3.85	cps
Ytterbium	176-1	81992	84018	82499	82836	1.27	cps
Ytterbium	176-2	29105	29573	29319	29333	0.80	cps
Yttrium	89-1	17023352	17176063	16864671	17021362	0.91	cps
Yttrium	89-2	1310031	1320789	1316591	1315804	0.41	cps
Zinc	66-2	7964593	8049008	8021566	8011722	0.54	cps
Zirconium	90-1	34075524	34330684	33803610	34069939	0.77	cps
Zirconium	91-1	7629575	7564639	7620672	7604962	0.46	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB05 Instrumnet Name : P8
Client Sample ID : CCB05 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:47:45 DataFile Name : 062CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	340	313	290	314	7.96	cps
Antimony	121-1	1017	1147	827	997	16.15	cps
Arsenic	75-2	20	10	3	11	75.52	cps
Barium	135-1	307	237	257	267	13.52	cps
Barium	137-1	483	453	503	480	5.24	cps
Beryllium	9-1	104	91	97	97	6.60	cps
Bismuth	209-1	7492739	7567575	7630001	7563439	0.91	cps
Bismuth	209-2	3281729	3312775	3359668	3318057	1.18	cps
Bromine	81-1	21186	20969	21046	21067	0.52	cps
Cadmium	108-1	17	17	40	24	55.10	cps
Cadmium	106-1	6508	6498	6508	6505	0.09	cps
Cadmium	111-1	4637	4590	4591	4606	0.59	cps
Calcium	43-1	1867	1783	1777	1809	2.77	cps
Calcium	44-1	52653	52559	51378	52197	1.36	cps
Carbon	12-1	4693936	4548604	4414148	4552229	3.07	cps
Carbon	12-2	30725	30452	30719	30632	0.51	cps
Chlorine	35-1	220307	219347	219171	219608	0.28	cps
Chlorine	35-2	1077	1037	973	1029	5.06	cps
Chromium	52-2	1940	1837	1957	1911	3.40	cps
Cobalt	59-2	117	123	103	114	8.90	cps
Copper	63-2	2647	2740	3220	2869	10.72	cps
Dysprosium	156-1	7	3	17	9	78.08	cps
Dysprosium	156-2	0	3	0	1	173.21	cps
Erbium	164-1	97	80	70	82	16.39	cps
Erbium	164-2	27	33	27	29	13.31	cps
Gadolinium	160-1	103	113	117	111	6.24	cps
Gadolinium	160-2	23	30	30	28	13.86	cps
Holmium	165-1	12736954	12508920	12366693	12537522	1.49	cps
Holmium	165-2	4625753	4627655	4613728	4622378	0.16	cps
Indium	115-1	10650447	10633516	10593972	10625978	0.27	cps
Indium	115-2	1080803	1087376	1081675	1083285	0.33	cps
Iron	54-2	1073	1180	1130	1128	4.73	cps
Iron	56-2	14157	14397	15622	14726	5.34	cps
Iron	57-2	407	410	363	393	6.62	cps
Krypton	83-1	410	440	413	421	3.90	cps
Lead	206-1	2594	2354	2444	2464	4.92	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB05 Instrumnet Name : P8
Client Sample ID : CCB05 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:47:45 DataFile Name : 062CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2317	2167	2157	2214	4.05	cps
Lead	208-1	10559	9748	9742	10016	4.69	cps
Lithium	6-1	2508724	2514598	2539294	2520872	0.64	cps
Magnesium	24-2	767	790	723	760	4.45	cps
Manganese	55-2	4457	4371	4207	4345	2.92	cps
Molybdenum	94-1	1497	1527	1527	1517	1.14	cps
Molybdenum	95-1	1097	840	777	904	18.74	cps
Molybdenum	96-1	1400	1097	1117	1205	14.09	cps
Molybdenum	97-1	683	563	543	597	12.69	cps
Molybdenum	98-1	1620	1363	1297	1427	11.97	cps
Neodymium	150-1	13	3	3	7	86.65	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	897	953	1020	957	6.45	cps
Phosphorus	31-2	87	107	120	104	16.06	cps
Potassium	39-2	22604	22992	22985	22860	0.97	cps
Rhodium	103-1	9972816	9934652	9943828	9950432	0.20	cps
Rhodium	103-2	4148462	4176589	4102955	4142669	0.90	cps
Scandium	45-1	6322749	6324251	6224928	6290643	0.90	cps
Scandium	45-2	131871	133005	130671	131849	0.89	cps
Selenium	82-1	-43	-50	-13	-36	-54.94	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	47	23	40	37	32.79	cps
Silicon	28-1	472690	483034	467234	474319	1.69	cps
Silver	107-1	673	570	650	631	8.59	cps
Silver	109-1	683	583	557	608	10.99	cps
Sodium	23-2	76469	76506	76824	76600	0.25	cps
Strontium	86-1	733	740	797	757	4.60	cps
Strontium	88-1	867	867	937	890	4.54	cps
Sulfur	34-1	704479	707196	707279	706318	0.23	cps
Terbium	159-1	12853979	12875430	12918712	12882707	0.26	cps
Terbium	159-2	4396553	4511775	4386279	4431536	1.57	cps
Thallium	203-1	613	537	610	587	7.39	cps
Thallium	205-1	1557	1400	1437	1465	5.60	cps
Tin	118-1	6882	6658	6862	6801	1.82	cps
Titanium	47-1	497	493	490	493	0.68	cps
Uranium	238-1	327	373	350	350	6.67	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB05 Instrumnet Name : P8
Client Sample ID : CCB05 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:47:45 DataFile Name : 062CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	30	47	23	33	36.07	cps
Ytterbium	172-1	83	77	73	78	6.55	cps
Ytterbium	172-2	33	20	23	26	27.15	cps
Ytterbium	176-1	1640	1490	1570	1567	4.79	cps
Ytterbium	176-2	250	357	320	309	17.54	cps
Yttrium	89-1	18216106	18573467	18303818	18364464	1.01	cps
Yttrium	89-2	1362800	1404881	1490018	1419233	4.57	cps
Zinc	66-2	2460	2274	2377	2370	3.95	cps
Zirconium	90-1	2334	2514	2867	2571	10.55	cps
Zirconium	91-1	463	557	643	554	16.24	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW004 Instrumnet Name : P8
Client Sample ID : PBW004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:51:53 DataFile Name : 063CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	277	263	270	270	2.47	cps
Antimony	121-1	530	400	477	469	13.94	cps
Arsenic	75-2	3	3	13	7	86.65	cps
Barium	135-1	210	230	253	231	9.39	cps
Barium	137-1	337	333	363	344	4.77	cps
Beryllium	9-1	62	63	69	65	6.08	cps
Bismuth	209-1	7481755	7572325	7590482	7548187	0.77	cps
Bismuth	209-2	3335029	3332348	3369267	3345548	0.62	cps
Bromine	81-1	21313	21083	21377	21257	0.73	cps
Cadmium	108-1	30	13	27	23	37.81	cps
Cadmium	106-1	6815	7025	6768	6870	1.99	cps
Cadmium	111-1	4776	4925	4789	4830	1.71	cps
Calcium	43-1	1773	1797	1637	1736	4.98	cps
Calcium	44-1	50401	51324	50906	50877	0.91	cps
Carbon	12-1	4608749	4438266	4348891	4465302	2.96	cps
Carbon	12-2	30766	29533	30044	30114	2.06	cps
Chlorine	35-1	208550	206116	205308	206658	0.82	cps
Chlorine	35-2	883	1007	970	953	6.64	cps
Chromium	52-2	1910	1883	1993	1929	2.97	cps
Cobalt	59-2	97	90	103	97	6.89	cps
Copper	63-2	2547	2634	2884	2688	6.50	cps
Dysprosium	156-1	10	3	13	9	57.30	cps
Dysprosium	156-2	0	0	7	2	173.21	cps
Erbium	164-1	100	83	80	88	12.21	cps
Erbium	164-2	13	23	33	23	42.86	cps
Gadolinium	160-1	110	103	70	94	22.69	cps
Gadolinium	160-2	33	23	7	21	63.80	cps
Holmium	165-1	12586848	12551107	12729754	12622570	0.75	cps
Holmium	165-2	4629225	4586981	4755940	4657382	1.89	cps
Indium	115-1	10732366	10697470	10638932	10689590	0.44	cps
Indium	115-2	1090943	1092120	1090941	1091335	0.06	cps
Iron	54-2	1143	1030	1197	1123	7.58	cps
Iron	56-2	12012	12175	13069	12419	4.58	cps
Iron	57-2	320	267	357	314	14.39	cps
Krypton	83-1	407	403	403	404	0.48	cps
Lead	206-1	2064	2064	1964	2030	2.84	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW004 Instrumnet Name : P8
Client Sample ID : PBW004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:51:53 DataFile Name : 063CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1857	1647	2110	1871	12.41	cps
Lead	208-1	8274	8068	8398	8247	2.02	cps
Lithium	6-1	2519241	2566192	2475588	2520340	1.80	cps
Magnesium	24-2	367	430	390	396	8.10	cps
Manganese	55-2	4174	4631	4391	4398	5.20	cps
Molybdenum	94-1	1040	1007	1053	1033	2.33	cps
Molybdenum	95-1	487	413	413	438	9.67	cps
Molybdenum	96-1	710	557	520	596	16.92	cps
Molybdenum	97-1	280	280	263	274	3.51	cps
Molybdenum	98-1	677	670	567	638	9.67	cps
Neodymium	150-1	7	20	0	9	114.55	cps
Neodymium	150-2	0	3	0	1	173.21	cps
Nickel	60-2	813	920	1007	913	10.60	cps
Phosphorus	31-2	90	97	93	93	3.57	cps
Potassium	39-2	22427	21730	21680	21946	1.90	cps
Rhodium	103-1	9837642	9972816	9935764	9915407	0.70	cps
Rhodium	103-2	4207062	4060686	4133130	4133626	1.77	cps
Scandium	45-1	6419477	6418438	6322693	6386869	0.87	cps
Scandium	45-2	134919	133944	135228	134697	0.50	cps
Selenium	82-1	13	-70	-47	-34	-124.81	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	13	13	20	16	24.76	cps
Silicon	28-1	466893	459817	460487	462399	0.84	cps
Silver	107-1	440	410	417	422	3.73	cps
Silver	109-1	287	307	310	301	4.19	cps
Sodium	23-2	70693	71487	71923	71368	0.87	cps
Strontium	86-1	777	687	727	730	6.18	cps
Strontium	88-1	810	773	790	791	2.32	cps
Sulfur	34-1	709699	712430	711414	711181	0.19	cps
Terbium	159-1	12845003	12837479	12863190	12848557	0.10	cps
Terbium	159-2	4437832	4473270	4402958	4438020	0.79	cps
Thallium	203-1	503	477	447	476	5.96	cps
Thallium	205-1	1027	1083	1120	1077	4.37	cps
Tin	118-1	5881	5571	5805	5752	2.81	cps
Titanium	47-1	413	363	350	376	8.89	cps
Uranium	238-1	277	230	243	250	9.61	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBW004 Instrumnet Name : P8
Client Sample ID : PBW004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:51:53 DataFile Name : 063CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	30	40	27	32	21.53	cps
Ytterbium	172-1	80	67	127	91	34.58	cps
Ytterbium	172-2	17	17	17	17	0.00	cps
Ytterbium	176-1	1607	1627	1670	1635	1.98	cps
Ytterbium	176-2	343	293	320	319	7.85	cps
Yttrium	89-1	18340742	18508732	18519981	18456485	0.54	cps
Yttrium	89-2	1498713	1460580	1515468	1491587	1.89	cps
Zinc	66-2	2364	2344	2594	2434	5.71	cps
Zirconium	90-1	1580	1930	1934	1815	11.19	cps
Zirconium	91-1	407	383	380	390	3.73	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCSW004 Instrumnet Name : P8
Client Sample ID : LCSW004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:55:15 DataFile Name : 064LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5524	5014	4697	5079	8.22	cps
Antimony	121-1	148274	150582	150720	149859	0.92	cps
Arsenic	75-2	1747	1557	1373	1559	11.98	cps
Barium	135-1	175316	175559	176339	175738	0.30	cps
Barium	137-1	306049	306917	305597	306188	0.22	cps
Beryllium	9-1	13442	13274	13606	13441	1.24	cps
Bismuth	209-1	7556533	7508883	7712655	7592690	1.40	cps
Bismuth	209-2	3351724	3356337	3393434	3367165	0.68	cps
Bromine	81-1	20699	21637	21169	21168	2.22	cps
Cadmium	108-1	1447	1540	1580	1522	4.50	cps
Cadmium	106-1	8649	8943	8733	8775	1.72	cps
Cadmium	111-1	23491	24025	24050	23855	1.32	cps
Calcium	43-1	114115	112257	112078	112817	1.00	cps
Calcium	44-1	1977248	1916530	1970421	1954733	1.70	cps
Carbon	12-1	4846207	4808594	4663715	4772839	2.02	cps
Carbon	12-2	33268	33612	33923	33601	0.97	cps
Chlorine	35-1	3158160	3330915	3408696	3299257	3.89	cps
Chlorine	35-2	16660	16636	16443	16580	0.72	cps
Chromium	52-2	34291	32022	28091	31468	9.97	cps
Cobalt	59-2	32053	29694	26802	29516	8.91	cps
Copper	63-2	55692	53136	48191	52340	7.29	cps
Dysprosium	156-1	37	37	30	34	11.18	cps
Dysprosium	156-2	7	10	3	7	50.03	cps
Erbium	164-1	83	77	77	79	4.87	cps
Erbium	164-2	23	37	30	30	22.23	cps
Gadolinium	160-1	123	130	97	117	15.12	cps
Gadolinium	160-2	13	30	17	20	44.10	cps
Holmium	165-1	12572944	12563541	12578344	12571610	0.06	cps
Holmium	165-2	4670620	4610310	4690810	4657247	0.90	cps
Indium	115-1	10545167	10721900	11023920	10763662	2.25	cps
Indium	115-2	1103319	1095232	1107717	1102089	0.57	cps
Iron	54-2	133387	127863	109718	123656	10.01	cps
Iron	56-2	2671421	2502715	2161510	2445215	10.62	cps
Iron	57-2	61702	58155	50773	56877	9.80	cps
Krypton	83-1	477	460	503	480	4.55	cps
Lead	206-1	56214	55806	57135	56385	1.21	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCSW004 Instrumnet Name : P8
Client Sample ID : LCSW004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:55:15 DataFile Name : 064LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	48474	49511	49742	49242	1.37	cps
Lead	208-1	225328	224662	226934	225641	0.52	cps
Lithium	6-1	2553901	2559180	2486668	2533250	1.60	cps
Magnesium	24-2	436433	412361	366296	405030	8.80	cps
Manganese	55-2	9783	9397	8643	9274	6.26	cps
Molybdenum	94-1	149163	151403	152428	150998	1.11	cps
Molybdenum	95-1	183602	185740	182010	183784	1.02	cps
Molybdenum	96-1	203939	203083	205252	204091	0.54	cps
Molybdenum	97-1	116450	115643	116289	116127	0.37	cps
Molybdenum	98-1	293152	296654	300222	296676	1.19	cps
Neodymium	150-1	13	13	13	13	0.00	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	9473	9233	8446	9051	5.94	cps
Phosphorus	31-2	410	397	413	407	2.17	cps
Potassium	39-2	336863	328065	310807	325245	4.08	cps
Rhodium	103-1	9914422	9868437	10302705	10028522	2.38	cps
Rhodium	103-2	4188544	4226227	4168398	4194390	0.70	cps
Scandium	45-1	6366005	6301796	6394186	6353996	0.75	cps
Scandium	45-2	136188	138082	137187	137152	0.69	cps
Selenium	82-1	5538	5768	5731	5679	2.18	cps
Selenium	77-2	143	110	150	134	15.94	cps
Selenium	78-2	440	350	323	371	16.47	cps
Silicon	28-1	1009870	999654	1008176	1005900	0.54	cps
Silver	107-1	92494	95330	94799	94208	1.60	cps
Silver	109-1	89562	89448	93629	90880	2.62	cps
Sodium	23-2	990632	970253	895345	952076	5.27	cps
Strontium	86-1	24338	24027	24241	24202	0.66	cps
Strontium	88-1	205831	210208	207083	207707	1.09	cps
Sulfur	34-1	726317	722662	723510	724163	0.26	cps
Terbium	159-1	12913544	13114615	12997352	13008504	0.78	cps
Terbium	159-2	4431207	4510059	4388834	4443367	1.38	cps
Thallium	203-1	67052	67595	66268	66971	1.00	cps
Thallium	205-1	159015	159542	158499	159019	0.33	cps
Tin	118-1	309134	315269	313231	312545	1.00	cps
Titanium	47-1	50599	51074	50776	50816	0.47	cps
Uranium	238-1	189719	193369	193150	192080	1.07	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCSW004 Instrumnet Name : P8
Client Sample ID : LCSW004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:55:15 DataFile Name : 064LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	62864	59094	53071	58343	8.47	cps
Ytterbium	172-1	80	53	73	69	20.15	cps
Ytterbium	172-2	30	33	27	30	11.10	cps
Ytterbium	176-1	2024	1897	1843	1921	4.81	cps
Ytterbium	176-2	433	367	457	419	11.15	cps
Yttrium	89-1	18853198	18833528	18798084	18828270	0.15	cps
Yttrium	89-2	1508681	1505140	1505465	1506429	0.13	cps
Zinc	66-2	15595	14948	14007	14850	5.38	cps
Zirconium	90-1	126985	126807	129236	127676	1.06	cps
Zirconium	91-1	27664	27587	28489	27914	1.79	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBS004 Instrumnet Name : P8
Client Sample ID : PBS004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:58:36 DataFile Name : 065CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	260	297	273	277	6.71	cps
Antimony	121-1	300	283	260	281	7.15	cps
Arsenic	75-2	10	10	3	8	49.52	cps
Barium	135-1	180	173	160	171	5.95	cps
Barium	137-1	307	340	360	336	8.03	cps
Beryllium	9-1	52	52	45	50	7.33	cps
Bismuth	209-1	7661937	7599453	7749243	7670211	0.98	cps
Bismuth	209-2	3359451	3341435	3383893	3361593	0.63	cps
Bromine	81-1	21650	21323	22031	21668	1.63	cps
Cadmium	108-1	23	27	30	27	12.51	cps
Cadmium	106-1	6728	6765	6782	6758	0.40	cps
Cadmium	111-1	4734	4764	4776	4758	0.46	cps
Calcium	43-1	1627	1573	1673	1625	3.08	cps
Calcium	44-1	51415	51405	51488	51436	0.09	cps
Carbon	12-1	4479464	4437184	4305075	4407241	2.06	cps
Carbon	12-2	29971	30001	30154	30042	0.33	cps
Chlorine	35-1	381088	355211	335265	357188	6.43	cps
Chlorine	35-2	1453	1357	1427	1412	3.54	cps
Chromium	52-2	1833	1913	1897	1881	2.24	cps
Cobalt	59-2	97	103	127	109	14.47	cps
Copper	63-2	2407	2644	2937	2662	9.97	cps
Dysprosium	156-1	10	7	10	9	21.63	cps
Dysprosium	156-2	7	0	7	4	86.60	cps
Erbium	164-1	73	73	90	79	12.20	cps
Erbium	164-2	20	17	40	26	49.38	cps
Gadolinium	160-1	93	103	127	108	15.87	cps
Gadolinium	160-2	10	23	7	13	66.12	cps
Holmium	165-1	12377970	12596435	12780720	12585042	1.60	cps
Holmium	165-2	4688815	4671581	4627323	4662573	0.68	cps
Indium	115-1	10809173	10605477	10745193	10719948	0.97	cps
Indium	115-2	1101581	1105587	1098461	1101876	0.32	cps
Iron	54-2	1027	933	1060	1007	6.52	cps
Iron	56-2	11845	12169	13446	12487	6.78	cps
Iron	57-2	237	290	303	277	12.75	cps
Krypton	83-1	400	380	360	380	5.26	cps
Lead	206-1	1944	1900	1900	1915	1.31	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBS004 Instrumnet Name : P8
Client Sample ID : PBS004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:58:36 DataFile Name : 065CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1520	1690	1567	1592	5.52	cps
Lead	208-1	7494	7428	7384	7435	0.75	cps
Lithium	6-1	2525981	2507295	2472656	2501977	1.08	cps
Magnesium	24-2	353	357	323	344	5.33	cps
Manganese	55-2	4581	4324	4241	4382	4.05	cps
Molybdenum	94-1	873	853	830	852	2.55	cps
Molybdenum	95-1	377	293	383	351	14.28	cps
Molybdenum	96-1	473	480	497	483	2.49	cps
Molybdenum	97-1	180	233	157	190	20.68	cps
Molybdenum	98-1	493	400	517	470	13.14	cps
Neodymium	150-1	13	20	13	16	24.76	cps
Neodymium	150-2	7	7	3	6	34.70	cps
Nickel	60-2	970	980	1153	1034	9.97	cps
Phosphorus	31-2	120	77	77	91	27.46	cps
Potassium	39-2	21953	22214	21980	22049	0.65	cps
Rhodium	103-1	9995026	10092227	10089047	10058767	0.55	cps
Rhodium	103-2	4218631	4229518	4192097	4213415	0.46	cps
Scandium	45-1	6335872	6438704	6400404	6391660	0.81	cps
Scandium	45-2	137173	137732	138395	137767	0.44	cps
Selenium	82-1	-43	77	77	37	188.93	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	30	27	30	29	6.65	cps
Silicon	28-1	474423	464128	460057	466203	1.59	cps
Silver	107-1	683	757	603	681	11.26	cps
Silver	109-1	720	457	560	579	22.92	cps
Sodium	23-2	70271	70790	70817	70626	0.44	cps
Strontium	86-1	793	710	813	772	7.10	cps
Strontium	88-1	853	813	660	776	13.16	cps
Sulfur	34-1	724554	718935	723165	722218	0.41	cps
Terbium	159-1	13073654	12806272	13035902	12971943	1.12	cps
Terbium	159-2	4560425	4529038	4532012	4540492	0.38	cps
Thallium	203-1	610	600	480	563	12.84	cps
Thallium	205-1	1507	1457	1443	1469	2.27	cps
Tin	118-1	5765	5545	5448	5586	2.91	cps
Titanium	47-1	357	360	403	373	6.97	cps
Uranium	238-1	133	200	193	176	20.91	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : PBS004 Instrumnet Name : P8
Client Sample ID : PBS004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 16:58:36 DataFile Name : 065CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	47	20	30	32	41.81	cps
Ytterbium	172-1	100	110	70	93	22.30	cps
Ytterbium	172-2	23	17	40	27	45.07	cps
Ytterbium	176-1	1457	1450	1577	1495	4.77	cps
Ytterbium	176-2	260	303	307	290	8.98	cps
Yttrium	89-1	18846241	18895072	18892424	18877912	0.15	cps
Yttrium	89-2	1534711	1531488	1515778	1527325	0.66	cps
Zinc	66-2	2287	2350	2290	2309	1.54	cps
Zirconium	90-1	1633	1717	1807	1719	5.04	cps
Zirconium	91-1	310	387	307	334	13.53	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCS004 Instrumnet Name : P8
Client Sample ID : LCS004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:05:18 DataFile Name : 067LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5715	5745	5234	5564	5.15	cps
Antimony	121-1	161872	164729	162172	162925	0.96	cps
Arsenic	75-2	1920	1967	1657	1848	9.05	cps
Barium	135-1	187848	188536	192872	189752	1.44	cps
Barium	137-1	329075	330514	331764	330451	0.41	cps
Beryllium	9-1	14853	15018	15126	14999	0.92	cps
Bismuth	209-1	7616867	7481012	7353015	7483631	1.76	cps
Bismuth	209-2	3306526	3269823	3245618	3273989	0.94	cps
Bromine	81-1	21517	21293	21941	21583	1.52	cps
Cadmium	108-1	1543	1633	1670	1616	4.03	cps
Cadmium	106-1	8596	8823	8913	8777	1.86	cps
Cadmium	111-1	25402	25878	25632	25638	0.93	cps
Calcium	43-1	120489	122348	121552	121463	0.77	cps
Calcium	44-1	2074058	2073931	2080024	2076004	0.17	cps
Carbon	12-1	4741535	4603223	4545333	4630030	2.18	cps
Carbon	12-2	32045	31671	31310	31675	1.16	cps
Chlorine	35-1	2967472	3279195	3458475	3235047	7.68	cps
Chlorine	35-2	17210	17534	17157	17300	1.18	cps
Chromium	52-2	36530	36032	34188	35583	3.47	cps
Cobalt	59-2	34164	34452	32343	33653	3.40	cps
Copper	63-2	60562	58791	56967	58773	3.06	cps
Dysprosium	156-1	43	33	40	39	13.09	cps
Dysprosium	156-2	3	13	0	6	124.93	cps
Erbium	164-1	100	123	67	97	29.46	cps
Erbium	164-2	23	30	33	29	17.63	cps
Gadolinium	160-1	73	117	100	97	22.62	cps
Gadolinium	160-2	27	27	40	31	24.74	cps
Holmium	165-1	12390826	12261749	12438780	12363785	0.74	cps
Holmium	165-2	4446818	4573441	4499019	4506426	1.41	cps
Indium	115-1	10727025	10207330	10433551	10455969	2.49	cps
Indium	115-2	1068408	1077131	1061347	1068962	0.74	cps
Iron	54-2	146769	143873	136740	142461	3.62	cps
Iron	56-2	2891095	2812390	2675898	2793127	3.90	cps
Iron	57-2	66956	66708	62178	65281	4.12	cps
Krypton	83-1	337	450	430	406	14.92	cps
Lead	206-1	59740	60041	59338	59707	0.59	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCS004 Instrumnet Name : P8
Client Sample ID : LCS004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:05:18 DataFile Name : 067LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	51840	52402	52764	52335	0.89	cps
Lead	208-1	236357	240450	239114	238640	0.87	cps
Lithium	6-1	2545951	2526576	2543635	2538720	0.42	cps
Magnesium	24-2	471020	465212	443059	459763	3.21	cps
Manganese	55-2	12282	12145	11708	12045	2.49	cps
Molybdenum	94-1	161704	165051	164247	163667	1.07	cps
Molybdenum	95-1	197483	201452	198223	199053	1.06	cps
Molybdenum	96-1	221293	223127	221329	221916	0.47	cps
Molybdenum	97-1	124297	125417	123789	124501	0.67	cps
Molybdenum	98-1	318764	322899	317714	319792	0.86	cps
Neodymium	150-1	23	30	20	24	20.83	cps
Neodymium	150-2	0	3	3	2	86.60	cps
Nickel	60-2	10210	10354	9827	10130	2.69	cps
Phosphorus	31-2	440	453	377	423	9.68	cps
Potassium	39-2	360529	359563	351869	357320	1.33	cps
Rhodium	103-1	9700799	9752310	9752432	9735180	0.31	cps
Rhodium	103-2	4056398	4042290	4120160	4072949	1.02	cps
Scandium	45-1	6241222	6228240	6209181	6226214	0.26	cps
Scandium	45-2	133867	134956	134664	134496	0.42	cps
Selenium	82-1	6008	6165	6208	6127	1.72	cps
Selenium	77-2	133	93	117	114	17.56	cps
Selenium	78-2	443	427	433	434	1.93	cps
Silicon	28-1	853180	1021378	1009140	961233	9.76	cps
Silver	107-1	99979	103149	104012	102380	2.07	cps
Silver	109-1	97240	98338	97462	97680	0.59	cps
Sodium	23-2	1114230	1099052	1058156	1090479	2.66	cps
Strontium	86-1	26195	26645	26532	26457	0.89	cps
Strontium	88-1	221446	225506	223583	223512	0.91	cps
Sulfur	34-1	723605	734041	739652	732433	1.11	cps
Terbium	159-1	12663878	12685854	12551964	12633899	0.57	cps
Terbium	159-2	4383633	4378104	4386115	4382617	0.09	cps
Thallium	203-1	144865	145512	146213	145530	0.46	cps
Thallium	205-1	343562	344858	347563	345328	0.59	cps
Tin	118-1	329374	330601	331309	330428	0.30	cps
Titanium	47-1	13416	13406	13917	13580	2.15	cps
Uranium	238-1	207387	208602	205960	207316	0.64	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : LCS004 Instrumnet Name : P8
Client Sample ID : LCS004 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:05:18 DataFile Name : 067LCSE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	68158	67605	64792	66852	2.70	cps
Ytterbium	172-1	67	73	47	62	22.30	cps
Ytterbium	172-2	30	37	47	38	22.21	cps
Ytterbium	176-1	1970	1823	1903	1899	3.87	cps
Ytterbium	176-2	353	387	370	370	4.51	cps
Yttrium	89-1	18289329	18582217	18123131	18331559	1.27	cps
Yttrium	89-2	1361284	1350135	1494682	1402034	5.74	cps
Zinc	66-2	20608	20462	20101	20390	1.28	cps
Zirconium	90-1	136799	135976	138129	136968	0.79	cps
Zirconium	91-1	29765	29885	30336	29996	1.00	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV06 Instrumnet Name : P8
Client Sample ID : CCV06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:08:36 DataFile Name : 068CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	6177972	6181079	6223448	6194166	0.41	cps
Antimony	121-1	17960656	18771318	18513525	18415166	2.25	cps
Arsenic	75-2	387695	386903	387051	387216	0.11	cps
Barium	135-1	21938169	22488846	22340897	22255971	1.28	cps
Barium	137-1	37645192	38013019	38826334	38161515	1.58	cps
Beryllium	9-1	3187458	3177500	3145939	3170299	0.68	cps
Bismuth	209-1	5869833	5957823	5825623	5884426	1.14	cps
Bismuth	209-2	2629105	2643534	2658140	2643593	0.55	cps
Bromine	81-1	20061	20772	21670	20834	3.87	cps
Cadmium	108-1	342568	343158	342582	342769	0.10	cps
Cadmium	106-1	484195	490645	478614	484485	1.24	cps
Cadmium	111-1	4463278	4540393	4514180	4505950	0.87	cps
Calcium	43-1	26617767	26415056	26674799	26569207	0.51	cps
Calcium	44-1	432890007	433469660	431660300	432673322	0.21	cps
Carbon	12-1	5346290	5415364	5412638	5391431	0.73	cps
Carbon	12-2	45423	45356	44547	45109	1.08	cps
Chlorine	35-1	506364	491735	472424	490174	3.47	cps
Chlorine	35-2	2214	2230	2114	2186	2.89	cps
Chromium	52-2	4076963	4151589	4148341	4125631	1.02	cps
Cobalt	59-2	7371882	7406339	7296392	7358204	0.76	cps
Copper	63-2	64096319	63381256	63212324	63563300	0.74	cps
Dysprosium	156-1	893	903	787	861	7.51	cps
Dysprosium	156-2	220	250	227	232	6.79	cps
Erbium	164-1	860	1020	897	926	9.06	cps
Erbium	164-2	323	300	250	291	12.87	cps
Gadolinium	160-1	587	677	670	644	7.78	cps
Gadolinium	160-2	263	303	260	276	8.75	cps
Holmium	165-1	10715766	10681513	10930392	10775890	1.25	cps
Holmium	165-2	3975201	4073876	4077017	4042031	1.43	cps
Indium	115-1	8411676	8361770	8374049	8382498	0.31	cps
Indium	115-2	861118	860886	865282	862429	0.29	cps
Iron	54-2	39858737	40000743	40093471	39984317	0.30	cps
Iron	56-2	732928442	743387002	745576042	740630496	0.91	cps
Iron	57-2	18705591	18649766	18761722	18705693	0.30	cps
Krypton	83-1	487	473	517	492	4.51	cps
Lead	206-1	61584009	62766044	62526347	62292134	1.00	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV06 Instrumnet Name : P8
Client Sample ID : CCV06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:08:36 DataFile Name : 068CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	52861303	53512464	53531629	53301799	0.72	cps
Lead	208-1	244473310	247760870	244867331	245700504	0.73	cps
Lithium	6-1	2201417	2158776	2129333	2163175	1.68	cps
Magnesium	24-2	108160775	108522485	107499025	108060762	0.48	cps
Manganese	55-2	19054030	19112707	19226016	19130917	0.46	cps
Molybdenum	94-1	65414776	64937801	65335372	65229316	0.39	cps
Molybdenum	95-1	93650365	92737115	94075962	93487814	0.73	cps
Molybdenum	96-1	101004038	101582708	102001752	101529500	0.49	cps
Molybdenum	97-1	58027511	57895481	58198871	58040621	0.26	cps
Molybdenum	98-1	151287808	150643268	151562478	151164518	0.31	cps
Neodymium	150-1	1453	1453	1460	1456	0.26	cps
Neodymium	150-2	120	123	163	136	17.79	cps
Nickel	60-2	2036519	2073781	2060398	2056900	0.92	cps
Phosphorus	31-2	61677	62795	61135	61869	1.37	cps
Potassium	39-2	39801840	40167082	39740566	39903163	0.58	cps
Rhodium	103-1	7780048	7667519	7720594	7722720	0.73	cps
Rhodium	103-2	3298666	3234343	3283124	3272044	1.03	cps
Scandium	45-1	5533704	5504063	5445482	5494416	0.82	cps
Scandium	45-2	122476	125112	125505	124365	1.32	cps
Selenium	82-1	256664	257897	255281	256614	0.51	cps
Selenium	77-2	4951	5164	5208	5108	2.69	cps
Selenium	78-2	17501	17855	17801	17719	1.08	cps
Silicon	28-1	51517206	51912451	51871946	51767201	0.42	cps
Silver	107-1	22216880	22182608	21715552	22038347	1.27	cps
Silver	109-1	20995430	21374157	21213754	21194447	0.90	cps
Sodium	23-2	215912863	217546343	215834077	216431095	0.45	cps
Strontium	86-1	5814923	5915284	5925896	5885368	1.04	cps
Strontium	88-1	50198214	51270046	51363646	50943969	1.27	cps
Sulfur	34-1	1961253	1917339	1942461	1940351	1.14	cps
Terbium	159-1	11062854	10960423	10965446	10996241	0.53	cps
Terbium	159-2	3941781	3900430	3946088	3929433	0.64	cps
Thallium	203-1	15674565	15867796	15883746	15808703	0.74	cps
Thallium	205-1	37068904	38009169	37058436	37378836	1.46	cps
Tin	118-1	14477480	14625064	14616883	14573142	0.57	cps
Titanium	47-1	24377283	24814175	24568245	24586568	0.89	cps
Uranium	238-1	48011429	48061351	47354018	47808933	0.83	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCV06 Instrumnet Name : P8
Client Sample ID : CCV06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:08:36 DataFile Name : 068CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3209990	3261343	3236475	3235936	0.79	cps
Ytterbium	172-1	1203	1220	1213	1212	0.69	cps
Ytterbium	172-2	547	527	580	551	4.89	cps
Ytterbium	176-1	77435	78877	77539	77951	1.03	cps
Ytterbium	176-2	27218	28424	28127	27923	2.25	cps
Yttrium	89-1	15955941	15922274	15817457	15898557	0.45	cps
Yttrium	89-2	1216244	1224176	1226121	1222180	0.43	cps
Zinc	66-2	7602268	7578741	7466746	7549252	0.96	cps
Zirconium	90-1	32591914	32332426	32609680	32511340	0.48	cps
Zirconium	91-1	7177752	7238681	7292970	7236468	0.80	cps

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LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB06 Instrumnet Name : P8
Client Sample ID : CCB06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:11:25 DataFile Name : 069CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	317	317	300	311	3.09	cps
Antimony	121-1	3911	3224	2934	3356	14.95	cps
Arsenic	75-2	13	13	13	13	0.00	cps
Barium	135-1	717	543	500	587	19.54	cps
Barium	137-1	1173	967	907	1016	13.78	cps
Beryllium	9-1	191	176	157	175	9.63	cps
Bismuth	209-1	7125809	7565191	7126688	7272563	3.48	cps
Bismuth	209-2	3104859	3218771	3198449	3174026	1.91	cps
Bromine	81-1	20502	20398	19951	20284	1.44	cps
Cadmium	108-1	20	23	60	34	64.44	cps
Cadmium	106-1	5961	6798	5868	6209	8.25	cps
Cadmium	111-1	4359	4953	4219	4510	8.64	cps
Calcium	43-1	2227	2084	1917	2076	7.48	cps
Calcium	44-1	57545	54694	53228	55155	3.98	cps
Carbon	12-1	4683802	4535463	4525403	4581556	1.94	cps
Carbon	12-2	30839	31130	31053	31007	0.49	cps
Chlorine	35-1	302434	298351	289074	296620	2.31	cps
Chlorine	35-2	1310	1253	1323	1296	2.87	cps
Chromium	52-2	1610	1767	1713	1697	4.69	cps
Cobalt	59-2	207	190	183	193	6.22	cps
Copper	63-2	3070	3357	3340	3256	4.94	cps
Dysprosium	156-1	20	3	7	10	88.20	cps
Dysprosium	156-2	0	7	0	2	173.21	cps
Erbium	164-1	67	103	77	82	23.05	cps
Erbium	164-2	47	30	10	29	63.55	cps
Gadolinium	160-1	93	117	77	96	21.03	cps
Gadolinium	160-2	30	7	20	19	61.96	cps
Holmium	165-1	11454431	12472574	11943832	11956946	4.26	cps
Holmium	165-2	4414770	4452951	4379194	4415638	0.84	cps
Indium	115-1	9959461	10818968	10037607	10272012	4.63	cps
Indium	115-2	1023974	1033437	1034953	1030788	0.58	cps
Iron	54-2	1223	1503	1300	1342	10.78	cps
Iron	56-2	19203	19090	19156	19150	0.30	cps
Iron	57-2	530	487	423	480	11.18	cps
Krypton	83-1	403	447	430	427	5.12	cps
Lead	206-1	4758	4277	4051	4362	8.27	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB06 Instrumnet Name : P8
Client Sample ID : CCB06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:11:25 DataFile Name : 069CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4251	3794	3481	3842	10.08	cps
Lead	208-1	19339	17221	15974	17512	9.72	cps
Lithium	6-1	2409971	2481681	2349270	2413641	2.75	cps
Magnesium	24-2	1547	1440	1277	1421	9.57	cps
Manganese	55-2	4344	4321	4257	4307	1.04	cps
Molybdenum	94-1	3674	3054	3050	3259	11.01	cps
Molybdenum	95-1	3357	2617	2310	2761	19.49	cps
Molybdenum	96-1	4264	2944	2590	3266	27.01	cps
Molybdenum	97-1	2167	1540	1370	1692	24.80	cps
Molybdenum	98-1	5441	3864	3430	4245	24.93	cps
Neodymium	150-1	10	20	7	12	56.76	cps
Neodymium	150-2	3	3	0	2	86.60	cps
Nickel	60-2	873	983	1010	956	7.58	cps
Phosphorus	31-2	73	103	93	90	16.97	cps
Potassium	39-2	26381	25840	25463	25894	1.78	cps
Rhodium	103-1	9338550	9994070	9409839	9580820	3.75	cps
Rhodium	103-2	3972997	3971964	3926527	3957162	0.67	cps
Scandium	45-1	5775340	6202332	5917792	5965154	3.64	cps
Scandium	45-2	124298	124967	124621	124629	0.27	cps
Selenium	82-1	27	-50	107	28	282.00	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	57	27	20	34	56.70	cps
Silicon	28-1	499416	497770	473811	490332	2.92	cps
Silver	107-1	2677	2014	1813	2168	20.85	cps
Silver	109-1	2367	1903	1487	1919	22.94	cps
Sodium	23-2	88868	87373	85887	87376	1.71	cps
Strontium	86-1	937	807	690	811	15.21	cps
Strontium	88-1	1703	1537	1433	1558	8.75	cps
Sulfur	34-1	658300	663341	665529	662390	0.56	cps
Terbium	159-1	11953611	12944442	12198744	12365599	4.17	cps
Terbium	159-2	4176512	4259872	4271642	4236008	1.22	cps
Thallium	203-1	1543	1363	1340	1416	7.86	cps
Thallium	205-1	3551	3297	2864	3237	10.73	cps
Tin	118-1	7225	7029	6955	7070	1.98	cps
Titanium	47-1	933	733	653	773	18.65	cps
Uranium	238-1	1323	1043	1003	1123	15.52	cps

LB Number : LB135261 Operator : Jaswal
Lab Sample ID : CCB06 Instrumnet Name : P8
Client Sample ID : CCB06 Dilution Factor : 1
Date & Time Acquired : 2025-04-01 17:11:25 DataFile Name : 069CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	53	27	67	49	41.66	cps
Ytterbium	172-1	60	53	67	60	11.12	cps
Ytterbium	172-2	40	40	30	37	15.75	cps
Ytterbium	176-1	1373	1650	1337	1453	11.79	cps
Ytterbium	176-2	240	287	327	284	15.25	cps
Yttrium	89-1	17332491	18351136	17368625	17684084	3.27	cps
Yttrium	89-2	1286354	1298727	1291462	1292181	0.48	cps
Zinc	66-2	2544	2280	2440	2421	5.48	cps
Zirconium	90-1	4387	4064	3924	4125	5.76	cps
Zirconium	91-1	957	950	920	942	2.07	cps

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SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pipette ID: ICP A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #3

Block ID: 1. HOT BLOCK #1 2. N/A

Start Digest Date: 03/31/2025 Time : 08:35 Temp : 96 °C

End Digest Date: 03/31/2025 Time : 10:40 Temp : 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: *SL29*

Supervisor Signature: *[Signature]*

Temp : 1. 96°C 2. N/A

Standard Name	MLS USED	STD REF. # FROM LOG
Spike Sol 1	0.50	MP85065
Spike Sol 2	1.00	MP85066
Spike Sol 3	1.00	MP85067
Spike Sol 4	1.00	MP85068
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6158
1:1 HCL	5.00	MP84720
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

HOT BLOCK#1 CELL#50 96C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
03/31/25 11:40	<i>SL29 met. dig</i>	<i>[Signature]</i>
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB167399BL	PBW399	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	7
PB167399BS	LCS399	<2	50	50	Colorless	Colorless	Clear	Clear	MP85065,MP85066,MP85067,N	8
Q1504-02	PT-TM1-WP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	9
Q1504-04	PT-SNTI-WP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	10
Q1504-06	PT-MIN2-WP	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	11

WORKLIST(Hardcopy Internal Chain)

Worklist Name : PB167399

Worklist ID : 188639

Department : Digestion

Date : 03-31-2025 12:26:36

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1504-02	PT-TM1-WP	Water	Metals Group3	1:1 HNO3 to pH < 2	ALL103	QA Of	03/03/2025	6020B
Q1504-04	PT-SNT1-WP	Water	Metals Group4	1:1 HNO3 to pH < 2	ALL103	QA Of	03/03/2025	6020B
Q1504-06	PT-MIN2-WP	Water	Metals Group5	1:1 HNO3 to pH < 2	ALL103	QA Of	03/03/2025	6020B

442 of 594

Date/Time 03/31/25 12:40

Raw Sample Received by: S129-met-219

Raw Sample Relinquished by: ASD (Mete & Co)

Date/Time 03/31/25 13:40

Raw Sample Received by: S129-met-219

Raw Sample Relinquished by: S129-met-219

Q1504 METALS

Instrument ID: P8

Daily Analysis Runlog For Sequence/QC Batch ID # LB135261

Review By	jaswal	Review On	4/2/2025 10:55:29 AM
Supervise By	mohan	Supervise On	4/4/2025 3:37:41 PM
STD. NAME	STD REF.#		
ICAL Standard	MP84981,MP84989,MP84988,MP84986,MP84985,MP84984,MP84983,MP84980,MP84982		
ICV Standard	MP84990		
CCV Standard	MP84992		
ICSA Standard	MP84993,MP84996		
CRI Standard	MP84988		
LCS Standard			
Chk Standard	MP84998,MP84999		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	TUNE	TUNE	TUNE	04/01/25 10:03		Jaswal	OK
2	S0	S0	CAL1	04/01/25 11:12		Jaswal	OK
3	S2	S2	CAL3	04/01/25 11:19		Jaswal	OK
4	S3	S3	CAL4	04/01/25 11:23		Jaswal	OK
5	S4	S4	CAL5	04/01/25 11:26		Jaswal	OK
6	S5	S5	CAL6	04/01/25 11:28		Jaswal	OK
7	S6	S6	CAL7	04/01/25 11:31		Jaswal	OK
8	S7	S7	CAL8	04/01/25 11:34		Jaswal	OK
9	S8	S8	CAL9	04/01/25 11:37		Jaswal	OK
10	ICV01	ICV01	ICV	04/01/25 13:05		Jaswal	OK
11	LLICV	LLICV	LLICV	04/01/25 13:10		Jaswal	OK
12	ICB01	ICB01	ICB	04/01/25 13:13		Jaswal	OK
13	ICSA01	ICSA01	ICSA	04/01/25 13:17		Jaswal	OK
14	ICSAB01	ICSAB01	ICSAB	04/01/25 13:20		Jaswal	OK
15	CCV01	CCV01	CCV	04/01/25 13:24		Jaswal	OK
16	CCB01	CCB01	CCB	04/01/25 13:30		Jaswal	OK
17	CRI	CRI	CRDL	04/01/25 13:33		Jaswal	OK
18	Q1503-02	PT-TM1-WP	SAM	04/01/25 13:46	V high	Jaswal	Dilution

Instrument ID: P8

Daily Analysis Runlog For Sequence/QC Batch ID # LB135261

Review By	jaswal	Review On	4/2/2025 10:55:29 AM
Supervise By	mohan	Supervise On	4/4/2025 3:37:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP84981,MP84989,MP84988,MP84986,MP84985,MP84984,MP84983,MP84980,MP84982
ICV Standard	MP84990
CCV Standard	MP84992
ICSA Standard	MP84993,MP84996
CRI Standard	MP84988
LCS Standard	
Chk Standard	MP84998,MP84999

19	Q1503-04	PT-SNTI-WP	SAM	04/01/25 13:49	Sn high	Jaswal	Dilution
20	Q1503-06	PT-MIN2-WP	SAM	04/01/25 13:52	INT_STD 45Sc(1) Fail	Jaswal	Dilution
21	Q1504-02	PT-TM1-WP	SAM	04/01/25 13:56	V high	Jaswal	Dilution
22	Q1504-04	PT-SNTI-WP	SAM	04/01/25 13:59	Sn high	Jaswal	Dilution
23	Q1504-06	PT-MIN2-WP	SAM	04/01/25 14:02	INT_STD 45Sc(1) Fail	Jaswal	Dilution
24	Q1503-02DL	PT-TM1-WPDL	SAM	04/01/25 14:05	2X for V	Jaswal	Confirms
25	Q1503-04DL	PT-SNTI-WPDL	SAM	04/01/25 14:08	2X for Sn	Jaswal	Confirms
26	Q1503-06DL	PT-MIN2-WPDL	SAM	04/01/25 14:11	2X for IntStd 45SC(1)	Jaswal	Confirms
27	CCV02	CCV02	CCV	04/01/25 14:20		Jaswal	OK
28	CCB02	CCB02	CCB	04/01/25 14:28		Jaswal	OK
29	Q1504-02DL	PT-TM1-WPDL	SAM	04/01/25 14:31	2X for V	Jaswal	Confirms
30	Q1504-04DL	PT-SNTI-WPDL	SAM	04/01/25 14:34	2X for Sn	Jaswal	Confirms
31	Q1504-06DL	PT-MIN2-WPDL	SAM	04/01/25 14:38	5X for IntStd 45SC(1)	Jaswal	Confirms
32	PB167397BL	PB167397BL	MB	04/01/25 14:42		Jaswal	OK
33	PB167399BL	PB167399BL	MB	04/01/25 14:45		Jaswal	OK
34	PB167397BS	PB167397BS	LCS	04/01/25 14:49		Jaswal	OK
35	PB167399BS	PB167399BS	LCS	04/01/25 14:51		Jaswal	OK
36	CCV03	CCV03	CCV	04/01/25 14:54		Jaswal	OK
37	CCB03	CCB03	CCB	04/01/25 14:58		Jaswal	OK
38	200.8 MDL-6	200.8 MDL-6	SAM	04/01/25 15:33	Only for Cr,Fe,Mn,K	Jaswal	OK

Instrument ID: P8

Daily Analysis Runlog For Sequence/QC Batch ID # LB135261

Review By	jaswal	Review On	4/2/2025 10:55:29 AM
Supervise By	mohan	Supervise On	4/4/2025 3:37:41 PM

STD. NAME	STD REF.#
ICAL Standard	MP84981,MP84989,MP84988,MP84986,MP84985,MP84984,MP84983,MP84980,MP84982
ICV Standard	MP84990
CCV Standard	MP84992
ICSA Standard	MP84993,MP84996
CRI Standard	MP84988
LCS Standard	
Chk Standard	MP84998,MP84999

39	200.8 MDL-7	200.8 MDL-7	SAM	04/01/25 15:37	Only for Cr,Fe,Mn,K	Jaswal	OK
40	PBW06	PBW06	MB	04/01/25 15:40	Only for Cr,Fe,Mn,K	Jaswal	OK
41	PBW07	PBW07	MB	04/01/25 15:43	Only for Cr,Fe,Mn,K	Jaswal	OK
42	PBW	PBW	MB	04/01/25 15:47	Not used	Jaswal	Not Ok
43	LCSW	LCSW	LCS	04/01/25 15:50	Only for Cr,Fe,Mn,K	Jaswal	OK
44	CCV04	CCV04	CCV	04/01/25 15:53		Jaswal	OK
45	CCB04	CCB04	CCB	04/01/25 16:01		Jaswal	OK
46	WATER MDL-4	WATER MDL-4	SAM	04/01/25 16:05	Not use	Jaswal	Not Ok
47	WATER MDL-5	WATER MDL-5	SAM	04/01/25 16:08	Not use	Jaswal	Not Ok
48	PBW005	PBW005	MB	04/01/25 16:16	Not use	Jaswal	Not Ok
49	SOIL MDL-4	SOIL MDL-4	SAM	04/01/25 16:23	Not use	Jaswal	Not Ok
50	SOIL MDL-5	SOIL MDL-5	SAM	04/01/25 16:27	Not use	Jaswal	Not Ok
51	PBS005	PBS005	MB	04/01/25 16:33	Not use	Jaswal	Not Ok
52	CCV05	CCV05	CCV	04/01/25 16:40		Jaswal	OK
53	CCB05	CCB05	CCB	04/01/25 16:47		Jaswal	OK
54	PBW004	PBW004	MB	04/01/25 16:51	Not use	Jaswal	Not Ok
55	LCSW004	LCSW004	LCS	04/01/25 16:55	Not use	Jaswal	Not Ok
56	PBS004	PBS004	MB	04/01/25 16:58	Not use	Jaswal	Not Ok
57	LCS004	LCS004	LCS	04/01/25 17:05	Not use	Jaswal	Not Ok
58	CCV06	CCV06	CCV	04/01/25 17:08		Jaswal	OK

Instrument ID: P8

Daily Analysis Runlog For Sequence/QC Batch ID # LB135261

Review By	jaswal	Review On	4/2/2025 10:55:29 AM				
Supervise By	mohan	Supervise On	4/4/2025 3:37:41 PM				

STD. NAME	STD REF.#
ICAL Standard	MP84981,MP84989,MP84988,MP84986,MP84985,MP84984,MP84983,MP84980,MP84982
ICV Standard	MP84990
CCV Standard	MP84992
ICSA Standard	MP84993,MP84996
CRI Standard	MP84988
LCS Standard	
Chk Standard	MP84998,MP84999

59	CCB06	CCB06	CCB	04/01/25 17:11		Jaswal	OK
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Prep Standard - Chemical Standard Summary

Order ID : Q1504
Test : Metals Group3, Metals Group4, Metals Group5
Prepbatch ID : PB167399,
Sequence ID/Qc Batch ID: LB135261, LB135261, LB135261,

Standard ID :
 MP84720, MP84980, MP84981, MP84982, MP84983, MP84984, MP84985, MP84986, MP84987, MP84988, MP84989, MP84990, MP84992, MP84993, MP84996, MP84997, MP84998, MP84999, MP85065, MP85066, MP85067, MP85068,

Chemical ID :
 M4888, M5305, M5472, M5519, M5520, M5545, M5658, M5739, M5751, M5798, M5799, M5800, M5801, M5811, M5815, M5817, M5873, M5874, M5942, M5961, M5962, M5977, M5981, M5983, M6019, M6020, M6021, M6023, M6025, M6026, M6028, M6030, M6032, M6055, M6058, M6079, M6086, M6127, M6128, M6137, M6144, M6145, M6146, M6150, M6151, M6153, M6156, M6158, M6159, W3112,

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
170	1:1HCL	MP84720	03/03/2025	04/04/2025	Sagar Kanani	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 03/03/2025

FROM 1000.00000ml of M6151 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3947	S7(SFAM,6020,200.8)	MP84980	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 1.00000ml of M5799 + 1.00000ml of M5981 + 1.00000ml of M6079 + 1.00000ml of M6137 + 1.00000ml of M6153 + 1.90000ml of M6159 + 10.00000ml of M5942 + 10.00000ml of M5977 + 10.00000ml of M6158 + 2.00000ml of M5815 + 2.00000ml of M5817 + 4.00000ml of M6025 + 4.00000ml of M6032 + 4.90000ml of M5519 + 4.90000ml of M5811 + 5.00000ml of M6151 + 50.00000ml of M5305 + 829.60000ml of W3112 + 9.00000ml of M5751 + 9.00000ml of M6128 + 9.00000ml of M6145 + 9.90000ml of M6086 + 9.90000ml of M6127 + 9.90000ml of M6144 = Final Quantity: 1000.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1122	ICPMS CALIB BLANK(S0/ICB/CCB)	MP84981	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIP ETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 25.00000ml of M6151 + 4925.00000ml of W3112 + 50.00000ml of M6158 = Final Quantity: 5000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2902	S8 ICPMS	MP84982	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIP ETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 1.00000ml of M6159 + 2.50000ml of M5520 + 2.50000ml of M5811 + 5.00000ml of M6086 + 5.00000ml of M6127 + 5.00000ml of M6144 + 79.00000ml of MP84981 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3948	S6(SFAM,6020,200.8)	MP84983	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 48.50000ml of W3112 + 50.00000ml of MP84980 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3949	S5(SFAM,6020,200.8)	MP84984	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 73.50000ml of W3112 + 25.00000ml of MP84980 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3954	S4(SFAM,6020,200.8)	MP84985	03/25/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 86.00000ml of W3112 + 12.50000ml of MP84980 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3951	S3(SFAM, 6020,200.8)	MP84986	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 88.50000ml of W3112 + 10.00000ml of MP84983 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3955	S2CONC(SFAM,6020,200.8)	MP84987	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 0.00500ml of M6153 + 0.05000ml of M5798 + 0.05000ml of M5800 + 0.05000ml of M5801 + 0.05000ml of M5961 + 0.05000ml of M5981 + 0.05000ml of M6023 + 0.05000ml of M6025 + 0.05000ml of M6028 + 0.05000ml of M6030 + 0.05000ml of M6079 + 0.05000ml of M6128 + 0.10000ml of M5658 + 0.10000ml of M5751 + 0.10000ml of M6146 + 0.10000ml of M6159 + 0.25000ml of M5799 + 0.25000ml of M5811 + 0.25000ml of M5942 + 0.25000ml of M5962 + 0.25000ml of M5977 + 0.25000ml of M6021 + 0.25000ml of M6145 + 0.50000ml of M6032 + 0.50000ml of M6137 + 1.25000ml of M5815 + 1.25000ml of M5817 + 1.25000ml of M6151 + 2.50000ml of M5520 + 2.50000ml of M6086 + 2.50000ml of M6127 + 2.50000ml of M6144 + 2.50000ml of M6158 + 230.04500ml of W3112 = Final Quantity: 250.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3956	S2(SFAM,6020,200.8)	MP84988	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 98.00000ml of W3112 + 0.50000ml of MP84987 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3957	S1(SFAM,6020,200.8)	MP84989	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 88.50000ml of W3112 + 10.00000ml of MP84988 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3959	ICV(6020,200.8)	MP84990	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 0.05000ml of M5983 + 0.05000ml of M6019 + 0.05000ml of M6020 + 0.05000ml of M6058 + 0.45000ml of M5545 + 0.45000ml of M6156 + 2.00000ml of M6150 + 96.90000ml of MP84981 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3961	CCV	MP84992	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 0.20000ml of M6026 + 0.50000ml of M5799 + 0.50000ml of M5981 + 0.50000ml of M6079 + 0.50000ml of M6137 + 1.00000ml of M5815 + 1.00000ml of M5817 + 1.25000ml of M6153 + 10.00000ml of M6158 + 12.45000ml of M5520 + 12.45000ml of M5811 + 2.00000ml of M6032 + 24.95000ml of M6086 + 24.95000ml of M6127 + 24.95000ml of M6144 + 25.00000ml of M5305 + 4.50000ml of M5751 + 4.50000ml of M6128 + 4.50000ml of M6145 + 4.95000ml of M6159 + 5.00000ml of M6151 + 5.50000ml of M5942 + 5.50000ml of M5977 + 823.35000ml of W3112 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1142	ICSA ICPMS	MP84993	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 10.00000ml of M5873 + 90.00000ml of MP84981 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1143	ICSAB ICPMS	MP84996	03/25/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 0.00500ml of M5983 + 0.00500ml of M6019 + 0.00500ml of M6020 + 0.00500ml of M6058 + 10.00000ml of M5873 + 10.00000ml of M5874 + 79.98000ml of MP84981 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3962	MG 10PPM FOR TUNE	MP84997	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 0.01000ml of M6127 + 9.99000ml of MP84981 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3894	TUNE 200PPB	MP84998	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 2.00000ml of M6055 + 2.00000ml of MP84997 + 96.00000ml of MP84981 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3903	ISS 3PPM	MP84999	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 5.00000ml of M6158 + 75.00000ml of M5739 + 170.00000ml of MP84981 = Final Quantity: 250.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3880	M&B SPIKE-1	MP85065	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 5.00000ml of M5472 + 5.00000ml of M5658 + 5.00000ml of M5798 + 5.00000ml of M5800 + 5.00000ml of M5961 + 5.00000ml of M5962 + 5.00000ml of M5981 + 5.00000ml of M6021 + 5.00000ml of M6023 + 5.00000ml of M6028 + 5.00000ml of M6030 + 5.00000ml of M6079 + 5.00000ml of M6146 + 35.00000ml of MP84981 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3881	M&B SPIKE-2	MP85066	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 10.00000ml of M4888 + 10.00000ml of M5977 + 12.50000ml of M5520 + 12.50000ml of M5811 + 12.50000ml of M6032 + 2.50000ml of M5799 + 2.50000ml of M6137 + 5.00000ml of M6159 + 32.50000ml of MP84981 = Final Quantity: 100.000 ml

Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3882	M&B SPIKE-3	MP85067	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 0.62500ml of M6026 + 12.50000ml of M5751 + 12.50000ml of M6128 + 12.50000ml of M6145 + 11.87500ml of MP84981 =
Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3900	M&B SPIKE-4	MP85068	03/24/2025	04/14/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/07/2025

FROM 6.25000ml of M6086 + 6.25000ml of M6127 + 6.25000ml of M6144 + 6.25000ml of MP84981 = Final Quantity: 25.000 ml

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57022 / Ti, 1000 PPM, 125 ml	070721	09/27/2025	08/06/2021 / jaswal	08/05/2021 / jaswal	M4888

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	6020CAL-1 / Calibration Standard Method 6020	S2-MEB711244	10/20/2026	03/07/2025 / JANVI	04/01/2022 / jaswal	M5305

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57038 / Sr, 1000 PPM, 125 ml	082922	08/29/2025	01/14/2025 / Jaswal	03/16/2023 / jaswal	M5472

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57119 / Potassium (K) 10,000PPM	120822	12/08/2025	01/08/2024 / bin	03/17/2023 / bin	M5519

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57119 / Potassium (K) 10,000PPM	120822	12/08/2025	08/01/2024 / Jaswal	03/17/2023 / bin	M5520

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57022 / Titanium (Ti) 1000PPM	050223	05/02/2026	05/08/2023 / jaswal	05/08/2023 / jaswal	M5545

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58024 / Chromium, Cr, 500 ml, 1000 PPM	060523	06/05/2026	08/28/2023 / jaswal	08/25/2023 / jaswal	M5658

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	6020ISS / 6020ISS, 10 ug/ml, Bi, Ho, In, 6Li, Rh, Sc, TB, Y	T2-MEB709511	09/03/2026	08/07/2024 / jaswal	04/11/2022 / jaswal	M5739

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	071723	07/17/2026	10/01/2024 / Jaswal	08/25/2023 / jaswal	M5751

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57004 / Be, 1000 PPM, 125 ml	102523	10/25/2026	02/09/2024 / bin	02/09/2024 / bin	M5798

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57050 / Sn, 1000 PPM, 125 ml	071123	07/11/2026	02/09/2024 / bin	02/09/2024 / bin	M5799

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57027 / CO, 1000 PPM, 125 ml	091923	09/19/2026	05/31/2024 / bin	02/09/2024 / bin	M5800

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57033 / As, 1000 PPM, 125 ml	111323	11/13/2026	02/09/2024 / bin	02/09/2024 / bin	M5801

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58126 / Fe, 10000 PPM, 500 ml	051523	05/15/2026	02/06/2025 / kareem	01/03/2024 / jaswal	M5811

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57116 / S, 10000 PPM, 125 ml	071123	07/11/2026	03/01/2024 / jaswal	02/09/2024 / jaswal	M5817

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICPMS) STOCK SOLN	CP-MS ICSA-0803	04/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5873

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART B / ICSB (ICPMS) STOCK SOLUTION	CP-MS ICSB-0803	04/30/2025	04/17/2024 / jaswal	07/14/2022 / jaswal	M5874

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	06/18/2024 / Jaswal	02/22/2024 / Jaswal	M5942

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57028 / Ni, 1000 PPM, 125 ml	041124	04/11/2027	07/02/2024 / Jaswal	06/11/2024 / Jaswal	M5961

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57034 / Se, 1000 PPM, 125 ml	060624	06/06/2027	07/02/2024 / Jaswal	06/14/2024 / Jaswal	M5962

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGMO1-1 / MOLYBDENUM 125mL 1000ug/mL	T2-MO720876	07/17/2027	01/16/2025 / JANVI	02/22/2024 / Jaswal	M5977

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57092 / U, 1000 PPM, 125 ml	060724	06/07/2027	07/29/2024 / Jaswal	06/11/2024 / Jaswal	M5981

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57040 / Zr, 1000 PPM, 125 ml	071423	07/14/2026	07/29/2024 / Jaswal	06/11/2024 / Jaswal	M5983

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSR1-1 / Strontium, 125 ml, 1000 PPM	U2-SR730227	03/03/2028	01/14/2025 / Jaswal	08/05/2024 / Jaswal	M6019

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGU1-1 / Uranium 1000 ug/ml	U2-U735194	04/03/2028	01/15/2025 / Jaswal	08/05/2024 / Jaswal	M6020

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57023 / V, 1000 PPM, 125 ml	062424	06/24/2027	09/28/2024 / jaswal	08/05/2024 / Jaswal	M6021

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57081 / TI, 1000 PPM, 125 ml	0624724	06/27/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6023

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57082 / Pb, 1000 PPM, 125 ml	061224	11/09/2026	08/05/2024 / Jaswal	08/05/2024 / Jaswal	M6025

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57182 / Pb, 10000 PPM, 125 ml	110923	11/09/2026	12/05/2024 / janvi	08/05/2024 / Jaswal	M6026

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57048 / Cd, 1000 PPM, 125 ml	070124	07/01/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6028

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57047 / Ag, 1000 PPM, 125 ml	122823	12/28/2026	08/05/2024 / kareem	08/05/2024 / Jaswal	M6030

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57056 / Ba, 1000 PPM, 125 ml	010924	01/09/2027	01/14/2025 / Jaswal	08/05/2024 / Jaswal	M6032

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	IV-STOCK-12 / ICP-MS TUNING SOLUTION, 125mL	U2-MEB734294	06/21/2028	08/21/2024 / Jaswal	08/19/2024 / Jaswal	M6055

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CHEM-QC-4 / CHEM-QC-4, Second Source, 1000 ug/ml, B, Mo, Si, Sn, Ti	V2-MEB746173	01/29/2026	01/29/2025 / JANVI	08/22/2024 / Jaswal	M6058

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57040 / Zr, 1000 PPM, 125 ml	071423	07/14/2026	01/15/2025 / Jaswal	09/30/2024 / Jaswal	M6079

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Calcium, 500 ml, 10000 PPM	082324	08/23/2027	03/06/2025 / JANVI	10/14/2024 / jaswal	M6086

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58112 / Mg, 10000 PPM, 500 ml	112124	11/21/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6127

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58025 / Mn, 1000 PPM, 500 ml	101124	10/11/2027	01/13/2025 / kareem	01/13/2025 / kareem	M6128

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSI1-1 / SILICON 125mL 1000ug/mL	V2-SI744713	07/10/2029	01/14/2025 / Jaswal	10/03/2024 / Jaswal	M6137

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58111 / Na, 10000 PPM, 500 ml	072424	07/24/2027	01/23/2025 / kareem	01/13/2025 / Jaswal	M6144

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58030 / Zinc, Zn, 500 ml, 1000 PPM	121724	12/17/2027	02/04/2025 / jaswal	01/13/2025 / Jaswal	M6145

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	071724	07/17/2027	01/31/2025 / kareem	10/18/2024 / kareem	M6146

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-1 / ICV (ICP/ICPMS) STOCK SOLN	ICV1-1014	07/07/2025	02/07/2025 / JANVI	04/20/2021 / JANVI	M6150

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	08/18/2025	02/18/2025 / Sagar	01/15/2025 / Sagar	M6151

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGSR10 / Strontium (SR), 125mL 10,000ppm	V2-SR754329	02/28/2026	02/28/2025 / JANVI	01/07/2025 / JANVI	M6153

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57042 / Mo, 1000 PPM, 125 ml	032123	03/21/2026	11/06/2024 / JANVI	06/12/2024 / JANVI	M6156

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	03/10/2025 / Eman	02/02/2025 / Sagar	M6158

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / AI, 10000 PPM, 500 ml	011325	03/18/2026	03/18/2025 / kareem	02/09/2025 / kareem	M6159

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / lwona	07/03/2024 / lwona	W3112



M6032

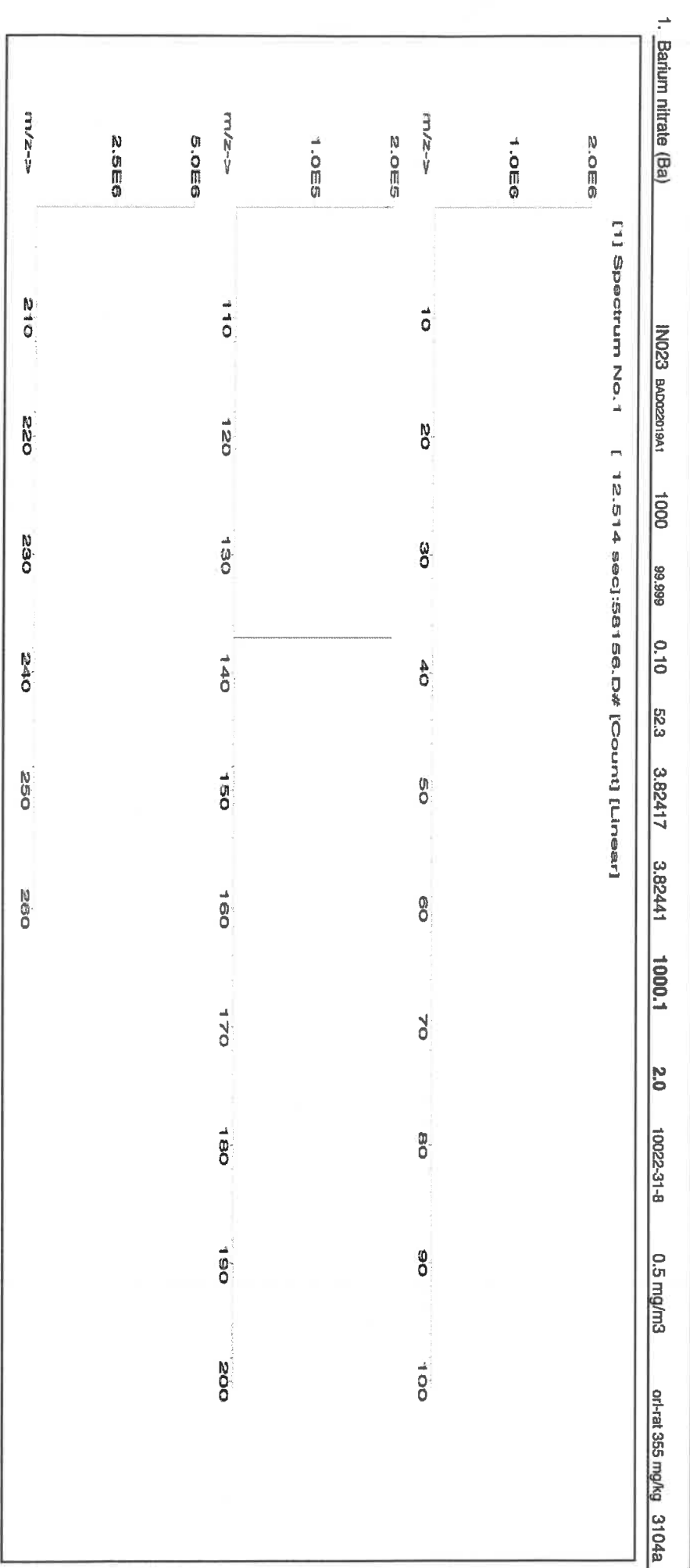


CERTIFIED WEIGHT REPORT:

Part Number: 57056
Lot Number: 010924
Description: Barium (Ba)
Solvent: Nitric Acid
Lot #
Expiration Date: 010927
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02
Balance Uncertainty: 5E-05
Flask Uncertainty: 0.058

<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
010924	
<i>Pedro L. Renteria</i>	
Reviewed By:	Pedro L. Renteria
010924	

SDS Information									
Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)
1. Barium nitrate (Ba)	IN023	BA0022019A1	1000	99.999	0.10	52.3	3.82417	3.82441	1000.1





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



Certified Reference Material CRM



Rev'd 2/10/14/2024 M6085 / M6086 / M6087

CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 082324
Description: Calcium (Ca)

Solvent: 24002546 Nitric Acid

Lot #

2% 80.0 Nitric Acid (mL)

Expiration Date: 082327

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 10000

NIST Test Number: 6UTB

5E-05 Balance Uncertainty

Weight shown below was diluted to (mL): 4000.1 0.15 Flask Uncertainty

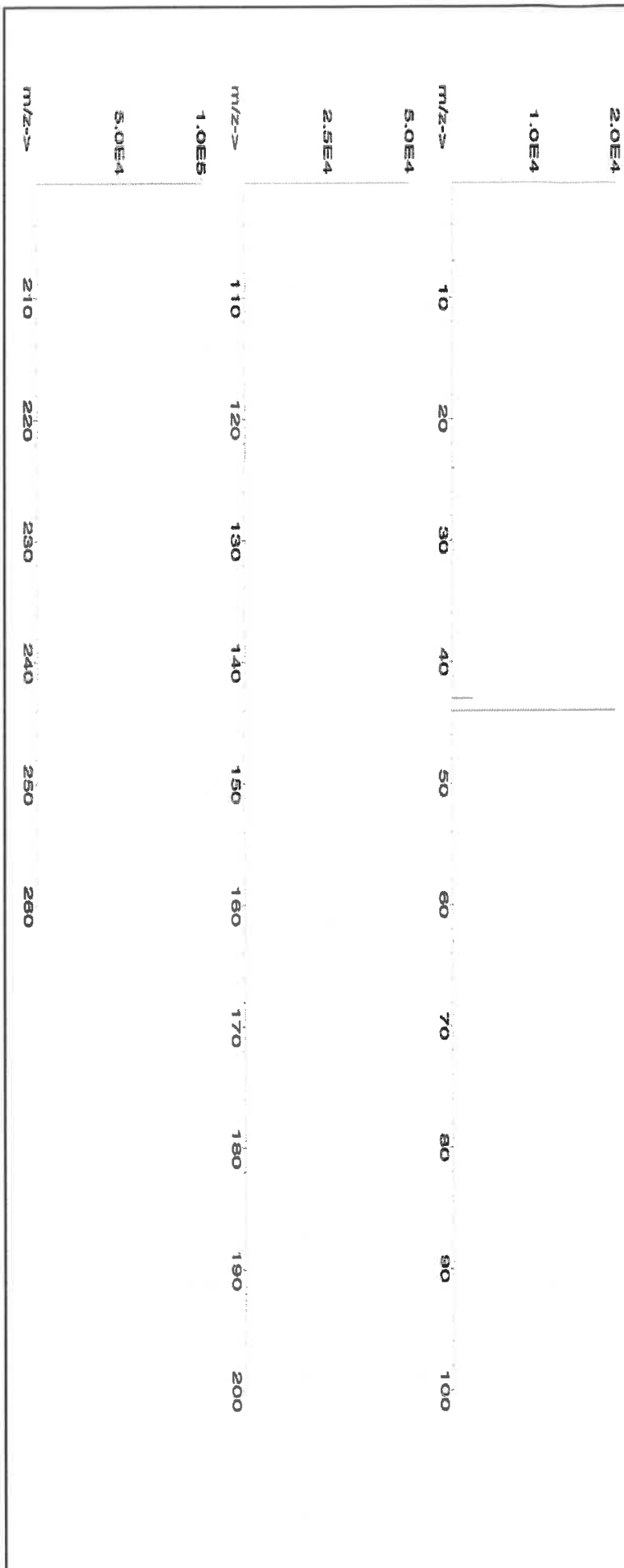
<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
Reviewed By:	Pedro L. Rentas
	082324

SDS Information

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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1. Calcium carbonate (Ca) IN014 CAD03202383 10000 99.999 0.10 39.9 100.2537 100.2656 10001.2 20.0 471-34-1 5 mg/m3 or-rat >2000mg/kg 3109a

[1] Spectrum No. 1 [12.514 sec]:58120.D* [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	T	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	30	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Su	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



CERTIFIED WEIGHT REPORT:

Part Number: 57048
Lot Number: 070124
Description: Cadmium (Cd)

Lot #
Solvent: 24002546 Nitric Acid

Expiration Date:

070127

2% 40.0 (mL) Nitric Acid

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6UTB

Weight shown below was diluted to (mL):

2000.07

SE-05 Balance Uncertainty
0.100 Flask Uncertainty

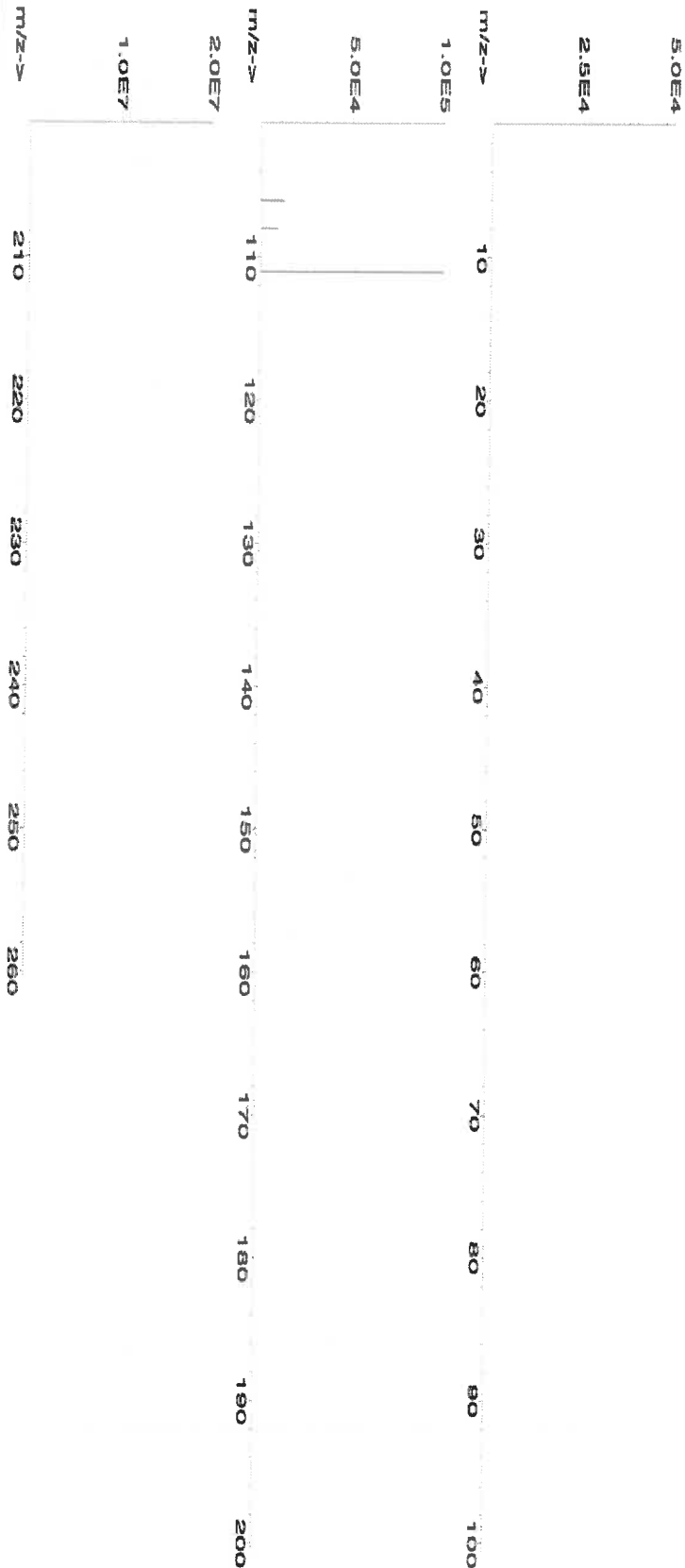
<i>Aleah O'Brady</i>	
Formulated By:	Aleah O'Brady
	070124
<i>Pedro L. Rentas</i>	
Reviewed By:	Pedro L. Rentas
	070124

Compound

Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Expanded	SDS Information	NIST
Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	+/- (µg/mL)	(Solvent Safety Info. On Attached pg.)	SRM

1. Cadmium nitrate tetrahydrate (Cd) IN024 CDM09221A1 1000 99.999 0.10 36.5 5.4797 5.4804 1000.1 2.0 10022-68-1 0.01 mg/m3 or-rat 60.2mg/kg 3108

[1] Spectrum No.1 [12.514 sec]:\$8148.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.2	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Ba	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Cd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pr	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



CERTIFIED WEIGHT REPORT:

Part Number: 58126
Lot Number: 051523
Description: Iron (Fe)

Solvent: 21110221 Nitric Acid

Lot #

Expiration Date: 051526

5.0% 250.0 (mL) Nitric Acid

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 10000

NIST Test Number: 6UTB

5E-05 Balance Uncertainty

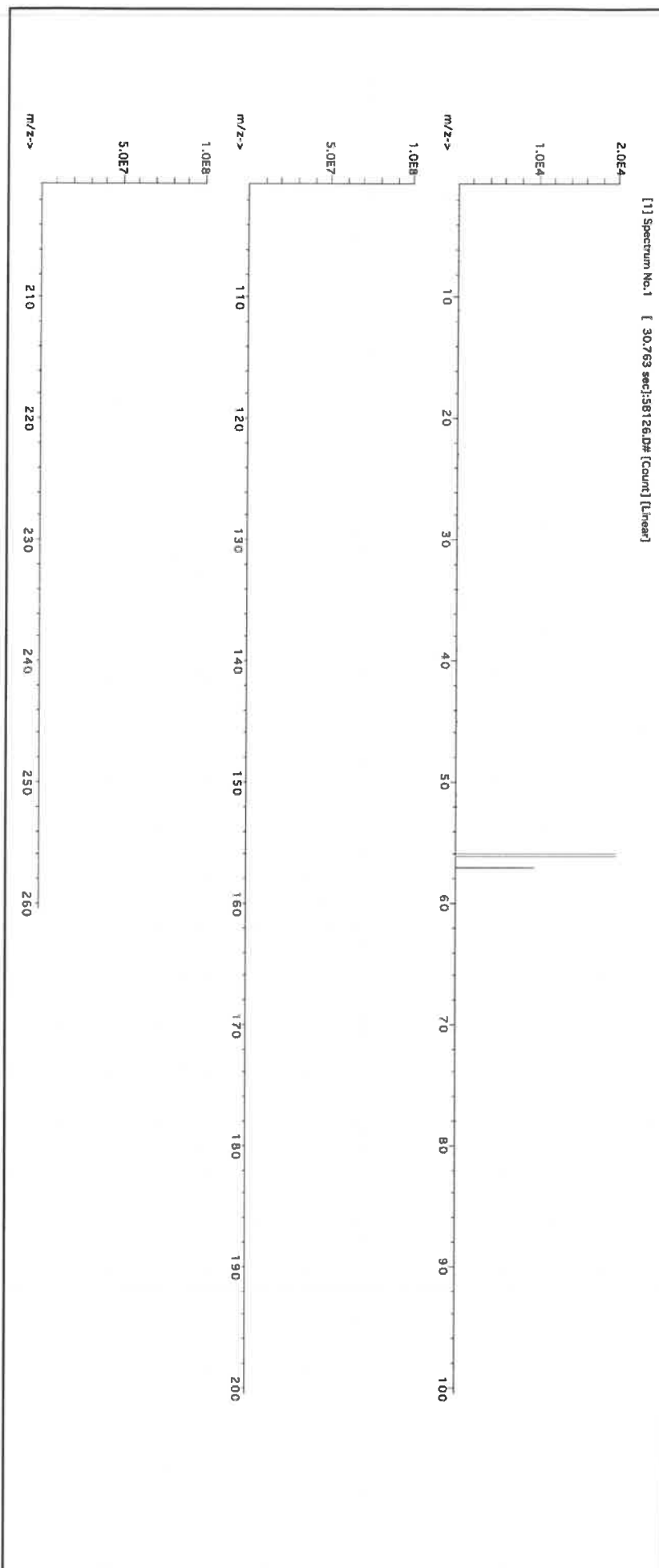
Weight shown below was diluted to (mL): 5000.1 **0.12 Flask Uncertainty**

<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
	051523
<i>Pedro L. Renias</i>	
Reviewed By:	Pedro L. Renias
	051523

SDS Information

Compound	Lot	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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1. Iron (Fe)	IN346	2302010-500	10000	99.995	0.10	100.0	50.0034	50.0111	10001.5	20.0	7439-89-6	5 mg/m3	or rat 7500mg/kg 3126a
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.10	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ce	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rb	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.10	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.05	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.10	Ge	<0.10	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.10
B	<0.02	Cu	<0.10	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Tl	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT:

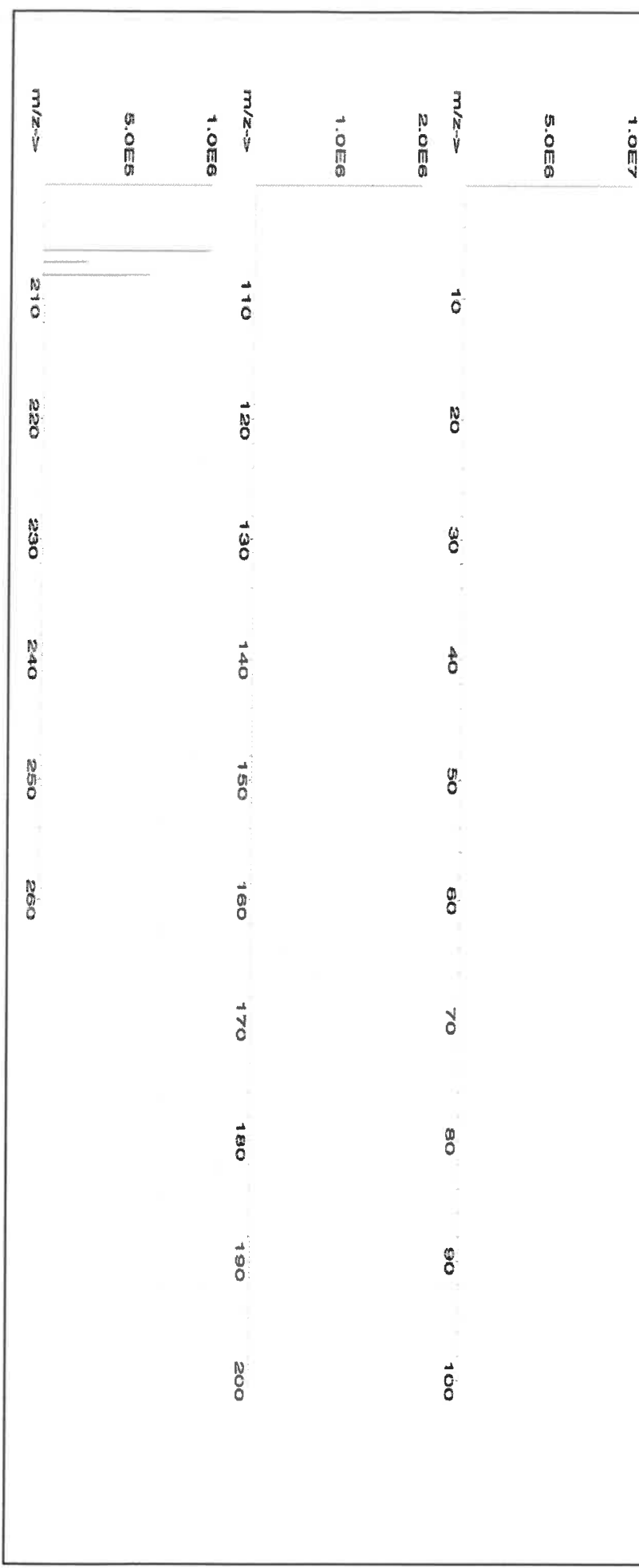
Part Number: **57182**
Lot Number: **110923**
Description: **Lead (Pb)**
Solvent: **24002546 Nitric Acid**
Lot #: **M6025**

Expiration Date: **110926**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **10000**
NIST Test Number: **6UTB**
Weight shown below was diluted to (mL): **2000.02**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Lawrence Barry
Reviewed By:	Pedro L. Rentas
110923	

SDS Information									
Compound	Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Expanded
	Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	+/- (µg/mL)
1. Lead(II) nitrate (Pb)	IN029	PED12016A1	10000	99.999	0.10	62.5	32.0006	32.0040	10001.1
									20.0
									10099-74-8
									0.05 mg/m3
									intrinsic 83 mg/kg
									3128

[1] Spectrum No.1 [17.284 sec]:58182.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Bu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

Physical Characterization:

(T)= Target analyte

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



Certified Reference Material CRM

MC026



CERTIFIED WEIGHT REPORT:

Part Number: **57182**
Lot Number: **110923**
Description: **Lead (Pb)**

Lot #
Solvent: **24002546 Nitric Acid**

Expiration Date: **110926**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **10000**
NIST Test Number: **6UTB**

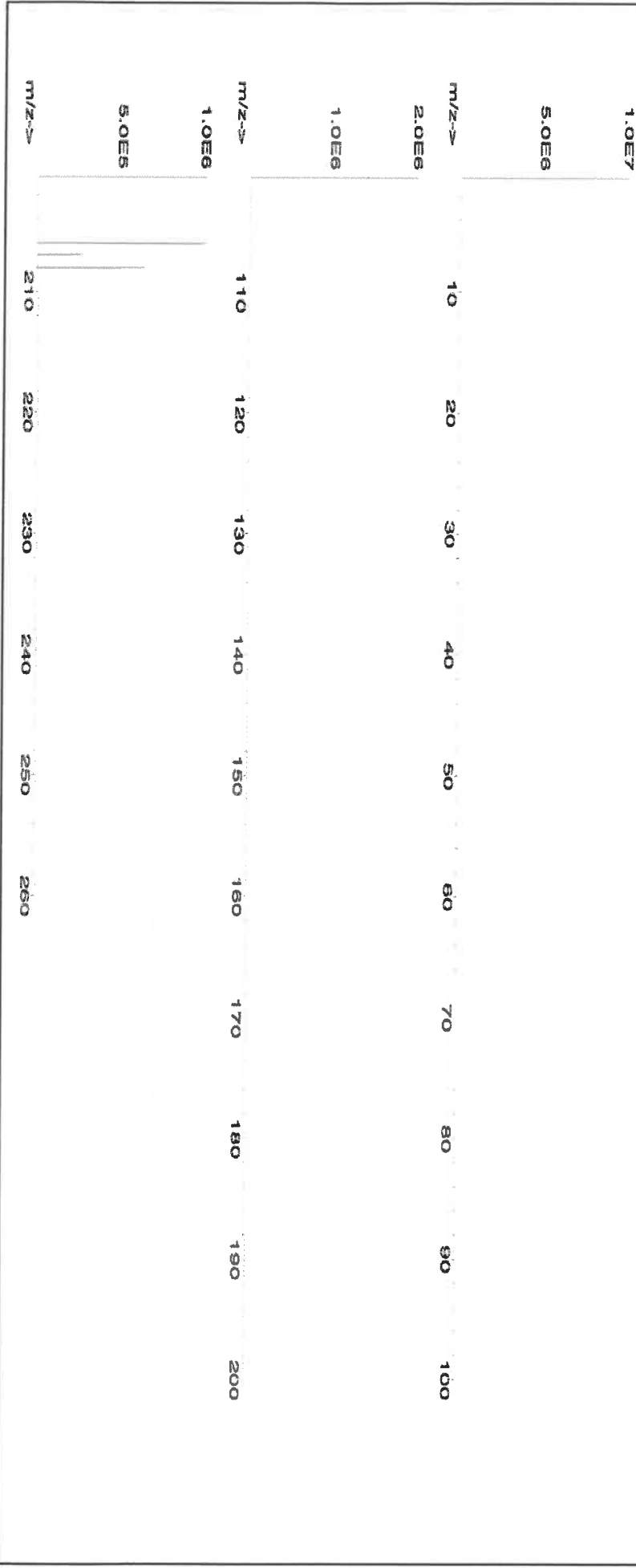
2%
40.0 (mL)
Nitric Acid

Weight shown below was diluted to (mL): **2000.02** 0.058 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Lawrence Barry
Reviewed By:	Pedro L. Rentas
110923	

SDS Information									
Compound	Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Expanded
	Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	+/- (µg/mL)
1. Lead(II) nitrate (Pb)	IN029	PED12016A1	10000	99.999	0.10	62.5	32.0006	32.0040	10001.1
									20.0
									10099-74-8
									0.05 mg/m3
									intrinsic 83 mg/kg
									3128

[1] Spectrum No.1 [17.284 sec]:58182.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

Physical Characterization:

(T)= Target analyte

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

A CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57022
070721
Titanium (Ti)

Expiration Date:	070724
Recommended Storage:	Ambient (20 °C)
Nominal Concentration (µg/mL):	1000

NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 2000.02

Lot #	Solvent:
20370011	Nitric Acid

2.0%	40.0	Nitric Acid
	(mL)	

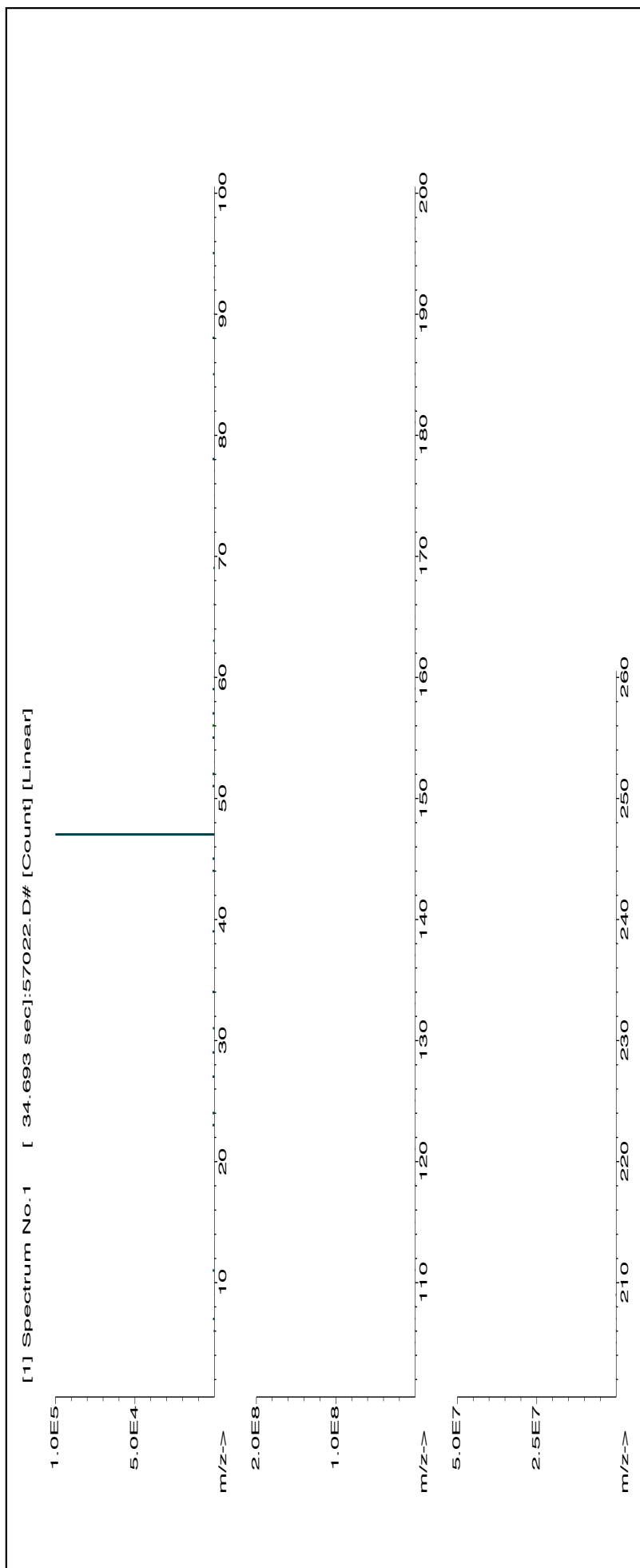
	
Formulated By:	Lawrence Barry
	
Reviewed By:	Pedro L. Rentas
	070721

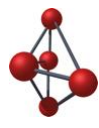
SDS Information

Expanded		Uncertainty		+/- (µg/mL)		CAS#		OSHA PEL (TWA)		LD50		NIST		SRM	
SDS Information (Solvent Safety Info. On Attached pg.)															

Compound	Part	Lot	Dilution	Initial	Uncertainty	Nominal	Initial	Final	Uncertainty	(Solvent Safety Info. On Attached pg.)	NIST
	Number	Number	Factor	Vol. (mL)	Pipette	Conc. (µg/mL)	Conc. (µg/mL)	Conc. (µg/mL)	+/- (µg/mL)	CAS#	SRM
										LD50	
										OSHA PEL (TWA)	

- | | | | | | | | | | | | | | |
|-------------------------------------|-------|--------|--------|-------|-------|------|---------|---------------|------------|------------|---------------|----|-------|
| 1. Ammonium hexafluorotitanate (Ti) | 58122 | 070120 | 0.1000 | 200.0 | 0.084 | 1000 | 10000.1 | 1000.0 | 2.2 | 16962-40-6 | 2.5 (F) mg/m3 | NA | 3162a |
|-------------------------------------|-------|--------|--------|-------|-------|------|---------|---------------|------------|------------|---------------|----|-------|





Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																			
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.02	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.02	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.02	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
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- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



Refine your results. Redefine your industry.

Certificate of Analysis

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inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: 6020CAL-1
Lot Number: S2-MEB711244
Matrix: 5% (v/v) HNO₃
tr. HF
Value / Analyte(s): 20 µg/mL ea:
Silver, Aluminum,
Arsenic, Barium,
Beryllium, Calcium,
Cadmium, Cobalt,
Chromium, Copper,
Iron, Potassium,
Magnesium, Manganese,
Sodium, Nickel,
Lead, Antimony,
Selenium, Thallium,
Vanadium, Zinc

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	20.01 ± 0.08 µg/mL	Antimony, Sb	20.01 ± 0.12 µg/mL
Arsenic, As	20.01 ± 0.18 µg/mL	Barium, Ba	20.01 ± 0.11 µg/mL
Beryllium, Be	20.01 ± 0.14 µg/mL	Cadmium, Cd	20.01 ± 0.11 µg/mL
Calcium, Ca	20.01 ± 0.10 µg/mL	Chromium, Cr	20.01 ± 0.16 µg/mL
Cobalt, Co	20.01 ± 0.11 µg/mL	Copper, Cu	20.01 ± 0.10 µg/mL
Iron, Fe	20.01 ± 0.09 µg/mL	Lead, Pb	20.01 ± 0.11 µg/mL
Magnesium, Mg	19.99 ± 0.10 µg/mL	Manganese, Mn	20.01 ± 0.10 µg/mL
Nickel, Ni	20.01 ± 0.11 µg/mL	Potassium, K	20.01 ± 0.10 µg/mL
Selenium, Se	20.02 ± 0.14 µg/mL	Silver, Ag	20.02 ± 0.09 µg/mL
Sodium, Na	20.01 ± 0.10 µg/mL	Thallium, Tl	20.01 ± 0.13 µg/mL
Vanadium, V	20.01 ± 0.11 µg/mL	Zinc, Zn	20.01 ± 0.11 µg/mL

Density: 1.026 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
Fe	Calculated		See Sec. 4.2
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{Its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

HF Note: This standard should not be prepared or stored in glass.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 20, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 20, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





Certified Reference Material CRM

CERTIFIED WEIGHT REPORT:

Part Number: **58119**
Lot Number: **120822**
Description: **Potassium (K)**

Solvent: 20510011 Nitric Acid

Lot #

Expiration Date:

2% 60.0 (mL) Nitric Acid

Recommended Storage:

120825 Ambient (20 °C)

Nominal Concentration (µg/mL):

10000

NIST Test Number:

6UTB

Weight shown below was diluted to (mL):

3000.4

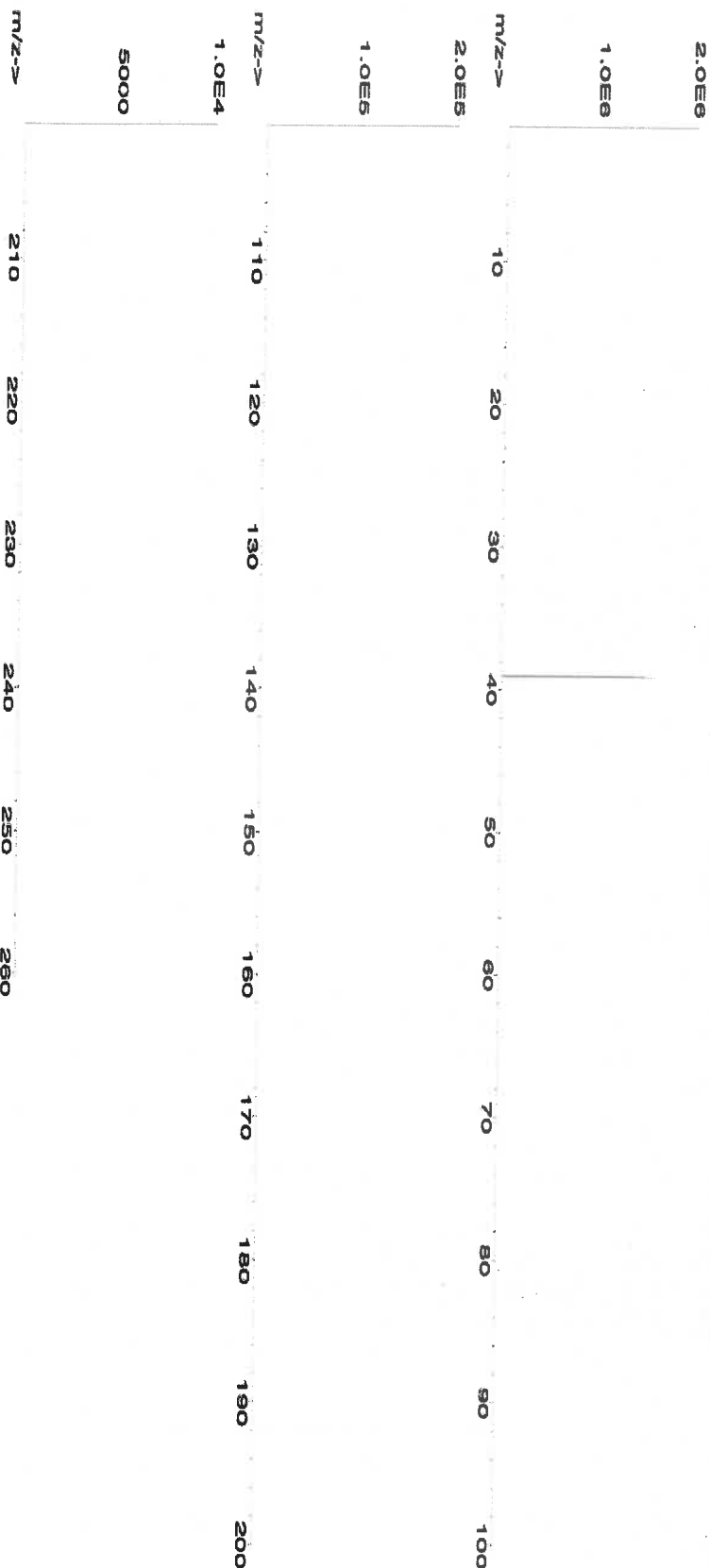
5E-05 Balance Uncertainty
0.06 Flask Uncertainty

Compound

Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Uncertainty	(Solvent Safety Info. On Attached pg.)					NIST
Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	+/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	SRM		

1. Potassium nitrate (K) IN034 KD022021A1 10000 99.989 0.10 37.6 79.7990 79.8075 10001.1 20.0 7757-79-1 5 mg/m3 or/air 3015 mg/kg 3141a

[1] Spectrum No.1 [35.763 sec]:58119.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
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Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.02	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
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- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



Certified Reference Material CRM

CERTIFIED WEIGHT REPORT:

Part Number: **58119**
Lot Number: **120822**
Description: **Potassium (K)**

Solvent: 20510011 Nitric Acid

Lot #

Expiration Date: 120825

2% 60.0 Nitric Acid (mL)

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 10000

NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 3000.4 0.06 Balance Uncertainty Flask Uncertainty

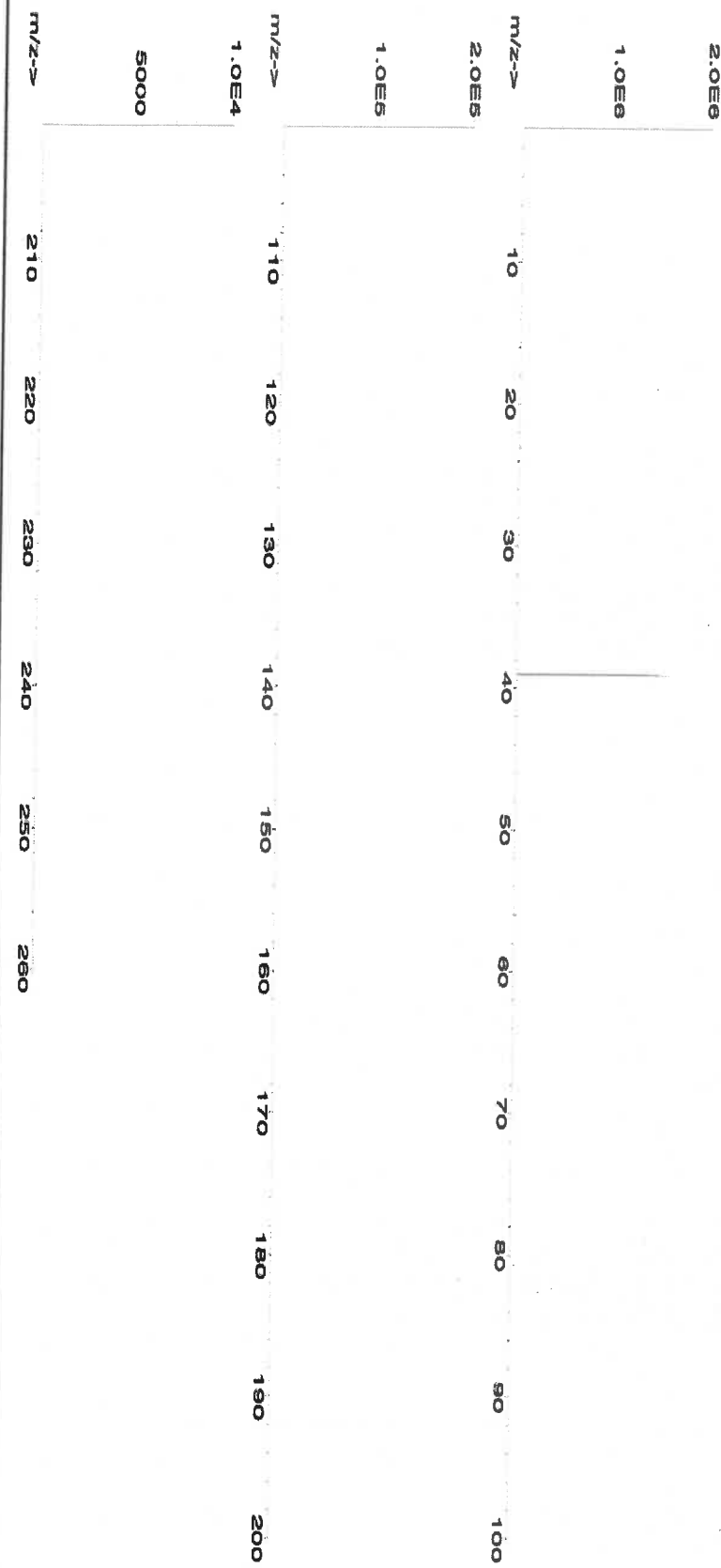
<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
Reviewed By:	Pedro L. Rentas
	120822

Compound

Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Expanded	SDS Information	NIST
Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	Uncertainty +/- (µg/mL)	(Solvent Safety Info. On Attached pg.)	SRM

1. Potassium nitrate (K) IN034 KD022021A1 10000 99.989 0.10 37.6 79.7990 79.8075 10001.1 20.0 7757-79-1 5 mg/m3 crtat 3015 mg/kg 3141a

[1] Spectrum No.1 [35.763 sec]:58119.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.02	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



CERTIFIED WEIGHT REPORT:

Part Number: 58024
Lot Number: 060523
Description: Chromium (Cr)

Lot # 21110221
Solvent: Nitric Acid

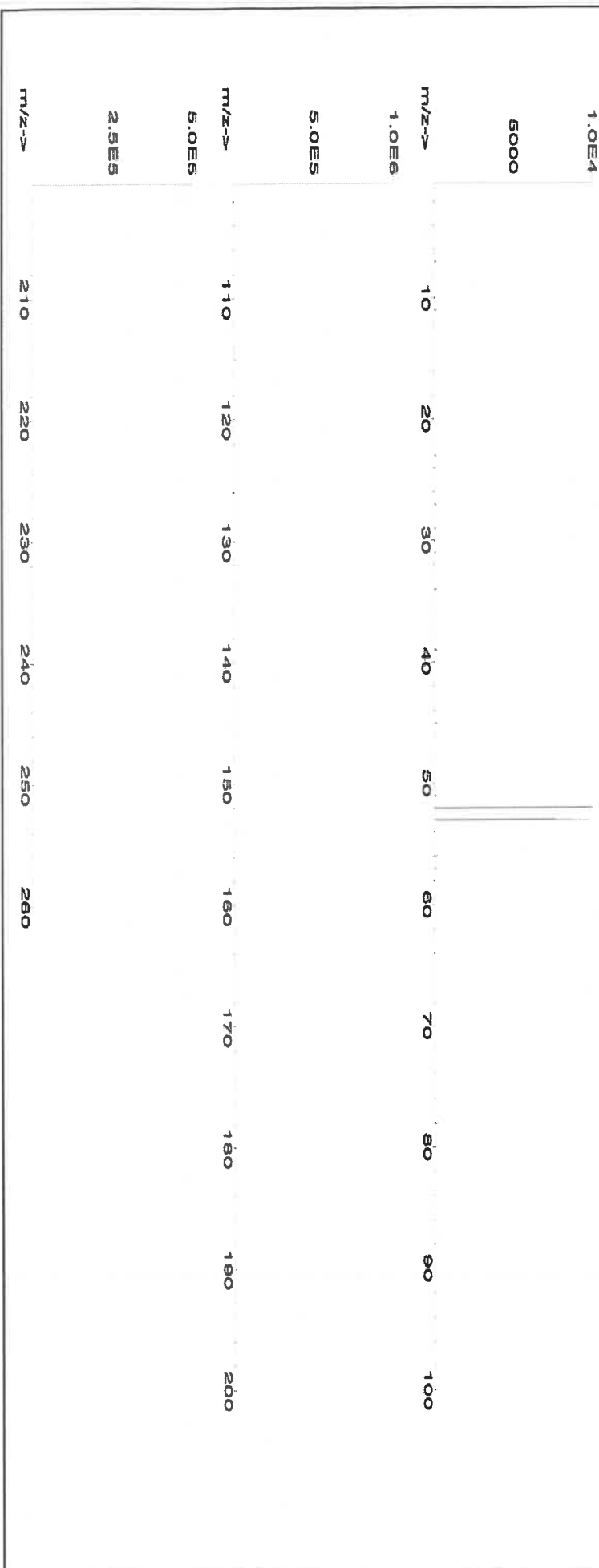
Formulated By:	Lawrence Barry
	060523
Reviewed By:	Pedro L. Ruelas
	060523

Expiration Date: 060526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 2000.02 0.058 Balance Uncertainty
Flask Uncertainty

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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1. Chromium(III) nitrate nonahydrate (Cr) 58124 071122 0.1000 200.0 0.084 1000 10000.1 1000.0 2.2 7789-02-8 0.5 mg(Cr)/m3 or rat 3250 mg/kg 3112a

[1] Spectrum No.1 [31.393 sec]:57024.D# [Count] [Linear]





Certified Reference Material CRM



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://AbsoluteStandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	T	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
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- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



Certified Reference Material CRM

R: 8/25/23 M5751



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

58029
071723
Copper (Cu)

Lot #
Solvent:

21110221 Nitric Acid

2.0% 40.0 Nitric Acid (mL)

Expiration Date: 071726

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

NIST Test Number: 6L7B

Volume shown below was diluted to (mL): 2000.02 5E-05 Balance Uncertainty 0.058 Flask Uncertainty

Formulated By:	Benson Chan	071723
Reviewed By:	Pedro L. Ruelas	071723

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)	NIST SRM
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1. Copper(II) nitrate trihydrate (Cu) 58129 022723 0.1000 200.0 0.084 1000 10000.5 1000.0 2.2 10031-43-3 1 mg/m3 or rat 794 mg/kg 3114

[1] Spectrum No. 1 [33.422 sec]: 58029.D# [Count] [Linear]

1.0E6	m/z ->	10	20	30	40	50	60	70	80	90	100
5.0E5											
5.0E7	m/z ->	110	120	130	140	150	160	170	180	190	200
2.0E7											
2.5E7											
1.0E7	m/z ->	210	220	230	240	250	260				

Absolute Standards, Inc.

800-368-1131
www.absolutestandards.com



Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
<https://AbsoluteStandards.com>

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Bu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	T	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



CERTIFIED WEIGHT REPORT:

Part Number: 57004
Lot Number: 102523
Description: Beryllium (Be)

Lot # 24002546
Solvent: Nitric Acid

Expiration Date:

102526

2.0%

40.0 (mL)

Nitric Acid

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6UTB

Volume shown below was diluted to (mL): 2000.02

5E-05 Balance Uncertainty

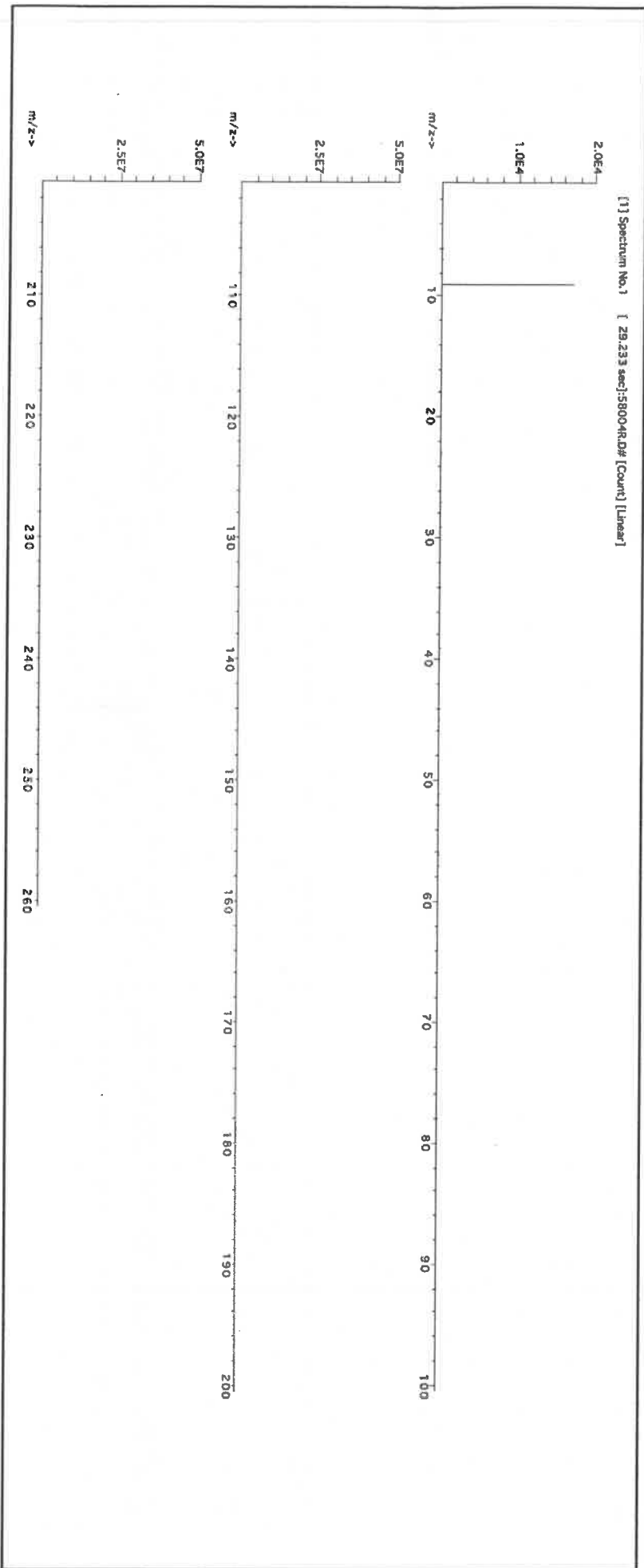
0.058 Flask Uncertainty

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

SDS Information

Compound	Part Number	Lot	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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1. Beryllium nitrate (Be)	58104	091423	0.1000	200.0	0.084	1000	10001.5	1000.0	2.2	13597-99-4	0.2µg/m3	intrinsc-rat 3.16mg/kg	NA
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Tc	<0.02	U	<0.02
As	<0.02	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Ti	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	T	Cr	<0.02	Ga	<0.02	Fe	<0.02	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Ta	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Tl	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

Solvents: 21110221 Nitric Acid
22D0562008 Hydrochloric acid

Lot # R-02509124

M599

36

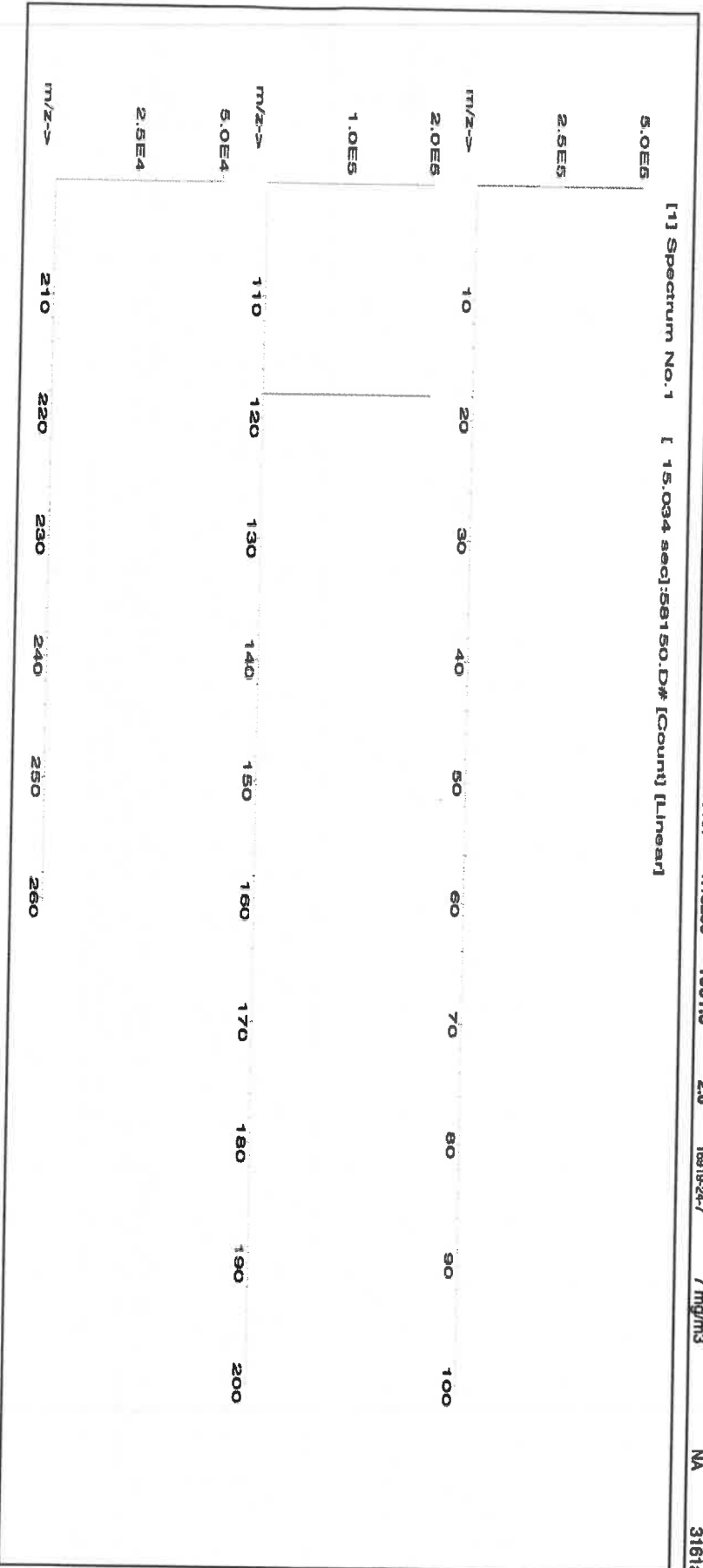
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By: Benson Chan	
071123	
Reviewed By: Pedro L. Rientas	
071123	

SDS Information												
Compound		Lot		Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Expanded	
RM#	Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	+/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50
											</	

1. Ammonium hexafluoroantimonate(V) (Sn) INO10 SMD042023A1 1000 99.999 0.10 44.2 1.13107 1.13286 1001.6 2.0 16919-24-7 7 mg/m3 NA 3161a

[1] Spectrum No. 1 [15.034 sec]:56150.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<500	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Ta	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



R: 02/09/24 115800 (54)

CERTIFIED WEIGHT REPORT:

Part Number: 57027
Lot Number: 091923
Description: Cobalt (Co)

Expiration Date: 091926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Volume shown below was diluted to (mL): 2000.02

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Lot # 24002546
Solvent: Nitric Acid

2.0% Nitric Acid
40.0 (mL)

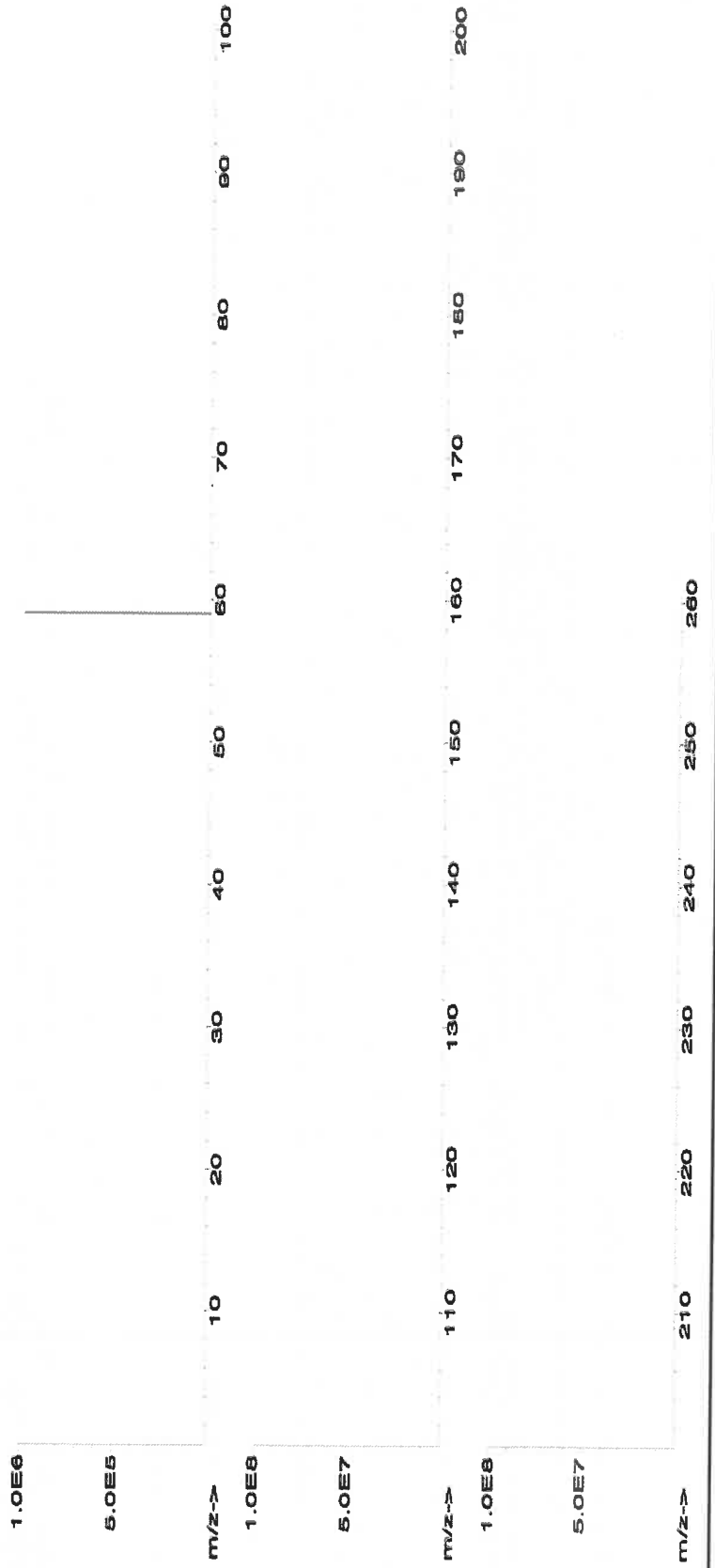
Formulated By:	Lawrence Barry
Reviewed By:	Pedro L. Rentas

SDS Information

Expanded Uncertainty +/- (µg/mL)
(Solvent Safety Info. On Attached pg.)
NIST SRM
CAS# OSHA PEL (TWA) LD50

1. Cobalt(II) nitrate hexahydrate (Co) 58127 050923 0.1000 200.0 0.084 1000 10000.0 1000.0 2.2 10026-22-9 0.02 mg/m3 orl-rat 691 mg/kg 3113

[1] Spectrum No.1 [34.243 sec]:58027.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.02	Os	<0.01	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.2	Na	<0.02	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	T	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



Certified Reference Material CRM

CERTIFIED WEIGHT REPORT:

Part Number: **57033**
Lot Number: **111323**
Description: **Arsenic (As)**

Lot # **24002546**
Solvent: **Nitric Acid**

Expiration Date: **111326**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test Number: **6LUTB**
Volume shown below was diluted to (mL): **4000.0**

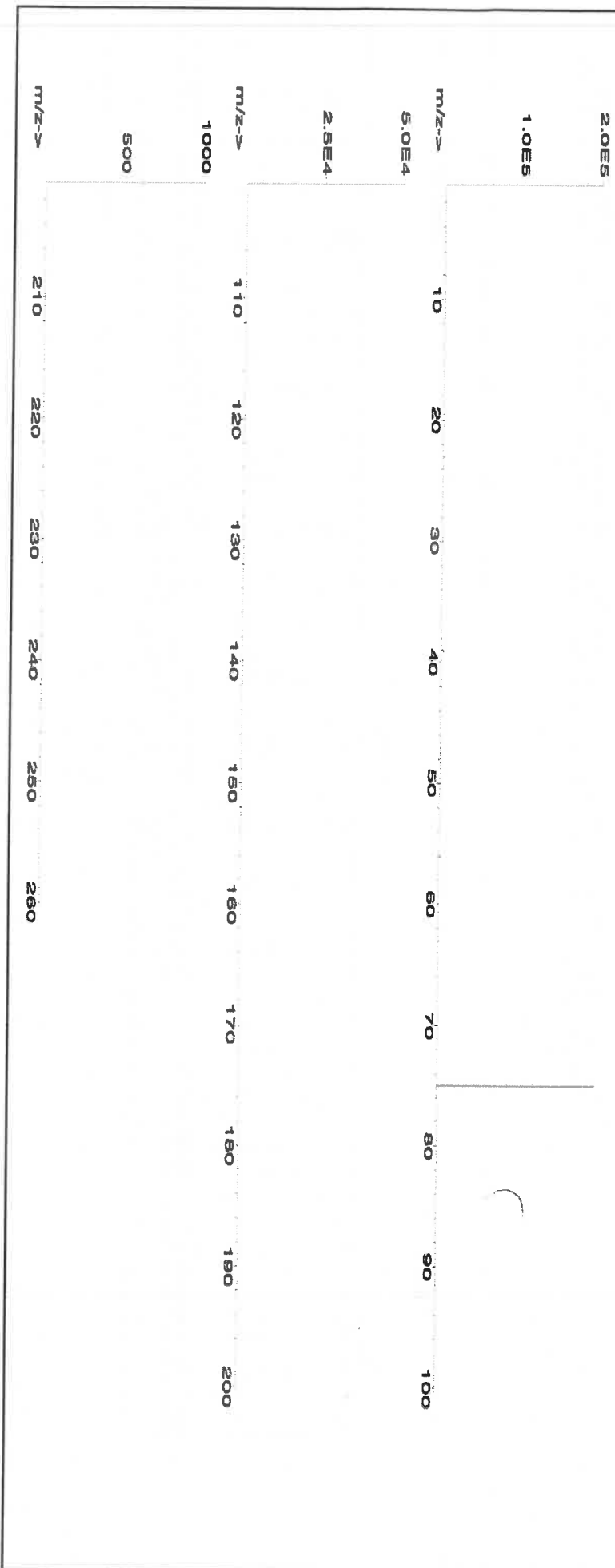
5E-05 Balance Uncertainty
0.06 Flask Uncertainty

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rendas	111323

SDS Information									
Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)

1. Arsenic (As)	58133	020522	0.1000	400.0	0.084	1000	10001.0	1000.0	2.0
						7440-38-2	0.5 mg/m3	or 1 at 500 mg/kg	3103a

[1] Spectrum No. 1 [34.433 sec]:57033.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Tc	<0.02	U	<0.02
As	T	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Ti	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Ru	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Bc	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Sr	<0.02	S	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge*	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	Ta	<0.02	Sa	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02			Tl	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57115
041723
Phosphorous (P)

Solvent: 21110221 Nitric Acid

Lot #

R102109124 M5815

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test Number:

041726
Ambient (20 °C)
10000
6UTB

2% 40.0 (mL) Nitric Acid

Weight shown below was diluted to (mL): 2000.02 0.056 Balance Uncertainty
Flask Uncertainty

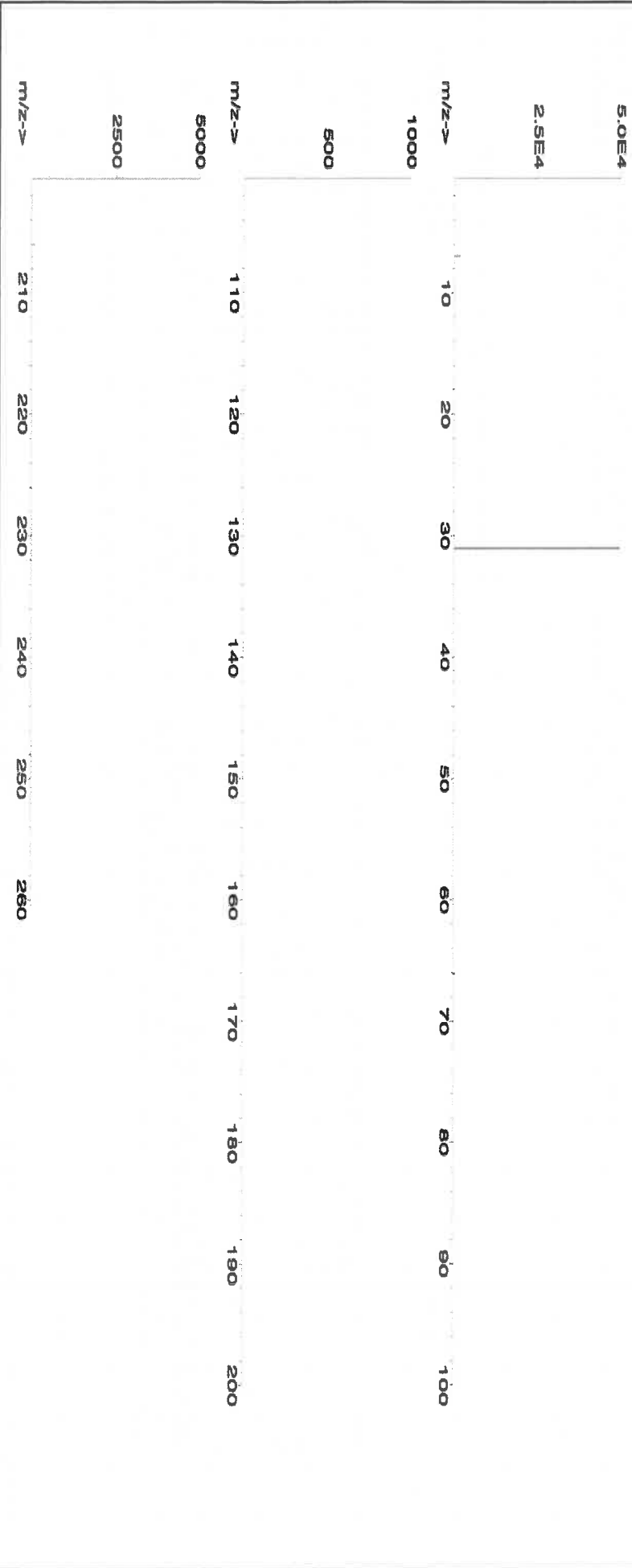
Formulated By:	Lawrence Barry	041723
Reviewed By:	Pedro L. Rentas	041723

Compound

RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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1. Ammonium dihydrogen phosphate (P) IN008 PVR2019A1 10000 99.999 0.10 27.5 72.7287 72.7289 10000.0 20.0 7722-76-1 5 mg/m3 or-hal->2000mg/kg 3186

[1] Spectrum No.1 [12.074 sec]:58115.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	T	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



CERTIFIED WEIGHT REPORT:

Part Number: **57116**
Lot Number: **071123**
Description: **Sulfur (S)**

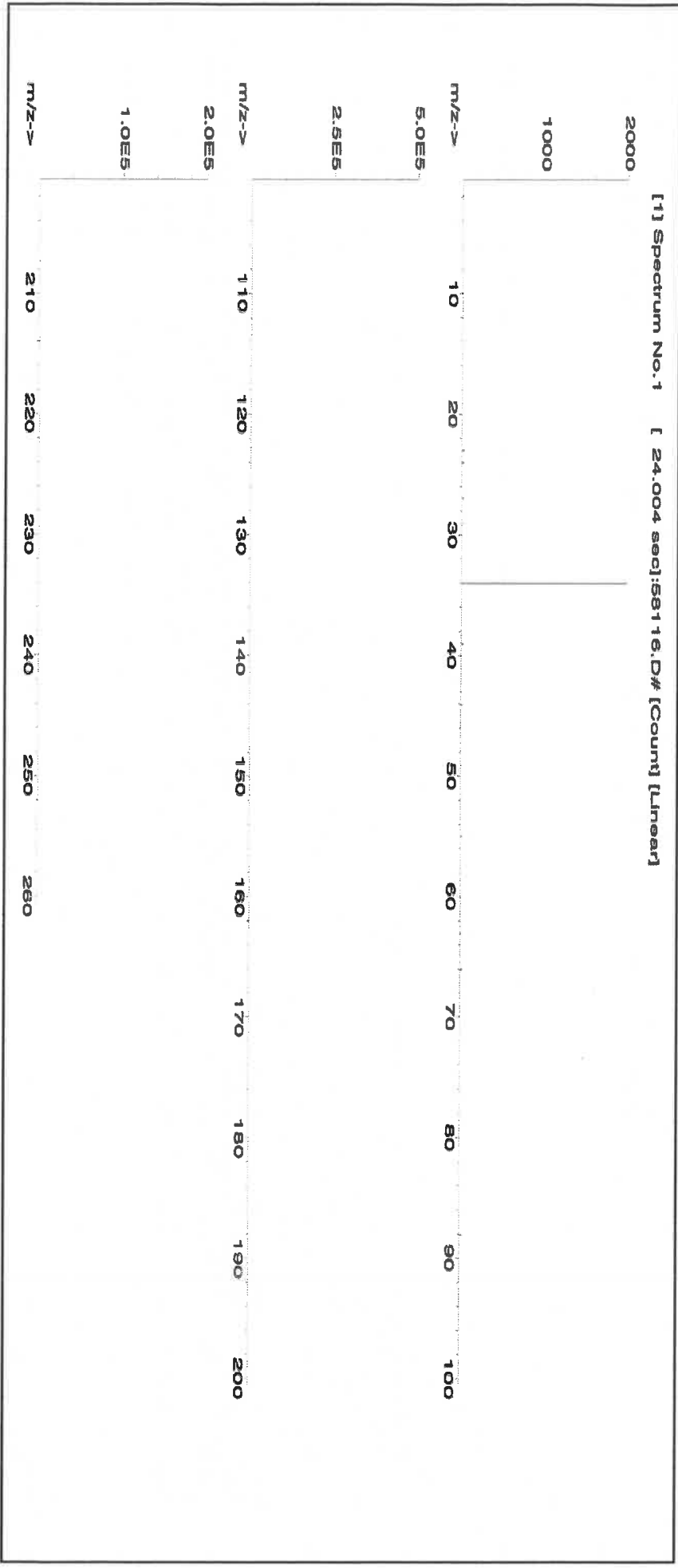
Solvent: **071123** Lot #
ASTM Type 1 Water

Formulated By:	Lawrence Barry
Reviewed By:	
Pedro L. Rentas	
071123	

Expiration Date: **071126**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **10000**
NIST Test Number: **6UTB**
Weight shown below was diluted to (mL): **1999.48**
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

SDS Information									
Compound	Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Expanded
	Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	+/- (µg/mL)
									CAS# OSHA PEL (TWA) LD50 SRM

1. Ammonium sulfate (S)	IN117	SLBR725V	10000	99.9	0.10	24.3	82.4675	82.4692	10000.1	20.0	7783-20-2	NA	oral 4250mg/kg	3181
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Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Ti	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	T	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

Physical Characterization:

(T)= Target analyte

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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R: 02/22/24 M.5942

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGT11
Lot Number: T2-TI719972
Matrix: 2% (v/v) HNO₃
tr. HF
Value / Analyte(s): 1 000 µg/mL ea:
Titanium
Starting Material: Ti Metal
Starting Material Lot#: 2094
Starting Material Purity: 99.9975%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 5 µg/mL
Density: 1.012 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 1002 ± 4 µg/mL
ICP Assay NIST SRM 3162a Lot Number: 130925

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum (1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (z) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum (w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (z) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000536	M	Eu	<	0.000268	O	Na	<	0.032670	M	Se		0.001204	O	Zn	<	0.003267
O	Al		0.000872	O	Fe		0.003225	O	Nb	<	0.043560	O	Si		0.004735	O	Zr	<	0.043560
M	As	<	0.008586	M	Ga	<	0.000268	M	Nd	<	0.000268	M	Sm	<	0.000268				
M	Au	<	0.004577	M	Gd	<	0.000268	O	Ni	<	0.010890	M	Sn		0.000096				
O	B	<	0.008929	M	Ge	<	0.002146	M	Os	<	0.000269	O	Sr		0.000096				
M	Ba	<	0.002683	M	Hf		0.002161	O	P	<	0.054450	M	Ta		0.010560				
M	Be	<	0.005366	M	Hg	<	0.003231	M	Pb	<	0.001073	M	Tb	<	0.000268				
M	Bi	<	0.001609	M	Ho	<	0.000268	M	Pd	<	0.000268	M	Te	<	0.001341				
O	Ca		0.000676	M	In	<	0.002683	M	Pr	<	0.000268	M	Th	<	0.053663				
M	Cd	<	0.000268	M	Ir	<	0.000269	M	Pt	<	0.000536	s	Ti	<					
M	Ce	<	0.000268	M	K		0.001172	M	Rb	<	0.000268	M	Tl	<	0.000268				
M	Co	<	0.004293	M	La	<	0.000268	M	Re	<	0.000268	M	Tm	<	0.000268				
M	Cr		0.000752	O	Li	<	0.027225	M	Rh	<	0.000268	M	U	<	0.000268				
M	Cs	<	0.000268	M	Lu	<	0.000268	M	Ru	<	0.000269	M	V	<	0.019855				
O	Cu	<	0.010890	O	Mg	<	0.005445	i	S	<		M	W		0.000473				
M	Dy	<	0.000268	O	Mn	<	0.003267	M	Sb	<	0.006976	M	Y	<	0.002146				
M	Er	<	0.000268	M	Mo		0.000774	O	Sc	<	0.004900	M	Yb	<	0.000536				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 47.87 +4 6 Ti(F)6-2

Chemical Compatibility - Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

Stability - 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 chemically stable for years in 2-5% HNO3 / trace HF in an LDPE container.

Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores (fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 48 amu	14 ppt	N/A	32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)]
ICP-OES 323.452 nm	0.0054 / 0.00092 µg/mL	1	Ce, Ar, Ni
ICP-OES 334.941 nm	0.0038 / 0.000028 µg/mL	1	Nb, Ta, Cr, U
ICP-OES 336.121 nm	0.0053 / 0.000034 µg/mL	1	W, Mo, Co

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.

800-368-1131
www.absolutestandards.com



Certified Reference Material CRM



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT:

Lot #

MS961 R-611124

Part Number:

Solvent: 24002546 Nitric Acid

Lot Number:

041124

Description:

Nickel (NI)

Expiration Date:

041127

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6UTB

Weight shown below was diluted to (mL):

249.85

5E-05 Balance Uncertainty
0.002 Flask Uncertainty

2% 5.0 (mL) Nitric Acid

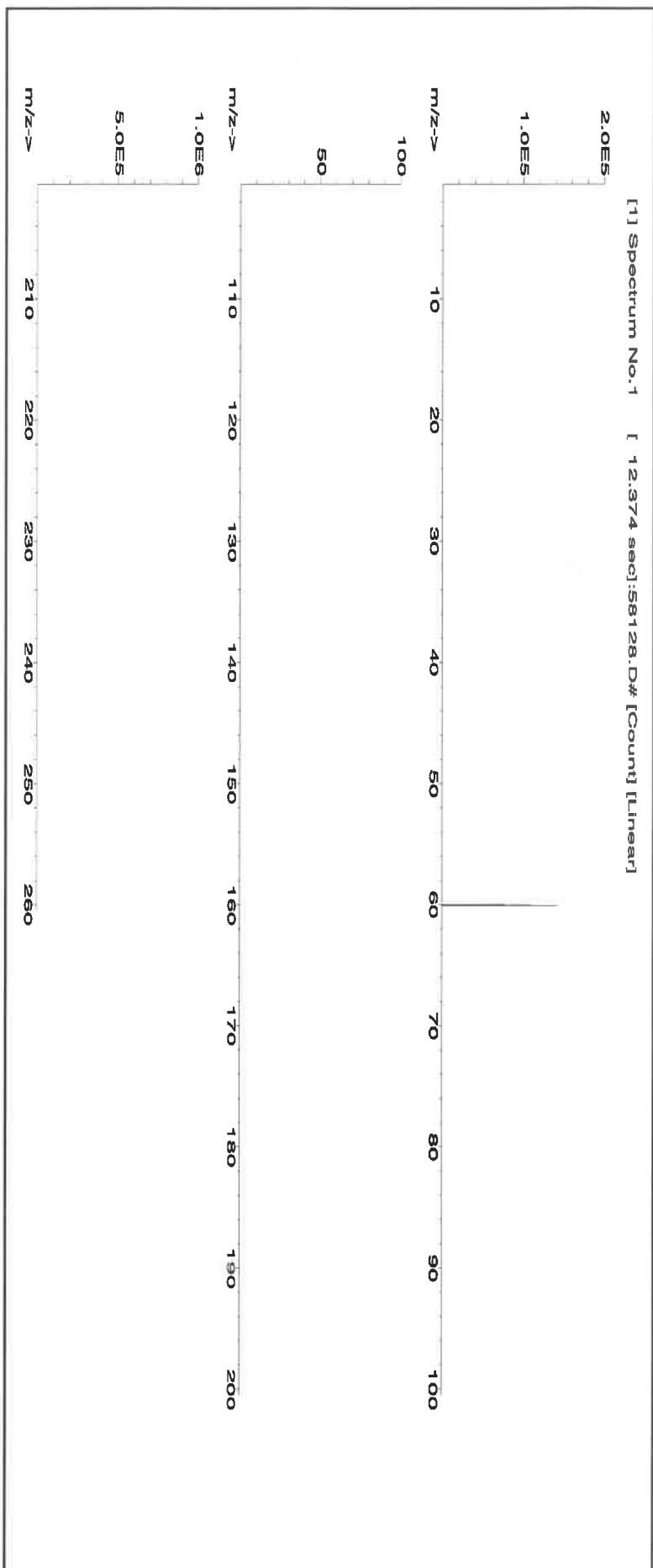
Formulated By:	Brian Geddes	041124
Reviewed By:	Pedro L. Rentas	041124

SDS Information

Compound	Lot	Nominal	Purity	Uncertainty	Assay	Target	Actual	Actual	Uncertainty	(Solvent Safety Info. On Attached pg.)			NIST
	RM#	Number	Conc. (µg/mL)	(%)	Purity (%)	(%)	Weight (g)	Weight (g)	Conc. (µg/mL)	+/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50

1. Nickel(II) nitrate hexahydrate (NI) IN033 NIM052023A1 1000 99.999 0.10 20.2 1.2369 1.2369 1000.0 2.0 13478-00-7 1 mg/m3 or-rat 1620 mg/kg 3136

[1] Spectrum No. 1 [12.374 sec]:58128.D# [Count] [Linear]



Part # 57028 Lot # 041124

1 of 2

Printed: 5/21/2024, 11:20:13 PM



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	T	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Ba	<0.02	Eu	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Bc	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Absolute Standards, Inc.

800-368-1131
www.absolutestandards.com



Certified Reference Material CRM



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
<https://AbsoluteStandards.com>

CERTIFIED WEIGHT REPORT:

Part Number:

57034

Lot Number:

060624

Description:

Selenium (Se)

Lot #

24002546

Solvent:

Nitric Acid

2.0%

40.0

(mL)

Nitric Acid

(mL)

Formulated By:

Benson Chan

Benson Chan

060624

Expiration Date:

060627

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6UTB

Volume shown below was diluted to (mL):

2000.07

SE-05 Balance Uncertainty

0.100 Flask Uncertainty

Reviewed By:

Pedro L. Rantas

Pedro L. Rantas

060624

SDS Information

Compound

Part Number

Lot Number

Dilution Factor

Initial Vol. (mL)

Pipette (mL)

Nominal Conc. (µg/mL)

Initial Conc. (µg/mL)

Final Conc. (µg/mL)

Expanded Uncertainty

(Solvent Safety Info. On Attached pg.)

CAS#

OSHA PEL (TWA)

LDSO

NIST SRM

1. Selenium (Se)

58134

071223

0.1000

200.0

0.084

1000

10002.5

1000.0

2.2

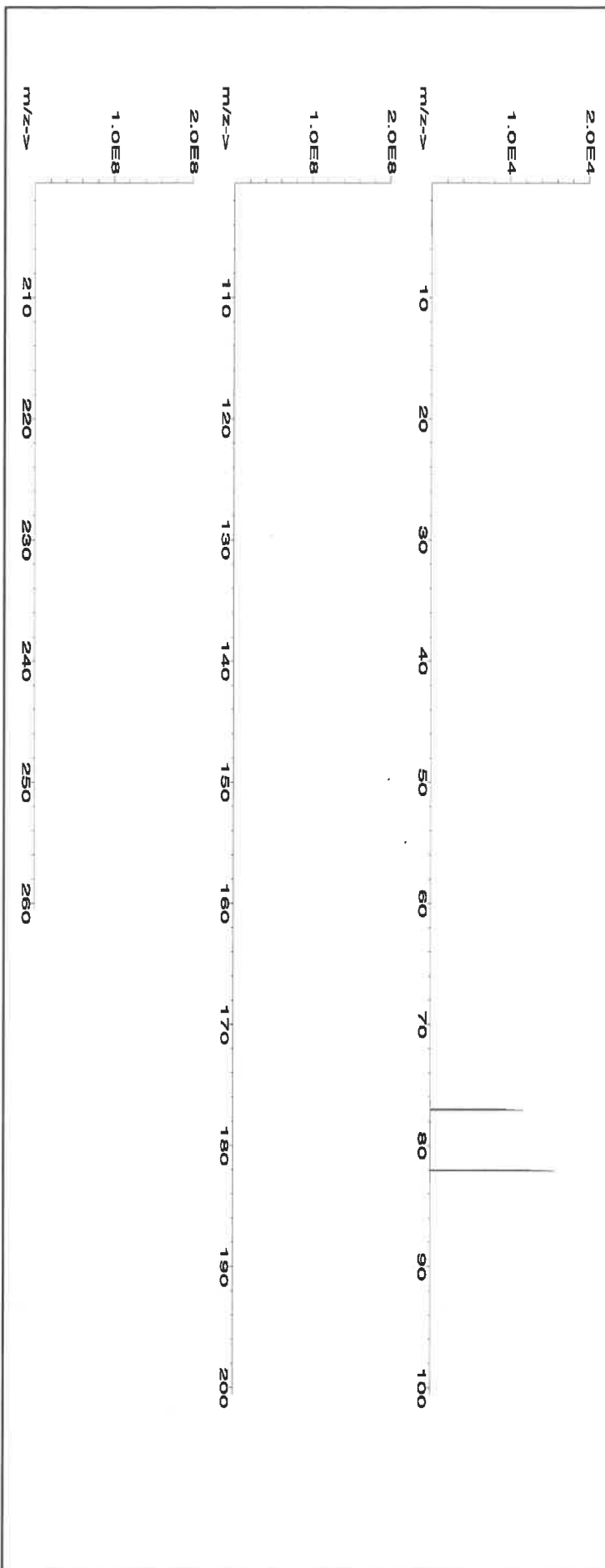
7782-49-2

0.2 mg/m3

or-tral 6700 mg/kg

3149

[1] Spectrum No.1 [33.702 sec]:58034.D# [Count] [Linear]



Absolute Standards, Inc.
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www.absolutestandards.com



Certified Reference Material CRM



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
<https://AbsoluteStandards.com>

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	T	Tb	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Certificate of Analysis

M5976, M5977

R: 02/22/24

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGMO1
Lot Number: T2-MO720876
Matrix: H2O
tr. NH4OH
Value / Analyte(s): 1 000 µg/mL ea:
Molybdenum
Starting Material: Ammonium Molybdate
Starting Material Lot#: 2361
Starting Material Purity: 99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 998 ± 7 µg/mL
Density: 1.000 g/mL (measured at 20 ± 4 °C)
Assay Information:

Assay Method #1 **998 ± 4 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance.

$$w_i = (1/u_{char i}^2) / (\sum (1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum (w_i^2 (u_{char i}^2))]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.000879	M	Se	<	0.008000	M	Zn		0.000598
M	Al		0.000563	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.000175				
M	Ba		0.001689	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.006334	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Tl	<	0.032000				
M	Ce	<	0.008300	M	K		0.130213	M	Rb		0.004575	M	Tl		0.001266				
M	Co		0.000598	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.000527	O	Li		0.000059	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.000527	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.002252	M	Mg		0.000563	i	S	<		M	W		0.087982				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.001513	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9

[MoO₄]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH₄OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO₄]-2 is soluble in concentrated HCl [MoOCl₅]-2, dilute HF / HNO₃ [MoOF₅]-2 and basic media [MoO₄]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO₄]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF₅]-2 for months in 1% HNO₃ / LDPE container. 1-10,000 ppm single element solutions as the [MoO₄]-2 chemically stable for years in 1% NH₄OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO₃ or hot dilute HCl); Oxide (soluble in HF or NH₄OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6798; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Technical



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





MS981

R: 6/11/24



CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

57092
060724
Uranium (U)

Expiration Date:
Recommended Storage:
Nominal Concentration (µg/mL):
NIST Test Number:

060727
Ambient (20 °C)
1000
6UTB

Volume shown below was diluted to (mL): 2000.07

5E-05 Balance Uncertainty
0.100 Flask Uncertainty

Lot # Solvent:
24002546 Nitric Acid

2.0% Nitric Acid
40.0 (mL)

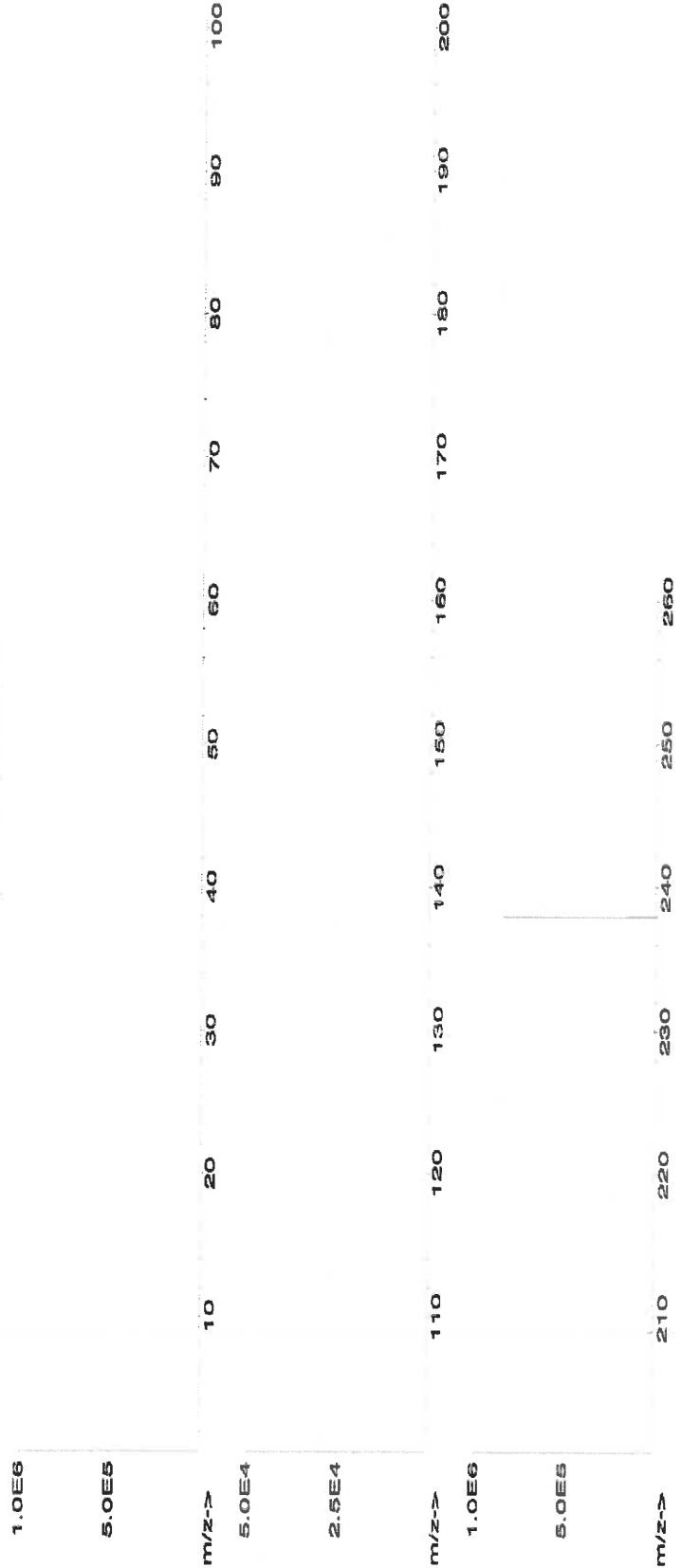
<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
<i>Pedro L. Rentas</i>	
Reviewed By:	Pedro L. Rentas

SDS Information

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	(Solvent Safety Info. On Attached pg.)		
										CAS#	OSHA PEL (TWA)	LD50

1. Uranyl nitrate hexahydrate (U)	58192	041524	0.1000	200.0	0.084	1000	10001.5	1000.0	2.2	13620-83-7	0.05 mg/m3	orl-rat 1040 mg/kg	3164
-----------------------------------	-------	--------	--------	-------	-------	------	---------	--------	-----	------------	------------	--------------------	------

[1] Spectrum No.1 [23.264 sec]:57092.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																			
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.02	Os	<0.01	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.02	Hg	<0.2	P	<0.2	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

[Signature]

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

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Certified Reference Material CRM

45983 R: 6/11/24

CERTIFIED WEIGHT REPORT:

Part Number: 57040
Lot Number: 071423
Description: Zirconium (Zr)

Expiration Date: 071426
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 2000.02

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Lot # Solvent:
21110221 Nitric Acid

2.0% Nitric Acid
40.0 (mL)

Formulated By: Benson Chan

071423

Reviewed By: Pedro L. Rentas

071423

Expanded Uncertainty
+/- (µg/mL)

Final Conc. (µg/mL)

Initial Conc. (µg/mL)

Nominal Conc. (µg/mL)

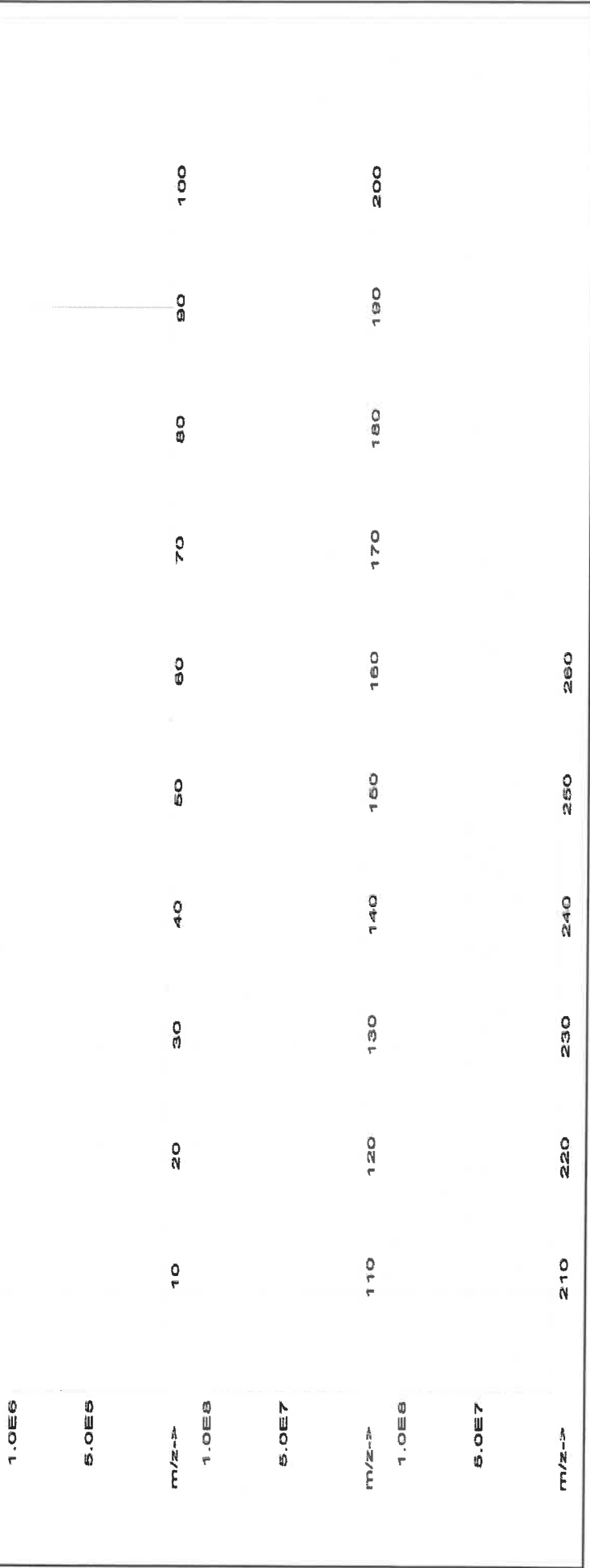
Part Number Lot Number
58140 070621

Compound
1. Zirconyl chloride octahydrate (Zr)

NIST SRM

1. Zirconyl chloride octahydrate (Zr)	58140	070621	0.1000	200.0	0.084	1000	10000.3	1000.0	2.2	13520-92-8	NA	NA	NA
---------------------------------------	-------	--------	--------	-------	-------	------	---------	--------	-----	------------	----	----	----

[1] Spectrum No.1 [41.153 sec]:57040.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.02	Os	<0.01	Rh	<0.02	Ag	<0.02	Tl	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.2	Fe	<0.02	Hg	<0.2	P	<0.2	Ru	<0.02	Sr	<0.02	Tm	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02
																	T

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

[Signature]

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

[Faint text, possibly a signature or stamp]

8/19/24, M6055

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F: 540-585-3012

info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories".

Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: IV-STOCK-12
Lot Number: U2-MEB734294
Matrix: 5% (v/v) HNO₃
Value / Analyte(s): 10 µg/mL ea:
Barium, Beryllium,
Bismuth, Cerium,
Cobalt, Indium,
Lithium, Nickel,
Lead, Uranium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Barium, Ba	10.01 ± 0.04 µg/mL	Beryllium, Be	10.01 ± 0.05 µg/mL
Bismuth, Bi	10.01 ± 0.06 µg/mL	Cerium, Ce	10.01 ± 0.04 µg/mL
Cobalt, Co	10.01 ± 0.05 µg/mL	Indium, In	10.01 ± 0.04 µg/mL
Lead, Pb	10.00 ± 0.04 µg/mL	Lithium, Li	10.01 ± 0.04 µg/mL
Nickel, Ni	10.01 ± 0.04 µg/mL	Uranium, U	10.01 ± 0.05 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Bi	ICP Assay	3106	180815
Ce	ICP Assay	3110	160830
Ce	EDTA	928	928
Ce	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
In	ICP Assay	3124a	110516
In	EDTA	928	928
In	Calculated		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Calculated		See Sec. 4.2
Li	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
U	ICP Assay	traceable to 3164	R2-U689597
U	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i})^2 / (\sum (1/(u_{\text{char } i})^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum ((w_i)^2 (u_{\text{char } i})^2)]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.
- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 21, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 21, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Certificate of Analysis

R: 08/22/24 M6058, M6059

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: CHEM-CLP-4
Lot Number: V2-MEB746172
Matrix: 3% (v/v) HNO₃
3% (v/v) HF
Value / Analyte(s): 1 000 µg/mL ea:
Boron, Molybdenum,
Silicon, Tin,
Titanium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Boron, B	1 000 ± 5 µg/mL	Molybdenum, Mo	1 000 ± 5 µg/mL
Silicon, Si	1 000 ± 7 µg/mL	Tin, Sn	1 000 ± 5 µg/mL
Titanium, Ti	1 000 ± 6 µg/mL		

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	190605
B	Calculated		See Sec. 4.2
Mo	ICP Assay	traceable to 3134	U2-MO739068
Si	ICP Assay	Traceable to 3150	S2-SI702546
Sn	ICP Assay	3161a	140917
Ti	ICP Assay	traceable to 3162a	T2-TI725816

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{\text{CRM/RM}}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{\text{char } i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k(u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2(u_{\text{char } i})^2]^{1/2}$ where $u_{\text{char } i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{\text{CRM/RM}}$, where one method of characterization is used is the mean of individual results:

$$X_{\text{CRM/RM}} = (X_a)(u_{\text{char } a})$$

X_a = mean of Assay Method A with

$u_{\text{char } a}$ = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k(u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{its}}^2 + u_{\text{ts}}^2)^{1/2}$$

k = coverage factor = 2

$u_{\text{char } a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{its} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™)

see the Limited License to Use PCRM™ in the Inorganic Ventures [Terms and Conditions of Sale](https://www.inorganicventures.com/terms-and-conditions-sale).

<https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 12, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 12, 2029**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Joseph Burns
Custom VS Manager



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





Certified Reference Material CRM



CERTIFIED WEIGHT REPORT:

Part Number: **57040**
Lot Number: **071423**
Description: **Zirconium (Zr)**

Lot # **21110221**
Solvent: **Nitric Acid**

Expiration Date: **071426**
Recommended Storage: **Ambient (20 °C)**
Nominal Concentration (µg/mL): **1000**
NIST Test Number: **6UTB**
Volume shown below was diluted to (mL): **2000.02**

2.0%
40.0 (mL)
Nitric Acid

Formulated By:		Benson Chan	071423
Reviewed By:		Pedro L. Renteria	071423

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty		CAS#	OSHA PEL (TWA)	LD50	NIST SRM
									+/-	(µg/mL)				

1. **Zirconium chloride octahydrate (Zr)** 58140 070621 0.1000 200.0 0.084 1000 10000.3 1000.0 2.2 13520-82-8 NA NA NA

[1] Spectrum No. 1 [41.163 sec]: 57040.DW [Count] [Linear]

1.OE6	m/z-->	10	20	30	40	50	60	70	80	90	100
5.OE6	m/z-->	110	120	130	140	150	160	170	180	190	200
1.OE8	m/z-->	210	220	230	240	250	260				
5.OE7	m/z-->										



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	T

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

[Handwritten signature]

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



CERTIFIED WEIGHT REPORT:

Part Number:
Lot Number:
Description:

58112
112124
Magnesium (Mg)

Lot #
Nitric Acid

R-1113125

Expiration Date:

112127

2%

40.0 (mL)
Nitric Acid

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

10000

NIST Test Number:

6LUB

5E-05 Balance Uncertainty

Weight shown below was diluted to (mL):

2000.07 0.100 Flask Uncertainty

<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
Reviewed By:	<i>Pedro L. Rentas</i>
	112124

Compound

Lot
Number

Nominal
Conc. (µg/mL)

Purity
Uncertainty
Assay
(%)

Target
Weight (g)

Actual
Weight (g)

Expanded
Uncertainty
± (µg/mL)

CAS#

OSHA PEL (TWA)

LD50

NIST
SRM

1. Magnesium nitrate hexahydrate (Mg) IN030 MG000023A1 10000 99.999 0.10 8.51 234.9183 234.9459 10001.2 20.0 13446-18-9 NA off-rat 5440 mg/kg 3131a

[1] Spectrum No. 1 [19.823 sec]:58112.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Rc	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	T	Os	<0.02	Rb	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Ru	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Sm	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sc	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2			Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



CERTIFIED WEIGHT REPORT:

Part Number: 58025
Lot Number: 101124
Description: Manganese (Mn)
Expiration Date: 10/11/27
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.2
Lot #: 24002546
Solvent: Nitric Acid
Purity: 99.999
Uncertainty: 0.10
Assay: 20.8
Target Weight (g): 80.0
Actual Weight (g): 19.2344
Actual Conc. (µg/mL): 1000.1
Expanded Uncertainty: ±0.10
CAS#: 7440-48-4
OSHA PEL (TWA): 5 mg/m³
LD50: 3132

<i>Giovanni Esposito</i>	
Formulated By:	Giovanni Esposito
Reviewed By:	Pedro L. Renteria
	101124

SDS Information

Compound	Lot	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
----------	-----	-----------------------	------------	-----------------	-----------	-------------------	-------------------	----------------------	----------------------	------	----------------	------	----------

1. Manganese(II) nitrate hydrate (Mn) IN031 MNM02020A1 1000 99.999 0.10 20.8 19.2322 19.2344 1000.1 2.0 15710-66-4 5 mg/m³ or-trt >300mg/kg 3132

[1] Spectrum No.1 [34.243 sec]:57025.D# [Count] [Linear]

5.0E6	210	220	230	240	250	260
2.5E6	10	20	30	40	50	60
1.0E6	110	120	130	140	150	160
5.0E7	170	180	190	200		



Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	T	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Certificate of Analysis

300 Technology Drive
 Christiansburg, VA 24073 USA
 inorganicventures.com

P: 800-669-6799/540-585-3030
 F: 540-585-3012
 info@inorganicventures.com

M6137
 R-71013124

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
 Catalog Number: CGSI1
 Lot Number: V2-SI744713
 Matrix: tr. HNO₃
 tr. HF
 Value / Analyte(s): 1 000 µg/mL ea:
 Silicon
 Starting Material: Silica
 Starting Material Lot#: 1771
 Starting Material Purity: 99.9981%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 6 µg/mL
 Density: 1.003 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	999 ± 5 µg/mL ICP Assay NIST SRM Traceable to 3150 Lot Number: S2-SI702546
Assay Method #2	1000 ± 7 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i}^2) / (\sum (1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum (w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	O	Na		0.001656	M	Se	<	0.022000	M	Zn	<	0.002500
M	Al		0.010787	M	Fe	<	0.027000	M	Nb	<	0.001300	s	Si	<		O	Zr	<	0.001900
M	As	<	0.001900	M	Ga	<	0.001300	M	Nd	<	0.000310	M	Sm	<	0.000310				
M	Au	<	0.000910	M	Gd	<	0.000310	M	Ni	<	0.005500	M	Sn		0.000096				
M	B		0.016180	M	Ge	<	0.001900	M	Os	<	0.000610	O	Sr		0.000092				
M	Ba		0.000096	M	Hf		0.000423	i	P	<		M	Ta		0.002542				
O	Be	<	0.000570	M	Hg	<	0.000610	M	Pb	<	0.000310	M	Tb	<	0.000310				
M	Bi	<	0.000310	M	Ho	<	0.000610	M	Pd	<	0.000610	M	Te	<	0.000910				
O	Ca		0.011557	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.001900				
M	Cd	<	0.000310	M	Ir	<	0.000310	M	Pt	<	0.000310	M	Ti		0.001078				
M	Ce	<	0.000610	O	K		0.000577	M	Rb	<	0.009100	M	Tl	<	0.000310				
M	Co	<	0.001600	M	La	<	0.000310	M	Re	<	0.000310	M	Tm	<	0.000310				
M	Cr	<	0.010000	O	Li	<	0.000460	M	Rh	<	0.000310	M	U	<	0.000310				
M	Cs	<	0.000310	M	Lu	<	0.000310	M	Ru	<	0.000310	O	V	<	0.001300				
M	Cu	<	0.002500	O	Mg		0.001348	O	S	<	0.570000	M	W	<	0.001900				
M	Dy	<	0.000310	M	Mn	<	0.002500	M	Sb	<	0.000310	M	Y	<	0.000310				
M	Er	<	0.000310	M	Mo	<	0.000310	O	Sc	<	0.000590	M	Yb	<	0.000310				

M - Checked by ICP-MS

O - Checked by ICP-OES

i - Spectral Interference

n - Not Checked For

s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form In Solution - 28.09 +4 6 Si(OH)x(F)y2-

Chemical Compatibility -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths, or high levels of transition elements unless they are fluorinated. Stable with most inorganic anions with a tendency to hydrolyze forming silicic acid (silicic acid is soluble up to ∼100 ppm in water) in all dilute acids except HF.

Stability - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.

Si Containing Samples (Preparation and Solution) -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphous (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si- O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 28 amu	4000 - 8000 ppt	N/A	N2, 12C16O
ICP-OES 212.412 nm	0.02/0.01 µg/mL	1	Hf, Os, Mo, Ta
ICP-OES 251.611 nm	0.012/0.003 µg/mL	1	Ta, U, Zn, Th
ICP-OES 288.158 nm	0.03/0.004 µg/mL	1	Ta, Ce, Cr, Cd, Th

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; Inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 10, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 10, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





CERTIFIED WEIGHT REPORT:

Part Number: 58111
Lot Number: 072424
Description: Sodium (Na)

Lot #

R-1113/25 Solvent: 24002546 Nitric Acid

Expiration Date: 072427
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

146144 2% 80.0 Nitric Acid (mL)

Weight shown below was diluted to (mL): 4000.2 0.10 Flask Uncertainty

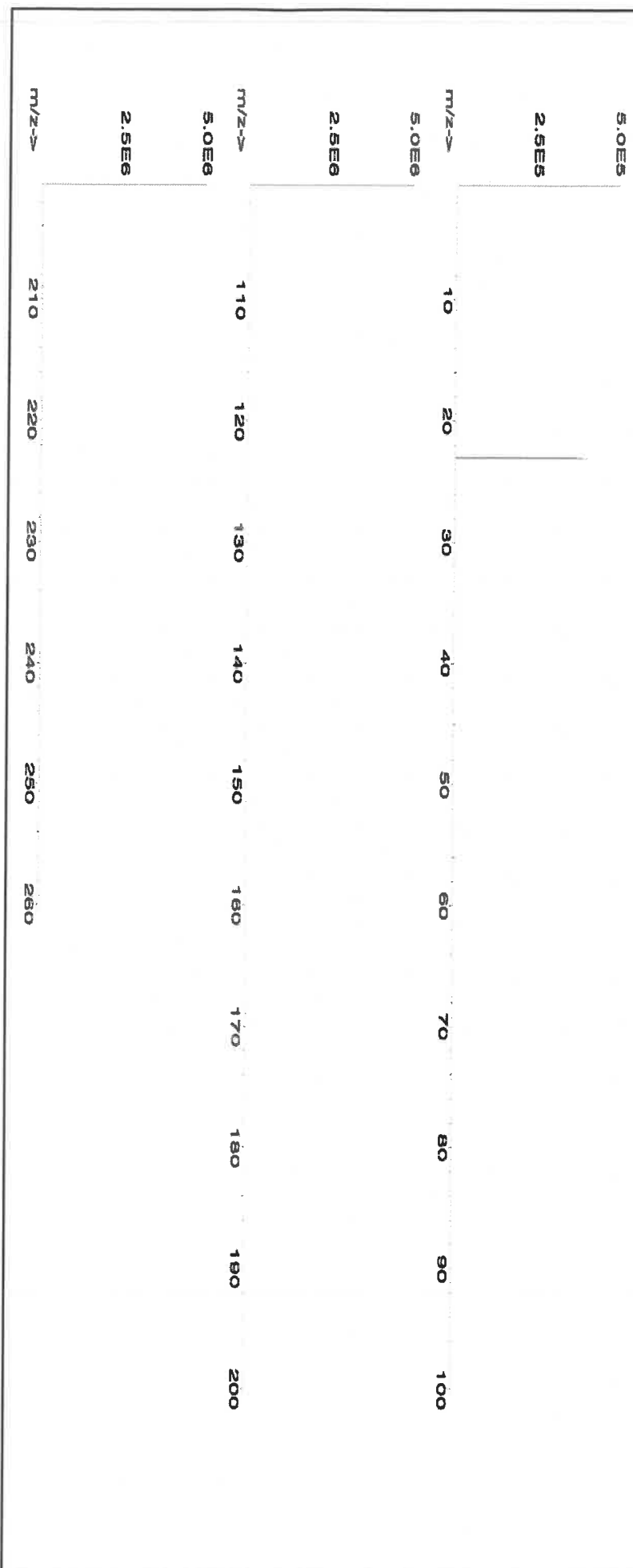
Formulated By:	Benson Chan	072424
Reviewed By:	Pedro L. Renteria	072424

SDS Information

Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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1. Sodium nitrate (Na) IN036 NAV01201511 10000 99.999 0.10 26.9 148.7096 ##### 10000.0 20.0 7631-99-4 5 mg/m3 orl-rat 3430 mg/kg 3152a

[1] Spectrum No. 1 [8.935 sec]:58111.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	La	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rb	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	T	Tb	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 121724
Description: Zinc (Zn)

Lot #

R → 11/13/25 Solvent: 24012496 Nitric Acid

Expiration Date: 121727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

M6145

2% 40.0 (mL) Nitric Acid

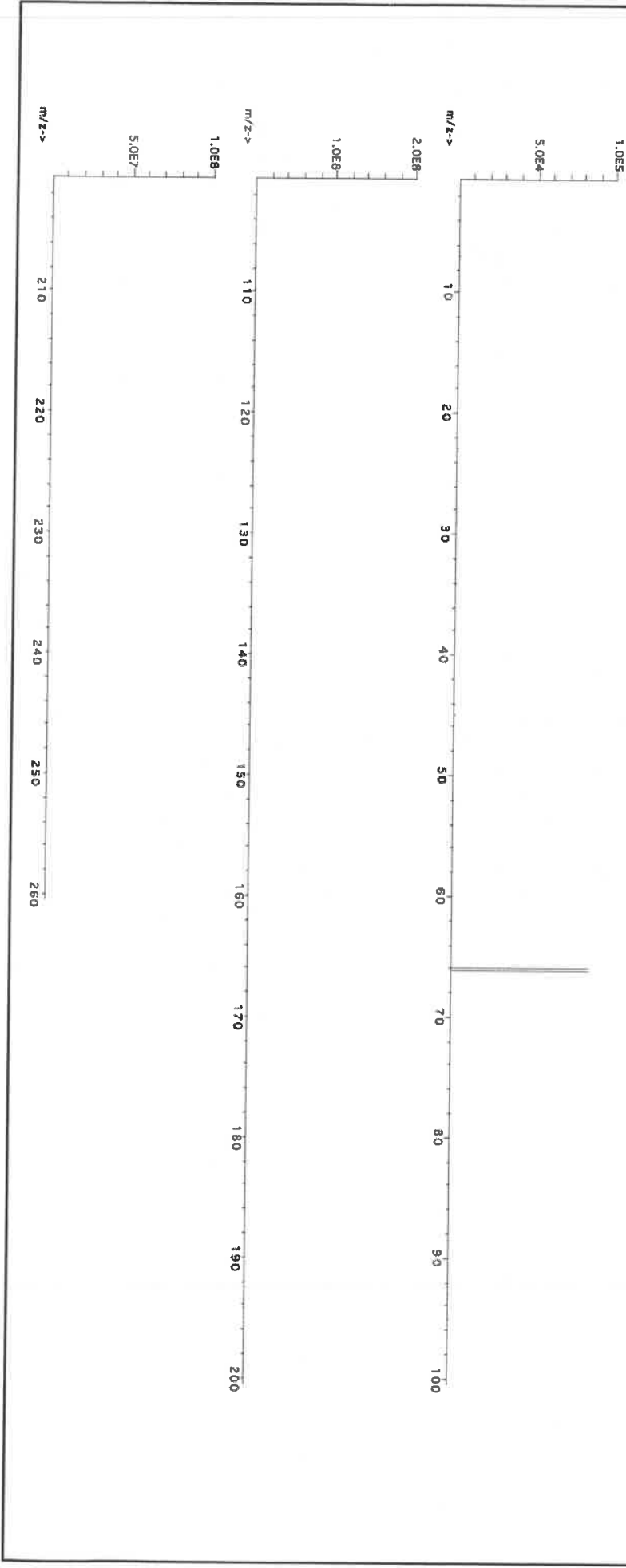
Weight shown below was diluted to (mL): 2000.1 0.10 Balance Uncertainty
5E-05 Flask Uncertainty

<i>Aleah O'Brady</i>	
Formulated By:	Aleah O'Brady
Reviewed By:	<i>Pedro L. Rentes</i>
	Pedro L. Rentes
	121724

Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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1. Zinc nitrate hexahydrate (Zn) IN016 ZNE0302021A1 1000 99.999 0.10 24.3 8.2308 8.2311 1000.0 2.0 10196-18-6 1 mg/m3 or-rat 1190mg/kg 3168

[1] Spectrum No.1 [31.103 sec; 58130.D# [Count] [Lines]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Bu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

R: 4/20/21

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

QATS LABORATORY INORGANIC REFERENCE MATERIAL
INITIAL CALIBRATION VERIFICATION SOLUTIONS
(ICV1, ICV5, AND ICV6)

MG150

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Metals in Dilute Acidic or
Cyanide in Basic Aqueous Solutions
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) SAMPLE DESCRIPTION

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.

(B) BREAKAGE OR MISSING ITEMS

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) ANALYSIS OF SAMPLES

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

ICV1-1014 For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.





QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: *Inorganic ICV Solutions*

ICV1-1014 For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) K₂Cr₂O₇ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from K₃Fe(CN)₆, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS

ICV1-1014		
Element	Concentration (µg/L) (after 10-fold dilution)	Concentration (µg/L) (after 50-fold dilution)
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	Concentration (µg/L) (after 100-fold dilution)	Analyte	Concentration (µg/L) (after 100-fold dilution)
Hg	4.0	CN ⁻	99

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™



M6151

R → 11/15/25

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid–base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl ₂)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO ₃)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH ₄)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

 **avantorsm**



Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA–ANALYZED® Reagent
For Trace Metal Analysis

 **avantor**™

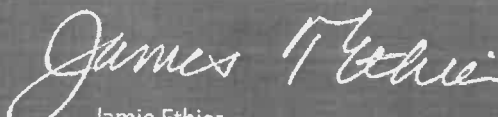


Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
------	---------------	--------

For Laboratory, Research, or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

R → 1/7/23
M6153

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGSR10
Lot Number: V2-SR745329
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 10 000 µg/mL ea:
Strontium
Starting Material: Strontium Carbonate
Starting Material Lot#: 2647
Starting Material Purity: 99.9960%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10081 ± 39 µg/mL
Density: 1.030 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1 **10059 ± 50 µg/mL**
ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985

Assay Method #2 **10087 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum (1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum (w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000960	M	Eu	<	0.000480	O	Na		0.002964	M	Se	<	0.042000	M	Zn		0.004560
M	Al		0.003420	O	Fe		0.013225	M	Nb	<	0.000480	O	Si		0.012997	M	Zr		0.001847
M	As	<	0.007200	M	Ga	<	0.002900	M	Nd	<	0.000480	M	Sm	<	0.000480				
M	Au	<	0.003900	M	Gd	<	0.000480	O	Ni		0.001482	M	Sn	<	0.000480				
O	B	<	0.003200	M	Ge	<	0.004800	M	Os	<	0.001500	s	Sr	<					
M	Ba		0.638494	M	Hf	<	0.000480	O	P	<	0.017000	M	Ta	<	0.000480				
O	Be	<	0.000450	M	Hg	<	0.000960	M	Pb		0.010717	M	Tb	<	0.000480				
M	Bi	<	0.002000	M	Ho	<	0.000480	M	Pd	<	0.002000	M	Te	<	0.016000				
O	Ca		0.025083	M	In	<	0.008600	M	Pr		0.000547	M	Th	<	0.000480				
M	Cd	<	0.000960	M	Ir	<	0.000480	M	Pt	<	0.000480	M	Ti		0.004560				
M	Ce		0.000661	O	K		0.025083	M	Rb	<	0.003400	M	Tl	<	0.000480				
M	Co		0.001527	M	La	<	0.000480	M	Re	<	0.000480	M	Tm		0.004332				
O	Cr	<	0.004700	O	Li	<	0.005600	O	Rh	<	0.013000	M	U	<	0.000480				
M	Cs	<	0.000480	M	Lu	<	0.000480	M	Ru	<	0.000960	M	V	<	0.000960				
O	Cu	<	0.003800	O	Mg		0.001048	O	S	<	0.045000	M	W	<	0.002400				
M	Dy	<	0.000960	O	Mn		0.000319	M	Sb	<	0.009600	O	Y	<	0.001200				
M	Er	<	0.000480	M	Mo	<	0.002900	M	Sc	<	0.001500	M	Yb	<	0.000480				

M - Checked by ICP-MS

O - Checked by ICP-OES

i - Spectral Interference

n - Not Checked For

s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures [Terms and Conditions of Sale](https://www.inorganicventures.com/terms-and-conditions-sale). <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 Sr(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, and HNO₃. Avoid H₂SO₄, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO₃ / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO₃); Ores (Carbonate fusion in PtO followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2, 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; Info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 26, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- August 26, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





M6156

Certified Reference Material CRM



R → 6/12/24

CERTIFIED WEIGHT REPORT:

Part Number:

Lot Number:

Description:

57042

032123

Molybdenum (Mo)

Lot #

MKBQ8597V Ammonium hydroxide

Expiration Date:

Recommended Storage:

Nominal Concentration (µg/mL):

NIST Test Number:

Volume shown below was diluted to (mL):

032126

Ambient (20 °C)

1000

6UTB

5E-05 Balance Uncertainty

0.058 Flask Uncertainty

3000.41

Expanded

Uncertainty

(µg/mL)

Final

Conc. (µg/mL)

Initial

Conc. (µg/mL)

Nominal

Conc. (µg/mL)

Initial

Vol. (mL)

Dilution

Factor

0.1000

300.0

0.084

1000

10001.4

1000.0

2.1

13106-76-8

5 mg(Mo)/m3

or-l-rat 333 mg/kg

3134

SDS Information

(Solvent Safety Info. On Attached pg.)

LD50

CAS#

OSHA PEL (TWA)

NIST

SRM

Formulated By: Lawrence Barry 032123

Reviewed By: Pedro L. Rentas 032123

Ammonium hydroxide

0.5%

15.0 (mL)

5E-05

0.058

3000.41

1000

10001.4

1000.0

2.1

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1000.0

2.1

13106-76-8

5 mg(Mo)/m3

or-l-rat 333 mg/kg</



Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Tc	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.02	Os	<0.01	Rh	<0.02	Ag	<0.02	Tl	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.02	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	T	<0.2	Sm	<0.02	S	<0.02	Sn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

Nitric Acid 69%
CMOS

avantor™



R- 0210212025

m - 6158

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO ₃)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO ₄)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™



Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

 **avantor™**



Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
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For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Croak
Director Quality Operations, Bioscience Production

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: 6020ISS
Lot Number: S2-MEB709511
Matrix: 7% (v/v) HNO₃
Value / Analyte(s): 10 µg/mL ea:
Bismuth, Holmium,
Indium, 6-Lithium,
Rhodium, Scandium,
Terbium, Yttrium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
6-Lithium, Li6	10.00 ± 0.03 µg/mL	Bismuth, Bi	10.00 ± 0.05 µg/mL
Holmium, Ho	10.00 ± 0.05 µg/mL	Indium, In	10.00 ± 0.04 µg/mL
Rhodium, Rh	10.00 ± 0.07 µg/mL	Scandium, Sc	10.00 ± 0.04 µg/mL
Terbium, Tb	10.00 ± 0.04 µg/mL	Yttrium, Y	10.00 ± 0.04 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Bi	ICP Assay	3106	180815
Bi	Calculated		See Sec. 4.2
Ho	ICP Assay	3123a	090408
Ho	EDTA	928	928
In	ICP Assay	3124a	110516
In	EDTA	928	928
In	Calculated		See Sec. 4.2
Li6	Gravimetric		See Sec. 4.2
Rh	ICP Assay	3144	070619
Sc	ICP Assay	3148a	100701
Sc	EDTA	928	928
Tb	ICP Assay	3157a	100518
Tb	EDTA	928	928
Tb	Calculated		See Sec. 4.2
Y	ICP Assay	3167a	120314
Y	EDTA	928	928
Y	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i})^2 / (\sum(1/(u_{char\ i})^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2(u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)(u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Lithium Li6	95.6 ± 0.3
Lithium Li7	4.4 ± 0.1

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 03, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **September 03, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





**QATS LABORATORY INORGANIC REFERENCE MATERIAL
 INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (ICSA WITH ICSB)**

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

CAUTION: Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
 Available Upon Request

(A) SAMPLE DESCRIPTION

Enclosed is a set of one (1) or more bottles of an Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) BREAKAGE OR MISSING ITEMS

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to the Contracting Officer, Ross Miller at miller.ross@epa.gov. If directed by Ross Miller, return the chain of custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
 APTIM Federal Services, LLC
 2700 Chandler Avenue - Building C
 Las Vegas, NV 89120

(C) ANALYSIS OF SAMPLES

This interference check sample set is to be used to verify elemental isobaric correction factors of inductively coupled plasma-mass spectrometers (ICP-MS). This reference material set consists of two (2) concentrated solutions. The ICSA solution contains several interferent elements and species; for a complete listing refer to the CLP SOW. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for the ICP-MS ICS Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO₃. Analyze this solution by ICP-MS.

ICSB-0803, Analytes, mixed with ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO₃. Analyze this ICSAB solution by ICP-MS.

(D) "CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS ICS SOLUTION(S)

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803							
Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

[] Indicates analytes that do not require ICP-MS determination in the ICS.

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value $\pm$ 2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value $\pm$ 15 percent of the listed certified value.



**QATS LABORATORY INORGANIC REFERENCE MATERIAL
 INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (ICSA WITH ICSB)**

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APPLICATION: For use with the CLP SFAM01.0 SOW and revisions.

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Contains Heavy Metals
HAZARDOUS MATERIAL

Safety Data Sheets
 Available Upon Request

(A) SAMPLE DESCRIPTION

Enclosed is a set of one (1) or more bottles of an Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".**

CAUTION: The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

(B) BREAKAGE OR MISSING ITEMS

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to the Contracting Officer, Ross Miller at miller.ross@epa.gov. If directed by Ross Miller, return the chain of custody record with appropriate annotations and signatures to the address provided below.

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Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO₃. Analyze this solution by ICP-MS.

ICSB-0803, Analytes, mixed with ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO₃. Analyze this ICSAB solution by ICP-MS.

(D) "CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS ICS SOLUTION(S)

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803							
Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

[] Indicates analytes that do not require ICP-MS determination in the ICS.

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value $\pm$ 2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value $\pm$ 15 percent of the listed certified value.



Certified Reference Material CRM

M6030



CERTIFIED WEIGHT REPORT:

Part Number: **57047**
Lot Number: **122823**
Description: **Silver (Ag)**

Lot #
Solvent: 24002546 Nitric Acid

Expiration Date: 122826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

2% 80.0 (mL) Nitric Acid

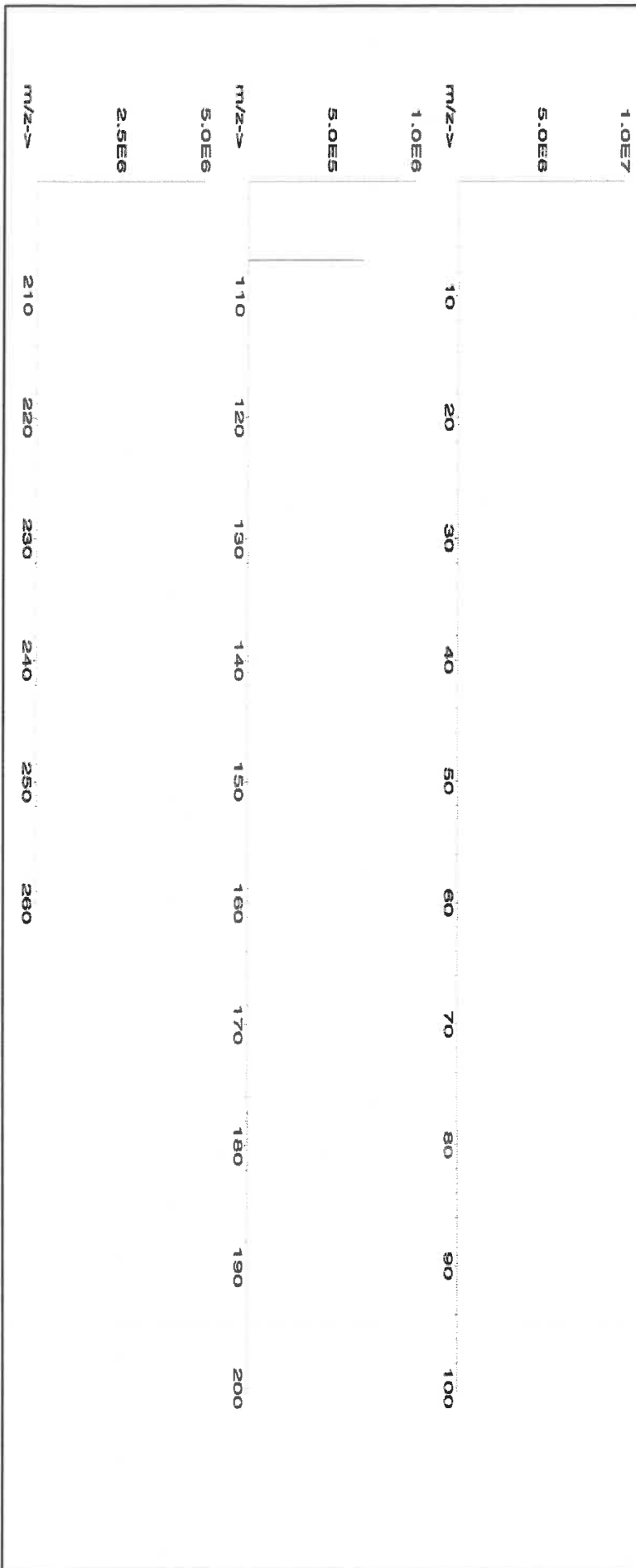
Weight shown below was diluted to (mL): 4000.30 0.058 Balance Uncertainty Flask Uncertainty

Formulated By:	Benson Chan
Reviewed By:	Pedro L. Rentas
	122823

SDS Information									
Compound	RM#	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Purity (%)	Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)

1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9996	0.10	63.7	6.27992	6.27998	1000.0
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[1] Spectrum No. 1 [14.044 sec]:58147.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	T	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



R: 10/18/24
Certified Reference Material CRM



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT:

Part Number:

57051

Lot #
24002546

Solvent:
Nitric Acid

Lot Number:

071724

Description:

Antimony (Sb)

Expiration Date:

071727

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6UJB

Volume shown below was diluted to (mL):

2000.26

Balance Uncertainty
0.058

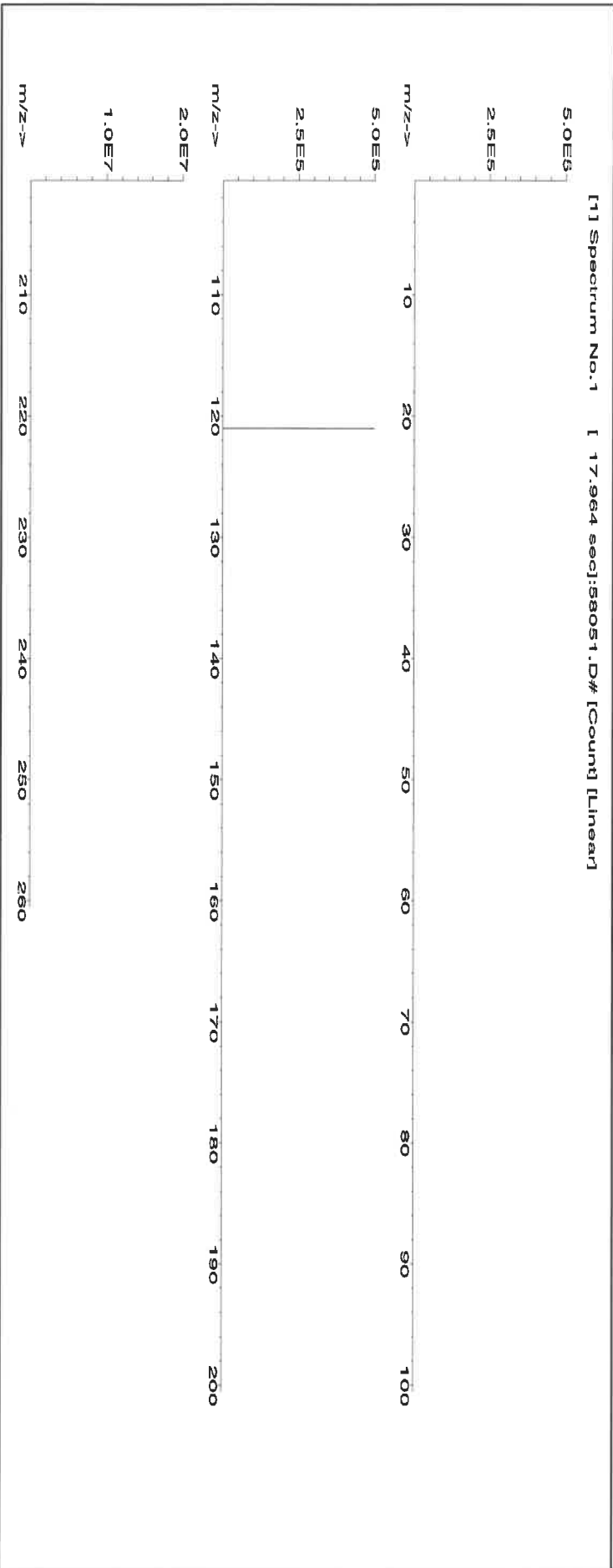
F flask Uncertainty

Formulated By:	<i>Giovanni Esposito</i>	071724
Reviewed By:	<i>Pedro L. Rentas</i>	071724

SDS Information

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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1. Antimony (Sb)	58151	060324	0.1000	200.0	0.084	1000	10001.4	1000.0	2.2	7440-36-0	0.5 mg/m3	or-rat 7000 mg/kg	3102a
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R: 8/5/24

M6019

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

**2.0 PRODUCT DESCRIPTION**

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGSR1
Lot Number: U2-SR730227
Matrix: 0.1% (v/v) HNO₃
Value / Analyte(s): 1 000 µg/mL ea:
Strontium
Starting Material: SrCO₃
Starting Material Lot#: M2-2192
Starting Material Purity: 99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1001 ± 3 µg/mL
Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	998 ± 4 µg/mL ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985
Assay Method #2	1001 ± 3 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	1001 ± 2 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i})^2 / (\sum(1/u_{char\ i})^2)$$

$$CRM/RM \text{ Expanded Uncertainty } (k) = U_{CRM/RM} = k(u_{char}^2 + u_{bb}^2 + u_{ts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2(u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a)(u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (k) = U_{CRM/RM} = k(u_{char\ a}^2 + u_{bb}^2 + u_{ts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001980	M	Eu	<	0.000495	O	Na	0.000200	M	Se	<	0.013862	O	Zn	0.000143	
O	Al	0.000370	O	Fe	0.000410	M	Nb	<	0.000495	i	Si	<			M	Zr	<	0.000495
M	As	<	0.000495	M	Ga	<	0.000495	M	Nd	<	0.000495	M	Sm	<	0.000495			
M	Au	<	0.000989	M	Gd	<	0.000495	O	Ni	<	0.007631	M	Sn	<	0.000990			
M	B	<	0.039606	M	Ge	<	0.000495	M	Os	<	0.000494	s	Sr	<				
M	Ba	0.006486	M	Hf	<	0.000495	i	P	<			M	Ta	<	0.000495			
M	Be	<	0.000990	M	Hg	<	0.000989	M	Pb	<	0.002970	M	Tb	<	0.000495			
M	Bi	<	0.000495	M	Ho	<	0.000495	M	Pd	<	0.003957	M	Te	<	0.027724			
O	Ca	0.004255	M	In	<	0.000495	M	Pr	<	0.000495	M	Th	<	0.000990				
M	Cd	0.001339	M	Ir	<	0.000494	M	Pt	<	0.002970	M	Ti	<	0.005940				
M	Ce	<	0.004950	O	K	<	0.008184	M	Rb	<	0.002970	M	Tl	<	0.000495			
M	Co	<	0.000495	M	La	<	0.000495	M	Re	<	0.000495	M	Tm	<	0.000495			
O	Cr	<	0.003207	O	Li	<	0.000884	O	Rh	<	0.012829	M	U	<	0.001485			
M	Cs	<	0.000990	M	Lu	<	0.002970	M	Ru	<	0.000989	M	V	<	0.001980			
M	Cu	0.000099	O	Mg	0.000064	i	S	<				M	W	<	0.003960			
M	Dy	<	0.000495	O	Mn	0.000066	M	Sb	<	0.014852	O	Y	<	0.000995				
M	Er	<	0.000495	M	Mo	<	0.001980	M	Sc	<	0.001980	M	Yb	<	0.000495			

M - Checked by ICP-MS

O - Checked by ICP-OES

i - Spectral Interference

n - Not Checked For

s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 Sr(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, and HNO₃. Avoid H₂SO₄, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO₃ / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO₃); Ores (Carbonate fusion in PtO followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 03, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 03, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



R: 8/5/24

M6019

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Christiansburg, VA 24073 USA
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

**2.0 PRODUCT DESCRIPTION**

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGSR1
Lot Number: U2-SR730227
Matrix: 0.1% (v/v) HNO₃
Value / Analyte(s): 1 000 µg/mL ea:
Strontium
Starting Material: SrCO₃
Starting Material Lot#: M2-2192
Starting Material Purity: 99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1001 ± 3 µg/mL
Density: 1.000 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	998 ± 4 µg/mL ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985
Assay Method #2	1001 ± 3 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	1001 ± 2 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char\ i})^2 / (\sum (1/u_{char\ i})^2)$$

$$CRM/RM \text{ Expanded Uncertainty } (k) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{ts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum (w_i)^2 (u_{char\ i})^2]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char\ a})$$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (k) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{ts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{ts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001980	M	Eu	<	0.000495	O	Na	0.000200	M	Se	<	0.013862	O	Zn	0.000143
O	Al	0.000370	O	Fe	0.000410	M	Nb	<	0.000495	i	Si	<		M	Zr	<	0.000495
M	As	<	0.000495	M	Ga	<	0.000495	M	Nd	<	0.000495	M	Sm	<	0.000495		
M	Au	<	0.000989	M	Gd	<	0.000495	O	Ni	<	0.007631	M	Sn	<	0.000990		
M	B	<	0.039606	M	Ge	<	0.000495	M	Os	<	0.000494	s	Sr	<			
M	Ba	0.006486	M	Hf	<	0.000495	i	P	<		M	Ta	<	0.000495			
M	Be	<	0.000990	M	Hg	<	0.000989	M	Pb	<	0.002970	M	Tb	<	0.000495		
M	Bi	<	0.000495	M	Ho	<	0.000495	M	Pd	<	0.003957	M	Te	<	0.027724		
O	Ca	0.004255	M	In	<	0.000495	M	Pr	<	0.000495	M	Th	<	0.000990			
M	Cd	0.001339	M	Ir	<	0.000494	M	Pt	<	0.002970	M	Ti	<	0.005940			
M	Ce	<	0.004950	O	K	<	0.008184	M	Rb	<	0.002970	M	Tl	<	0.000495		
M	Co	<	0.000495	M	La	<	0.000495	M	Re	<	0.000495	M	Tm	<	0.000495		
O	Cr	<	0.003207	O	Li	<	0.000884	O	Rh	<	0.012829	M	U	<	0.001485		
M	Cs	<	0.000990	M	Lu	<	0.002970	M	Ru	<	0.000989	M	V	<	0.001980		
M	Cu	0.000099	O	Mg	0.000064	i	S	<		M	W	<	0.003960				
M	Dy	<	0.000495	O	Mn	0.000066	M	Sb	<	0.014852	O	Y	<	0.000995			
M	Er	<	0.000495	M	Mo	<	0.001980	M	Sc	<	0.001980	M	Yb	<	0.000495		

M - Checked by ICP-MS

O - Checked by ICP-OES

i - Spectral Interference

n - Not Checked For

s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 87.62 +2 6 Sr(H₂O)₆+2

Chemical Compatibility - Soluble in HCl, and HNO₃. Avoid H₂SO₄, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO₃ / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO₃); Ores (Carbonate fusion in PtO followed by HCl dissolution); Organic Matrices (Dry ash and dissolution in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 88 amu	1200 ppt	N/A	72Ge16O, 176Yb+2, 176Lu+2 , 176Hf+2
ICP-OES 407.771 nm	0.0004 / 0.00006 µg/mL	1	U, Ce
ICP-OES 421.552 nm	0.0008 / 0.00004 µg/mL	1	Rb
ICP-OES 460.733 nm	0.07 / 0.003 µg/mL	1	Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 03, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 03, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





Certified Reference Material CRM

M6023



ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://AbsoluteStandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57081
Lot Number: 062724
Description: Thallium (TI)

Solvent: 24002546 Nitric Acid

Lot #

Aleah O'Brady
Formulated By: Aleah O'Brady 062724

Expiration Date: 062727

2% 40.0 (mL) Nitric Acid

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

NIST Test Number: 6U7B

5E-05 Balance Uncertainty

Weight shown below was diluted to (mL): 2000.1 0.10 Flask Uncertainty

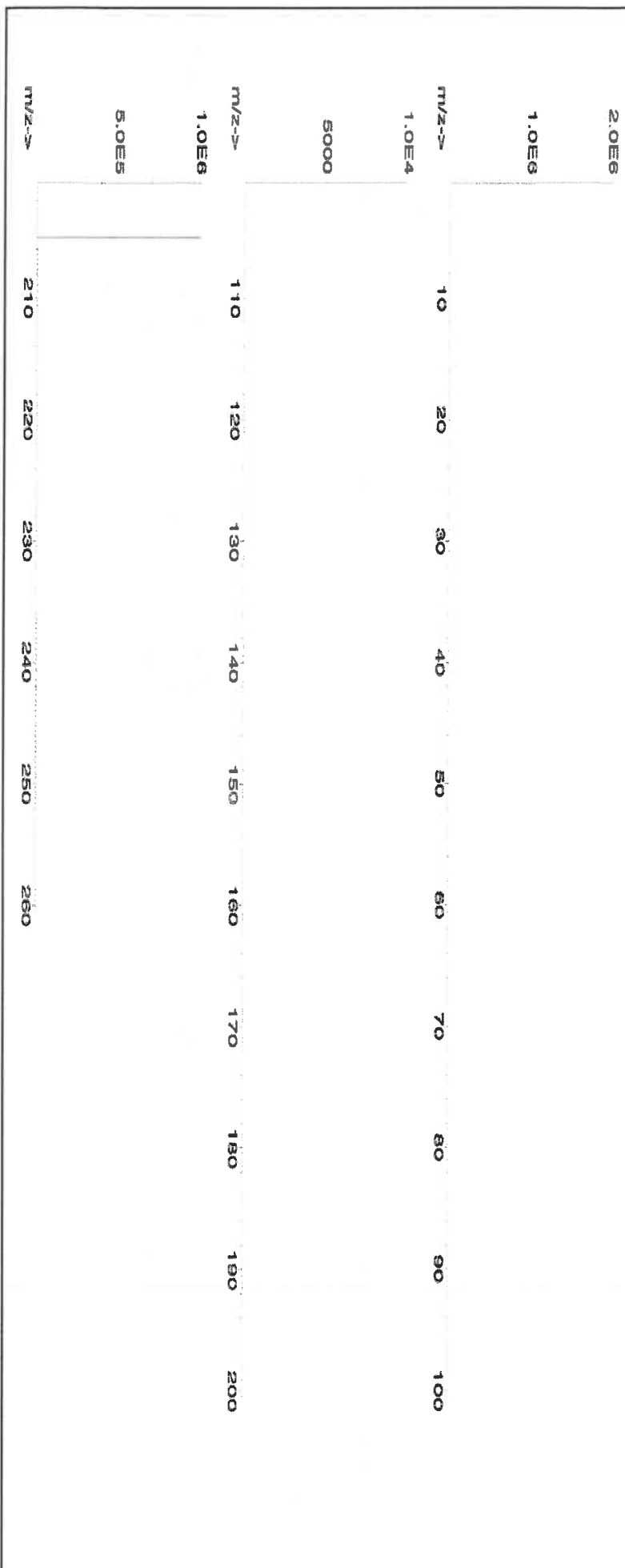
Pedro L. Renteria
Reviewed By: Pedro L. Renterias 062724

SDS Information

Compound	Lot Number	Nominal Conc. (µg/mL)	Purity (%)	Uncertainty Assay (%)	Target Weight (g)	Actual Weight (g)	Actual Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
----------	------------	-----------------------	------------	-----------------------	-------------------	-------------------	----------------------	----------------------------------	------	----------------	------	----------

1. Thallium nitrate (TI) IN037 BCCF4399 1000 99.999 0.10 77.0 2.5975 2.5977 1000.1 2.0 10102-45-1 0.1 mg/m3 or-mus 15mg/kg 3158

[1] Spectrum No.1 [14.044 sec]:57081.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Sc	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	T	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Tm	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Sn	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Ti	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Se	<0.02	Ta	<0.02			Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



CERTIFIED WEIGHT REPORT:

Part Number: 57022
Lot Number: 050223
Description: Titanium (Ti)

Lot # 21110221
Solvent: Nitric Acid

Expiration Date: 050226

2.0%

40.0 (mL)

Nitric Acid

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

Formulated By:	Lawrence Barry	050223
Reviewed By:	Pedro L. Rentes	050223

Lawrence Barry
Pedro L. Rentes

Reviewed By:

Pedro L. Rentes

050223

Volume shown below was diluted to (mL): 2000.02

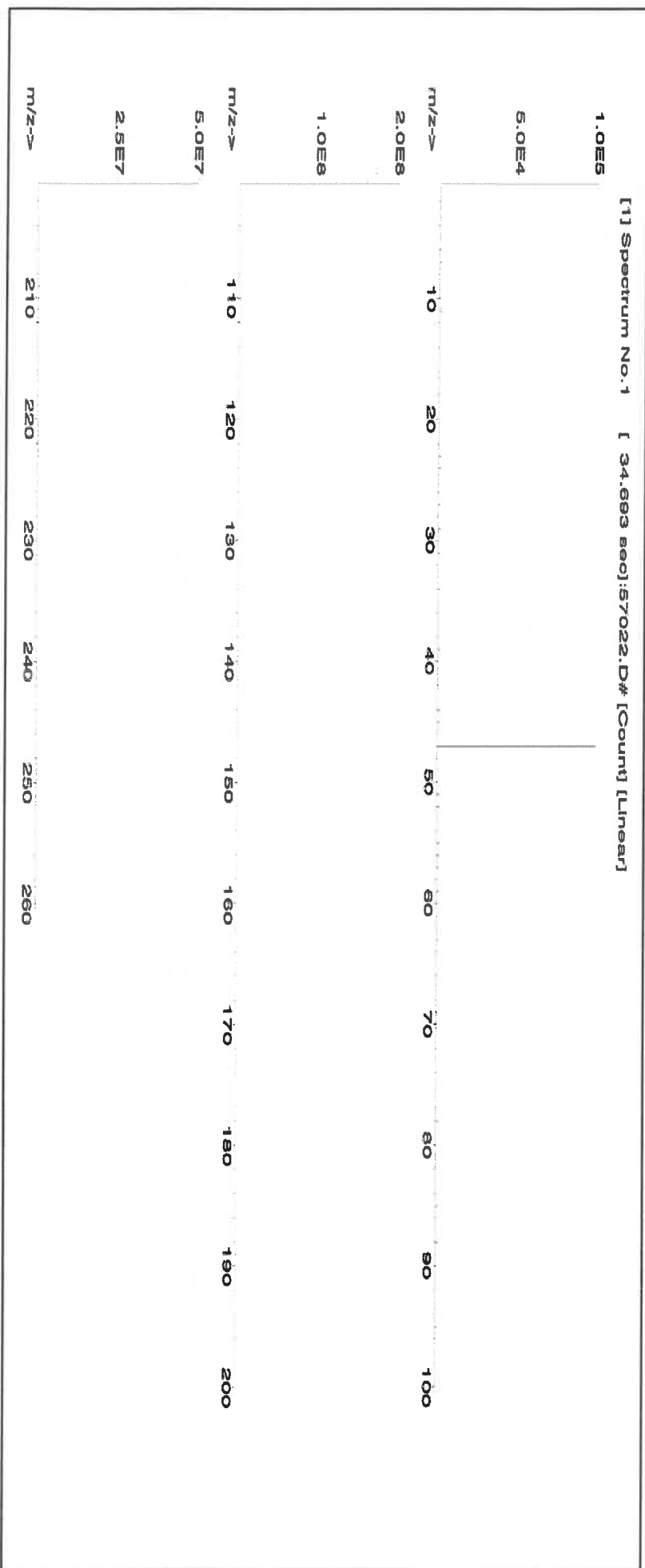
5E-05 Balance Uncertainty
0.058 Flask Uncertainty

SDS Information

Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)	CAS#	OSHA PEL (TWA)	LD50	NIST SRM
----------	-------------	------------	-----------------	-------------------	--------------------------	-----------------------	-----------------------	---------------------	----------------------------------	------	----------------	------	----------

1. Ammonium hexafluoroantimonate (Ti) 58122 071122 0.1000 200.0 0.084 1000 10000.1 1000.0 2.2 16962-40-6 2.5 (F) mg/m3 NA 3162a

[1] Spectrum No.1 [34.683 sec]:57022.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Tm	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tn	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution
Catalog Number: CGU1
Lot Number: U2-U735194
Matrix: 2% (v/v) HNO₃
Value / Analyte(s): 1 000 µg/mL ea:
Uranium
Starting Material: Uranyl Nitrate Hexahydrate
Starting Material Lot#: 2504
Starting Material Purity: 99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1000 ± 5 µg/mL
Density: 1.010 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	1001 ± 4 µg/mL ICP Assay NIST SRM traceable to 3164 Lot Number: R2-U689597
Assay Method #2	1000 ± 5 µg/mL Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

X_i = mean of Assay Method i with standard uncertainty $u_{char i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{char i}^2) / (\sum (1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (k) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum (w_i)^2 (u_{char i}^2)]^{1/2}$ where $u_{char i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

X_a = mean of Assay Method A with

$u_{char a}$ = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (k) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M Ag < 0.001400	M Eu < 0.000270	M Na 0.001811	M Se < 0.004800	M Zn 0.002126
M Al 0.000322	M Fe 0.007481	M Nb < 0.000790	M Si < 0.000270	M Zr < 0.000270
M As < 0.007300	M Ga < 0.000270	M Nd < 0.000270	M Sm < 0.000270	
M Au < 0.001400	M Gd < 0.000270	M Ni 0.000905	M Sn < 0.120000	
M B < 0.017000	M Ge < 0.000800	M Os < 0.000270	M Sr < 0.000270	
M Ba < 0.003100	M Hf < 0.000270	M P < 0.000270	M Ta < 0.000270	
M Be < 0.003200	M Hg < 0.000270	M Pb 0.000511	M Tb < 0.000270	
M Bi < 0.003000	M Ho < 0.000270	M Pd < 0.000270	M Te < 0.001100	
M Ca < 0.048000	M In < 0.001400	M Pr < 0.000270	M Th 0.000200	
M Cd < 0.000270	M Ir < 0.000270	M Pt < 0.000270	M Ti < 0.000530	
M Ce < 0.000270	M K < 0.047000	M Rb < 0.000660	M Tl < 0.000270	
M Co < 0.000270	M La 0.000322	M Re < 0.000270	M Tm < 0.000270	
M Cr 0.001732	M Li < 0.001100	M Rh < 0.000270	M U < 0.003500	
M Cs < 0.003500	M Lu < 0.000270	M Ru < 0.000270	M V < 0.000270	
M Cu < 0.005600	M Mg 0.000240	M S < 0.000270	M W < 0.000270	
M Dy < 0.000270	M Mn < 0.006500	M Sb < 0.000270	M Y < 0.000270	
M Er < 0.000270	M Mo 0.000433	M Sc < 0.000800	M Yb < 0.000270	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference

n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures [Terms and Conditions of Sale](https://www.inorganicventures.com/terms-and-conditions-sale). <https://www.inorganicventures.com/terms-and-conditions-sale>. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.
- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.
- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT
Atomic Weight; Valence; Coordination Number; Chemical Form In Solution - 238.03 +6 8 UO₂2+(uranyl)
Chemical Compatibility - Soluble in HCl and HNO₃. Avoid H₃PO₄. H₂SO₄ and HF matrices should not be a problem depending upon [U]. Although the UO₂2+ ion is distinctly basic, any U+4 will precipitate in basic media. UO₂2+salts are generally soluble in water and UO₂2+ is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF₄ and UF₆ are water soluble.
Stability - 2-100 ppb levels stable for months in 1% HNO₃ / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO₃ / LDPE container.
U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO₃); Oxide (Soluble in HNO₃); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO₃. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H₂SO₄.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 03, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 03, 2028**

- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor



Certificate Approved By:

Jodie Wall
Stock VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director





Certified Reference Material CRM

M6021



CERTIFIED WEIGHT REPORT:

Part Number: 57023
Lot Number: 062424
Description: Vanadium (V)

Lot # 24002546
Solvent: Nitric Acid

Aleah O'Brady	
Formulated By:	Aleah O'Brady
Reviewed By:	Pedro L. Rantas

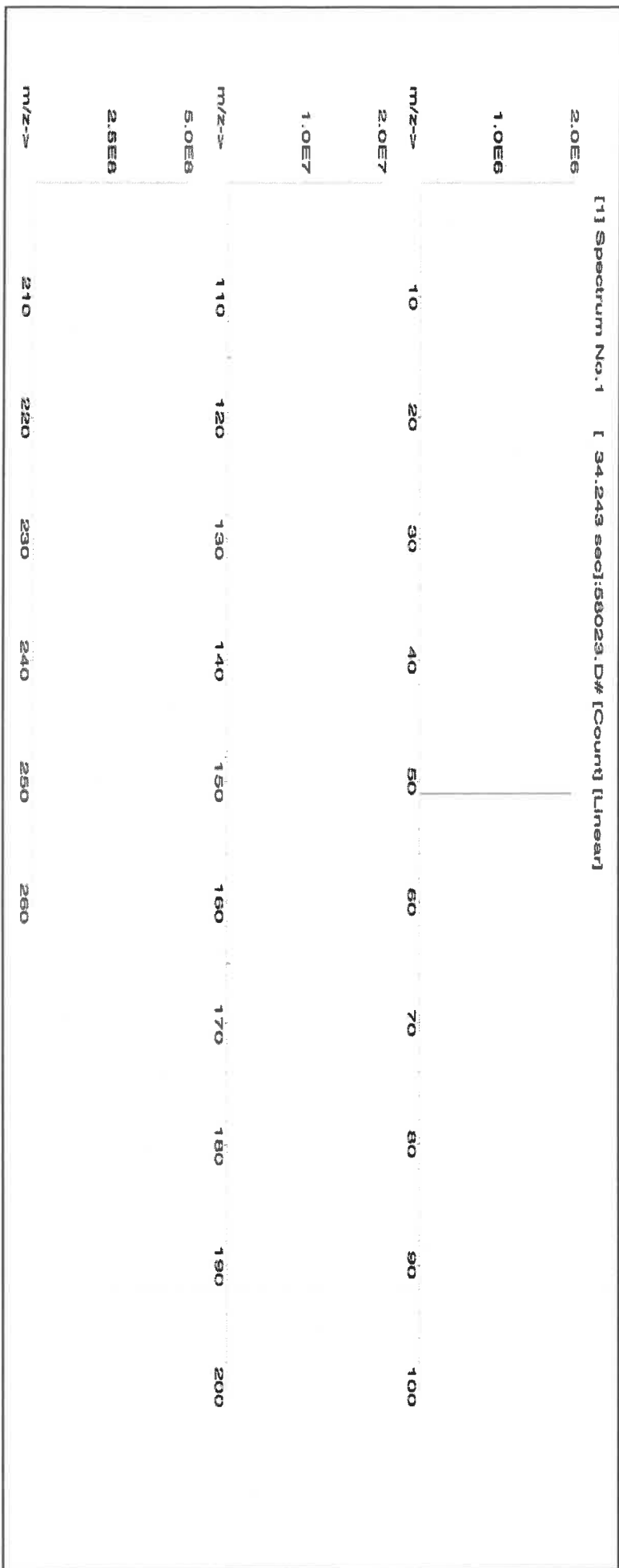
Expiration Date: 062427
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Volume shown below was diluted to (mL): 2000.3
5E-05 Balance Uncertainty
0.06 Flask Uncertainty

2.0% 40.0 (mL) Nitric Acid

SDS Information									
(Solvent Safety Info. On Attached pg.)									
Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Nominal Conc. (µg/mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty +/- (µg/mL)
1. Ammonium metavanadate (V)	58123	021224	0.1000	200.0	0.084	1000	10000.3	1000.0	2.2
						7803-55-6		0.05 mg/m3	or -rat 58.1mg/kg
									3165

[1] Spectrum No.1 [34.243 sec]:58023.D# [Count] [Linear]





Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS ($\mu\text{g/mL}$)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pt	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	T
Ba	<0.02	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Ru	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Sr	<0.02	S	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	Ta	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02			Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

- * The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- * Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
- * All standard containers are meticulously cleaned prior to use.
- * Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- * Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- * All Standards should be stored with caps tight and under appropriate laboratory conditions.
- * Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).



SHIPPING DOCUMENTS

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phenova®
Certified Reference Materials

A Phenomenex®
Company

Packing List

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

For terms and conditions of your order, please visit:
www.phenova.com/home/termsandsale

Date	Order #
03/03/2025	333289



Ship To

Alliance Tech Group - Newark
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ

3/5/2025

14:30

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
PO2-1517	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
			PT-TMSET-WP	WP Trace Metals Set : (TM1, HG and SNTI)		
1	1	0	PT-TM1-WP	WP Trace Metals 1	WP0325	8264-04
1	1	0	PT-HG-WP	WP Mercury	WP0325	8264-05
1	1	0	PT-SNTI-WP	WP Tin & Titanium	WP0325	8264-38
1	1	0	PT-CR6-WP	WP Hexavalent Chromium	WP0325	8264-06
1	1	0	PT-DEM-WP	WP Demand	WP0325	8264-07
			PT-MINSET-WP	WP Minerals Set : (MIN1, MIN2 and COND)		
1	1	0	PT-MIN1-WP	WP Minerals 1 Only	WP0325	8264-08
1	1	0	PT-MIN2-WP	WP Minerals 2 Only	WP0325	8264-102
1	1	0	PT-COND-WP	WP Conductivity Only	WP0325	8264-72
1	1	0	PT-SOL-WP	WP Solids	WP0325	8264-09
			PT-NUTSET-WP	WP Nutrients Set : (NUT1, NUT2 and NUT3)		
1	1	0	PT-NUT1-WP	WP NUT1 Simple Nutrients Only	WP0325	8264-10
1	1	0	PT-NUT2-WP	WP NUT2 - Complex Nutrients	WP0325	8264-11
1	1	0	PT-NUT3-WP	WP NUT3 - Nitrite Only	WP0325	8264-69
1	1	0	PT-OGR1L-WP	WP Oil and Grease 1L	WP0325	8264-103
1	1	0	PT-CL-WP	WP Residual Chlorine	WP0325	8264-13
1	1	0	PT-PH-WP	WP pH	WP0325	8264-15
1	1	0	PT-CN-WP	WP Cyanide	WP0325	8264-14
1	1	0	PT-PHEN-WP	WP Phenolics	WP0325	8264-16



phenova
Certified Reference Materials

A Phenomenex[®]
Company

Packing List

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

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Date	Order #
03/03/2025	333289



Ship To

Alliance Tech Group - Newark
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ

3/5/2025 14:30

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
PO2-1517	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-S2-WP	WP Sulfide	WP0325	8264-22
1	1	0	PT-SSOL-WP	WP Settleable Solids	WP0325	8264-17
1	1	0	PT-TURB-WP	WP Turbidity	WP0325	8264-20
1	1	0	PT-VOA-WP	WP Volatiles	WP0325	8264-26
1	1	0	PT-BN-WP	WP Base Neutrals	WP0325	8264-27
1	1	0	PT-ACIDS-WP	WP Acids	WP0325	8264-28
1	1	0	PT-PEST-WP	WP Pesticides	WP0325	8264-29
1	1	0	PT-CHLR-WP	WP Chlordane	WP0325	8264-30
1	1	0	PT-TXP-WP	WP Toxaphene	WP0325	8264-31
1	1	0	PT-PCBW-WP	WP PCBs in Water	WP0325	8264-32
1	1	0	PT-HERB-WP	WP Herbicides	WP0325	8264-36
1	1	0	RR-TPH1L-WP	WP TPH 1L	R40367	R40367-104
1	1	0	RR-VSOL-WP	WP Volatile Solids	R40367	R40367-18
1	1	0	RR-SIO2-WP	WP Silica	R40367	R40367-21
1	1	0	RR-COL-WP	WP Color	R40367	R40367-51
1	1	0	RR-GAS-WP	WP Gasoline Range Organics	R40367	R40367-62
1	1	0	RR-DIES-WP	WP Diesel Range Organics	R40367	R40367-63
1	1	0	RR-8011-WP	WP EDB/DBCP/TCP	R40367	R40367-98
1	1	0	RR-PAH-WP	WP PAH-Low Level	R40433	R40433-37

6390 Joyce Dr., #100
Golden, CO 80403

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Packing List

Date	Order #
03/07/2025	335989



Ship To

Alliance Tech Group - Newark
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ
3/11/2025 9:55

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
Email: Sohil Jodhani	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	RR-TRIAZINE-WP	WP Triazine Pesticides	R40480	R40480-108

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488