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

DATA PACKAGE

METALS

PROJECT NAME : FORMER SCHLUMBERGER STC PTC SITE D3868221

JACOBS ENGINEERING GROUP, INC.

412 Mt. Kemble Ave

Downtown Building

Morristown, NJ - 07960

Phone No: 9732670555

ORDER ID : Q1812

ATTENTION : John Ynfante

Laboratory Certification ID # 20012

Table Of Contents for Q1812

1) METALS DATA 2

2) Signature Page 4

3) Case Narrative 5

4) Qualifier Page 7

5) Conformance/Non Conformance 8

6) QA Checklist 9

7) Chronicle 10

8) Hit Summary 11

9) Sample Data 12

- 9.1) RINSE-EB-TANK-041525 13
- 9.2) RINSE-EB-PUMP-041525 14

10) METALS CALIBRATION DATA 15

- 10.1) Initial and Continuing Calibration Verification 16
- 10.2) CRDL Standard For AA & ICP 28
- 10.3) Initial and Continuing Calibration Blank Summary 30
- 10.4) Preparation Blank Summary 40
- 10.5) Interference Check Sample 42

11) METALS QC DATA 45

- 11.1) Matrix Spike Summary 46
- 11.2) Post Digest Spike Summary 48
- 11.3) Duplicate Sample Summary 49
- 11.4) Laboratory Control Sample Summary 51
- 11.5) Internal Standard Relative Intensity Summary8A 53
- 11.6) Internal Standard Relative Intensity Summary8B 57
- 11.7) ICP Serial Dilutions 63

12) METALS PREPARATION & INSTRUMENT DATA 64

13) PREPARATION & ANALYTICAL SUMMARY 65

- 13.1) Sample Preparation Summary 66
- 13.2) Analysis Run Log 68

14) METALS RAW DATA 71

- 14.1) METALS RAW DATA - ANALYTICAL 72
- 14.2) LB135470 72
- 14.3) LB135513 74
- 14.4) LB135595 504
- 14.5) METALS RAW DATA - PREP 682

14.5.1) PB167634 682
14.5.2) PB167612 685
15) Analytical Runlogs 688
16) Standard Prep Logs 696
17) Shipping Document 928
17.1) Chain Of Custody 929
17.2) Lab Certificate 930
17.3) Internal COC 931

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Fax : 908 789 8922

Cover Page

Order ID : Q1812

Project ID : Former Schlumberger STC PTC Site D3868221

Client : JACOBS Engineering Group, Inc.

Lab Sample Number	Client Sample Number
Q1812-01	TB01-041525
Q1812-02	RINSE-EB-TANK-041525
Q1812-03	RINSE-EB-PUMP-041525

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 : _____

Date: 4/30/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

CASE NARRATIVE

JACOBS Engineering Group, Inc.
Project Name: Former Schlumberger STC PTC Site D3868221
Project # N/A
Chemtech Project # Q1812
Test Name: Metals ICP-TAL,Mercury

A. Number of Samples and Date of Receipt:
3 Water samples were received on 04/15/2025.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Diesel Range Organics, Gasoline Range Organics, Mercury, Metals ICP-RCRA, Metals ICP-TAL, METALS RCRA, METALS-TAL, SVOC-TCL BNA -20, TPH GC and VOC-TCLVOA-10. This data package contains results for Metals ICP-TAL,Mercury.

C. Analytical Techniques:
The analysis of Metals ICP-TAL was based on method 6020B, digestion based on method 3010 (waters). The analysis and digestion of Mercury was based on method 7470A.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate analysis met criteria for all samples.
The Matrix Spike (285MS) analysis met criteria for all samples except for Arsenic, Iron, Silver due to matrix interference.
The Matrix Spike Duplicate (285MSD) analysis met criteria for all samples except for Arsenic, Iron, Silver due to matrix interference..
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution met the acceptable requirements.

E. Additional Comments:

The fax and hardcopy is not matching for Metals parameters. After fax, at the time of second review lab noticed ICSAB was out side of qc limits therefore these samples were reanalyzed and reported, Hard copy is reported correct.

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_____

284 Sheffield Street, Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

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

ALLIANCE **284 Sheffield Street, Mountainside New Jersey 07092**
NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1812 MATRIX: Water

METHOD: 6020B,7470A

		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.	Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range. The Matrix Spike (285MS) analysis met criteria for all samples except for Arsenic, Iron, Silver due to matrix interference. The Matrix Spike Duplicate (285MSD) analysis met criteria for all samples except for Arsenic, Iron, Silver due to matrix interference..		✓	
7.	Sample Duplicate Analysis Met QC Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓
8.	Digestion Holding Time Met If not met, list number of days exceeded for each sample:			✓
9.	Analysis Holding Time Met If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓

ADDITIONAL COMMENTS:

The fax and hardcopy is not matching for Metals parameters. After fax, at the time of second review lab noticed ICSAB was out side of qc limits therefore these samples were reanalyzed and reported, Hard copy is reported correct.

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.

_____ _____

QA REVIEW Date

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1812

	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 Castody	✓
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:** 04/30/2025

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

LAB CHRONICLE

OrderID:	Q1812	**OrderDate:**	4/15/2025 4:26:00 PM
Client:	JACOBS Engineering Group, Inc.	**Project:**	Former Schlumberger STC PTC Site D3868221
Contact:	John Ynfante	**Location:**	L31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1812-02	**RINSE-EB-TANK-041525**	**Water**			**04/15/25**			**04/15/25**
			Mercury	7470A		04/16/25	04/17/25	
			Metals ICP-TAL	6020B		04/17/25	04/29/25	
Q1812-03	**RINSE-EB-PUMP-041525**	**Water**			**04/15/25**			**04/15/25**
			Mercury	7470A		04/16/25	04/17/25	
			Metals ICP-TAL	6020B		04/17/25	04/29/25	

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

Hit Summary Sheet
SW-846

SDG No.: Q1812 **Order ID:** Q1812

Client: JACOBS Engineering Group, Inc. **Project ID:** Former Schlumberger STC PTC Site D386

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : RINSE-EB-TANK-041525								
Q1812-02	RINSE-EB-TANK-041525	Water	Aluminum	25.1		1.94	20.0	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Arsenic	0.19	J	0.089	1.00	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Barium	23.8		0.21	10.0	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Calcium	23300		45.7	500	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Chromium	0.23	J	0.21	2.00	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Copper	19.6		0.30	2.00	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Iron	30.7	J	7.81	50.0	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Lead	0.21	J	0.21	1.00	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Magnesium	6690		19.5	500	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Manganese	4.62		0.43	1.00	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Nickel	1.17		0.27	1.00	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Potassium	2420		36.4	500	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Sodium	20900		128	500	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Vanadium	0.11	J	0.077	5.00	ug/L
Q1812-02	RINSE-EB-TANK-041525	Water	Zinc	15.0		1.25	5.00	ug/L
Client ID : RINSE-EB-PUMP-041525								
Q1812-03	RINSE-EB-PUMP-041525	Water	Aluminum	30.5		1.94	20.0	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Antimony	0.15	J	0.11	2.00	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Arsenic	0.37	J	0.089	1.00	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Barium	25.0		0.21	10.0	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Calcium	23900		45.7	500	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Chromium	0.32	J	0.21	2.00	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Copper	14.3		0.30	2.00	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Iron	605		7.81	50.0	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Magnesium	6880		19.5	500	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Manganese	15.6		0.43	1.00	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Nickel	0.70	J	0.27	1.00	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Potassium	2510		36.4	500	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Sodium	22100		128	500	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Vanadium	0.13	J	0.077	5.00	ug/L
Q1812-03	RINSE-EB-PUMP-041525	Water	Zinc	42.8		1.25	5.00	ug/L

SAMPLE DATA

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	RINSE-EB-TANK-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-02	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	25.1		1	1.94	20.0	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-36-0	Antimony	0.11	U	1	0.11	2.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-38-2	Arsenic	0.19	JN	1	0.089	1.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-39-3	Barium	23.8		1	0.21	10.0	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-41-7	Beryllium	0.32	U	1	0.32	1.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-43-9	Cadmium	0.34	U	1	0.34	1.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-70-2	Calcium	23300		1	45.7	500	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-47-3	Chromium	0.23	J	1	0.21	2.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-48-4	Cobalt	0.070	U	1	0.070	1.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-50-8	Copper	19.6		1	0.30	2.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7439-89-6	Iron	30.7	JN	1	7.81	50.0	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7439-92-1	Lead	0.21	J	1	0.21	1.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7439-95-4	Magnesium	6690		1	19.5	500	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7439-96-5	Manganese	4.62		1	0.43	1.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7439-97-6	Mercury	0.076	U	1	0.076	0.20	ug/L	04/16/25 14:40	04/17/25 12:38	SW7470A	
7440-02-0	Nickel	1.17		1	0.27	1.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-09-7	Potassium	2420		1	36.4	500	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7782-49-2	Selenium	2.90	U	1	2.90	5.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-22-4	Silver	0.060	UN	1	0.060	1.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-23-5	Sodium	20900		1	128	500	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-28-0	Thallium	0.060	U	1	0.060	1.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-62-2	Vanadium	0.11	J	1	0.077	5.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A
7440-66-6	Zinc	15.0		1	1.25	5.00	ug/L	04/17/25 11:35	04/29/25 12:50	SW6020	3010A

Color Before:	Light Gray	Clarity Before:	Cloudy	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS RCRA				

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

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

Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	04/15/25
Project:	Former Schlumberger STC PTC Site D3868221	Date Received:	04/15/25
Client Sample ID:	RINSE-EB-PUMP-041525	SDG No.:	Q1812
Lab Sample ID:	Q1812-03	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	30.5		1	1.94	20.0	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-36-0	Antimony	0.15	J	1	0.11	2.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-38-2	Arsenic	0.37	JN	1	0.089	1.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-39-3	Barium	25.0		1	0.21	10.0	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-41-7	Beryllium	0.32	U	1	0.32	1.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-43-9	Cadmium	0.34	U	1	0.34	1.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-70-2	Calcium	23900		1	45.7	500	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-47-3	Chromium	0.32	J	1	0.21	2.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-48-4	Cobalt	0.070	U	1	0.070	1.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-50-8	Copper	14.3		1	0.30	2.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7439-89-6	Iron	605	N	1	7.81	50.0	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7439-92-1	Lead	0.21	U	1	0.21	1.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7439-95-4	Magnesium	6880		1	19.5	500	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7439-96-5	Manganese	15.6		1	0.43	1.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7439-97-6	Mercury	0.076	U	1	0.076	0.20	ug/L	04/16/25 14:40	04/17/25 12:41	SW7470A	
7440-02-0	Nickel	0.70	J	1	0.27	1.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-09-7	Potassium	2510		1	36.4	500	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7782-49-2	Selenium	2.90	U	1	2.90	5.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-22-4	Silver	0.060	UN	1	0.060	1.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-23-5	Sodium	22100		1	128	500	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-28-0	Thallium	0.060	U	1	0.060	1.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-62-2	Vanadium	0.13	J	1	0.077	5.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A
7440-66-6	Zinc	42.8		1	1.25	5.00	ug/L	04/17/25 11:35	04/29/25 12:54	SW6020	3010A

Color Before:	Light Gray	Clarity Before:	Cloudy	Texture:	
Color After:	Colorless	Clarity After:	Clear	Artifacts:	
Comments:	METALS RCRA				

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

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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
ICV92	Mercury	4.28	4.0	107	90 - 110	CV	04/17/2025	12:15	LB135470

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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
CCV85	Mercury	5.27	5.0	106	90 - 110	CV	04/17/2025	12:20	LB135470
CCV86	Mercury	4.65	5.0	93	90 - 110	CV	04/17/2025	12:53	LB135470
CCV87	Mercury	4.90	5.0	98	90 - 110	CV	04/17/2025	13:23	LB135470

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	483	500	97	90 - 110	P	04/21/2025	15:46	LB135513
	Antimony	201	200	101	90 - 110	P	04/21/2025	15:46	LB135513
	Arsenic	197	200	99	90 - 110	P	04/21/2025	15:46	LB135513
	Barium	96.8	100	97	90 - 110	P	04/21/2025	15:46	LB135513
	Beryllium	103	100	103	90 - 110	P	04/21/2025	15:46	LB135513
	Cadmium	98.8	100	99	90 - 110	P	04/21/2025	15:46	LB135513
	Calcium	1980	2000	99	90 - 110	P	04/21/2025	15:46	LB135513
	Chromium	97.4	100	97	90 - 110	P	04/21/2025	15:46	LB135513
	Cobalt	102	100	102	90 - 110	P	04/21/2025	15:46	LB135513
	Copper	104	100	104	90 - 110	P	04/21/2025	15:46	LB135513
	Iron	2030	2000	102	90 - 110	P	04/21/2025	15:46	LB135513
	Lead	197	200	99	90 - 110	P	04/21/2025	15:46	LB135513
	Magnesium	1170	1200	97	90 - 110	P	04/21/2025	15:46	LB135513
	Manganese	96.8	100	97	90 - 110	P	04/21/2025	15:46	LB135513
	Nickel	101	110	92	90 - 110	P	04/21/2025	15:46	LB135513
	Potassium	1930	2000	96	90 - 110	P	04/21/2025	15:46	LB135513
	Selenium	213	200	106	90 - 110	P	04/21/2025	15:46	LB135513
	Silver	53.5	50.0	107	90 - 110	P	04/21/2025	15:46	LB135513
	Sodium	2090	2000	104	90 - 110	P	04/21/2025	15:46	LB135513
	Thallium	198	210	94	90 - 110	P	04/21/2025	15:46	LB135513
	Vanadium	96.8	100	97	90 - 110	P	04/21/2025	15:46	LB135513
	Zinc	204	200	102	90 - 110	P	04/21/2025	15:46	LB135513

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- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	22.2	20.0	111	80 - 120	P	04/21/2025	15:54	LB135513
	Antimony	2.04	2.0	102	80 - 120	P	04/21/2025	15:54	LB135513
	Arsenic	1.09	1.0	109	80 - 120	P	04/21/2025	15:54	LB135513
	Barium	10.2	10.0	102	80 - 120	P	04/21/2025	15:54	LB135513
	Beryllium	1.15	1.0	115	80 - 120	P	04/21/2025	15:54	LB135513
	Cadmium	1.06	1.0	106	80 - 120	P	04/21/2025	15:54	LB135513
	Calcium	537	500	107	80 - 120	P	04/21/2025	15:54	LB135513
	Chromium	2.15	2.0	108	80 - 120	P	04/21/2025	15:54	LB135513
	Cobalt	1.13	1.0	113	80 - 120	P	04/21/2025	15:54	LB135513
	Copper	2.34	2.0	117	80 - 120	P	04/21/2025	15:54	LB135513
	Iron	56.9	50.0	114	80 - 120	P	04/21/2025	15:54	LB135513
	Lead	0.99	1.0	99	80 - 120	P	04/21/2025	15:54	LB135513
	Magnesium	571	500	114	80 - 120	P	04/21/2025	15:54	LB135513
	Manganese	1.16	1.0	116	80 - 120	P	04/21/2025	15:54	LB135513
	Nickel	1.08	1.0	108	80 - 120	P	04/21/2025	15:54	LB135513
	Potassium	538	500	108	80 - 120	P	04/21/2025	15:54	LB135513
	Selenium	5.25	5.0	105	80 - 120	P	04/21/2025	15:54	LB135513
	Silver	1.03	1.0	103	80 - 120	P	04/21/2025	15:54	LB135513
	Sodium	571	500	114	80 - 120	P	04/21/2025	15:54	LB135513
	Thallium	0.98	1.0	98	80 - 120	P	04/21/2025	15:54	LB135513
	Vanadium	5.46	5.0	109	80 - 120	P	04/21/2025	15:54	LB135513
	Zinc	5.76	5.0	115	80 - 120	P	04/21/2025	15:54	LB135513

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	51100	50000	102	90 - 110	P	04/21/2025	16:15	LB135513
	Antimony	495	500	99	90 - 110	P	04/21/2025	16:15	LB135513
	Arsenic	498	500	100	90 - 110	P	04/21/2025	16:15	LB135513
	Barium	2500	2500	100	90 - 110	P	04/21/2025	16:15	LB135513
	Beryllium	522	500	104	90 - 110	P	04/21/2025	16:15	LB135513
	Cadmium	489	500	98	90 - 110	P	04/21/2025	16:15	LB135513
	Calcium	253000	250000	101	90 - 110	P	04/21/2025	16:15	LB135513
	Chromium	501	500	100	90 - 110	P	04/21/2025	16:15	LB135513
	Cobalt	475	500	95	90 - 110	P	04/21/2025	16:15	LB135513
	Copper	4620	5000	92	90 - 110	P	04/21/2025	16:15	LB135513
	Iron	127000	125000	102	90 - 110	P	04/21/2025	16:15	LB135513
	Lead	2530	2500	101	90 - 110	P	04/21/2025	16:15	LB135513
	Magnesium	250000	250000	100	90 - 110	P	04/21/2025	16:15	LB135513
	Manganese	4970	5000	99	90 - 110	P	04/21/2025	16:15	LB135513
	Nickel	481	500	96	90 - 110	P	04/21/2025	16:15	LB135513
	Potassium	126000	125000	101	90 - 110	P	04/21/2025	16:15	LB135513
	Selenium	478	500	96	90 - 110	P	04/21/2025	16:15	LB135513
	Silver	481	500	96	90 - 110	P	04/21/2025	16:15	LB135513
	Sodium	248000	250000	99	90 - 110	P	04/21/2025	16:15	LB135513
	Thallium	505	500	101	90 - 110	P	04/21/2025	16:15	LB135513
	Vanadium	510	500	102	90 - 110	P	04/21/2025	16:15	LB135513
	Zinc	4700	5000	94	90 - 110	P	04/21/2025	16:15	LB135513
CCV02	Aluminum	51600	50000	103	90 - 110	P	04/21/2025	17:01	LB135513
	Antimony	505	500	101	90 - 110	P	04/21/2025	17:01	LB135513
	Arsenic	500	500	100	90 - 110	P	04/21/2025	17:01	LB135513
	Barium	2500	2500	100	90 - 110	P	04/21/2025	17:01	LB135513
	Beryllium	533	500	107	90 - 110	P	04/21/2025	17:01	LB135513
	Cadmium	493	500	99	90 - 110	P	04/21/2025	17:01	LB135513
	Calcium	251000	250000	101	90 - 110	P	04/21/2025	17:01	LB135513
	Chromium	503	500	101	90 - 110	P	04/21/2025	17:01	LB135513
	Cobalt	485	500	97	90 - 110	P	04/21/2025	17:01	LB135513
	Copper	4680	5000	94	90 - 110	P	04/21/2025	17:01	LB135513
	Iron	127000	125000	102	90 - 110	P	04/21/2025	17:01	LB135513
	Lead	2510	2500	100	90 - 110	P	04/21/2025	17:01	LB135513

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	Magnesium	256000	250000	102	90 - 110	P	04/21/2025	17:01	LB135513
	Manganese	4960	5000	99	90 - 110	P	04/21/2025	17:01	LB135513
	Nickel	489	500	98	90 - 110	P	04/21/2025	17:01	LB135513
	Potassium	128000	125000	103	90 - 110	P	04/21/2025	17:01	LB135513
	Selenium	468	500	94	90 - 110	P	04/21/2025	17:01	LB135513
	Silver	489	500	98	90 - 110	P	04/21/2025	17:01	LB135513
	Sodium	257000	250000	103	90 - 110	P	04/21/2025	17:01	LB135513
	Thallium	507	500	102	90 - 110	P	04/21/2025	17:01	LB135513
	Vanadium	514	500	103	90 - 110	P	04/21/2025	17:01	LB135513
	Zinc	4770	5000	95	90 - 110	P	04/21/2025	17:01	LB135513
CCV03	Aluminum	50200	50000	100	90 - 110	P	04/21/2025	17:44	LB135513
	Antimony	484	500	97	90 - 110	P	04/21/2025	17:44	LB135513
	Arsenic	478	500	96	90 - 110	P	04/21/2025	17:44	LB135513
	Barium	2410	2500	96	90 - 110	P	04/21/2025	17:44	LB135513
	Beryllium	530	500	106	90 - 110	P	04/21/2025	17:44	LB135513
	Cadmium	474	500	95	90 - 110	P	04/21/2025	17:44	LB135513
	Calcium	240000	250000	96	90 - 110	P	04/21/2025	17:44	LB135513
	Chromium	484	500	97	90 - 110	P	04/21/2025	17:44	LB135513
	Cobalt	466	500	93	90 - 110	P	04/21/2025	17:44	LB135513
	Copper	4500	5000	90	90 - 110	P	04/21/2025	17:44	LB135513
	Iron	122000	125000	98	90 - 110	P	04/21/2025	17:44	LB135513
	Lead	2420	2500	97	90 - 110	P	04/21/2025	17:44	LB135513
	Magnesium	248000	250000	99	90 - 110	P	04/21/2025	17:44	LB135513
	Manganese	4820	5000	96	90 - 110	P	04/21/2025	17:44	LB135513
	Nickel	461	500	92	90 - 110	P	04/21/2025	17:44	LB135513
	Potassium	123000	125000	98	90 - 110	P	04/21/2025	17:44	LB135513
	Selenium	451	500	90	90 - 110	P	04/21/2025	17:44	LB135513
	Silver	468	500	94	90 - 110	P	04/21/2025	17:44	LB135513
	Sodium	251000	250000	100	90 - 110	P	04/21/2025	17:44	LB135513
	Thallium	485	500	97	90 - 110	P	04/21/2025	17:44	LB135513
	Vanadium	494	500	99	90 - 110	P	04/21/2025	17:44	LB135513
	Zinc	4630	5000	93	90 - 110	P	04/21/2025	17:44	LB135513
CCV04	Aluminum	49800	50000	100	90 - 110	P	04/21/2025	18:18	LB135513
	Antimony	487	500	97	90 - 110	P	04/21/2025	18:18	LB135513

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- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	Arsenic	481	500	96	90 - 110	P	04/21/2025	18:18	LB135513
	Barium	2430	2500	97	90 - 110	P	04/21/2025	18:18	LB135513
	Beryllium	522	500	104	90 - 110	P	04/21/2025	18:18	LB135513
	Cadmium	477	500	95	90 - 110	P	04/21/2025	18:18	LB135513
	Calcium	242000	250000	97	90 - 110	P	04/21/2025	18:18	LB135513
	Chromium	490	500	98	90 - 110	P	04/21/2025	18:18	LB135513
	Cobalt	476	500	95	90 - 110	P	04/21/2025	18:18	LB135513
	Copper	4580	5000	92	90 - 110	P	04/21/2025	18:18	LB135513
	Iron	125000	125000	100	90 - 110	P	04/21/2025	18:18	LB135513
	Lead	2400	2500	96	90 - 110	P	04/21/2025	18:18	LB135513
	Magnesium	248000	250000	99	90 - 110	P	04/21/2025	18:18	LB135513
	Manganese	4810	5000	96	90 - 110	P	04/21/2025	18:18	LB135513
	Nickel	475	500	95	90 - 110	P	04/21/2025	18:18	LB135513
	Potassium	123000	125000	99	90 - 110	P	04/21/2025	18:18	LB135513
	Selenium	455	500	91	90 - 110	P	04/21/2025	18:18	LB135513
	Silver	472	500	94	90 - 110	P	04/21/2025	18:18	LB135513
	Sodium	251000	250000	100	90 - 110	P	04/21/2025	18:18	LB135513
	Thallium	488	500	98	90 - 110	P	04/21/2025	18:18	LB135513
	Vanadium	502	500	100	90 - 110	P	04/21/2025	18:18	LB135513
	Zinc	4700	5000	94	90 - 110	P	04/21/2025	18:18	LB135513
CCV05	Aluminum	49800	50000	100	90 - 110	P	04/21/2025	18:46	LB135513
	Antimony	479	500	96	90 - 110	P	04/21/2025	18:46	LB135513
	Arsenic	487	500	97	90 - 110	P	04/21/2025	18:46	LB135513
	Barium	2410	2500	96	90 - 110	P	04/21/2025	18:46	LB135513
	Beryllium	533	500	107	90 - 110	P	04/21/2025	18:46	LB135513
	Cadmium	473	500	95	90 - 110	P	04/21/2025	18:46	LB135513
	Calcium	241000	250000	96	90 - 110	P	04/21/2025	18:46	LB135513
	Chromium	493	500	99	90 - 110	P	04/21/2025	18:46	LB135513
	Cobalt	481	500	96	90 - 110	P	04/21/2025	18:46	LB135513
	Copper	4590	5000	92	90 - 110	P	04/21/2025	18:46	LB135513
	Iron	125000	125000	100	90 - 110	P	04/21/2025	18:46	LB135513
	Lead	2440	2500	98	90 - 110	P	04/21/2025	18:46	LB135513
	Magnesium	247000	250000	99	90 - 110	P	04/21/2025	18:46	LB135513
	Manganese	4820	5000	96	90 - 110	P	04/21/2025	18:46	LB135513

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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
CCV05	Nickel	471	500	94	90 - 110	P	04/21/2025	18:46	LB135513
	Potassium	123000	125000	98	90 - 110	P	04/21/2025	18:46	LB135513
	Selenium	457	500	91	90 - 110	P	04/21/2025	18:46	LB135513
	Silver	463	500	92	90 - 110	P	04/21/2025	18:46	LB135513
	Sodium	251000	250000	100	90 - 110	P	04/21/2025	18:46	LB135513
	Thallium	490	500	98	90 - 110	P	04/21/2025	18:46	LB135513
	Vanadium	501	500	100	90 - 110	P	04/21/2025	18:46	LB135513
	Zinc	4670	5000	93	90 - 110	P	04/21/2025	18:46	LB135513
CCV06	Aluminum	49700	50000	99	90 - 110	P	04/21/2025	19:11	LB135513
	Antimony	490	500	98	90 - 110	P	04/21/2025	19:11	LB135513
	Arsenic	489	500	98	90 - 110	P	04/21/2025	19:11	LB135513
	Barium	2460	2500	98	90 - 110	P	04/21/2025	19:11	LB135513
	Beryllium	524	500	105	90 - 110	P	04/21/2025	19:11	LB135513
	Cadmium	485	500	97	90 - 110	P	04/21/2025	19:11	LB135513
	Calcium	241000	250000	96	90 - 110	P	04/21/2025	19:11	LB135513
	Chromium	488	500	98	90 - 110	P	04/21/2025	19:11	LB135513
	Cobalt	472	500	94	90 - 110	P	04/21/2025	19:11	LB135513
	Copper	4560	5000	91	90 - 110	P	04/21/2025	19:11	LB135513
	Iron	124000	125000	99	90 - 110	P	04/21/2025	19:11	LB135513
	Lead	2440	2500	98	90 - 110	P	04/21/2025	19:11	LB135513
	Magnesium	246000	250000	98	90 - 110	P	04/21/2025	19:11	LB135513
	Manganese	4820	5000	96	90 - 110	P	04/21/2025	19:11	LB135513
	Nickel	468	500	94	90 - 110	P	04/21/2025	19:11	LB135513
	Potassium	123000	125000	98	90 - 110	P	04/21/2025	19:11	LB135513
	Selenium	457	500	92	90 - 110	P	04/21/2025	19:11	LB135513
	Silver	478	500	96	90 - 110	P	04/21/2025	19:11	LB135513
	Sodium	251000	250000	100	90 - 110	P	04/21/2025	19:11	LB135513
	Thallium	492	500	98	90 - 110	P	04/21/2025	19:11	LB135513
	Vanadium	496	500	99	90 - 110	P	04/21/2025	19:11	LB135513
	Zinc	4610	5000	92	90 - 110	P	04/21/2025	19:11	LB135513

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- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	502	500	100	90 - 110	P	04/29/2025	12:14	LB135595
	Antimony	203	200	101	90 - 110	P	04/29/2025	12:14	LB135595
	Arsenic	200	200	100	90 - 110	P	04/29/2025	12:14	LB135595
	Barium	102	100	102	90 - 110	P	04/29/2025	12:14	LB135595
	Beryllium	106	100	106	90 - 110	P	04/29/2025	12:14	LB135595
	Cadmium	103	100	104	90 - 110	P	04/29/2025	12:14	LB135595
	Calcium	1980	2000	99	90 - 110	P	04/29/2025	12:14	LB135595
	Chromium	101	100	101	90 - 110	P	04/29/2025	12:14	LB135595
	Cobalt	105	100	105	90 - 110	P	04/29/2025	12:14	LB135595
	Copper	107	100	107	90 - 110	P	04/29/2025	12:14	LB135595
	Iron	2130	2000	106	90 - 110	P	04/29/2025	12:14	LB135595
	Lead	194	200	97	90 - 110	P	04/29/2025	12:14	LB135595
	Magnesium	1220	1200	101	90 - 110	P	04/29/2025	12:14	LB135595
	Manganese	100	100	100	90 - 110	P	04/29/2025	12:14	LB135595
	Nickel	105	110	96	90 - 110	P	04/29/2025	12:14	LB135595
	Potassium	1950	2000	98	90 - 110	P	04/29/2025	12:14	LB135595
	Selenium	211	200	105	90 - 110	P	04/29/2025	12:14	LB135595
	Silver	54.5	50.0	109	90 - 110	P	04/29/2025	12:14	LB135595
	Sodium	2100	2000	105	90 - 110	P	04/29/2025	12:14	LB135595
	Thallium	193	210	92	90 - 110	P	04/29/2025	12:14	LB135595
	Vanadium	100	100	100	90 - 110	P	04/29/2025	12:14	LB135595
	Zinc	201	200	100	90 - 110	P	04/29/2025	12:14	LB135595

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Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	22.4	20.0	112	80 - 120	P	04/29/2025	12:18	LB135595
	Antimony	2.00	2.0	100	80 - 120	P	04/29/2025	12:18	LB135595
	Arsenic	0.98	1.0	98	80 - 120	P	04/29/2025	12:18	LB135595
	Barium	9.98	10.0	100	80 - 120	P	04/29/2025	12:18	LB135595
	Beryllium	1.12	1.0	112	80 - 120	P	04/29/2025	12:18	LB135595
	Cadmium	1.06	1.0	106	80 - 120	P	04/29/2025	12:18	LB135595
	Calcium	509	500	102	80 - 120	P	04/29/2025	12:18	LB135595
	Chromium	2.02	2.0	101	80 - 120	P	04/29/2025	12:18	LB135595
	Cobalt	1.08	1.0	108	80 - 120	P	04/29/2025	12:18	LB135595
	Copper	2.13	2.0	106	80 - 120	P	04/29/2025	12:18	LB135595
	Iron	52.9	50.0	106	80 - 120	P	04/29/2025	12:18	LB135595
	Lead	0.96	1.0	96	80 - 120	P	04/29/2025	12:18	LB135595
	Magnesium	547	500	109	80 - 120	P	04/29/2025	12:18	LB135595
	Manganese	1.00	1.0	100	80 - 120	P	04/29/2025	12:18	LB135595
	Nickel	1.07	1.0	107	80 - 120	P	04/29/2025	12:18	LB135595
	Potassium	501	500	100	80 - 120	P	04/29/2025	12:18	LB135595
	Selenium	5.22	5.0	104	80 - 120	P	04/29/2025	12:18	LB135595
	Silver	1.02	1.0	102	80 - 120	P	04/29/2025	12:18	LB135595
	Sodium	543	500	109	80 - 120	P	04/29/2025	12:18	LB135595
	Thallium	0.94	1.0	94	80 - 120	P	04/29/2025	12:18	LB135595
	Vanadium	5.14	5.0	103	80 - 120	P	04/29/2025	12:18	LB135595
	Zinc	5.15	5.0	103	80 - 120	P	04/29/2025	12:18	LB135595

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	51600	50000	103	90 - 110	P	04/29/2025	12:40	LB135595
	Antimony	519	500	104	90 - 110	P	04/29/2025	12:40	LB135595
	Arsenic	498	500	100	90 - 110	P	04/29/2025	12:40	LB135595
	Barium	2640	2500	105	90 - 110	P	04/29/2025	12:40	LB135595
	Beryllium	521	500	104	90 - 110	P	04/29/2025	12:40	LB135595
	Cadmium	515	500	103	90 - 110	P	04/29/2025	12:40	LB135595
	Calcium	254000	250000	102	90 - 110	P	04/29/2025	12:40	LB135595
	Chromium	510	500	102	90 - 110	P	04/29/2025	12:40	LB135595
	Cobalt	487	500	97	90 - 110	P	04/29/2025	12:40	LB135595
	Copper	4670	5000	94	90 - 110	P	04/29/2025	12:40	LB135595
	Iron	128000	125000	103	90 - 110	P	04/29/2025	12:40	LB135595
	Lead	2510	2500	100	90 - 110	P	04/29/2025	12:40	LB135595
	Magnesium	251000	250000	100	90 - 110	P	04/29/2025	12:40	LB135595
	Manganese	4960	5000	99	90 - 110	P	04/29/2025	12:40	LB135595
	Nickel	461	500	92	90 - 110	P	04/29/2025	12:40	LB135595
	Potassium	125000	125000	100	90 - 110	P	04/29/2025	12:40	LB135595
	Selenium	487	500	97	90 - 110	P	04/29/2025	12:40	LB135595
	Silver	508	500	102	90 - 110	P	04/29/2025	12:40	LB135595
	Sodium	252000	250000	101	90 - 110	P	04/29/2025	12:40	LB135595
	Thallium	511	500	102	90 - 110	P	04/29/2025	12:40	LB135595
	Vanadium	512	500	102	90 - 110	P	04/29/2025	12:40	LB135595
	Zinc	4730	5000	95	90 - 110	P	04/29/2025	12:40	LB135595
CCV02	Aluminum	52000	50000	104	90 - 110	P	04/29/2025	13:03	LB135595
	Antimony	516	500	103	90 - 110	P	04/29/2025	13:03	LB135595
	Arsenic	498	500	100	90 - 110	P	04/29/2025	13:03	LB135595
	Barium	2630	2500	105	90 - 110	P	04/29/2025	13:03	LB135595
	Beryllium	523	500	105	90 - 110	P	04/29/2025	13:03	LB135595
	Cadmium	514	500	103	90 - 110	P	04/29/2025	13:03	LB135595
	Calcium	253000	250000	101	90 - 110	P	04/29/2025	13:03	LB135595
	Chromium	511	500	102	90 - 110	P	04/29/2025	13:03	LB135595
	Cobalt	490	500	98	90 - 110	P	04/29/2025	13:03	LB135595
	Copper	4690	5000	94	90 - 110	P	04/29/2025	13:03	LB135595
	Iron	130000	125000	104	90 - 110	P	04/29/2025	13:03	LB135595
	Lead	2490	2500	100	90 - 110	P	04/29/2025	13:03	LB135595

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Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	Magnesium	254000	250000	102	90 - 110	P	04/29/2025	13:03	LB135595
	Manganese	5010	5000	100	90 - 110	P	04/29/2025	13:03	LB135595
	Nickel	455	500	91	90 - 110	P	04/29/2025	13:03	LB135595
	Potassium	126000	125000	101	90 - 110	P	04/29/2025	13:03	LB135595
	Selenium	483	500	97	90 - 110	P	04/29/2025	13:03	LB135595
	Silver	505	500	101	90 - 110	P	04/29/2025	13:03	LB135595
	Sodium	259000	250000	104	90 - 110	P	04/29/2025	13:03	LB135595
	Thallium	505	500	101	90 - 110	P	04/29/2025	13:03	LB135595
	Vanadium	510	500	102	90 - 110	P	04/29/2025	13:03	LB135595
	Zinc	4760	5000	95	90 - 110	P	04/29/2025	13:03	LB135595

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Metals

- 2b -
CRDL STANDARD FOR AA & ICP

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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
CRA	Mercury	0.16	0.2	81	40 - 160	CV	04/17/2025	12:24	LB135470
CRI	Aluminum	22.2	20.0	111	70 - 130	P	04/21/2025	16:32	LB135513
	Antimony	1.98	2.0	99	70 - 130	P	04/21/2025	16:32	LB135513
	Arsenic	1.11	1.0	111	70 - 130	P	04/21/2025	16:32	LB135513
	Barium	9.85	10.0	98	70 - 130	P	04/21/2025	16:32	LB135513
	Beryllium	1.11	1.0	111	70 - 130	P	04/21/2025	16:32	LB135513
	Cadmium	1.07	1.0	107	70 - 130	P	04/21/2025	16:32	LB135513
	Calcium	518	500	104	70 - 130	P	04/21/2025	16:32	LB135513
	Chromium	2.04	2.0	102	70 - 130	P	04/21/2025	16:32	LB135513
	Cobalt	1.07	1.0	107	50 - 150	P	04/21/2025	16:32	LB135513
	Copper	2.19	2.0	110	70 - 130	P	04/21/2025	16:32	LB135513
	Iron	53.5	50.0	107	70 - 130	P	04/21/2025	16:32	LB135513
	Lead	0.93	1.0	93	70 - 130	P	04/21/2025	16:32	LB135513
	Magnesium	555	500	111	70 - 130	P	04/21/2025	16:32	LB135513
	Manganese	1.10	1.0	110	50 - 150	P	04/21/2025	16:32	LB135513
	Nickel	1.11	1.0	111	70 - 130	P	04/21/2025	16:32	LB135513
	Potassium	521	500	104	70 - 130	P	04/21/2025	16:32	LB135513
	Selenium	5.02	5.0	100	70 - 130	P	04/21/2025	16:32	LB135513
	Silver	1.01	1.0	101	70 - 130	P	04/21/2025	16:32	LB135513
	Sodium	582	500	116	70 - 130	P	04/21/2025	16:32	LB135513
	Thallium	0.95	1.0	95	70 - 130	P	04/21/2025	16:32	LB135513
	Vanadium	5.12	5.0	102	70 - 130	P	04/21/2025	16:32	LB135513
	Zinc	5.24	5.0	105	50 - 150	P	04/21/2025	16:32	LB135513
CRI	Aluminum	20.7	20.0	103	70 - 130	P	04/29/2025	12:47	LB135595
	Antimony	1.98	2.0	99	70 - 130	P	04/29/2025	12:47	LB135595
	Arsenic	1.00	1.0	100	70 - 130	P	04/29/2025	12:47	LB135595
	Barium	9.97	10.0	100	70 - 130	P	04/29/2025	12:47	LB135595
	Beryllium	1.09	1.0	109	70 - 130	P	04/29/2025	12:47	LB135595
	Cadmium	1.03	1.0	103	70 - 130	P	04/29/2025	12:47	LB135595
	Calcium	499	500	100	70 - 130	P	04/29/2025	12:47	LB135595
	Chromium	2.02	2.0	101	70 - 130	P	04/29/2025	12:47	LB135595
	Cobalt	1.07	1.0	107	50 - 150	P	04/29/2025	12:47	LB135595
	Copper	2.12	2.0	106	70 - 130	P	04/29/2025	12:47	LB135595
	Iron	55.4	50.0	111	70 - 130	P	04/29/2025	12:47	LB135595
	Lead	0.97	1.0	97	70 - 130	P	04/29/2025	12:47	LB135595

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Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	Magnesium	547	500	109	70 - 130	P	04/29/2025	12:47	LB135595
	Manganese	1.02	1.0	102	50 - 150	P	04/29/2025	12:47	LB135595
	Nickel	1.01	1.0	101	70 - 130	P	04/29/2025	12:47	LB135595
	Potassium	506	500	101	70 - 130	P	04/29/2025	12:47	LB135595
	Selenium	5.00	5.0	100	70 - 130	P	04/29/2025	12:47	LB135595
	Silver	0.99	1.0	99	70 - 130	P	04/29/2025	12:47	LB135595
	Sodium	549	500	110	70 - 130	P	04/29/2025	12:47	LB135595
	Thallium	0.95	1.0	95	70 - 130	P	04/29/2025	12:47	LB135595
	Vanadium	5.06	5.0	101	70 - 130	P	04/29/2025	12:47	LB135595
	Zinc	5.08	5.0	102	50 - 150	P	04/29/2025	12:47	LB135595

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB92	Mercury	0.20	+/-0.20	U	0.20	CV	04/17/2025	12:17	LB135470

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB85	Mercury	0.20	+/-0.20	U	0.20	CV	04/17/2025	12:22	LB135470
CCB86	Mercury	0.20	+/-0.20	U	0.20	CV	04/17/2025	12:55	LB135470
CCB87	Mercury	0.20	+/-0.20	U	0.20	CV	04/17/2025	13:25	LB135470

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	2.95	+/-20.0	J	20.0	P	04/21/2025	16:01	LB135513
	Antimony	2.00	+/-2.00	U	2.00	P	04/21/2025	16:01	LB135513
	Arsenic	1.00	+/-1.00	U	1.00	P	04/21/2025	16:01	LB135513
	Barium	10.0	+/-10.0	U	10.0	P	04/21/2025	16:01	LB135513
	Beryllium	1.00	+/-1.00	U	1.00	P	04/21/2025	16:01	LB135513
	Cadmium	1.00	+/-1.00	U	1.00	P	04/21/2025	16:01	LB135513
	Calcium	500	+/-500	U	500	P	04/21/2025	16:01	LB135513
	Chromium	2.00	+/-2.00	U	2.00	P	04/21/2025	16:01	LB135513
	Cobalt	1.00	+/-1.00	U	1.00	P	04/21/2025	16:01	LB135513
	Copper	2.00	+/-2.00	U	2.00	P	04/21/2025	16:01	LB135513
	Iron	50.0	+/-50.0	U	50.0	P	04/21/2025	16:01	LB135513
	Lead	1.00	+/-1.00	U	1.00	P	04/21/2025	16:01	LB135513
	Magnesium	500	+/-500	U	500	P	04/21/2025	16:01	LB135513
	Manganese	1.00	+/-1.00	U	1.00	P	04/21/2025	16:01	LB135513
	Nickel	1.00	+/-1.00	U	1.00	P	04/21/2025	16:01	LB135513
	Potassium	500	+/-500	U	500	P	04/21/2025	16:01	LB135513
	Selenium	5.00	+/-5.00	U	5.00	P	04/21/2025	16:01	LB135513
	Silver	1.00	+/-1.00	U	1.00	P	04/21/2025	16:01	LB135513
	Sodium	500	+/-500	U	500	P	04/21/2025	16:01	LB135513
	Thallium	1.00	+/-1.00	U	1.00	P	04/21/2025	16:01	LB135513
	Vanadium	5.00	+/-5.00	U	5.00	P	04/21/2025	16:01	LB135513
	Zinc	5.00	+/-5.00	U	5.00	P	04/21/2025	16:01	LB135513

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	19.7	+/-20.0	J	20.0	P	04/21/2025	16:18	LB135513
	Antimony	2.00	+/-2.00	U	2.00	P	04/21/2025	16:18	LB135513
	Arsenic	1.00	+/-1.00	U	1.00	P	04/21/2025	16:18	LB135513
	Barium	10.0	+/-10.0	U	10.0	P	04/21/2025	16:18	LB135513
	Beryllium	1.00	+/-1.00	U	1.00	P	04/21/2025	16:18	LB135513
	Cadmium	1.00	+/-1.00	U	1.00	P	04/21/2025	16:18	LB135513
	Calcium	500	+/-500	U	500	P	04/21/2025	16:18	LB135513
	Chromium	2.00	+/-2.00	U	2.00	P	04/21/2025	16:18	LB135513
	Cobalt	1.00	+/-1.00	U	1.00	P	04/21/2025	16:18	LB135513
	Copper	2.00	+/-2.00	U	2.00	P	04/21/2025	16:18	LB135513
	Iron	50.0	+/-50.0	U	50.0	P	04/21/2025	16:18	LB135513
	Lead	1.00	+/-1.00	U	1.00	P	04/21/2025	16:18	LB135513
	Magnesium	500	+/-500	U	500	P	04/21/2025	16:18	LB135513
	Manganese	1.00	+/-1.00	U	1.00	P	04/21/2025	16:18	LB135513
	Nickel	1.00	+/-1.00	U	1.00	P	04/21/2025	16:18	LB135513
	Potassium	500	+/-500	U	500	P	04/21/2025	16:18	LB135513
	Selenium	5.00	+/-5.00	U	5.00	P	04/21/2025	16:18	LB135513
	Silver	1.00	+/-1.00	U	1.00	P	04/21/2025	16:18	LB135513
	Sodium	500	+/-500	U	500	P	04/21/2025	16:18	LB135513
	Thallium	0.070	+/-1.00	J	1.00	P	04/21/2025	16:18	LB135513
	Vanadium	5.00	+/-5.00	U	5.00	P	04/21/2025	16:18	LB135513
	Zinc	5.00	+/-5.00	U	5.00	P	04/21/2025	16:18	LB135513
CCB02	Aluminum	19.3	+/-20.0	J	20.0	P	04/21/2025	17:04	LB135513
	Antimony	2.00	+/-2.00	U	2.00	P	04/21/2025	17:04	LB135513
	Arsenic	1.00	+/-1.00	U	1.00	P	04/21/2025	17:04	LB135513
	Barium	10.0	+/-10.0	U	10.0	P	04/21/2025	17:04	LB135513
	Beryllium	1.00	+/-1.00	U	1.00	P	04/21/2025	17:04	LB135513
	Cadmium	1.00	+/-1.00	U	1.00	P	04/21/2025	17:04	LB135513
	Calcium	500	+/-500	U	500	P	04/21/2025	17:04	LB135513
	Chromium	2.00	+/-2.00	U	2.00	P	04/21/2025	17:04	LB135513
	Cobalt	1.00	+/-1.00	U	1.00	P	04/21/2025	17:04	LB135513
	Copper	2.00	+/-2.00	U	2.00	P	04/21/2025	17:04	LB135513
	Iron	50.0	+/-50.0	U	50.0	P	04/21/2025	17:04	LB135513
	Lead	1.00	+/-1.00	U	1.00	P	04/21/2025	17:04	LB135513
	Magnesium	500	+/-500	U	500	P	04/21/2025	17:04	LB135513
	Manganese	1.00	+/-1.00	U	1.00	P	04/21/2025	17:04	LB135513
	Nickel	1.00	+/-1.00	U	1.00	P	04/21/2025	17:04	LB135513
	Potassium	500	+/-500	U	500	P	04/21/2025	17:04	LB135513
	Selenium	5.00	+/-5.00	U	5.00	P	04/21/2025	17:04	LB135513

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	1.00	+/-1.00	U	1.00	P	04/21/2025	17:04	LB135513
	Sodium	500	+/-500	U	500	P	04/21/2025	17:04	LB135513
	Thallium	1.00	+/-1.00	U	1.00	P	04/21/2025	17:04	LB135513
	Vanadium	5.00	+/-5.00	U	5.00	P	04/21/2025	17:04	LB135513
	Zinc	5.00	+/-5.00	U	5.00	P	04/21/2025	17:04	LB135513
CCB03	Aluminum	7.32	+/-20.0	J	20.0	P	04/21/2025	17:48	LB135513
	Antimony	2.00	+/-2.00	U	2.00	P	04/21/2025	17:48	LB135513
	Arsenic	1.00	+/-1.00	U	1.00	P	04/21/2025	17:48	LB135513
	Barium	10.0	+/-10.0	U	10.0	P	04/21/2025	17:48	LB135513
	Beryllium	1.00	+/-1.00	U	1.00	P	04/21/2025	17:48	LB135513
	Cadmium	1.00	+/-1.00	U	1.00	P	04/21/2025	17:48	LB135513
	Calcium	500	+/-500	U	500	P	04/21/2025	17:48	LB135513
	Chromium	2.00	+/-2.00	U	2.00	P	04/21/2025	17:48	LB135513
	Cobalt	1.00	+/-1.00	U	1.00	P	04/21/2025	17:48	LB135513
	Copper	2.00	+/-2.00	U	2.00	P	04/21/2025	17:48	LB135513
	Iron	50.0	+/-50.0	U	50.0	P	04/21/2025	17:48	LB135513
	Lead	1.00	+/-1.00	U	1.00	P	04/21/2025	17:48	LB135513
	Magnesium	500	+/-500	U	500	P	04/21/2025	17:48	LB135513
	Manganese	1.00	+/-1.00	U	1.00	P	04/21/2025	17:48	LB135513
	Nickel	1.00	+/-1.00	U	1.00	P	04/21/2025	17:48	LB135513
	Potassium	500	+/-500	U	500	P	04/21/2025	17:48	LB135513
	Selenium	5.00	+/-5.00	U	5.00	P	04/21/2025	17:48	LB135513
	Silver	1.00	+/-1.00	U	1.00	P	04/21/2025	17:48	LB135513
	Sodium	500	+/-500	U	500	P	04/21/2025	17:48	LB135513
	Thallium	1.00	+/-1.00	U	1.00	P	04/21/2025	17:48	LB135513
	Vanadium	5.00	+/-5.00	U	5.00	P	04/21/2025	17:48	LB135513
	Zinc	5.00	+/-5.00	U	5.00	P	04/21/2025	17:48	LB135513
CCB04	Aluminum	8.67	+/-20.0	J	20.0	P	04/21/2025	18:21	LB135513
	Antimony	0.11	+/-2.00	J	2.00	P	04/21/2025	18:21	LB135513
	Arsenic	1.00	+/-1.00	U	1.00	P	04/21/2025	18:21	LB135513
	Barium	10.0	+/-10.0	U	10.0	P	04/21/2025	18:21	LB135513
	Beryllium	1.00	+/-1.00	U	1.00	P	04/21/2025	18:21	LB135513
	Cadmium	1.00	+/-1.00	U	1.00	P	04/21/2025	18:21	LB135513
	Calcium	500	+/-500	U	500	P	04/21/2025	18:21	LB135513
	Chromium	2.00	+/-2.00	U	2.00	P	04/21/2025	18:21	LB135513
	Cobalt	1.00	+/-1.00	U	1.00	P	04/21/2025	18:21	LB135513
	Copper	2.00	+/-2.00	U	2.00	P	04/21/2025	18:21	LB135513
	Iron	50.0	+/-50.0	U	50.0	P	04/21/2025	18:21	LB135513
	Lead	1.00	+/-1.00	U	1.00	P	04/21/2025	18:21	LB135513

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	500	+/-500	U	500	P	04/21/2025	18:21	LB135513
	Manganese	1.00	+/-1.00	U	1.00	P	04/21/2025	18:21	LB135513
	Nickel	1.00	+/-1.00	U	1.00	P	04/21/2025	18:21	LB135513
	Potassium	500	+/-500	U	500	P	04/21/2025	18:21	LB135513
	Selenium	5.00	+/-5.00	U	5.00	P	04/21/2025	18:21	LB135513
	Silver	1.00	+/-1.00	U	1.00	P	04/21/2025	18:21	LB135513
	Sodium	500	+/-500	U	500	P	04/21/2025	18:21	LB135513
	Thallium	1.00	+/-1.00	U	1.00	P	04/21/2025	18:21	LB135513
	Vanadium	5.00	+/-5.00	U	5.00	P	04/21/2025	18:21	LB135513
	Zinc	5.00	+/-5.00	U	5.00	P	04/21/2025	18:21	LB135513
CCB05	Aluminum	4.04	+/-20.0	J	20.0	P	04/21/2025	18:49	LB135513
	Antimony	0.11	+/-2.00	J	2.00	P	04/21/2025	18:49	LB135513
	Arsenic	1.00	+/-1.00	U	1.00	P	04/21/2025	18:49	LB135513
	Barium	10.0	+/-10.0	U	10.0	P	04/21/2025	18:49	LB135513
	Beryllium	1.00	+/-1.00	U	1.00	P	04/21/2025	18:49	LB135513
	Cadmium	1.00	+/-1.00	U	1.00	P	04/21/2025	18:49	LB135513
	Calcium	500	+/-500	U	500	P	04/21/2025	18:49	LB135513
	Chromium	2.00	+/-2.00	U	2.00	P	04/21/2025	18:49	LB135513
	Cobalt	1.00	+/-1.00	U	1.00	P	04/21/2025	18:49	LB135513
	Copper	2.00	+/-2.00	U	2.00	P	04/21/2025	18:49	LB135513
	Iron	50.0	+/-50.0	U	50.0	P	04/21/2025	18:49	LB135513
	Lead	1.00	+/-1.00	U	1.00	P	04/21/2025	18:49	LB135513
	Magnesium	500	+/-500	U	500	P	04/21/2025	18:49	LB135513
	Manganese	1.00	+/-1.00	U	1.00	P	04/21/2025	18:49	LB135513
	Nickel	1.00	+/-1.00	U	1.00	P	04/21/2025	18:49	LB135513
	Potassium	500	+/-500	U	500	P	04/21/2025	18:49	LB135513
	Selenium	5.00	+/-5.00	U	5.00	P	04/21/2025	18:49	LB135513
	Silver	1.00	+/-1.00	U	1.00	P	04/21/2025	18:49	LB135513
	Sodium	500	+/-500	U	500	P	04/21/2025	18:49	LB135513
	Thallium	1.00	+/-1.00	U	1.00	P	04/21/2025	18:49	LB135513
	Vanadium	5.00	+/-5.00	U	5.00	P	04/21/2025	18:49	LB135513
	Zinc	5.00	+/-5.00	U	5.00	P	04/21/2025	18:49	LB135513
CCB06	Aluminum	4.56	+/-20.0	J	20.0	P	04/21/2025	19:14	LB135513
	Antimony	0.11	+/-2.00	J	2.00	P	04/21/2025	19:14	LB135513
	Arsenic	1.00	+/-1.00	U	1.00	P	04/21/2025	19:14	LB135513
	Barium	10.0	+/-10.0	U	10.0	P	04/21/2025	19:14	LB135513
	Beryllium	1.00	+/-1.00	U	1.00	P	04/21/2025	19:14	LB135513
	Cadmium	1.00	+/-1.00	U	1.00	P	04/21/2025	19:14	LB135513
	Calcium	500	+/-500	U	500	P	04/21/2025	19:14	LB135513

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB06	Chromium	2.00	+/-2.00	U	2.00	P	04/21/2025	19:14	LB135513
	Cobalt	1.00	+/-1.00	U	1.00	P	04/21/2025	19:14	LB135513
	Copper	2.00	+/-2.00	U	2.00	P	04/21/2025	19:14	LB135513
	Iron	50.0	+/-50.0	U	50.0	P	04/21/2025	19:14	LB135513
	Lead	1.00	+/-1.00	U	1.00	P	04/21/2025	19:14	LB135513
	Magnesium	500	+/-500	U	500	P	04/21/2025	19:14	LB135513
	Manganese	1.00	+/-1.00	U	1.00	P	04/21/2025	19:14	LB135513
	Nickel	1.00	+/-1.00	U	1.00	P	04/21/2025	19:14	LB135513
	Potassium	500	+/-500	U	500	P	04/21/2025	19:14	LB135513
	Selenium	5.00	+/-5.00	U	5.00	P	04/21/2025	19:14	LB135513
	Silver	1.00	+/-1.00	U	1.00	P	04/21/2025	19:14	LB135513
	Sodium	500	+/-500	U	500	P	04/21/2025	19:14	LB135513
	Thallium	1.00	+/-1.00	U	1.00	P	04/21/2025	19:14	LB135513
	Vanadium	5.00	+/-5.00	U	5.00	P	04/21/2025	19:14	LB135513
	Zinc	5.00	+/-5.00	U	5.00	P	04/21/2025	19:14	LB135513

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- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	04/29/2025	12:29	LB135595
	Antimony	2.00	+/-2.00	U	2.00	P	04/29/2025	12:29	LB135595
	Arsenic	1.00	+/-1.00	U	1.00	P	04/29/2025	12:29	LB135595
	Barium	10.0	+/-10.0	U	10.0	P	04/29/2025	12:29	LB135595
	Beryllium	1.00	+/-1.00	U	1.00	P	04/29/2025	12:29	LB135595
	Cadmium	1.00	+/-1.00	U	1.00	P	04/29/2025	12:29	LB135595
	Calcium	500	+/-500	U	500	P	04/29/2025	12:29	LB135595
	Chromium	2.00	+/-2.00	U	2.00	P	04/29/2025	12:29	LB135595
	Cobalt	1.00	+/-1.00	U	1.00	P	04/29/2025	12:29	LB135595
	Copper	2.00	+/-2.00	U	2.00	P	04/29/2025	12:29	LB135595
	Iron	50.0	+/-50.0	U	50.0	P	04/29/2025	12:29	LB135595
	Lead	1.00	+/-1.00	U	1.00	P	04/29/2025	12:29	LB135595
	Magnesium	500	+/-500	U	500	P	04/29/2025	12:29	LB135595
	Manganese	1.00	+/-1.00	U	1.00	P	04/29/2025	12:29	LB135595
	Nickel	1.00	+/-1.00	U	1.00	P	04/29/2025	12:29	LB135595
	Potassium	500	+/-500	U	500	P	04/29/2025	12:29	LB135595
	Selenium	5.00	+/-5.00	U	5.00	P	04/29/2025	12:29	LB135595
	Silver	1.00	+/-1.00	U	1.00	P	04/29/2025	12:29	LB135595
	Sodium	500	+/-500	U	500	P	04/29/2025	12:29	LB135595
	Thallium	1.00	+/-1.00	U	1.00	P	04/29/2025	12:29	LB135595
	Vanadium	5.00	+/-5.00	U	5.00	P	04/29/2025	12:29	LB135595
	Zinc	5.00	+/-5.00	U	5.00	P	04/29/2025	12:29	LB135595

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	04/29/2025	12:44	LB135595
	Antimony	2.00	+/-2.00	U	2.00	P	04/29/2025	12:44	LB135595
	Arsenic	1.00	+/-1.00	U	1.00	P	04/29/2025	12:44	LB135595
	Barium	10.0	+/-10.0	U	10.0	P	04/29/2025	12:44	LB135595
	Beryllium	1.00	+/-1.00	U	1.00	P	04/29/2025	12:44	LB135595
	Cadmium	1.00	+/-1.00	U	1.00	P	04/29/2025	12:44	LB135595
	Calcium	500	+/-500	U	500	P	04/29/2025	12:44	LB135595
	Chromium	2.00	+/-2.00	U	2.00	P	04/29/2025	12:44	LB135595
	Cobalt	1.00	+/-1.00	U	1.00	P	04/29/2025	12:44	LB135595
	Copper	2.00	+/-2.00	U	2.00	P	04/29/2025	12:44	LB135595
	Iron	50.0	+/-50.0	U	50.0	P	04/29/2025	12:44	LB135595
	Lead	1.00	+/-1.00	U	1.00	P	04/29/2025	12:44	LB135595
	Magnesium	500	+/-500	U	500	P	04/29/2025	12:44	LB135595
	Manganese	1.00	+/-1.00	U	1.00	P	04/29/2025	12:44	LB135595
	Nickel	1.00	+/-1.00	U	1.00	P	04/29/2025	12:44	LB135595
	Potassium	500	+/-500	U	500	P	04/29/2025	12:44	LB135595
	Selenium	5.00	+/-5.00	U	5.00	P	04/29/2025	12:44	LB135595
	Silver	1.00	+/-1.00	U	1.00	P	04/29/2025	12:44	LB135595
	Sodium	500	+/-500	U	500	P	04/29/2025	12:44	LB135595
	Thallium	1.00	+/-1.00	U	1.00	P	04/29/2025	12:44	LB135595
	Vanadium	5.00	+/-5.00	U	5.00	P	04/29/2025	12:44	LB135595
	Zinc	5.00	+/-5.00	U	5.00	P	04/29/2025	12:44	LB135595
CCB02	Aluminum	20.0	+/-20.0	U	20.0	P	04/29/2025	13:07	LB135595
	Antimony	2.00	+/-2.00	U	2.00	P	04/29/2025	13:07	LB135595
	Arsenic	1.00	+/-1.00	U	1.00	P	04/29/2025	13:07	LB135595
	Barium	10.0	+/-10.0	U	10.0	P	04/29/2025	13:07	LB135595
	Beryllium	1.00	+/-1.00	U	1.00	P	04/29/2025	13:07	LB135595
	Cadmium	1.00	+/-1.00	U	1.00	P	04/29/2025	13:07	LB135595
	Calcium	500	+/-500	U	500	P	04/29/2025	13:07	LB135595
	Chromium	2.00	+/-2.00	U	2.00	P	04/29/2025	13:07	LB135595
	Cobalt	1.00	+/-1.00	U	1.00	P	04/29/2025	13:07	LB135595
	Copper	2.00	+/-2.00	U	2.00	P	04/29/2025	13:07	LB135595
	Iron	50.0	+/-50.0	U	50.0	P	04/29/2025	13:07	LB135595
	Lead	1.00	+/-1.00	U	1.00	P	04/29/2025	13:07	LB135595
	Magnesium	500	+/-500	U	500	P	04/29/2025	13:07	LB135595
	Manganese	1.00	+/-1.00	U	1.00	P	04/29/2025	13:07	LB135595
	Nickel	1.00	+/-1.00	U	1.00	P	04/29/2025	13:07	LB135595
	Potassium	500	+/-500	U	500	P	04/29/2025	13:07	LB135595
	Selenium	5.00	+/-5.00	U	5.00	P	04/29/2025	13:07	LB135595

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Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	1.00	+/-1.00	U	1.00	P	04/29/2025	13:07	LB135595
	Sodium	500	+/-500	U	500	P	04/29/2025	13:07	LB135595
	Thallium	1.00	+/-1.00	U	1.00	P	04/29/2025	13:07	LB135595
	Vanadium	5.00	+/-5.00	U	5.00	P	04/29/2025	13:07	LB135595
	Zinc	5.00	+/-5.00	U	5.00	P	04/29/2025	13:07	LB135595

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Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Instrument: CV1

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB167634BL		**WATER**		**Batch Number:**	**PB167634**		**Prep Date:**	**04/16/2025**	
	Mercury	0.20	<0.20	U	0.20	CV	04/17/2025	12:31	LB135470

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- 3b -
PREPARATION BLANK SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Instrument: P8

Sample ID	Analyte	Result (ug/L)	Acceptance Limit	Conc Qual	CRQL ug/L	M	Analysis Date	Analysis Time	Run
PB167612BL		**WATER**		**Batch Number:**	**PB167612**		**Prep Date:**	**04/17/2025**	
	Aluminum	20.0	<20.0	U	20.0	P	04/29/2025	12:57	LB135595
	Antimony	2.00	<2.00	U	2.00	P	04/29/2025	12:57	LB135595
	Arsenic	1.00	<1.00	U	1.00	P	04/29/2025	12:57	LB135595
	Barium	10.0	<10.0	U	10.0	P	04/29/2025	12:57	LB135595
	Beryllium	1.00	<1.00	U	1.00	P	04/29/2025	12:57	LB135595
	Cadmium	1.00	<1.00	U	1.00	P	04/29/2025	12:57	LB135595
	Calcium	500	<500	U	500	P	04/29/2025	12:57	LB135595
	Chromium	2.00	<2.00	U	2.00	P	04/29/2025	12:57	LB135595
	Cobalt	1.00	<1.00	U	1.00	P	04/29/2025	12:57	LB135595
	Copper	2.00	<2.00	U	2.00	P	04/29/2025	12:57	LB135595
	Iron	50.0	<50.0	U	50.0	P	04/29/2025	12:57	LB135595
	Lead	1.00	<1.00	U	1.00	P	04/29/2025	12:57	LB135595
	Magnesium	500	<500	U	500	P	04/29/2025	12:57	LB135595
	Manganese	1.00	<1.00	U	1.00	P	04/29/2025	12:57	LB135595
	Nickel	1.00	<1.00	U	1.00	P	04/29/2025	12:57	LB135595
	Potassium	500	<500	U	500	P	04/29/2025	12:57	LB135595
	Selenium	5.00	<5.00	U	5.00	P	04/29/2025	12:57	LB135595
	Silver	1.00	<1.00	U	1.00	P	04/29/2025	12:57	LB135595
	Sodium	500	<500	U	500	P	04/29/2025	12:57	LB135595
	Thallium	1.00	<1.00	U	1.00	P	04/29/2025	12:57	LB135595
	Vanadium	5.00	<5.00	U	5.00	P	04/29/2025	12:57	LB135595
	Zinc	5.00	<5.00	U	5.00	P	04/29/2025	12:57	LB135595

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Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	99000	100000	99	0	0	04/21/2025	16:05	LB135513
	Antimony	1.12	1.5	75	-2.5	5.5	04/21/2025	16:05	LB135513
	Arsenic	0.27	0.1	270	-1.9	2.1	04/21/2025	16:05	LB135513
	Barium	1.42	1.2	118	-18.8	21.2	04/21/2025	16:05	LB135513
	Beryllium	0.31			-2	2	04/21/2025	16:05	LB135513
	Cadmium	0.53	0.7	76	-1.3	2.7	04/21/2025	16:05	LB135513
	Calcium	106000	100000	106	0	0	04/21/2025	16:05	LB135513
	Chromium	20.3	21.0	97	17	25	04/21/2025	16:05	LB135513
	Cobalt	1.17	1.0	117	-1	3	04/21/2025	16:05	LB135513
	Copper	7.83	8.0	98	4	12	04/21/2025	16:05	LB135513
	Iron	112000	100000	112	0	0	04/21/2025	16:05	LB135513
	Lead	4.41	4.0	110	2	6	04/21/2025	16:05	LB135513
	Magnesium	103000	100000	103	0	0	04/21/2025	16:05	LB135513
	Manganese	6.79	7.0	97	5	9	04/21/2025	16:05	LB135513
	Nickel	5.39	6.0	90	4	8	04/21/2025	16:05	LB135513
	Potassium	105000	100000	105	0	0	04/21/2025	16:05	LB135513
	Selenium	0.14	0.3	47	-9.7	10	04/21/2025	16:05	LB135513
	Silver	0.060			-2	2	04/21/2025	16:05	LB135513
	Sodium	111000	100000	111	0	0	04/21/2025	16:05	LB135513
	Thallium	0.14			-2	2	04/21/2025	16:05	LB135513
	Vanadium	0.14	0.5	28	-9.5	10.5	04/21/2025	16:05	LB135513
	Zinc	13.9	11.0	126	1	21	04/21/2025	16:05	LB135513
ICSAB01	Aluminum	94500	100000	94	0	0	04/21/2025	16:12	LB135513
	Antimony	20.1	22.0	91	18	26	04/21/2025	16:12	LB135513
	Arsenic	20.3	19.0	107	16.2	21.9	04/21/2025	16:12	LB135513
	Barium	20.8	22.0	94	2	42	04/21/2025	16:12	LB135513
	Beryllium	21.2	19.0	112	16.2	21.9	04/21/2025	16:12	LB135513
	Cadmium	19.3	20.0	96	17	23	04/21/2025	16:12	LB135513
	Calcium	101000	100000	101	0	0	04/21/2025	16:12	LB135513
	Chromium	39.0	40.0	98	34	46	04/21/2025	16:12	LB135513
	Cobalt	20.9	20.0	104	17	23	04/21/2025	16:12	LB135513
	Copper	27.6	25.0	110	21	29	04/21/2025	16:12	LB135513
	Iron	106000	100000	106	0	0	04/21/2025	16:12	LB135513
	Lead	23.1	25.0	92	21.3	28.8	04/21/2025	16:12	LB135513
	Magnesium	99400	100000	99	0	0	04/21/2025	16:12	LB135513
	Manganese	26.5	27.0	98	23	31.1	04/21/2025	16:12	LB135513
	Nickel	24.3	24.0	101	20.4	27.6	04/21/2025	16:12	LB135513
	Potassium	101000	100000	101	0	0	04/21/2025	16:12	LB135513
	Selenium	20.8	19.0	110	9	29	04/21/2025	16:12	LB135513
	Silver	18.3	18.0	102	15.3	20.7	04/21/2025	16:12	LB135513
	Sodium	107000	100000	107	0	0	04/21/2025	16:12	LB135513
	Thallium	19.7	21.0	94	17.9	24.2	04/21/2025	16:12	LB135513

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Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	Vanadium	20.1	19.0	106	9	29	04/21/2025	16:12	LB135513
	Zinc	30.9	29.0	107	19	39	04/21/2025	16:12	LB135513
ICSA01	Aluminum	94000	100000	94	0	0	04/29/2025	12:32	LB135595
	Antimony	1.08	1.5	72	-2.5	5.5	04/29/2025	12:32	LB135595
	Arsenic	0.34	0.1	340	-1.9	2.1	04/29/2025	12:32	LB135595
	Barium	1.41	1.2	118	-18.8	21.2	04/29/2025	12:32	LB135595
	Beryllium	0.29			-2	2	04/29/2025	12:32	LB135595
	Cadmium	0.48	0.7	69	-1.3	2.7	04/29/2025	12:32	LB135595
	Calcium	99200	100000	99	0	0	04/29/2025	12:32	LB135595
	Chromium	19.5	21.0	93	17	25	04/29/2025	12:32	LB135595
	Cobalt	1.15	1.0	115	-1	3	04/29/2025	12:32	LB135595
	Copper	7.65	8.0	96	4	12	04/29/2025	12:32	LB135595
	Iron	106000	100000	106	0	0	04/29/2025	12:32	LB135595
	Lead	4.51	4.0	113	2	6	04/29/2025	12:32	LB135595
	Magnesium	98100	100000	98	0	0	04/29/2025	12:32	LB135595
	Manganese	7.47	7.0	107	5	9	04/29/2025	12:32	LB135595
	Nickel	5.16	6.0	86	4	8	04/29/2025	12:32	LB135595
	Potassium	98200	100000	98	0	0	04/29/2025	12:32	LB135595
	Selenium	0.28	0.3	93	-9.7	10	04/29/2025	12:32	LB135595
	Silver	0.040			-2	2	04/29/2025	12:32	LB135595
	Sodium	105000	100000	105	0	0	04/29/2025	12:32	LB135595
	Thallium	0.060			-2	2	04/29/2025	12:32	LB135595
	Vanadium	0.14	0.5	28	-9.5	10.5	04/29/2025	12:32	LB135595
	Zinc	10.9	11.0	100	1	21	04/29/2025	12:32	LB135595
ICSAB01	Aluminum	93000	100000	93	0	0	04/29/2025	12:37	LB135595
	Antimony	20.7	22.0	94	18	26	04/29/2025	12:37	LB135595
	Arsenic	21.0	19.0	110	16.2	21.9	04/29/2025	12:37	LB135595
	Barium	21.6	22.0	98	2	42	04/29/2025	12:37	LB135595
	Beryllium	21.7	19.0	114	16.2	21.9	04/29/2025	12:37	LB135595
	Cadmium	20.2	20.0	101	17	23	04/29/2025	12:37	LB135595
	Calcium	97900	100000	98	0	0	04/29/2025	12:37	LB135595
	Chromium	39.5	40.0	99	34	46	04/29/2025	12:37	LB135595
	Cobalt	21.0	20.0	105	17	23	04/29/2025	12:37	LB135595
	Copper	27.4	25.0	110	21	29	04/29/2025	12:37	LB135595
	Iron	104000	100000	104	0	0	04/29/2025	12:37	LB135595
	Lead	22.9	25.0	92	21.3	28.8	04/29/2025	12:37	LB135595
	Magnesium	97900	100000	98	0	0	04/29/2025	12:37	LB135595
	Manganese	27.1	27.0	100	23	31.1	04/29/2025	12:37	LB135595
	Nickel	24.5	24.0	102	20.4	27.6	04/29/2025	12:37	LB135595
	Potassium	97900	100000	98	0	0	04/29/2025	12:37	LB135595
	Selenium	21.0	19.0	110	9	29	04/29/2025	12:37	LB135595
	Silver	19.0	18.0	106	15.3	20.7	04/29/2025	12:37	LB135595

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Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

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	Sodium	105000	100000	105	0	0	04/29/2025	12:37	LB135595
	Thallium	19.6	21.0	93	17.9	24.2	04/29/2025	12:37	LB135595
	Vanadium	20.4	19.0	107	9	29	04/29/2025	12:37	LB135595
	Zinc	30.0	29.0	103	19	39	04/29/2025	12:37	LB135595

METAL QC DATA

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metals
- 5a -
MATRIX SPIKE SUMMARY

client: JACOBS Engineering Group, Inc. **level:** low **sdg no.:** Q1812

contract: JACO05 **lab code:** CHEM **case no.:** Q1812 **sas no.:** Q1812

matrix: Water **sample id:** Q1824-04 **client id:** 285MS

Percent Solids for Sample: NA **Spiked ID:** Q1824-04MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75 - 125	9630		632		10000	90		P
Antimony	ug/L	75 - 125	499		0.55	J	500	100		P
Arsenic	ug/L	75 - 125	2.62		2.55		500	0	N	P
Barium	ug/L	75 - 125	2260		34.9		2500	89		P
Beryllium	ug/L	75 - 125	547		1.00	U	500	109		P
Cadmium	ug/L	75 - 125	488		1.00	U	500	98		P
Calcium	ug/L	75 - 125	61400		13400		50000	96		P
Chromium	ug/L	75 - 125	479		7.28		500	94		P
Cobalt	ug/L	75 - 125	487		1.98		500	97		P
Copper	ug/L	75 - 125	4870		59.4		5000	96		P
Iron	ug/L	75 - 125	31300		13000		25000	73	N	P
Lead	ug/L	75 - 125	2750		392		2500	94		P
Magnesium	ug/L	75 - 125	52800		1200		50000	103		P
Manganese	ug/L	75 - 125	5250		533		5000	94		P
Nickel	ug/L	75 - 125	499		10.4		500	98		P
Mercury	ug/L	75 - 125	3.53		0.20	U	4.0	88		CV
Potassium	ug/L	75 - 125	28500		6660		25000	87		P
Selenium	ug/L	75 - 125	476		5.00	U	500	95		P
Silver	ug/L	75 - 125	83.1		0.060	J	500	17	N	P
Sodium	ug/L	75 - 125	270000		248000		50000	45		P
Thallium	ug/L	75 - 125	475		1.00	U	500	95		P
Vanadium	ug/L	75 - 125	510		4.16	J	500	101		P
Zinc	ug/L	75 - 125	5960		1170		5000	96		P

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metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: JACOBS Engineering Group, Inc. **level:** low **sdg no.:** Q1812

contract: JACO05 **lab code:** CHEM **case no.:** Q1812 **sas no.:** Q1812

matrix: Water **sample id:** Q1824-04 **client id:** 285MSD

Percent Solids for Sample: NA **Spiked ID:** Q1824-04MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75 - 125	9450		632		10000	88		P
Antimony	ug/L	75 - 125	501		0.55	J	500	100		P
Arsenic	ug/L	75 - 125	2.45		2.55		500	0	N	P
Barium	ug/L	75 - 125	2280		34.9		2500	90		P
Beryllium	ug/L	75 - 125	551		1.00	U	500	110		P
Cadmium	ug/L	75 - 125	498		1.00	U	500	100		P
Calcium	ug/L	75 - 125	60600		13400		50000	95		P
Chromium	ug/L	75 - 125	484		7.28		500	95		P
Cobalt	ug/L	75 - 125	486		1.98		500	97		P
Copper	ug/L	75 - 125	4840		59.4		5000	96		P
Iron	ug/L	75 - 125	31000		13000		25000	72	N	P
Lead	ug/L	75 - 125	2760		392		2500	95		P
Magnesium	ug/L	75 - 125	53600		1200		50000	105		P
Manganese	ug/L	75 - 125	5280		533		5000	95		P
Nickel	ug/L	75 - 125	494		10.4		500	97		P
Mercury	ug/L	75 - 125	3.39		0.20	U	4.0	85		CV
Potassium	ug/L	75 - 125	28200		6660		25000	86		P
Selenium	ug/L	75 - 125	479		5.00	U	500	96		P
Silver	ug/L	75 - 125	83.6		0.060	J	500	17	N	P
Sodium	ug/L	75 - 125	272000		248000		50000	49		P
Thallium	ug/L	75 - 125	475		1.00	U	500	95		P
Vanadium	ug/L	75 - 125	511		4.16	J	500	101		P
Zinc	ug/L	75 - 125	5960		1170		5000	96		P

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Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Matrix: Water **Level:** LOW **Client ID:** 285A

Sample ID: Q1824-04 **Spiked ID:** Q1824-04A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/L	75 - 125	2.41		2.55		500	0		P
Iron	ug/L	75 - 125	31000		13000		25000	72		P
Silver	ug/L	75 - 125	83.9		0.060	J	500	17		P

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Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **Level:** LOW **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Matrix: Water **Sample ID:** Q1824-04 **Client ID:** 285DUP

Percent Solids for Sample: NA **Duplicate ID** Q1824-04DUP **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	20	632		625		1		P
Antimony	ug/L	20	0.55	J	0.55	J	0		P
Arsenic	ug/L	20	2.55		2.25		12		P
Barium	ug/L	20	34.9		34.4		1		P
Beryllium	ug/L	20	1.00	U	1.00	U			P
Cadmium	ug/L	20	1.00	U	1.00	U			P
Calcium	ug/L	20	13400		13100		2		P
Chromium	ug/L	20	7.28		6.29		15		P
Cobalt	ug/L	20	1.98		1.90		4		P
Copper	ug/L	20	59.4		54.4		9		P
Iron	ug/L	20	13000		11300		14		P
Lead	ug/L	20	392		385		2		P
Magnesium	ug/L	20	1200		1160		3		P
Manganese	ug/L	20	533		526		1		P
Nickel	ug/L	20	10.4		9.65		7		P
Mercury	ug/L	20	0.20	U	0.20	U			CV
Potassium	ug/L	20	6660		6710		1		P
Selenium	ug/L	20	5.00	U	5.00	U			P
Silver	ug/L	20	0.060	J	0.060	J	0		P
Sodium	ug/L	20	248000		246000		1		P
Thallium	ug/L	20	1.00	U	1.00	U			P
Vanadium	ug/L	20	4.16	J	3.88	J	7		P
Zinc	ug/L	20	1170		1150		2		P

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

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Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **Level:** LOW **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Matrix: Water **Sample ID:** Q1824-04MS **Client ID:** 285MSD

Percent Solids for Sample: NA **Duplicate ID** Q1824-04MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	20	9630		9450		2		P
Antimony	ug/L	20	499		501		0		P
Arsenic	ug/L	20	2.62		2.45		7		P
Barium	ug/L	20	2260		2280		1		P
Beryllium	ug/L	20	547		551		1		P
Cadmium	ug/L	20	488		498		2		P
Calcium	ug/L	20	61400		60600		1		P
Chromium	ug/L	20	479		484		1		P
Cobalt	ug/L	20	487		486		0		P
Copper	ug/L	20	4870		4840		1		P
Iron	ug/L	20	31300		31000		1		P
Lead	ug/L	20	2750		2760		0		P
Magnesium	ug/L	20	52800		53600		2		P
Manganese	ug/L	20	5250		5280		1		P
Nickel	ug/L	20	499		494		1		P
Mercury	ug/L	20	3.53		3.39		4		CV
Potassium	ug/L	20	28500		28200		1		P
Selenium	ug/L	20	476		479		1		P
Silver	ug/L	20	83.1		83.6		1		P
Sodium	ug/L	20	270000		272000		1		P
Thallium	ug/L	20	475		475		0		P
Vanadium	ug/L	20	510		511		0		P
Zinc	ug/L	20	5960		5960		0		P

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

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LABORATORY CONTROL SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB167612BS							
Aluminum	ug/L	10000	10200		102	80 - 120	P
Antimony	ug/L	500	519		104	80 - 120	P
Arsenic	ug/L	500	510		102	80 - 120	P
Barium	ug/L	2500	2590		104	80 - 120	P
Beryllium	ug/L	500	523		105	80 - 120	P
Cadmium	ug/L	500	534		107	80 - 120	P
Calcium	ug/L	50000	51100		102	80 - 120	P
Chromium	ug/L	500	510		102	80 - 120	P
Cobalt	ug/L	500	511		102	80 - 120	P
Copper	ug/L	5000	5020		100	80 - 120	P
Iron	ug/L	25000	27500		110	80 - 120	P
Lead	ug/L	2500	2450		98	80 - 120	P
Magnesium	ug/L	50000	52400		105	80 - 120	P
Manganese	ug/L	5000	5060		101	80 - 120	P
Nickel	ug/L	500	520		104	80 - 120	P
Potassium	ug/L	25000	25500		102	80 - 120	P
Selenium	ug/L	500	502		100	80 - 120	P
Silver	ug/L	500	529		106	80 - 120	P
Sodium	ug/L	50000	53100		106	80 - 120	P
Thallium	ug/L	500	495		99	80 - 120	P
Vanadium	ug/L	500	514		103	80 - 120	P
Zinc	ug/L	5000	4990		100	80 - 120	P

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LABORATORY CONTROL SAMPLE SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Case No.:** Q1812 **SAS No.:** Q1812

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB167634BS							
Mercury	ug/L	4.0	3.98		100	80 - 120	CV

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FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: Q1812 Sas No.: Q1812 SDG No.: Q1812

Instrument ID: P8 Start Date : 04/21/2025

Run Number: LB135513 End Date : 04/21/2025

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	1514	100		100		100		100		100	
S2	S2	1520	98		100		99		99		97	
S3	S3	1524	101		100		99		99		101	
S4	S4	1527	105		98		99		98		101	
S5	S5	1530	105		96		96		95		100	
S6	S6	1533	101		92		94		90		99	
S7	S7	1536	99		90		93		87		98	
S8	S8	1538	90		87		90		78		91	
ICV01	ICV01	1546	108		98		99		101		103	
LLICV	LLICV	1554	107		99		99		101		102	
ICB01	ICB01	1601	106		101		102		102		101	
ICSA01	ICSA01	1605	99		97		98		90		98	
ICSAB01	ICSAB01	1612	100		98		97		90		99	
CCV01	CCV01	1615	95		95		94		85		97	
CCB01	CCB01	1618	108		104		103		103		105	
CRI	CRI	1632	105		104		103		102		103	
ZZZZZZ	ZZZZZZ	1636										
ZZZZZZ	ZZZZZZ	1639										
ZZZZZZ	ZZZZZZ	1642										
ZZZZZZ	ZZZZZZ	1645										
ZZZZZZ	ZZZZZZ	1648										
Q1824-04DUP	285DUP	1652	111		112		108		102		108	
Q1824-04L	285L	1655	110		109		107		106		107	
Q1824-04MS	285MS	1658	100		109		106		98		105	
CCV02	CCV02	1701	94		99		98		89		98	
CCB02	CCB02	1704	106		109		107		107		107	
Q1824-04MSD	285MSD	1707	99		110		107		99		105	
Q1824-04A	285A	1710	97		107		105		98		104	
ZZZZZZ	ZZZZZZ	1713										
ZZZZZZ	ZZZZZZ	1716										
ZZZZZZ	ZZZZZZ	1719										
ZZZZZZ	ZZZZZZ	1726										
ZZZZZZ	ZZZZZZ	1733										
ZZZZZZ	ZZZZZZ	1737										
CCV03	CCV03	1744	91		99		97		88		97	
CCB03	CCB03	1748	107		106		106		105		106	

Internal Standard %RI Limit: 70 - 130

Alliance TECHNICAL GROUP
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FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: Q1812 Sas No.: Q1812 SDG No.: Q1812

Instrument ID: P8 Start Date : 04/21/2025

Run Number: LB135513 End Date : 04/21/2025

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	1514	100		100		100		100		100	
S2	S2	1520	98		99		98		98		99	
S3	S3	1524	97		98		96		98		99	
S4	S4	1527	94		95		93		96		99	
S5	S5	1530	91		93		92		96		98	
S6	S6	1533	90		90		88		94		95	
S7	S7	1536	89		88		84		92		94	
S8	S8	1538	87		90		77		91		93	
ICV01	ICV01	1546	95		99		99		101		103	
LLICV	LLICV	1554	97		100		99		100		103	
ICB01	ICB01	1601	99		101		100		101		102	
ICSA01	ICSA01	1605	93		95		88		97		97	
ICSAB01	ICSAB01	1612	95		95		89		96		97	
CCV01	CCV01	1615	98		96		85		95		96	
CCB01	CCB01	1618	101		101		101		101		103	
CRI	CRI	1632	101		100		99		99		100	
ZZZZZZ	ZZZZZZ	1636										
ZZZZZZ	ZZZZZZ	1639										
ZZZZZZ	ZZZZZZ	1642										
ZZZZZZ	ZZZZZZ	1645										
ZZZZZZ	ZZZZZZ	1648										
Q1824-04DUP	285DUP	1652	103		103		100		103		106	
Q1824-04L	285L	1655	103		103		103		103		106	
Q1824-04MS	285MS	1658	106		101		96		102		104	
CCV02	CCV02	1701	100		96		88		96		99	
CCB02	CCB02	1704	103		102		105		103		105	
Q1824-04MSD	285MSD	1707	106		101		96		101		104	
Q1824-04A	285A	1710	104		99		93		100		101	
ZZZZZZ	ZZZZZZ	1713										
ZZZZZZ	ZZZZZZ	1716										
ZZZZZZ	ZZZZZZ	1719										
ZZZZZZ	ZZZZZZ	1726										
ZZZZZZ	ZZZZZZ	1733										
ZZZZZZ	ZZZZZZ	1737										
CCV03	CCV03	1744	98		95		88		96		97	
CCB03	CCB03	1748	99		100		103		100		102	

Internal Standard %RI Limit: 70 - 130

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FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: Q1812 Sas No.: Q1812 SDG No.: Q1812

Instrument ID: P8 Start Date : 04/29/2025

Run Number: LB135595 End Date : 04/29/2025

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	1131	100		100		100		100		100	
S2	S2	1138	99		96		98		98		97	
S3	S3	1141	99		98		96		98		99	
S4	S4	1145	100		95		97		96		99	
S5	S5	1147	97		93		96		93		99	
S6	S6	1150	94		93		96		92		99	
S7	S7	1153	91		90		94		89		98	
S8	S8	1156	85		90		91		81		93	
ICV01	ICV01	1214	101		103		104		103		103	
LLICV	LLICV	1218	102		103		104		103		103	
ICB01	ICB01	1229	99		104		103		103		103	
ICSA01	ICSA01	1232	94		99		99		91		98	
ICSAB01	ICSAB01	1237	94		103		103		93		100	
CCV01	CCV01	1240	91		101		100		90		98	
CCB01	CCB01	1244	102		108		106		107		104	
CRI	CRI	1247	103		108		107		105		106	
Q1812-02	RINSE-EB-TA	1250	105		111		111		107		108	
Q1812-03	RINSE-EB-PU	1254	105		111		110		107		107	
PB167612BL	PB167612BL	1257	101		106		106		105		103	
PB167612BS	PB167612BS	1300	99		104		102		97		102	
CCV02	CCV02	1303	93		99		99		89		97	
CCB02	CCB02	1307	102		109		109		108		105	

Internal Standard %RI Limit: 70 - 130

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FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: Q1812 Sas No.: Q1812 SDG No.: Q1812

Instrument ID: P8 Start Date : 04/29/2025

Run Number: LB135595 End Date : 04/29/2025

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	1131	100		100		100		100		100	
S2	S2	1138	98		98		98		99		98	
S3	S3	1141	94		97		96		97		96	
S4	S4	1145	94		95		94		97		97	
S5	S5	1147	91		94		90		96		95	
S6	S6	1150	92		92		89		95		95	
S7	S7	1153	94		92		86		94		94	
S8	S8	1156	94		95		81		95		95	
ICV01	ICV01	1214	104		104		103		104		103	
LLICV	LLICV	1218	102		103		102		103		101	
ICB01	ICB01	1229	99		100		99		99		99	
ICSA01	ICSA01	1232	100		99		91		100		97	
ICSAB01	ICSAB01	1237	102		102		94		101		99	
CCV01	CCV01	1240	106		103		91		100		100	
CCB01	CCB01	1244	106		107		106		106		104	
CRI	CRI	1247	107		107		106		105		105	
Q1812-02	RINSE-EB-TA	1250	112		110		106		109		109	
Q1812-03	RINSE-EB-PU	1254	110		109		106		108		107	
PB167612BL	PB167612BL	1257	106		106		104		104		102	
PB167612BS	PB167612BS	1300	105		102		97		102		100	
CCV02	CCV02	1303	104		101		90		99		99	
CCB02	CCB02	1307	108		107		107		105		106	

Internal Standard %RI Limit: 70 - 130

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FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: Q1812 Sas No.: Q1812 SDG No.: Q1812

Instrument ID: P8 Start Date : 04/21/2025

Run Number: LB135513 End Date : 04/21/2025

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	1514	100		100							
S2	S2	1520	99		100							
S3	S3	1524	101		101							
S4	S4	1527	102		102							
S5	S5	1530	102		100							
S6	S6	1533	99		96							
S7	S7	1536	99		94							
S8	S8	1538	93		82							
ICV01	ICV01	1546	104		104							
LLICV	LLICV	1554	103		103							
ICB01	ICB01	1601	103		104							
ICSA01	ICSA01	1605	102		94							
ICSAB01	ICSAB01	1612	100		93							
CCV01	CCV01	1615	97		88							
CCB01	CCB01	1618	106		106							
CRI	CRI	1632	105		103							
ZZZZZZ	ZZZZZZ	1636										
ZZZZZZ	ZZZZZZ	1639										
ZZZZZZ	ZZZZZZ	1642										
ZZZZZZ	ZZZZZZ	1645										
ZZZZZZ	ZZZZZZ	1648										
Q1824-04DUP	285DUP	1652	108		103							
Q1824-04L	285L	1655	110		105							
Q1824-04MS	285MS	1658	106		99							
CCV02	CCV02	1701	99		90							
CCB02	CCB02	1704	109		108							
Q1824-04MSD	285MSD	1707	107		100							
Q1824-04A	285A	1710	105		97							
ZZZZZZ	ZZZZZZ	1713										
ZZZZZZ	ZZZZZZ	1716										
ZZZZZZ	ZZZZZZ	1719										
ZZZZZZ	ZZZZZZ	1726										
ZZZZZZ	ZZZZZZ	1733										
ZZZZZZ	ZZZZZZ	1737										

Internal Standard %RI Limit: 70 -130

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FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: Q1812 Sas No.: Q1812 SDG No.: Q1812

Instrument ID: P8 Start Date : 04/21/2025

Run Number: LB135513 End Date : 04/21/2025

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	1744	98		89							
CCB03	CCB03	1748	105		105							

Internal Standard %RI Limit: 70 -130

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FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: Q1812 Sas No.: Q1812 SDG No.: Q1812

Instrument ID: P8 Start Date : 04/21/2025

Run Number: LB135513 End Date : 04/21/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
S0	S0	1514	100									
S2	S2	1520	98									
S3	S3	1524	98									
S4	S4	1527	96									
S5	S5	1530	94									
S6	S6	1533	89									
S7	S7	1536	86									
S8	S8	1538	79									
ICV01	ICV01	1546	102									
LLICV	LLICV	1554	100									
ICB01	ICB01	1601	101									
ICSA01	ICSA01	1605	89									
ICSAB01	ICSAB01	1612	88									
CCV01	CCV01	1615	85									
CCB01	CCB01	1618	101									
CRI	CRI	1632	99									
ZZZZZZ	ZZZZZZ	1636										
ZZZZZZ	ZZZZZZ	1639										
ZZZZZZ	ZZZZZZ	1642										
ZZZZZZ	ZZZZZZ	1645										
ZZZZZZ	ZZZZZZ	1648										
Q1824-04DUP	285DUP	1652	96									
Q1824-04L	285L	1655	101									
Q1824-04MS	285MS	1658	94									
CCV02	CCV02	1701	86									
CCB02	CCB02	1704	104									
Q1824-04MSD	285MSD	1707	96									
Q1824-04A	285A	1710	93									
ZZZZZZ	ZZZZZZ	1713										
ZZZZZZ	ZZZZZZ	1716										
ZZZZZZ	ZZZZZZ	1719										
ZZZZZZ	ZZZZZZ	1726										
ZZZZZZ	ZZZZZZ	1733										
ZZZZZZ	ZZZZZZ	1737										

Internal Standard %RI Limit: 70 -130

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FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: Q1812 Sas No.: Q1812 SDG No.: Q1812

Instrument ID: P8 Start Date : 04/21/2025

Run Number: LB135513 End Date : 04/21/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
CCV03	CCV03	1744	86									
CCB03	CCB03	1748	100									

Internal Standard %RI Limit: 70 -130

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FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: Q1812 Sas No.: Q1812 SDG No.: Q1812

Instrument ID: P8 Start Date : 04/29/2025

Run Number: LB135595 End Date : 04/29/2025

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	1131	100		100							
S2	S2	1138	98		97							
S3	S3	1141	99		97							
S4	S4	1145	100		100							
S5	S5	1147	100		98							
S6	S6	1150	99		97							
S7	S7	1153	95		91							
S8	S8	1156	93		81							
ICV01	ICV01	1214	102		102							
LLICV	LLICV	1218	103		103							
ICB01	ICB01	1229	102		102							
ICSA01	ICSA01	1232	99		90							
ICSAB01	ICSAB01	1237	102		93							
CCV01	CCV01	1240	100		87							
CCB01	CCB01	1244	105		103							
CRI	CRI	1247	105		103							
Q1812-02	RINSE-EB-TAN	1250	109		106							
Q1812-03	RINSE-EB-PUM	1254	109		106							
PB167612BL	PB167612BL	1257	105		103							
PB167612BS	PB167612BS	1300	103		98							
CCV02	CCV02	1303	99		90							
CCB02	CCB02	1307	107		106							

Internal Standard %RI Limit: 70 -130

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FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Lab Name: JACOBS Engineering Group, Inc. Contract: JACO05

Lab Code: CHEM Case no.: Q1812 Sas No.: Q1812 SDG No.: Q1812

Instrument ID: P8 Start Date : 04/29/2025

Run Number: LB135595 End Date : 04/29/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
S0	S0	1131	100									
S2	S2	1138	98									
S3	S3	1141	95									
S4	S4	1145	96									
S5	S5	1147	94									
S6	S6	1150	90									
S7	S7	1153	89									
S8	S8	1156	82									
ICV01	ICV01	1214	102									
LLICV	LLICV	1218	102									
ICB01	ICB01	1229	98									
ICSA01	ICSA01	1232	91									
ICSAB01	ICSAB01	1237	91									
CCV01	CCV01	1240	89									
CCB01	CCB01	1244	104									
CRI	CRI	1247	105									
Q1812-02	RINSE-EB-TAN	1250	106									
Q1812-03	RINSE-EB-PUM	1254	106									
PB167612BL	PB167612BL	1257	103									
PB167612BS	PB167612BS	1300	96									
CCV02	CCV02	1303	88									
CCB02	CCB02	1307	105									

Internal Standard %RI Limit: 70 -130

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Metals

-9 -

ICP SERIAL DILUTIONS

SAMPLE NO.

285L

Lab Name: Chemtech Consulting Group **Contract:** JACO05

Lab Code: CHEM **Lb No.:** lb135513 **Lab Sample ID :** Q1824-04L **SDG No.:** Q1812

Matrix (soil/water): Water **Level (low/med):** LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	632		639		1		P
Antimony	0.55	J	0.55	J	0		P
Arsenic	2.55		2.85	J	12		P
Barium	34.9		35.8	J	3		P
Beryllium	1.00	U	5.00	U			P
Cadmium	1.00	U	5.00	U			P
Calcium	13400		13700		3		P
Chromium	7.28		7.20	J	1		P
Cobalt	1.98		2.05	J	4		P
Copper	59.4		62.6		5		P
Iron	13000		12700		3		P
Lead	392		398		2		P
Magnesium	1200		1230	J	3		P
Manganese	533		504		5		P
Nickel	10.4		10.9		5		P
Mercury	0.20	U	1.00	U			CV
Potassium	6660		6490		3		P
Selenium	5.00	U	25.0	U			P
Silver	0.060	J	5.00	U	100.0		P
Sodium	248000		253000		2		P
Thallium	1.00	U	5.00	U			P
Vanadium	4.16	J	4.05	J	3		P
Zinc	1170		1230		5		P

METAL PREPARATION & INSTRUMENT DATA

METAL PREPARATION & ANALYICAL SUMMARY

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Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Method:**

Case No.: Q1812 **SAS No.:** Q1812

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB167612**						
PB167612BL	PB167612BL	MB	WATER	04/17/2025	50.0	50.0	
PB167612BS	PB167612BS	LCS	WATER	04/17/2025	50.0	50.0	
Q1812-02	RINSE-EB-TANK-041525	SAM	WATER	04/17/2025	50.0	50.0	
Q1812-03	RINSE-EB-PUMP-041525	SAM	WATER	04/17/2025	50.0	50.0	
Q1824-04DUP	285DUP	DUP	WATER	04/17/2025	50.0	50.0	
Q1824-04MS	285MS	MS	WATER	04/17/2025	50.0	50.0	
Q1824-04MSD	285MSD	MSD	WATER	04/17/2025	50.0	50.0	

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Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: JACOBS Engineering Group, Inc. **SDG No.:** Q1812

Contract: JACO05 **Lab Code:** CHEM **Method:**

Case No.: Q1812 **SAS No.:** Q1812

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB167634**						
PB167634BL	PB167634BL	MB	WATER	04/16/2025	30.0	30.0	
PB167634BS	PB167634BS	LCS	WATER	04/16/2025	30.0	30.0	
Q1812-02	RINSE-EB-TANK-041525	SAM	WATER	04/16/2025	30.0	30.0	
Q1812-03	RINSE-EB-PUMP-041525	SAM	WATER	04/16/2025	30.0	30.0	
Q1824-04DUP	285DUP	DUP	WATER	04/16/2025	30.0	30.0	
Q1824-04MS	285MS	MS	WATER	04/16/2025	30.0	30.0	
Q1824-04MSD	285MSD	MSD	WATER	04/16/2025	30.0	30.0	

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metals
- 14 -
ANALYSIS RUN LOG

Client: JACOBS Engineering Group, Inc. **Contract:** JACO05

Lab code: CHEM **Case no.:** Q1812 **Sas no.:** Q1812 **Sdg no.:** Q1812

Instrument id number: **Method:** **Run number:** LB135470

Start date: 04/17/2025 **End date:** 04/17/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1153	HG
S0.2	S0.2	1	1155	HG
S2.5	S2.5	1	1158	HG
S5	S5	1	1200	HG
S7.5	S7.5	1	1204	HG
S10	S10	1	1209	HG
ICV92	ICV92	1	1215	HG
ICB92	ICB92	1	1217	HG
CCV85	CCV85	1	1220	HG
CCB85	CCB85	1	1222	HG
CRA	CRA	1	1224	HG
PB167634BL	PB167634BL	1	1231	HG
PB167634BS	PB167634BS	1	1236	HG
Q1812-02	RINSE-EB-TANK-041525	1	1238	HG
Q1812-03	RINSE-EB-PUMP-041525	1	1241	HG
CCV86	CCV86	1	1253	HG
CCB86	CCB86	1	1255	HG
Q1824-04DUP	285DUP	1	1307	HG
Q1824-04MS	285MS	1	1314	HG
Q1824-04MSD	285MSD	1	1316	HG
Q1824-04L	285L	5	1318	HG
CCV87	CCV87	1	1323	HG
CCB87	CCB87	1	1325	HG

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metals
- 14 -
ANALYSIS RUN LOG

Client: JACOBS Engineering Group, Inc. **Contract:** JACO05

Lab code: CHEM **Case no.:** Q1812 **Sas no.:** Q1812 **Sdg no.:** Q1812

Instrument id number: **Method:** **Run number:** LB135513

Start date: 04/21/2025 **End date:** 04/21/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1514	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1520	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1524	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1527	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1530	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S6	S6	1	1533	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S7	S7	1	1536	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S8	S8	1	1538	Al,Ca,Fe,K,Mg,Na
ICV01	ICV01	1	1546	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV	LLICV	1	1554	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1601	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1605	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1612	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1615	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1618	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI	CRI	1	1632	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1824-04DUP	285DUP	1	1652	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1824-04L	285L	5	1655	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1824-04MS	285MS	1	1658	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1701	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1704	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1824-04MSD	285MSD	1	1707	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1824-04A	285A	1	1710	Ag,As,Fe
CCV03	CCV03	1	1744	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB03	CCB03	1	1748	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV04	CCV04	1	1818	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB04	CCB04	1	1821	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV05	CCV05	1	1846	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB05	CCB05	1	1849	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV06	CCV06	1	1911	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB06	CCB06	1	1914	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn

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metals
- 14 -
ANALYSIS RUN LOG

Client: JACOBS Engineering Group, Inc. **Contract:** JACO05

Lab code: CHEM **Case no.:** Q1812 **Sas no.:** Q1812 **Sdg no.:** Q1812

Instrument id number: **Method:** **Run number:** LB135595

Start date: 04/29/2025 **End date:** 04/29/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1131	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S2	S2	1	1138	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S3	S3	1	1141	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S4	S4	1	1145	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S5	S5	1	1147	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S6	S6	1	1150	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S7	S7	1	1153	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
S8	S8	1	1156	Al,Ca,Fe,K,Mg,Na
ICV01	ICV01	1	1214	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV	LLICV	1	1218	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICB01	ICB01	1	1229	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSA01	ICSA01	1	1232	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
ICSAB01	ICSAB01	1	1237	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV01	CCV01	1	1240	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB01	CCB01	1	1244	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI	CRI	1	1247	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1812-02	RINSE-EB-TANK-041525	1	1250	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q1812-03	RINSE-EB-PUMP-041525	1	1254	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB167612BL	PB167612BL	1	1257	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB167612BS	PB167612BS	1	1300	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCV02	CCV02	1	1303	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CCB02	CCB02	1	1307	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn

METAL
RAW DATA

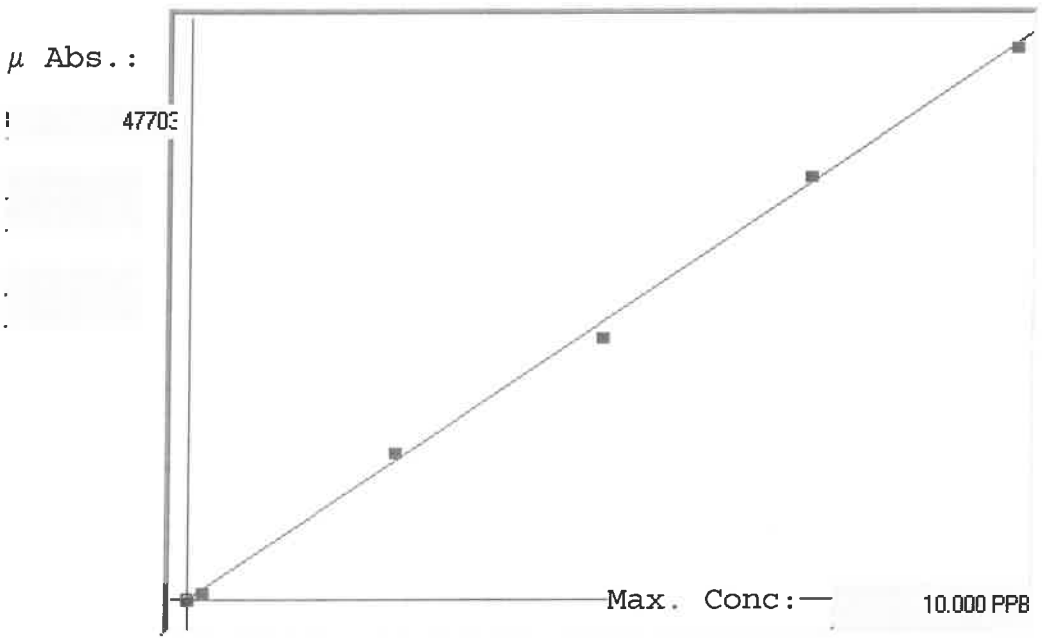
Reviewed By:jaswal
On:4/17/2025 11:13:23 PM
Inst Id :CV1
LB :LB135470

LB135470

7470A

INSTRUMENT ID: CV1

Linear



A= 0.0000e+000

B= 2.0848e-004

C= 1.0607e-002

Rho= 0.9992703

Accept=Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
0.0	0.000	-0.011	-0.011	-102	0.000	-102	0			
0.2	0.200	0.170	-0.030	763	0.0 %	763				
2.5	2.500	2.685	0.185	12828	0.0 %	12828				
5.0	5.000	4.754	-0.246	22752	0.0 %	22752				
7.5	7.500	7.646	0.146	36626	0.0 %	36626				
10.0	10.000	9.956	-0.044	47703	0.0 %	47703				

0% RD

-102

763

12828

22752

36626

47703

Reviewed By:jaswal
On:4/17/2025 11:13:23 PM
Inst Id :CV1
LB :LB135470

LB135470 INSTRUMENT ID : CV1

Method: 7470A Operator: Admin Date of Analysis: 17 Apr 2025 11:43:47

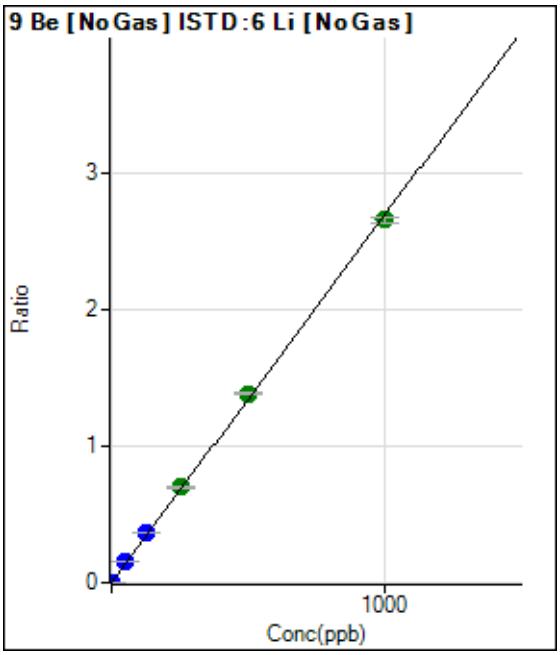
Sample ID	Extended ID	µ Abs.	Conc.	Stnd Conc	Method	Units	Date	Type	Type
0.0 - 1		-102	-	0.0000	7470A	PPB	17 Apr 2025 11:53:36	S	Std
0.2 - 1		763	-	0.2000	7470A	PPB	17 Apr 2025 11:55:54	S	Std
2.5 - 1		12828	-	2.5000	7470A	PPB	17 Apr 2025 11:58:11	S	Std
5.0 - 1		22752	-	5.0000	7470A	PPB	17 Apr 2025 12:00:28	S	Std
7.5 - 1		36626	-	7.5000	7470A	PPB	17 Apr 2025 12:04:56	S	Std
10.0 - 1		47703	-	10.0000	7470A	PPB	17 Apr 2025 12:09:53	S	Std
ICV92 - 1	ICV92	20481	4.2805		-7470A	PPB	17 Apr 2025 12:15:31	U	SMPL
ICB92 - 1	ICB92	-197	-0.0305		-7470A	PPB	17 Apr 2025 12:17:46	U	SMPL
CCV85 - 1	CCV85	25251	5.2749		-7470A	PPB	17 Apr 2025 12:20:03	U	SMPL
CCB85 - 1	CCB85	-294	-0.0507		-7470A	PPB	17 Apr 2025 12:22:18	U	SMPL
CRA - 1	CRA	730	0.1628		-7470A	PPB	17 Apr 2025 12:24:35	U	SMPL
HighStd - 1	HighStd	45648	9.5273		-7470A	PPB	17 Apr 2025 12:26:50	U	SMPL
ChkStd - 1	ChkStd	31963	6.6742		-7470A	PPB	17 Apr 2025 12:29:06	U	SMPL
PB167634BL - 1	PBW	-414	-0.0757		-7470A	PPB	17 Apr 2025 12:31:24	U	SMPL
PB167634BS - 1	LCSW	19039	3.9798		-7470A	PPB	17 Apr 2025 12:36:28	U	SMPL
Q1812-02 - 1	RINSE-EB-TANK-041525	-188	-0.0286		-7470A	PPB	17 Apr 2025 12:38:44	U	SMPL
Q1812-03 - 1	RINSE-EB-PUMP-041525	172	0.0465		-7470A	PPB	17 Apr 2025 12:41:02	U	SMPL
Q1814-01 - 1	A3729	4372	0.9221		-7470A	PPB	17 Apr 2025 12:43:19	U	SMPL
Q1814-02 - 1	SCRUBBLE-TANK-LIQUID	7921	1.6620		-7470A	PPB	17 Apr 2025 12:45:38	U	SMPL
Q1816-01 - 1	441	-449	-0.0830		-7470A	PPB	17 Apr 2025 12:47:54	U	SMPL
CCV86 - 1	CCV86	22256	4.6505		-7470A	PPB	17 Apr 2025 12:53:40	U	SMPL
CCB86 - 1	CCB86	-317	-0.0555		-7470A	PPB	17 Apr 2025 12:55:57	U	SMPL
Q1818-05 - 1	3828	490	0.1128		-7470A	PPB	17 Apr 2025 12:58:15	U	SMPL
Q1818-06 - 1	3829	543	0.1238		-7470A	PPB	17 Apr 2025 13:00:30	U	SMPL
Q1818-07 - 1	3651	-64	-0.0027		-7470A	PPB	17 Apr 2025 13:02:48	U	SMPL
Q1824-04 - 1	285	273	0.0675		-7470A	PPB	17 Apr 2025 13:05:04	U	SMPL
Q1824-04DUP - 1	285DUP	188	0.0498		-7470A	PPB	17 Apr 2025 13:07:20	U	SMPL
Q1824-04MS - 1	285MS	16873	3.5283		-7470A	PPB	17 Apr 2025 13:14:15	U	SMPL
Q1824-04MSD - 1	285MSD	16206	3.3892		-7470A	PPB	17 Apr 2025 13:16:31	U	SMPL
Q1824-04LX5 - 1		-193	-0.0296		-7470A	PPB	17 Apr 2025 13:18:50	U	SMPL
Q1824-04A - 1		18409	3.8485		-7470A	PPB	17 Apr 2025 13:21:09	U	SMPL
CCV87 - 1	CCV87	23447	4.8988		-7470A	PPB	17 Apr 2025 13:23:26	U	SMPL
CCB87 - 1	CCB87	-323	-0.0567		-7470A	PPB	17 Apr 2025 13:25:44	U	SMPL

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8042125- MS.b\
Analysis File: P8042125- MS.batch.bin
DA Date-Time: 2025-04-21 19:20:20
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2025-04-21 15:14:05
2	006CALS.d	S02	2025-04-21 15:20:51
3	007CALB.d	S03	2025-04-21 15:24:13
4	008CALS.d	S04	2025-04-21 15:27:39
5	009CALS.d	S05	2025-04-21 15:30:32
6	010CALS.d	S06	2025-04-21 15:33:20
7	011CALS.d	S07	2025-04-21 15:36:05
8	012CALS.d	S08	2025-04-21 15:38:55

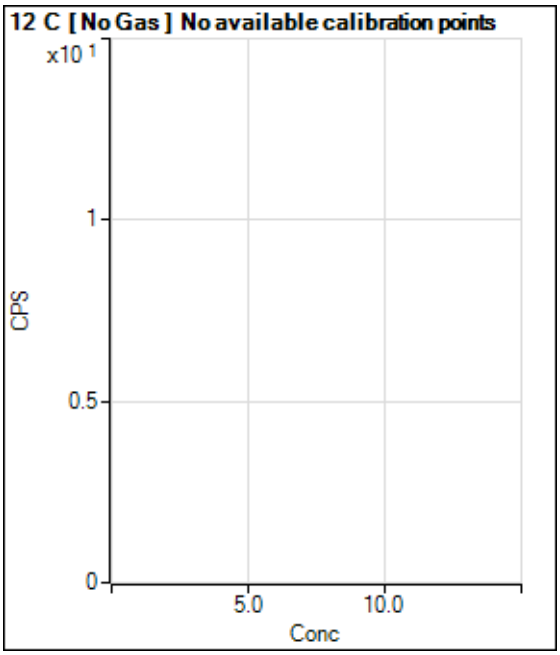
Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	136.91	0.0001	P	7.7
2	☐	1.000	1.293	8151.68	0.0035	P	1.3
3	☐	50.000	57.608	367014.13	0.1550	P	1.3
4	☐	125.000	137.050	907781.79	0.3687	P	1.5
5	☐	250.000	259.960	1719973.36	0.6993	A	1.1
6	☐	500.000	515.602	3298071.82	1.3868	A	1.6
7	☐	1000.000	987.822	6154220.87	2.6569	A	1.9
8	☐			781.65	0.0004	P	11.0

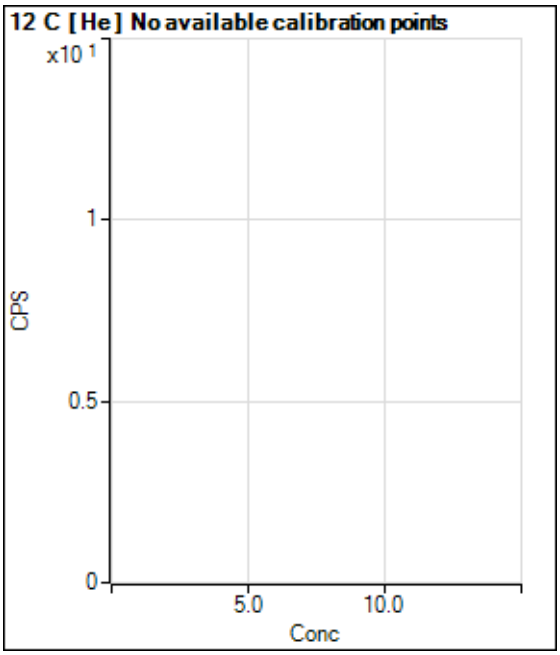
y = 0.0027 * x + 5.8287E-005
R = 0.9997
DL = 0.004979
BEC = 0.02167

Weight: <None>
Min Conc: 0

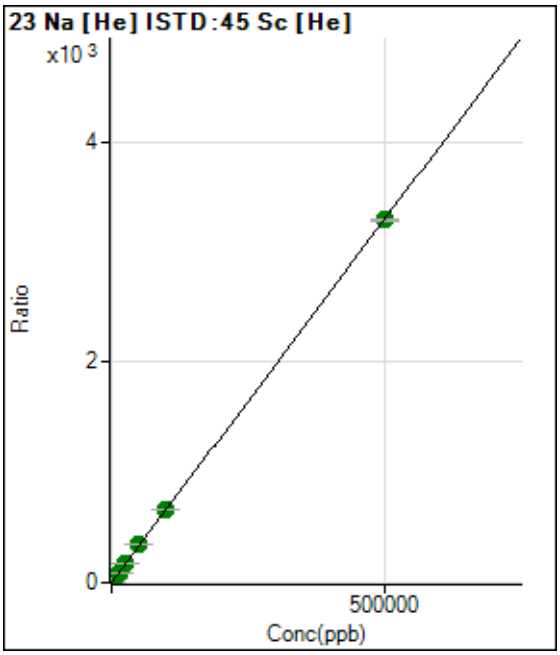


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			3798185.64		A	3.3
2	☐			3948328.14		A	1.3
3	☐			4034884.11		A	2.0
4	☐			4240061.88		A	1.8
5	☐			4263716.92		A	0.5
6	☐			4474054.06		A	0.6
7	☐			5154523.05		A	1.0
8	☐			4346773.58		A	2.0

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			25991.92		P	0.2
2	☐			26673.18		P	0.9
3	☐			27306.49		P	1.8
4	☐			28370.74		P	0.9
5	☐			29030.93		P	0.7
6	☐			31406.85		P	1.3
7	☐			38374.43		P	0.7
8	☐			39985.39		P	0.4

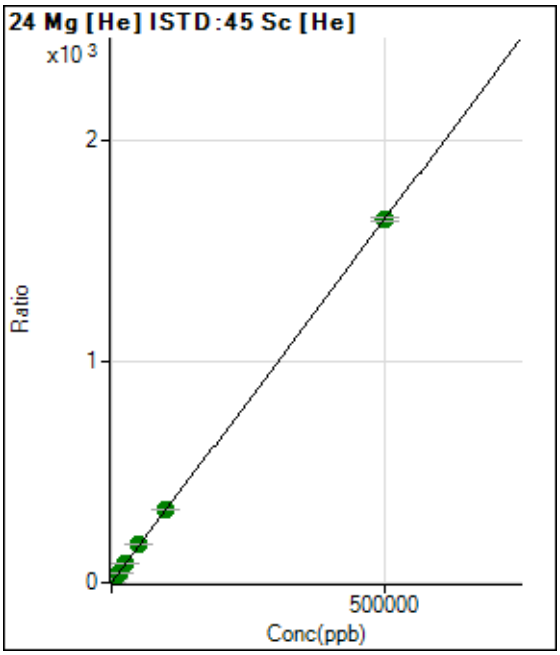


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	59187.04	0.5077	P	0.7
2	☐	500.000	599.036	511499.68	4.4595	P	0.6
3	☐	5000.000	5481.585	4139262.58	36.6693	A	0.5
4	☐	12500.000	13492.203	9759853.39	89.5146	A	0.7
5	☐	25000.000	27017.609	19025558.05	178.7406	A	0.6
6	☐	50000.000	52753.988	36519647.51	348.5213	A	2.0
7	☐	100000.00	100986.77	69281085.63	666.7089	A	1.3
8	☐	500000.00	499396.64	333218666.15	3,294.9847	A	0.6

y = 0.0066 * x + 0.5077
R = 1.0000
DL = 1.57
BEC = 76.96

Weight: <None>
Min Conc: 0

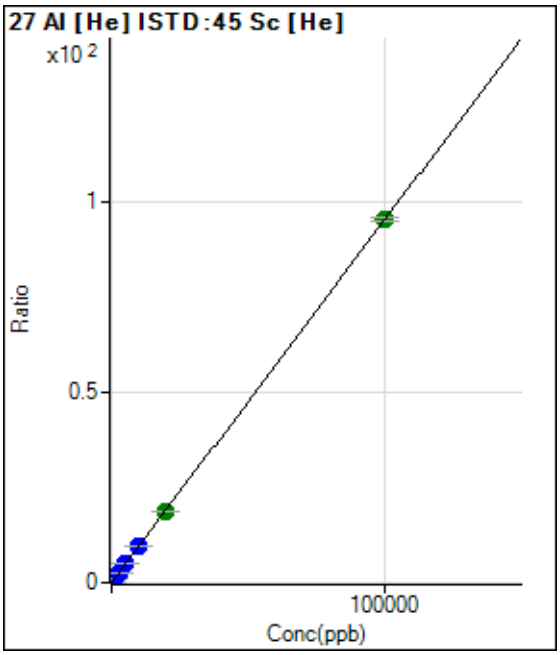
Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	450.01	0.0039	P	5.6
2	☐	500.000	602.028	227552.40	1.9839	P	0.6
3	☐	5000.000	5524.684	2051431.84	18.1742	A	1.8
4	☐	12500.000	13522.210	4849882.32	44.4774	A	0.2
5	☐	25000.000	26857.234	9402789.93	88.3354	A	0.8
6	☐	50000.000	52551.075	18112053.62	172.8406	A	1.1
7	☐	100000.00	100525.98	34356903.38	330.6267	A	1.3
8	☐	500000.00	499515.92	166143405.30	1,642.8761	A	1.0

y = 0.0033 * x + 0.0039
R = 1.0000
DL = 0.1972
BEC = 1.174

Weight: <None>
Min Conc: 0

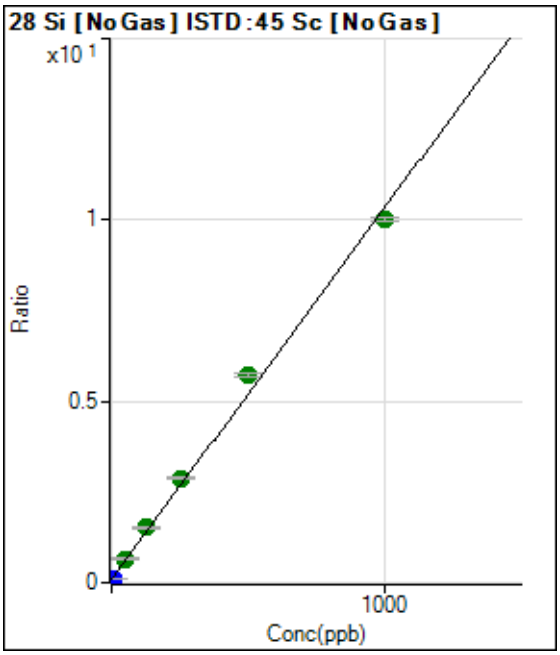


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	237.78	0.0020	P	23.4
2	☐	20.000	22.754	2716.94	0.0237	P	4.0
3	☐	1000.000	1046.123	112579.19	0.9973	P	0.8
4	☐	2500.000	2588.545	268716.03	2.4648	P	1.5
5	☐	5000.000	5146.944	521453.47	4.8989	P	0.2
6	☐	10000.000	9953.124	992530.29	9.4716	P	1.2
7	☐	20000.000	19703.486	1948213.19	18.7483	A	1.3
8	☐	100000.00	100053.96	9626727.08	95.1954	A	1.0

y = 9.5142E-004 * x + 0.0020
R = 1.0000
DL = 1.504
BEC = 2.144

Weight: <None>
Min Conc: 0

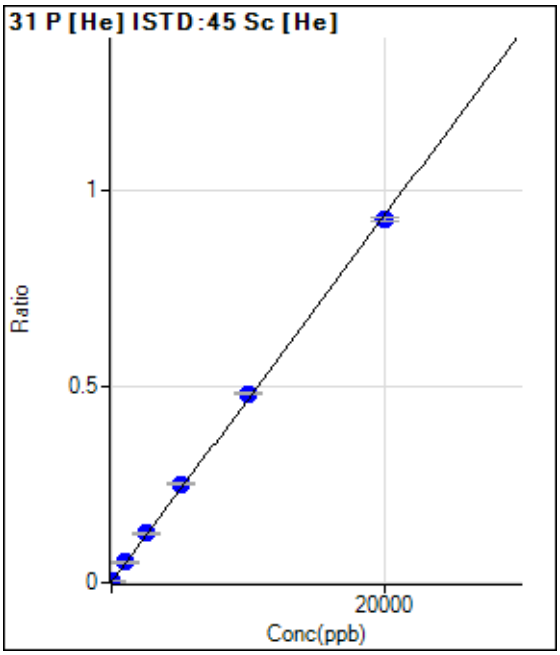
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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	521004.56	0.0916	P	0.9
2	☐	10.000	2.536	665625.66	0.1175	P	0.2
3	☐	50.000	55.631	3758148.35	0.6613	A	1.8
4	☐	125.000	139.329	8470213.63	1.5184	A	1.9
5	☐	250.000	271.663	15772456.15	2.8736	A	1.2
6	☐	500.000	549.687	29957795.66	5.7207	A	1.2
7	☐	1000.000	967.743	51367122.01	10.0019	A	1.2
8	☐			721578.62	0.1453	P	3.6

y = 0.0102 * x + 0.0916
R = 0.9976
DL = 0.2353
BEC = 8.942

Weight: <None>
Min Conc: 0

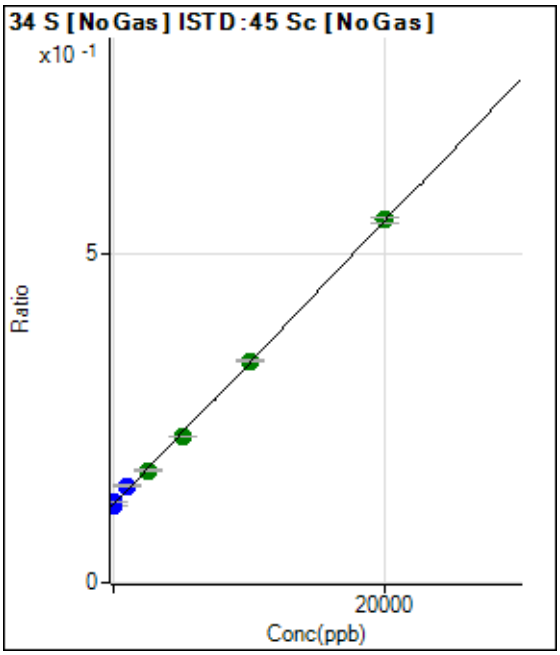


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-21.741	74.44	0.0006	P	22.3
2	☐	0.000	21.741	306.67	0.0027	P	11.8
3	☐	1000.000	1090.435	5947.96	0.0527	P	4.5
4	☐	2500.000	2655.495	13731.03	0.1260	P	3.0
5	☐	5000.000	5363.414	26902.78	0.2527	P	1.0
6	☐	10000.000	10254.506	50480.71	0.4817	P	1.0
7	☐	20000.000	19757.935	96289.90	0.9266	P	1.1
8	☐			138.89	0.0014	P	10.8

y = 4.6814E-005 * x + 0.0017
R = 0.9997
DL = 14.69
BEC = 35.39

Weight: <None>
Min Conc: 0

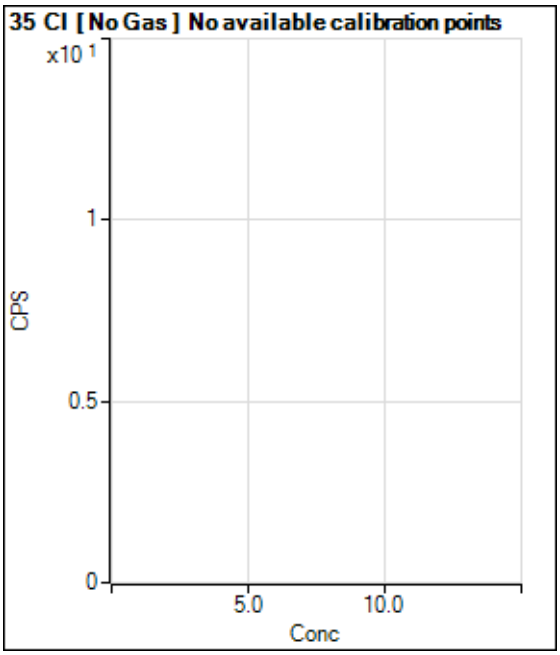
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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-108.351	669226.61	0.1176	P	0.5
2	☐	0.000	108.351	692553.80	0.1223	P	0.7
3	☐	1000.000	1263.847	837055.08	0.1473	P	1.0
4	☐	2500.000	2376.900	955874.86	0.1713	A	0.3
5	☐	5000.000	4753.403	1222413.00	0.2227	A	0.3
6	☐	10000.000	10098.666	1771460.11	0.3383	A	1.0
7	☐	20000.000	20014.511	2837976.80	0.5526	A	1.6
8	☐			537298.35	0.1082	P	1.7

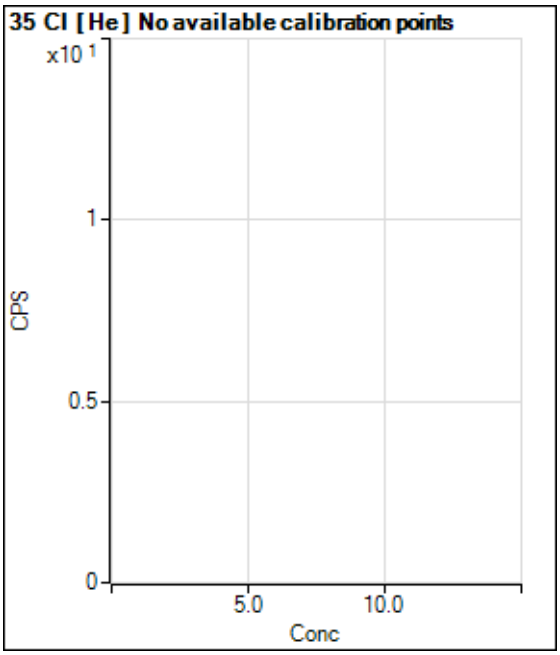
y = 2.1617E-005 * x + 0.1200
R = 0.9997
DL = 105.2
BEC = 5549

Weight: <None>
Min Conc: 0

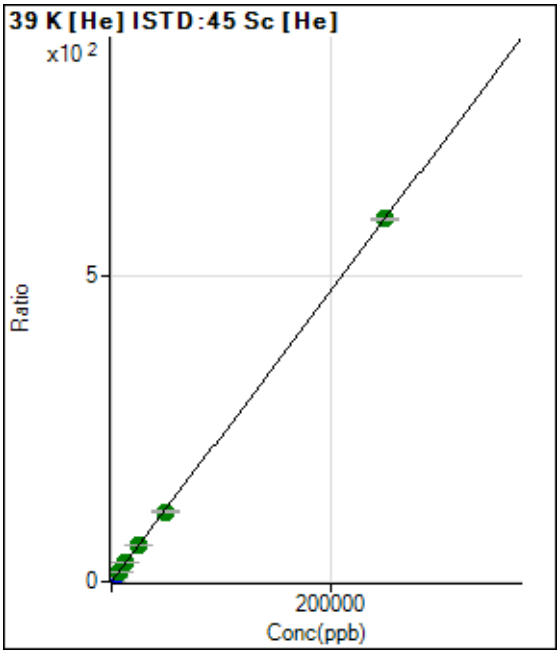


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			133156.68		P	0.4
2	☐			148717.76		P	0.3
3	☐			149546.29		P	0.9
4	☐			154357.90		P	0.5
5	☐			159523.14		P	0.3
6	☐			179681.65		P	0.5
7	☐			226943.87		P	1.4
8	☐			144992.90		P	1.0

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			555.57		P	7.2
2	☐			651.14		P	5.2
3	☐			630.02		P	8.8
4	☐			643.35		P	10.6
5	☐			632.24		P	8.6
6	☐			735.58		P	4.7
7	☐			928.93		P	4.3
8	☐			683.36		P	11.0

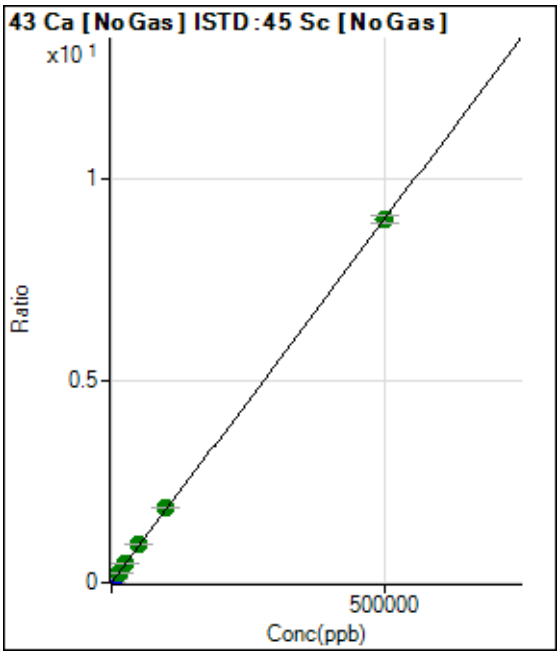


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18857.95	0.1618	P	1.7
2	☐	500.000	552.855	168338.13	1.4677	P	0.7
3	☐	2500.000	2563.823	701862.96	6.2177	P	0.7
4	☐	6250.000	6499.938	1691497.73	15.5151	A	1.3
5	☐	12500.000	12848.495	3247656.51	30.5108	A	0.6
6	☐	25000.000	24710.094	6133372.13	58.5286	A	0.7
7	☐	50000.000	48298.153	11872618.43	114.2452	A	0.5
8	☐	250000.00	250344.94	59816581.89	591.4930	A	0.2

y = 0.0024 * x + 0.1618
R = 1.0000
DL = 3.418
BEC = 68.49

Weight: <None>
Min Conc: 0

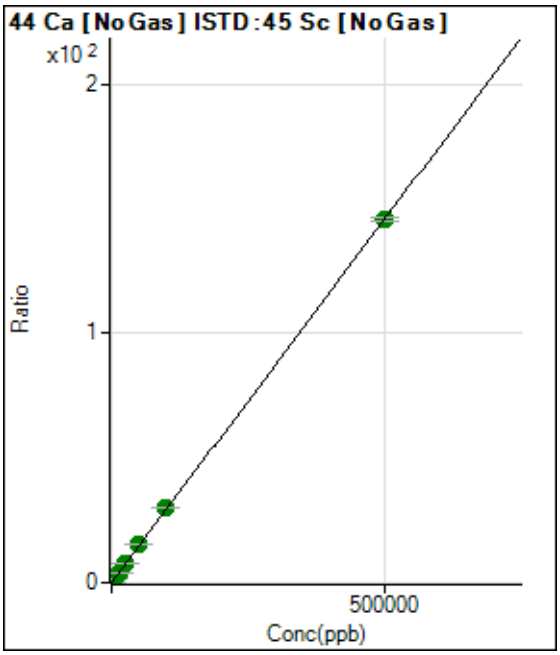
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Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1235.62	0.0002	P	7.9
2	☐	500.000	563.630	58599.81	0.0103	P	1.7
3	☐	5000.000	5168.137	529265.58	0.0931	P	0.3
4	☐	12500.000	13053.761	1310252.81	0.2349	A	1.0
5	☐	25000.000	25984.829	2564932.20	0.4673	A	1.4
6	☐	50000.000	52313.207	4925717.15	0.9406	A	1.3
7	☐	100000.00	103070.28	9516585.14	1.8530	A	0.9
8	☐	500000.00	499089.79	44546116.00	8.9717	A	2.0

y = 1.7976E-005 * x + 2.1723E-004
R = 1.0000
DL = 2.881
BEC = 12.08

Weight: <None>
Min Conc: 0

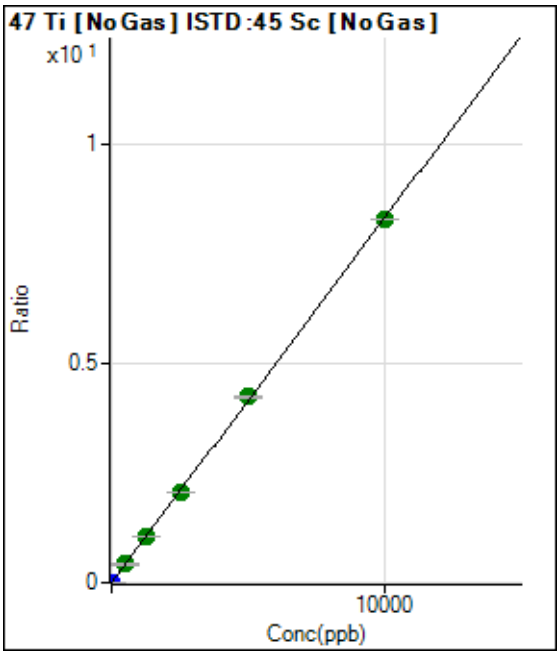


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38830.64	0.0068	P	0.5
2	☐	500.000	558.268	959761.82	0.1695	P	1.0
3	☐	5000.000	5176.351	8610652.93	1.5151	A	1.8
4	☐	12500.000	12996.150	21164259.41	3.7936	A	1.0
5	☐	25000.000	25602.090	40982488.56	7.4667	A	0.6
6	☐	50000.000	52410.255	80010732.14	15.2780	A	0.7
7	☐	100000.00	102288.86	153114124.38	29.8116	A	0.8
8	☐	500000.00	499256.87	722394522.57	145.4795	A	1.1

y = 2.9138E-004 * x + 0.0068
R = 1.0000
DL = 0.3741
BEC = 23.42

Weight: <None>
Min Conc: 0

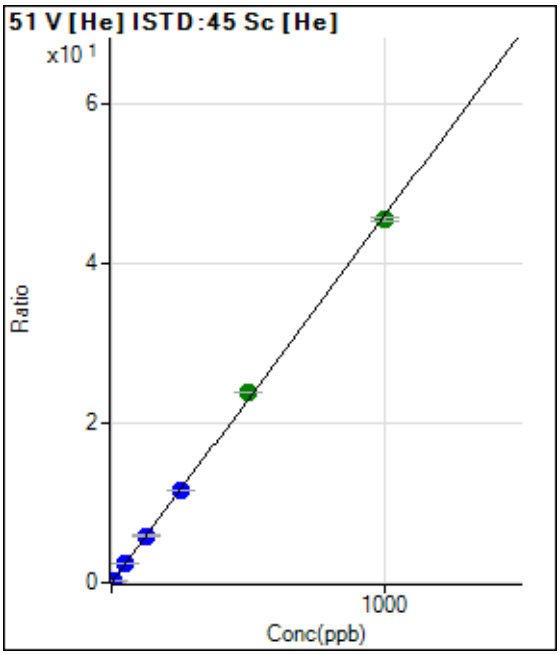
Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	782.92	0.0001	P	91.6
2	☐	5.000	5.451	26474.54	0.0047	P	2.9
3	☐	500.000	501.462	2373619.08	0.4176	A	0.9
4	☐	1250.000	1260.429	5854948.25	1.0495	A	0.8
5	☐	2500.000	2480.014	11333656.63	2.0649	A	0.4
6	☐	5000.000	5104.594	22258290.50	4.2500	A	0.7
7	☐	10000.000	9951.322	42552932.14	8.2852	A	0.1
8	☐			4972.02	0.0010	P	2.0

y = 8.3256E-004 * x + 1.3713E-004
R = 0.9999
DL = 0.4524
BEC = 0.1647

Weight: <None>
Min Conc: 0

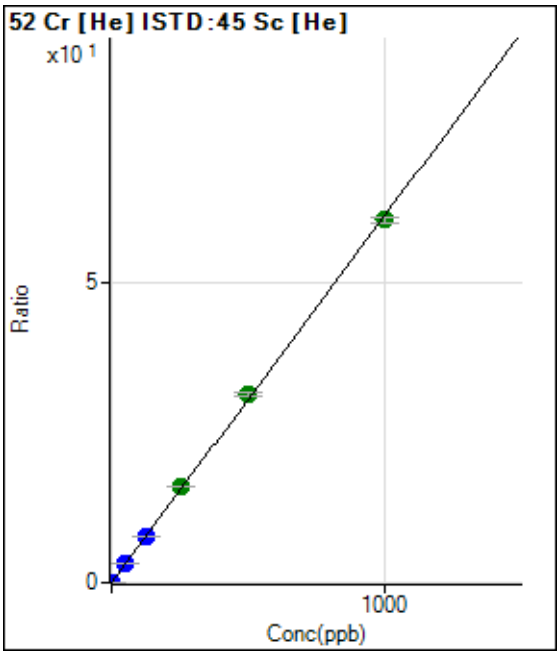


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0005	P	33.3
2	☐	5.000	5.643	29853.36	0.2603	P	1.3
3	☐	50.000	50.942	264769.09	2.3456	P	0.9
4	☐	125.000	127.976	642362.70	5.8919	P	1.1
5	☐	250.000	253.577	1242592.56	11.6739	P	0.5
6	☐	500.000	518.910	2503353.92	23.8885	A	0.6
7	☐	1000.000	989.229	4732378.40	45.5397	A	1.1
8	☐			1204.51	0.0119	P	3.8

y = 0.0460 * x + 4.7694E-004
R = 0.9997
DL = 0.01035
BEC = 0.01036

Weight: <None>
Min Conc: 0

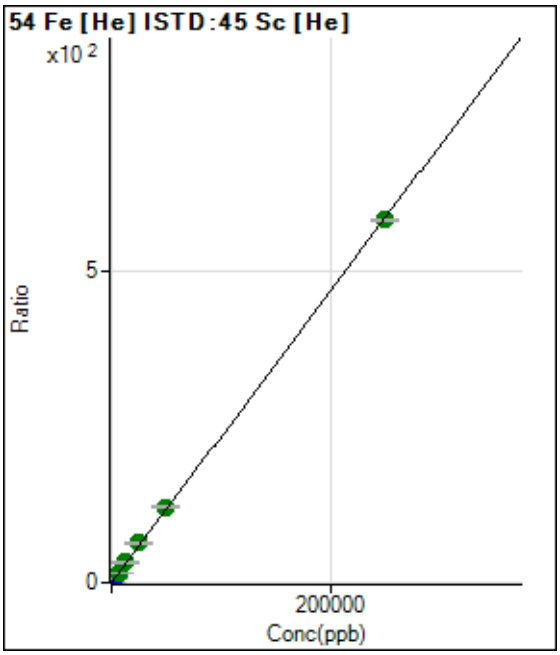
Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1795.68	0.0154	P	2.3
2	☐	2.000	2.263	17620.94	0.1536	P	0.7
3	☐	50.000	50.310	348525.04	3.0877	P	1.2
4	☐	125.000	125.805	839231.29	7.6979	P	1.5
5	☐	250.000	263.925	1717188.60	16.1325	A	0.1
6	☐	500.000	513.942	3290316.10	31.4003	A	1.7
7	☐	1000.000	989.431	6280117.68	60.4370	A	1.6
8	☐			51583.63	0.5101	P	1.3

y = 0.0611 * x + 0.0154
R = 0.9997
DL = 0.01776
BEC = 0.2523

Weight: <None>
Min Conc: 0

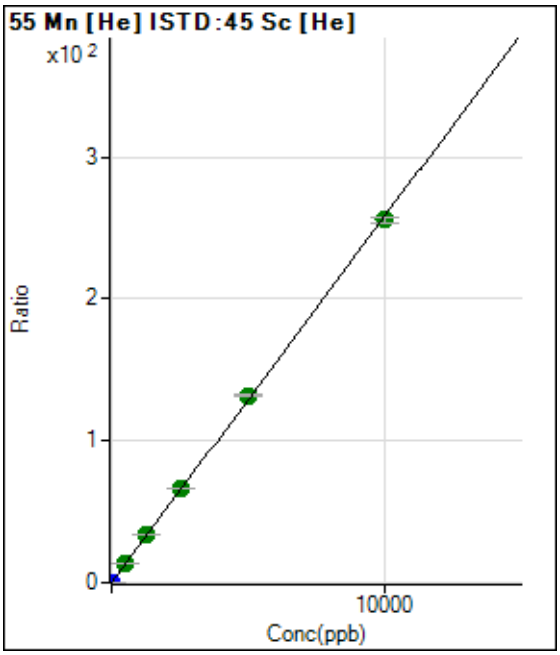


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1002.33	0.0086	P	16.3
2	☐	50.000	60.642	17206.01	0.1500	P	1.8
3	☐	2500.000	2707.539	713683.17	6.3223	P	0.3
4	☐	6250.000	7121.022	1811306.52	16.6141	A	1.7
5	☐	12500.000	13870.847	3443913.63	32.3541	A	1.0
6	☐	25000.000	27084.845	6619163.93	63.1679	A	1.6
7	☐	50000.000	52119.735	12630299.81	121.5469	A	1.6
8	☐	250000.00	249275.17	58785386.90	581.2946	A	0.3

y = 0.0023 * x + 0.0086
R = 0.9999
DL = 1.805
BEC = 3.689

Weight: <None>
Min Conc: 0

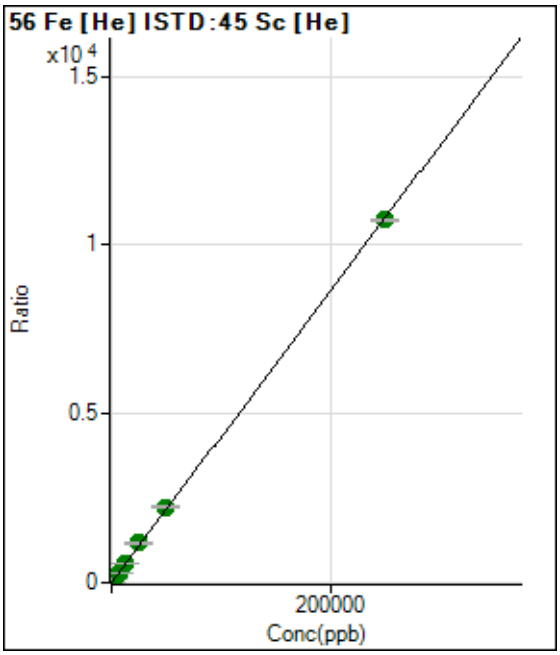
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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5373.29	0.0461	P	2.8
2	☐	1.000	1.144	8669.47	0.0756	P	3.5
3	☐	500.000	525.353	1533861.45	13.5892	A	1.7
4	☐	1250.000	1312.313	3693333.83	33.8764	A	1.2
5	☐	2500.000	2586.160	7101468.43	66.7150	A	0.9
6	☐	5000.000	5117.174	13827821.88	131.9623	A	1.7
7	☐	10000.000	9910.816	26553200.44	255.5382	A	1.8
8	☐			13926.90	0.1377	P	2.9

y = 0.0258 * x + 0.0461
R = 0.9998
DL = 0.152
BEC = 1.788

Weight: <None>
Min Conc: 0

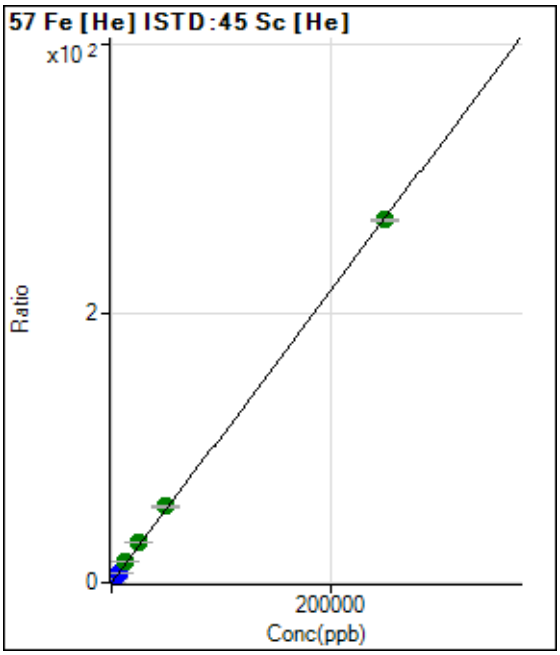


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12411.05	0.1065	P	0.9
2	☐	50.000	58.775	302671.91	2.6388	P	0.6
3	☐	2500.000	2769.600	13481185.91	119.4366	A	1.6
4	☐	6250.000	6985.172	32820770.90	301.0674	A	1.9
5	☐	12500.000	13666.225	62686247.96	588.9251	A	0.7
6	☐	25000.000	27087.473	122307325.95	1,167.1887	A	1.4
7	☐	50000.000	52077.714	233158778.74	2,243.9104	A	2.0
8	☐	250000.00	249296.32	1086248046.0	10,741.208	A	0.6

y = 0.0431 * x + 0.1065
R = 0.9999
DL = 0.07038
BEC = 2.471

Weight: <None>
Min Conc: 0

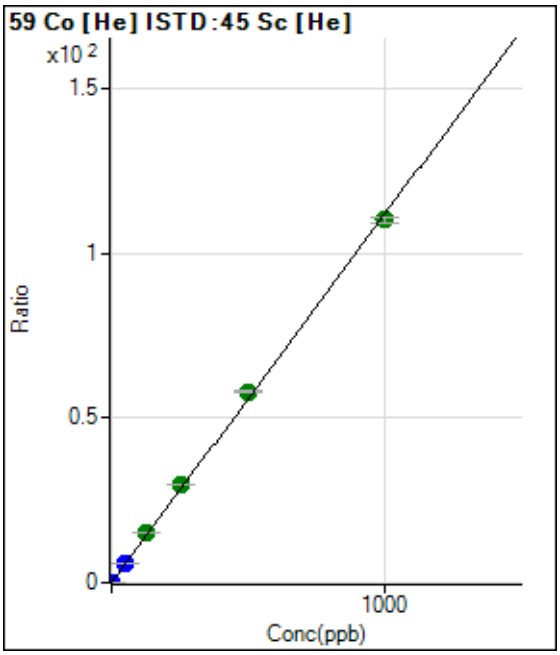
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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	275.56	0.0024	P	13.2
2	☐	50.000	60.160	7742.17	0.0675	P	3.5
3	☐	2500.000	2677.931	327575.16	2.9020	P	0.7
4	☐	6250.000	6733.772	795158.43	7.2936	P	1.4
5	☐	12500.000	14045.257	1618984.85	15.2104	A	1.3
6	☐	25000.000	27362.022	3104858.74	29.6296	A	1.3
7	☐	50000.000	52196.347	5873051.58	56.5199	A	1.6
8	☐	250000.00	249233.39	27291423.76	269.8693	A	0.6

y = 0.0011 * x + 0.0024
R = 0.9999
DL = 0.8672
BEC = 2.183

Weight: <None>
Min Conc: 0

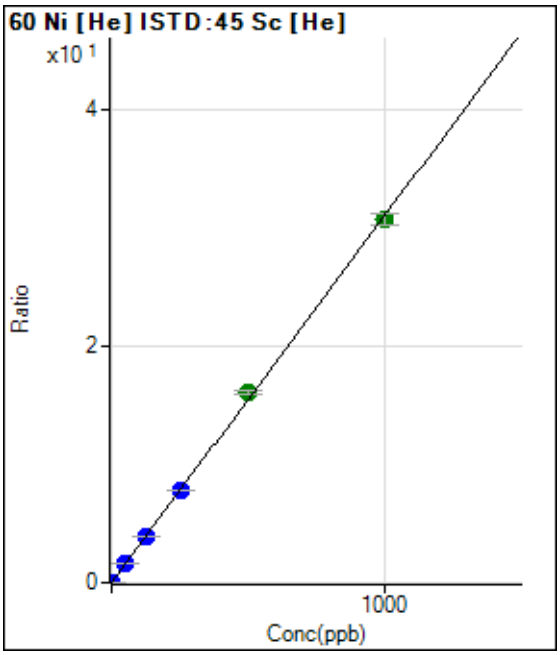


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	171.11	0.0015	P	13.0
2	☐	1.000	1.182	15324.98	0.1336	P	1.3
3	☐	50.000	51.731	653047.90	5.7851	P	0.8
4	☐	125.000	135.273	1649265.18	15.1254	A	1.0
5	☐	250.000	266.253	3168596.55	29.7692	A	1.3
6	☐	500.000	518.244	6071754.01	57.9426	A	1.3
7	☐	1000.000	985.444	11448321.64	110.1768	A	1.9
8	☐			23301.35	0.2304	P	1.7

y = 0.1118 * x + 0.0015
R = 0.9996
DL = 0.005118
BEC = 0.01313

Weight: <None>
Min Conc: 0

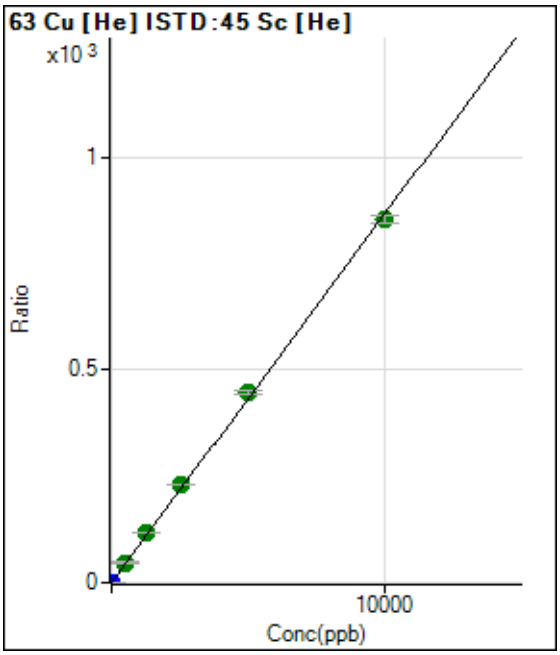
Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	843.37	0.0072	P	8.4
2	☐	1.000	1.150	4925.35	0.0429	P	0.7
3	☐	50.000	51.061	179742.33	1.5924	P	1.4
4	☐	125.000	126.322	428294.37	3.9288	P	1.9
5	☐	250.000	250.697	829163.11	7.7898	P	0.6
6	☐	500.000	520.621	1694269.91	16.1694	A	2.2
7	☐	1000.000	989.297	3191607.73	30.7189	A	3.3
8	☐			14531.99	0.1437	P	1.2

y = 0.0310 * x + 0.0072
R = 0.9997
DL = 0.05849
BEC = 0.233

Weight: <None>
Min Conc: 0

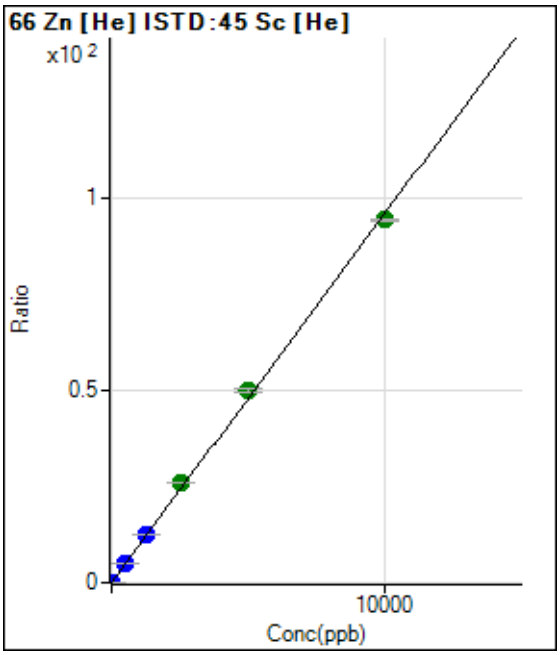


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2247.98	0.0193	P	3.5
2	☐	2.000	2.401	26046.13	0.2271	P	2.2
3	☐	500.000	544.165	5317973.32	47.1145	A	1.7
4	☐	1250.000	1346.134	12703622.03	116.5218	A	1.2
5	☐	2500.000	2678.548	24677319.63	231.8369	A	0.5
6	☐	5000.000	5182.220	46999054.30	448.5197	A	1.7
7	☐	10000.000	9850.028	88581506.46	852.4997	A	2.0
8	☐			23184.56	0.2293	P	1.9

y = 0.0865 * x + 0.0193
R = 0.9996
DL = 0.02312
BEC = 0.2228

Weight: <None>
Min Conc: 0

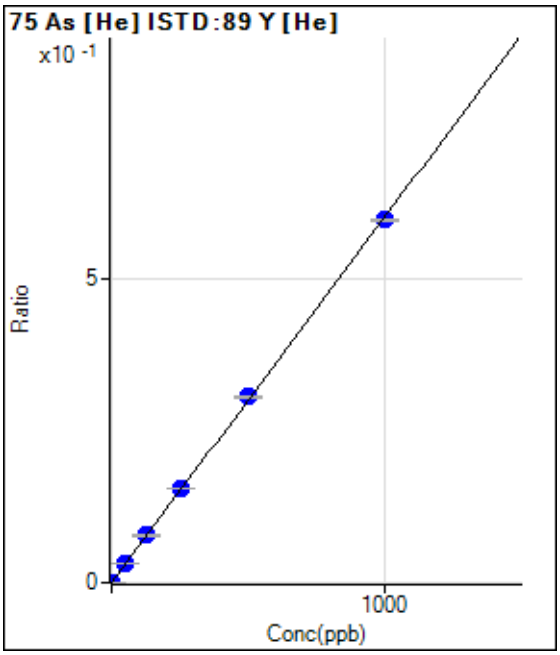
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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1894.59	0.0163	P	2.8
2	☐	5.000	5.773	8201.33	0.0715	P	3.9
3	☐	500.000	512.640	555615.71	4.9223	P	0.9
4	☐	1250.000	1286.696	1344258.97	12.3301	P	1.3
5	☐	2500.000	2701.919	2754107.32	25.8739	A	0.5
6	☐	5000.000	5207.557	5224049.16	49.8531	A	1.4
7	☐	10000.000	9840.522	9788510.27	94.1910	A	0.6
8	☐			57579.45	0.5694	P	1.1

y = 0.0096 * x + 0.0163
R = 0.9994
DL = 0.1403
BEC = 1.698

Weight: <None>
Min Conc: 0

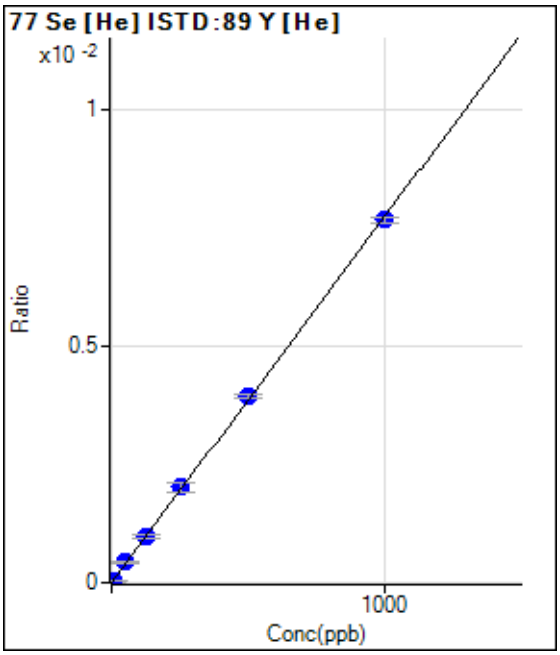


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.78	0.0000	P	137.
2	☐	1.000	1.143	777.81	0.0007	P	3.5
3	☐	50.000	51.942	34667.01	0.0312	P	1.0
4	☐	125.000	129.310	83755.75	0.0776	P	0.7
5	☐	250.000	257.075	163787.26	0.1543	P	0.9
6	☐	500.000	508.297	313016.33	0.3051	P	1.0
7	☐	1000.000	993.447	599148.58	0.5964	P	0.8
8	☐			316.67	0.0003	P	6.7

y = 6.0030E-004 * x + 6.8312E-006
R = 0.9999
DL = 0.04697
BEC = 0.01138

Weight: <None>
Min Conc: 0

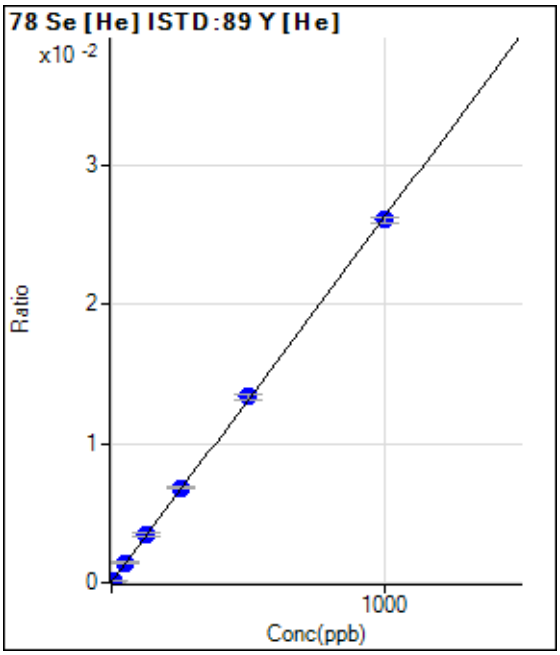
Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.22	0.0000	P	86.6
2	☐	5.000	6.651	60.00	0.0001	P	27.8
3	☐	50.000	56.925	492.24	0.0004	P	8.0
4	☐	125.000	126.838	1062.28	0.0010	P	8.9
5	☐	250.000	260.569	2143.51	0.0020	P	8.7
6	☐	500.000	510.268	4055.06	0.0040	P	1.4
7	☐	1000.000	991.639	7717.74	0.0077	P	1.8
8	☐			7.78	0.0000	P	108.

y = 7.7431E-006 * x + 1.9494E-006
R = 0.9999
DL = 0.6541
BEC = 0.2518

Weight: <None>
Min Conc: 0

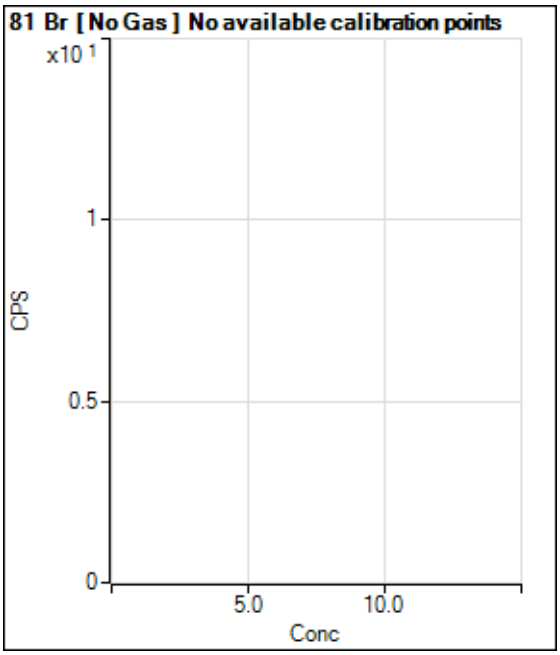


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	30.6
2	☐	5.000	5.590	192.23	0.0002	P	10.1
3	☐	50.000	53.553	1590.11	0.0014	P	8.1
4	☐	125.000	131.833	3758.32	0.0035	P	6.4
5	☐	250.000	258.388	7225.25	0.0068	P	2.3
6	☐	500.000	508.515	13719.00	0.0134	P	2.7
7	☐	1000.000	992.611	26203.39	0.0261	P	1.9
8	☐			28.89	0.0000	P	27.0

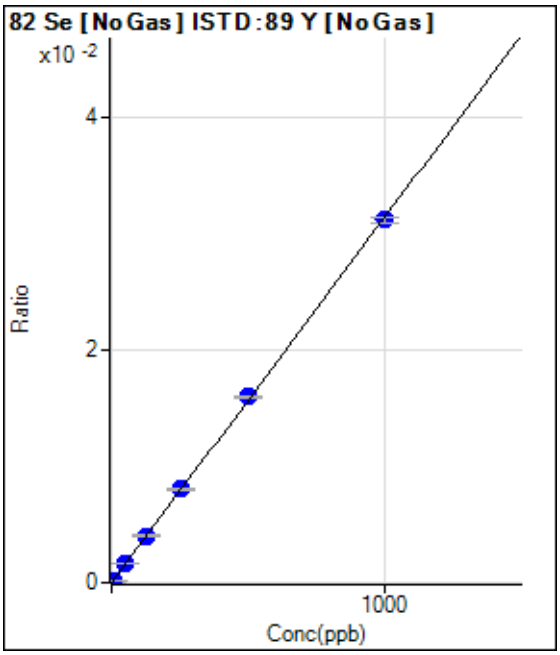
y = 2.6250E-005 * x + 2.4466E-005
R = 0.9999
DL = 0.8553
BEC = 0.932

Weight: <None>
Min Conc: 0

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			35273.26		P	0.8
2	☐			35411.55		P	1.1
3	☐			34658.32		P	1.9
4	☐			32848.57		P	0.3
5	☐			32605.79		P	1.6
6	☐			32587.98		P	0.4
7	☐			32758.35		P	3.0
8	☐			31583.46		P	2.3

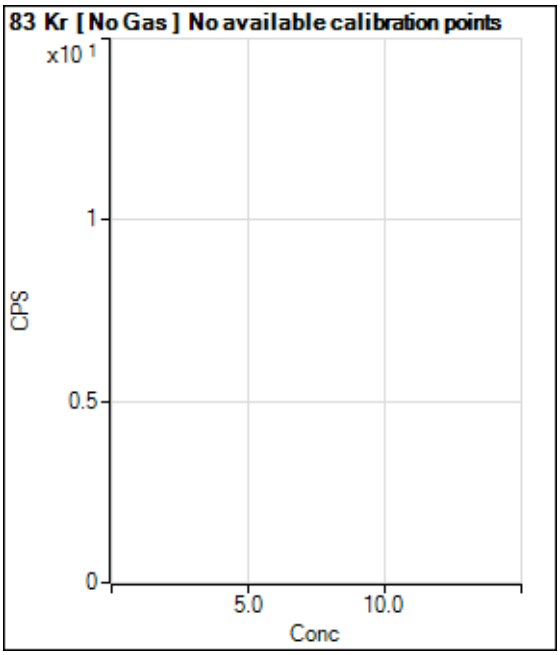


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	32.22	0.0000	P	88.7
2	☐	5.000	5.624	2722.58	0.0002	P	3.4
3	☐	50.000	51.655	24734.70	0.0016	P	1.6
4	☐	125.000	128.240	61275.86	0.0040	P	1.3
5	☐	250.000	256.417	119387.50	0.0080	P	2.3
6	☐	500.000	508.329	232028.98	0.0159	P	0.8
7	☐	1000.000	993.740	444824.33	0.0312	P	1.3
8	☐			333.36	0.0000	P	28.2

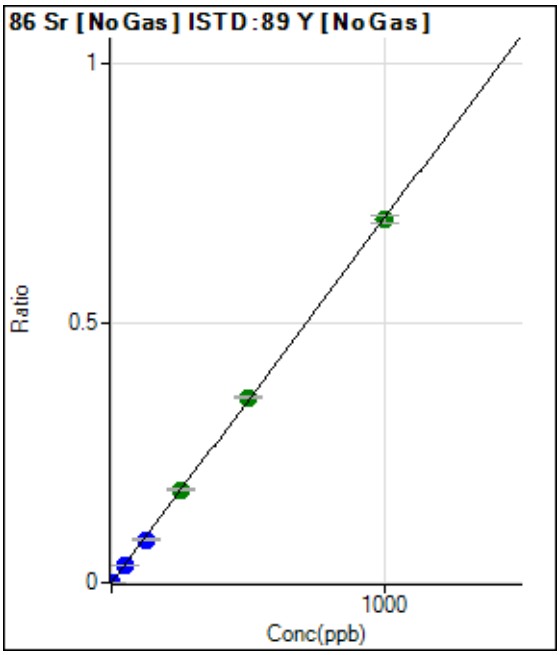
y = 3.1354E-005 * x + 2.0825E-006
R = 0.9999
DL = 0.1767
BEC = 0.06642

Weight: <None>
Min Conc: 0

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			338.90		P	5.0
2	☐			336.68		P	8.5
3	☐			334.45		P	3.2
4	☐			374.45		P	3.7
5	☐			376.68		P	8.4
6	☐			357.79		P	5.5
7	☐			375.57		P	13.4
8	☐			445.56		P	13.3

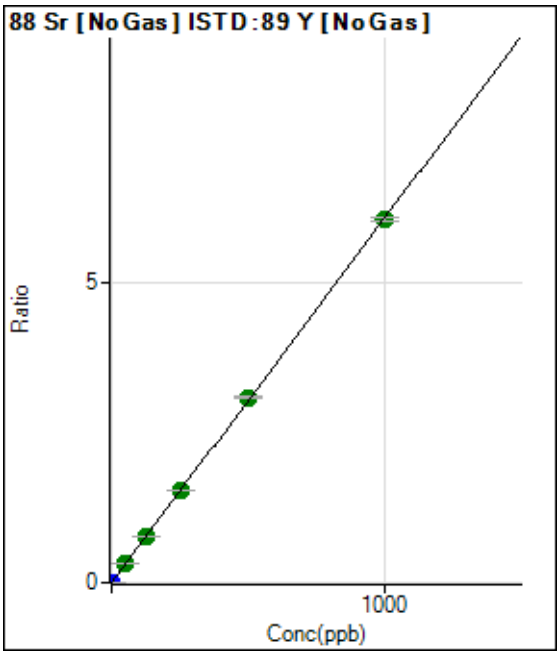


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	557.79	0.0000	P	5.7
2	☐	1.000	1.039	11688.30	0.0008	P	2.7
3	☐	50.000	47.884	513529.29	0.0337	P	1.2
4	☐	125.000	118.543	1268736.80	0.0833	P	0.7
5	☐	250.000	255.750	2667109.35	0.1797	A	1.5
6	☐	500.000	508.629	5200194.57	0.3573	A	1.2
7	☐	1000.000	995.161	9978985.06	0.6990	A	2.3
8	☐			30076.87	0.0022	P	1.7

y = 7.0233E-004 * x + 3.6179E-005
R = 0.9999
DL = 0.008852
BEC = 0.05151

Weight: <None>
Min Conc: 0

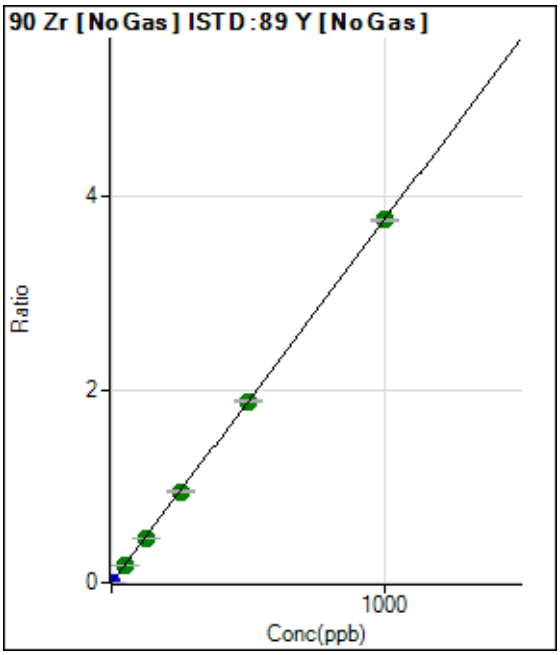
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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	626.69	0.0000	P	1.2
2	☐	1.000	1.051	98150.76	0.0064	P	0.9
3	☐	50.000	50.824	4717066.67	0.3093	A	1.4
4	☐	125.000	125.624	11642886.63	0.7644	A	1.1
5	☐	250.000	252.234	22782396.88	1.5347	A	1.2
6	☐	500.000	507.170	44919652.11	3.0858	A	0.9
7	☐	1000.000	995.737	86488089.82	6.0583	A	1.0
8	☐			260201.07	0.0189	P	0.7

y = 0.0061 * x + 4.0636E-005
R = 1.0000
DL = 0.0002439
BEC = 0.006679

Weight: <None>
Min Conc: 0

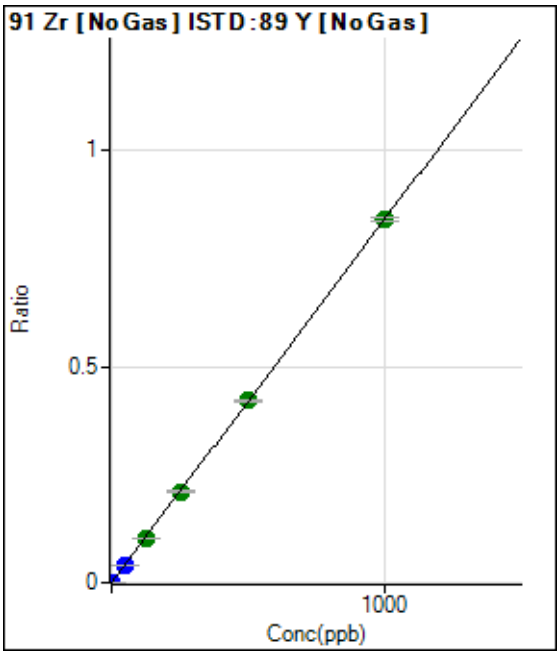


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1247.87	0.0001	P	8.1
2	☐	1.000	1.055	61805.23	0.0041	P	1.6
3	☐	50.000	50.072	2875399.61	0.1885	A	0.6
4	☐	125.000	122.588	7027851.08	0.4614	A	1.5
5	☐	250.000	251.247	14037348.12	0.9456	A	0.9
6	☐	500.000	500.635	27423540.15	1.8841	A	1.4
7	☐	1000.000	999.669	53707199.20	3.7621	A	0.5
8	☐			23742.48	0.0017	P	1.7

y = 0.0038 * x + 8.0938E-005
R = 1.0000
DL = 0.005252
BEC = 0.02151

Weight: <None>
Min Conc: 0

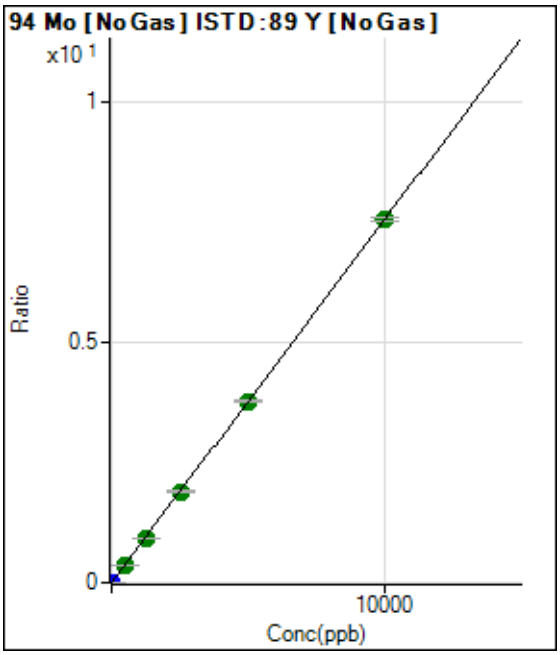
Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	295.56	0.0000	P	15.7
2	☐	1.000	1.022	13375.40	0.0009	P	3.1
3	☐	50.000	47.075	602942.75	0.0395	P	0.6
4	☐	125.000	123.179	1574981.15	0.1034	A	1.9
5	☐	250.000	250.587	3122533.25	0.2103	A	2.0
6	☐	500.000	501.947	6132638.59	0.4213	A	0.9
7	☐	1000.000	999.254	11973336.35	0.8387	A	0.9
8	☐			5264.38	0.0004	P	2.9

y = 8.3933E-004 * x + 1.9177E-005
R = 1.0000
DL = 0.01079
BEC = 0.02285

Weight: <None>
Min Conc: 0

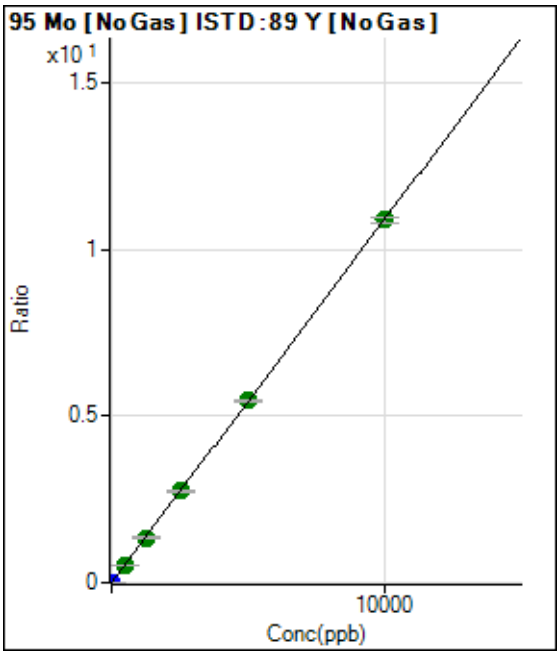


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	556.68	0.0000	P	11.1
2	☐	5.000	6.172	71685.86	0.0047	P	2.0
3	☐	500.000	498.398	5743499.92	0.3766	A	1.3
4	☐	1250.000	1231.747	14173462.84	0.9306	A	1.7
5	☐	2500.000	2507.934	28125705.13	1.8947	A	2.2
6	☐	5000.000	5004.549	55029396.40	3.7808	A	1.4
7	☐	10000.000	9998.103	107825137.28	7.5532	A	1.2
8	☐			20144.74	0.0015	P	2.6

y = 7.5546E-004 * x + 3.6111E-005
R = 1.0000
DL = 0.0159
BEC = 0.0478

Weight: <None>
Min Conc: 0

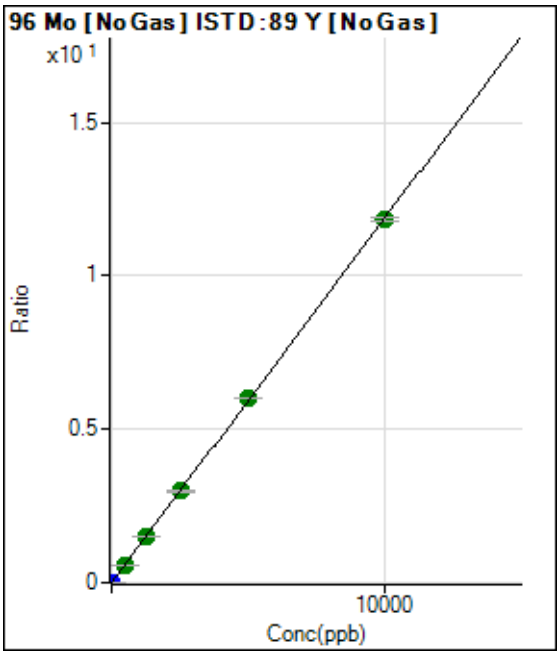
Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	266.67	0.0000	P	11.8
2	☐	5.000	5.147	85753.37	0.0056	P	1.5
3	☐	500.000	495.244	8224318.90	0.5392	A	0.7
4	☐	1250.000	1235.271	20483871.50	1.3449	A	1.6
5	☐	2500.000	2516.811	40675606.34	2.7401	A	2.6
6	☐	5000.000	5015.105	79471915.48	5.4600	A	1.3
7	☐	10000.000	9990.324	155267525.46	10.8766	A	1.8
8	☐			20568.68	0.0015	P	1.8

y = 0.0011 * x + 1.7300E-005
R = 1.0000
DL = 0.005613
BEC = 0.01589

Weight: <None>
Min Conc: 0

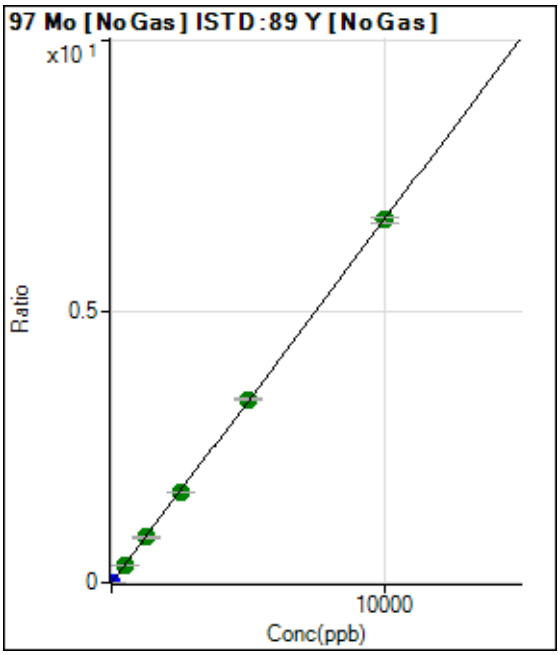


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	380.01	0.0000	P	5.1
2	☐	5.000	5.191	94392.20	0.0062	P	1.5
3	☐	500.000	498.230	9021143.06	0.5914	A	1.3
4	☐	1250.000	1254.734	22685750.77	1.4894	A	1.4
5	☐	2500.000	2519.217	44391514.34	2.9904	A	1.9
6	☐	5000.000	5064.915	87512567.59	6.0121	A	0.8
7	☐	10000.000	9962.235	168815070.82	11.8253	A	0.9
8	☐			36495.73	0.0026	P	3.9

y = 0.0012 * x + 2.4640E-005
R = 1.0000
DL = 0.003175
BEC = 0.02076

Weight: <None>
Min Conc: 0

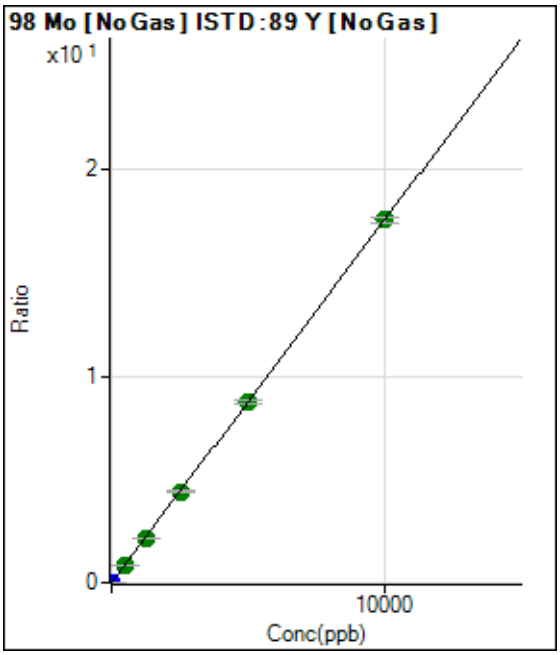
Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	176.67	0.0000	P	17.0
2	☐	5.000	5.191	53212.62	0.0035	P	1.3
3	☐	500.000	497.358	5079834.96	0.3330	A	2.1
4	☐	1250.000	1246.386	12713046.48	0.8346	A	0.6
5	☐	2500.000	2486.080	24712603.80	1.6647	A	1.5
6	☐	5000.000	5034.961	49073329.27	3.3715	A	1.3
7	☐	10000.000	9986.583	95460739.69	6.6871	A	1.5
8	☐			12060.87	0.0009	P	5.5

y = 6.6961E-004 * x + 1.1459E-005
R = 1.0000
DL = 0.008719
BEC = 0.01711

Weight: <None>
Min Conc: 0

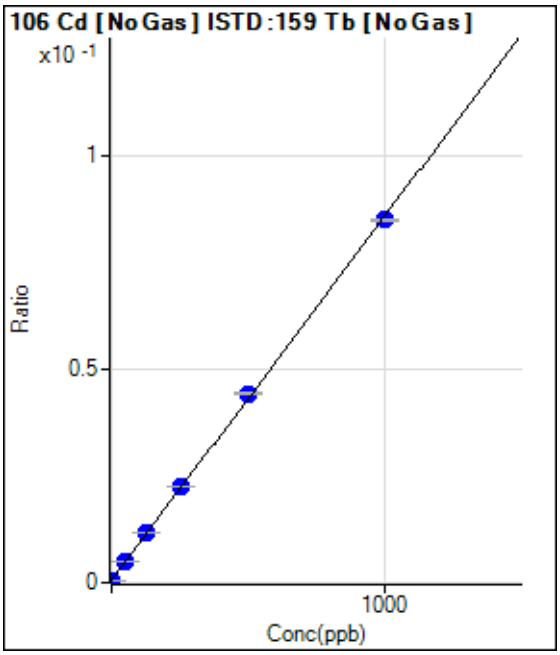


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	463.35	0.0000	P	8.8
2	☐	5.000	5.108	137195.13	0.0090	P	2.6
3	☐	500.000	494.930	13244875.91	0.8684	A	2.0
4	☐	1250.000	1229.126	32846890.34	2.1565	A	1.1
5	☐	2500.000	2499.877	65108290.14	4.3860	A	2.0
6	☐	5000.000	4995.575	127568496.99	8.7645	A	1.5
7	☐	10000.000	10005.106	250582994.04	17.5535	A	1.6
8	☐			30064.96	0.0022	P	5.3

y = 0.0018 * x + 3.0035E-005
R = 1.0000
DL = 0.0045
BEC = 0.01712

Weight: <None>
Min Conc: 0

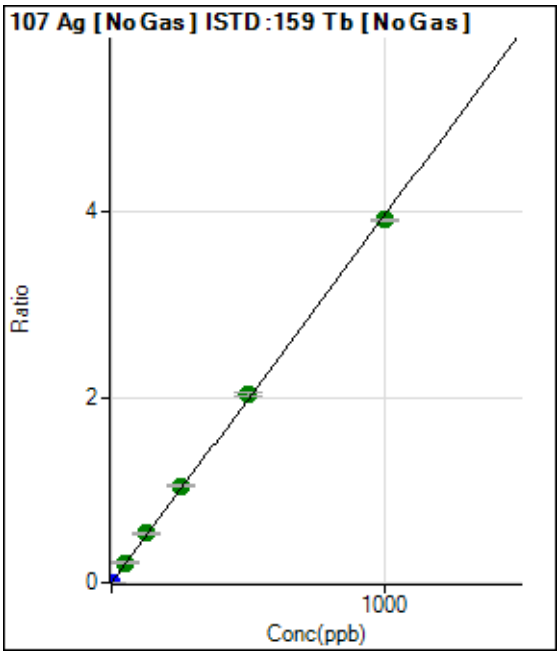
Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5222.14	0.0005	P	5.8
2	☐	1.000	1.529	6335.95	0.0007	P	0.7
3	☐	50.000	53.211	50235.50	0.0051	P	2.1
4	☐	125.000	131.214	116322.95	0.0117	P	1.6
5	☐	250.000	257.204	221487.31	0.0224	P	0.7
6	☐	500.000	512.877	428777.08	0.0442	P	1.1
7	☐	1000.000	990.823	815102.97	0.0849	P	0.5
8	☐			5040.97	0.0006	P	2.8

y = 8.5117E-005 * x + 5.3130E-004
R = 0.9998
DL = 1.088
BEC = 6.242

Weight: <None>
Min Conc: 0

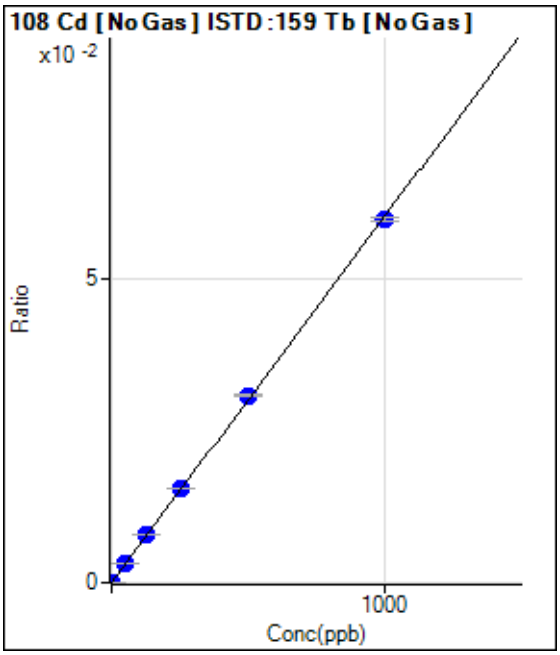


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	165.56	0.0000	P	16.1
2	☐	1.000	1.112	42373.75	0.0044	P	0.8
3	☐	50.000	54.879	2159897.19	0.2176	A	2.1
4	☐	125.000	133.850	5275622.70	0.5306	A	1.8
5	☐	250.000	263.261	10307746.23	1.0437	A	0.9
6	☐	500.000	514.678	19798814.85	2.0404	A	1.7
7	☐	1000.000	987.995	37617480.55	3.9168	A	0.6
8	☐			3805.01	0.0004	P	12.0

y = 0.0040 * x + 1.6820E-005
R = 0.9997
DL = 0.002045
BEC = 0.004243

Weight: <None>
Min Conc: 0

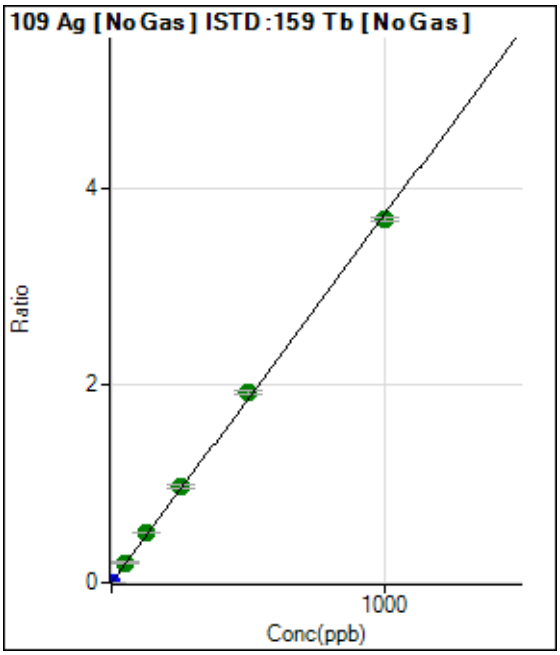
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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	71.0
2	☐	1.000	1.181	698.92	0.0001	P	13.8
3	☐	50.000	53.264	31950.24	0.0032	P	1.7
4	☐	125.000	130.637	78452.67	0.0079	P	2.1
5	☐	250.000	257.477	153593.76	0.0156	P	1.5
6	☐	500.000	511.777	299927.48	0.0309	P	1.2
7	☐	1000.000	991.374	575017.21	0.0599	P	1.1
8	☐			227.78	0.0000	P	8.4

y = 6.0392E-005 * x + 1.6856E-006
R = 0.9999
DL = 0.05944
BEC = 0.02791

Weight: <None>
Min Conc: 0

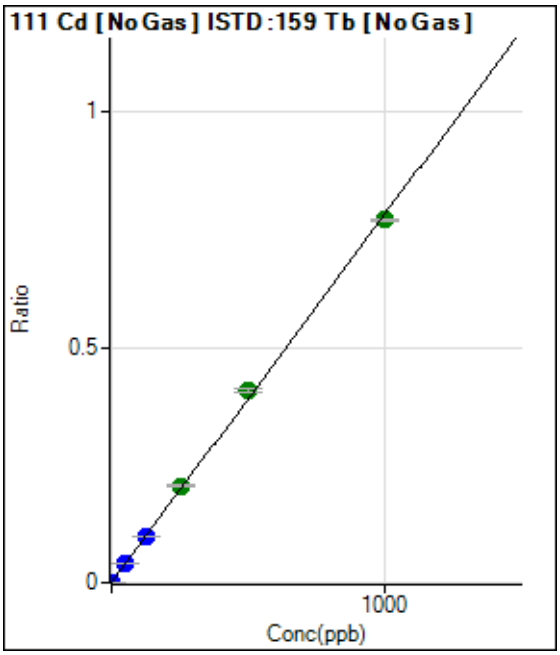


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	98.89	0.0000	P	29.1
2	☐	1.000	1.127	40364.57	0.0042	P	0.3
3	☐	50.000	54.379	2014206.72	0.2029	A	2.2
4	☐	125.000	135.428	5024034.13	0.5053	A	2.4
5	☐	250.000	260.666	9605052.36	0.9726	A	3.2
6	☐	500.000	519.849	18821430.27	1.9396	A	2.0
7	☐	1000.000	985.886	35328428.64	3.6784	A	1.2
8	☐			3512.71	0.0004	P	12.8

y = 0.0037 * x + 1.0083E-005
R = 0.9996
DL = 0.002362
BEC = 0.002703

Weight: <None>
Min Conc: 0

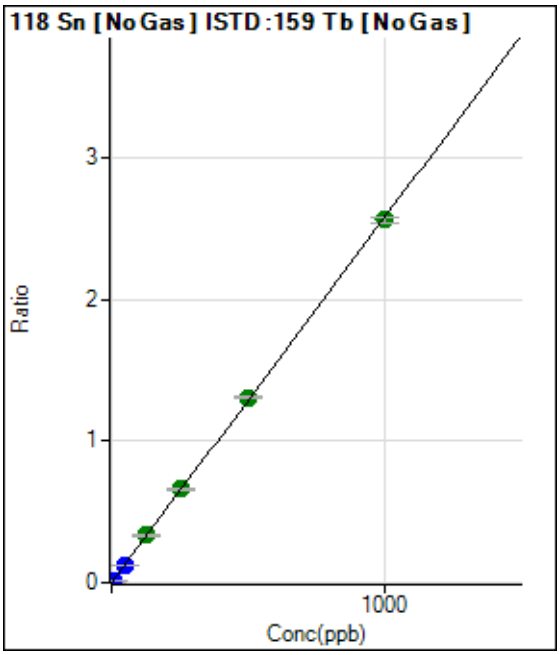
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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3680.50	0.0004	P	5.6
2	☐	1.000	1.186	12453.08	0.0013	P	1.0
3	☐	50.000	50.861	397851.40	0.0401	P	1.8
4	☐	125.000	124.839	972590.15	0.0978	P	1.7
5	☐	250.000	262.326	2026151.51	0.2052	A	1.5
6	☐	500.000	521.655	3955001.01	0.4076	A	2.1
7	☐	1000.000	986.068	7396543.33	0.7701	A	0.4
8	☐			4375.94	0.0005	P	2.6

y = 7.8062E-004 * x + 3.7446E-004
R = 0.9995
DL = 0.08034
BEC = 0.4797

Weight: <None>
Min Conc: 0

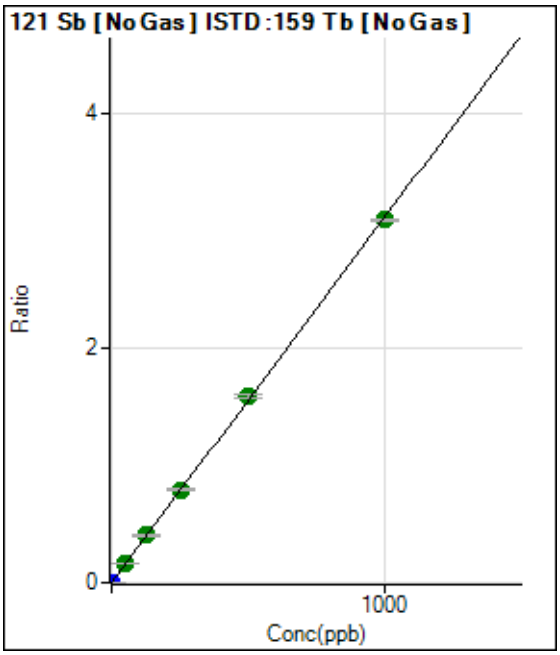


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5302.37	0.0005	P	22.5
2	☐	5.000	5.418	138919.80	0.0145	P	0.3
3	☐	50.000	49.197	1264139.96	0.1273	P	1.5
4	☐	125.000	128.925	3308690.23	0.3328	A	2.0
5	☐	250.000	256.033	6522628.52	0.6604	A	1.7
6	☐	500.000	508.148	12713415.51	1.3102	A	1.2
7	☐	1000.000	993.965	24609700.46	2.5622	A	1.5
8	☐			7394.28	0.0008	P	1.1

y = 0.0026 * x + 5.3953E-004
R = 0.9999
DL = 0.141
BEC = 0.2093

Weight: <None>
Min Conc: 0

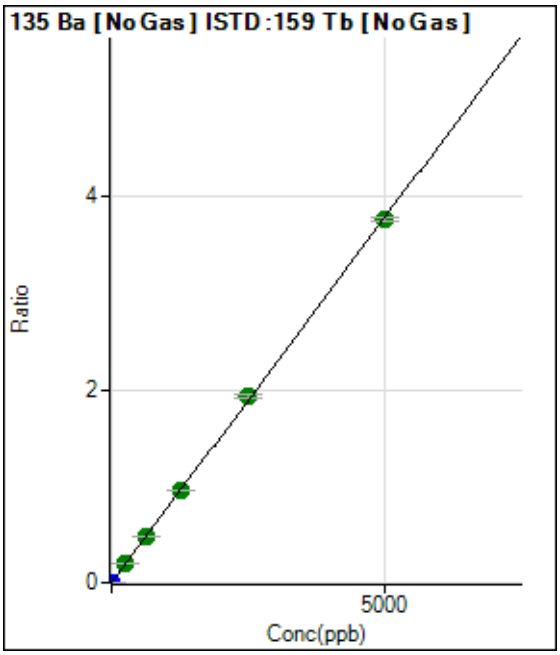
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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	138.89	0.0000	P	13.5
2	☐	2.000	2.165	64797.02	0.0068	P	1.2
3	☐	50.000	51.663	1599093.88	0.1611	A	1.6
4	☐	125.000	129.507	4014200.18	0.4038	A	2.0
5	☐	250.000	254.755	7844543.22	0.7942	A	1.7
6	☐	500.000	509.134	15401882.97	1.5873	A	2.3
7	☐	1000.000	993.597	29750982.61	3.0976	A	0.4
8	☐			17106.34	0.0019	P	0.8

y = 0.0031 * x + 1.4147E-005
R = 0.9999
DL = 0.00184
BEC = 0.004538

Weight: <None>
Min Conc: 0

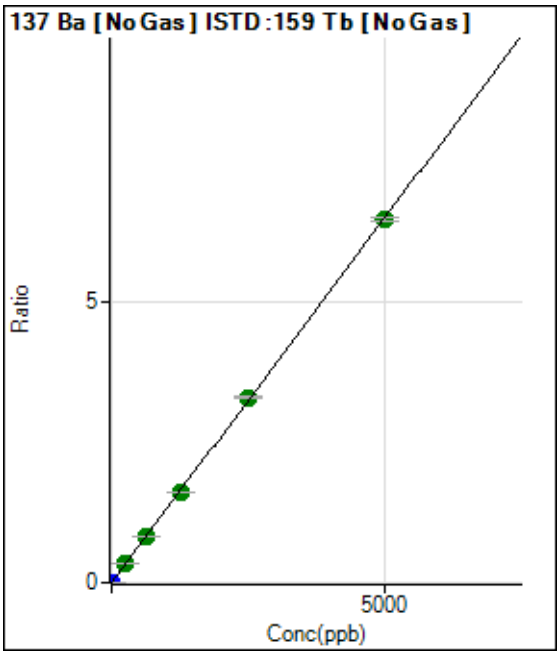


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	203.34	0.0000	P	15.4
2	☐	10.000	10.810	78431.97	0.0082	P	0.7
3	☐	250.000	260.881	1956968.31	0.1971	A	1.6
4	☐	625.000	631.029	4740035.73	0.4768	A	2.5
5	☐	1250.000	1263.312	9427073.68	0.9545	A	1.6
6	☐	2500.000	2544.405	18654519.58	1.9225	A	2.1
7	☐	5000.000	4973.170	36087703.91	3.7575	A	0.9
8	☐			13150.92	0.0015	P	1.9

y = 7.5556E-004 * x + 2.0700E-005
R = 0.9999
DL = 0.01268
BEC = 0.0274

Weight: <None>
Min Conc: 0

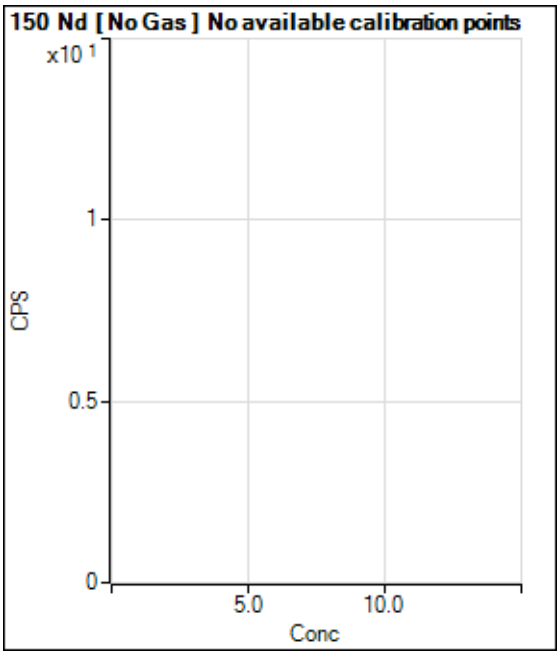
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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	304.45	0.0000	P	5.7
2	☐	10.000	10.766	134564.89	0.0140	P	1.7
3	☐	250.000	256.484	3315572.66	0.3340	A	1.6
4	☐	625.000	629.755	8152576.41	0.8200	A	1.4
5	☐	1250.000	1252.016	16101770.59	1.6302	A	0.1
6	☐	2500.000	2544.486	32149792.02	3.3131	A	1.9
7	☐	5000.000	4976.333	62229454.63	6.4795	A	1.2
8	☐			23209.98	0.0026	P	1.2

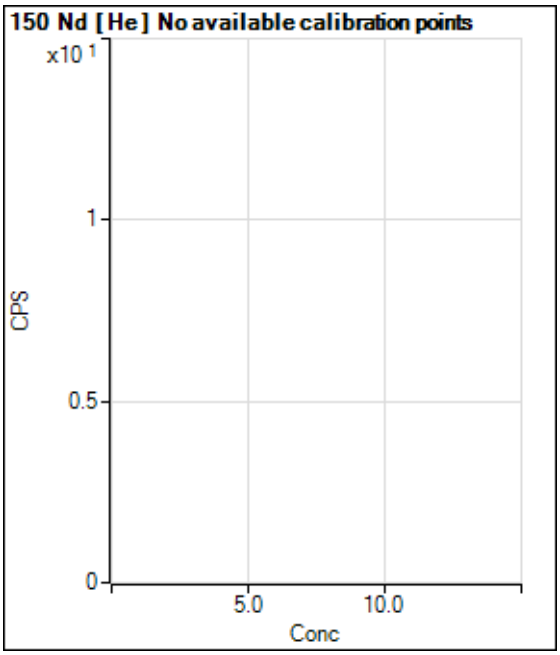
y = 0.0013 * x + 3.0971E-005
R = 0.9999
DL = 0.004076
BEC = 0.02379

Weight: <None>
Min Conc: 0

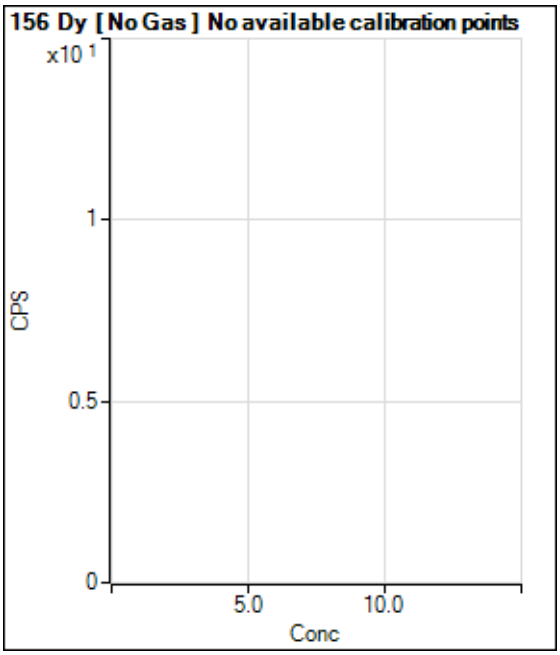


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			8.89		P	78.1
2	☐			15.56		P	12.4
3	☐			164.45		P	10.4
4	☐			368.90		P	13.6
5	☐			631.13		P	5.6
6	☐			1200.07		P	3.6
7	☐			2386.91		P	7.2
8	☐			505.57		P	7.2

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

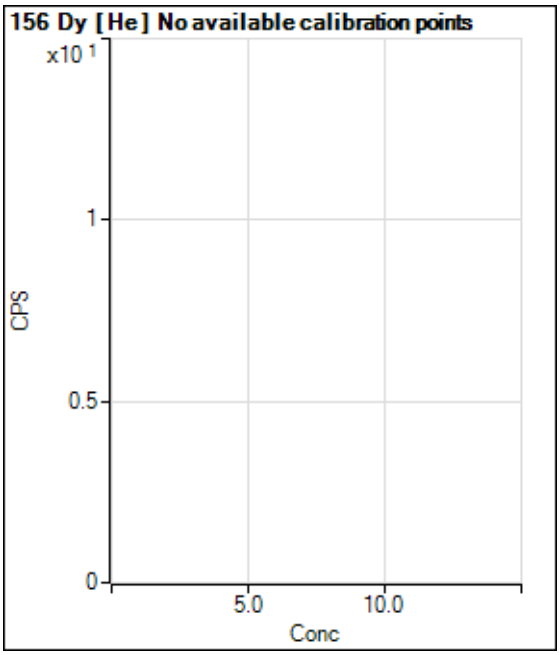


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1	☐			2.22		P	86.6
2	☐			2.22		P	86.6
3	☐			4.44		P	43.4
4	☐			8.89		P	21.6
5	☐			35.56		P	53.3
6	☐			53.33		P	12.5
7	☐			115.55		P	41.0
8	☐			115.56		P	21.7

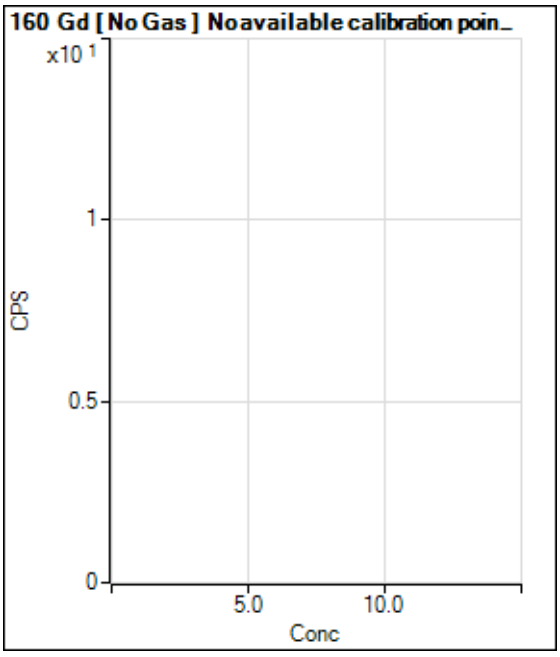


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			14.44		P	35.3
2	☐			27.78		P	38.6
3	☐			34.44		P	14.8
4	☐			125.56		P	25.2
5	☐			197.78		P	1.9
6	☐			363.34		P	5.1
7	☐			693.36		P	1.0
8	☐			1002.27		P	2.8

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

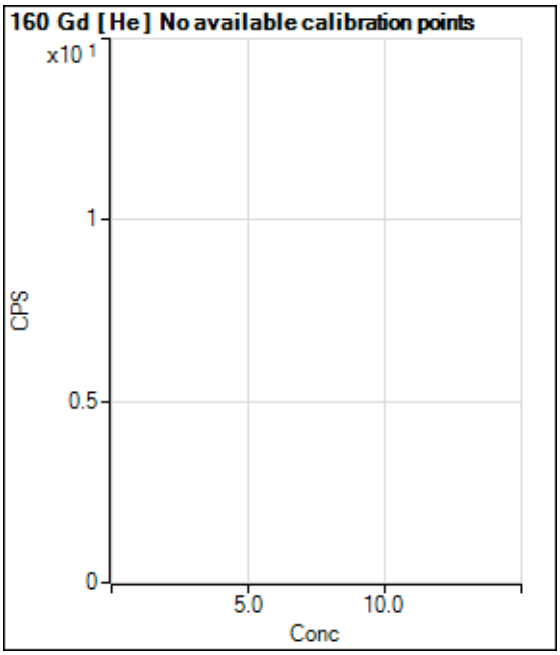


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1	☐			7.78		P	107.
2	☐			8.89		P	57.3
3	☐			6.66		P	86.6
4	☐			16.67		P	NaN
5	☐			33.33		P	10.0
6	☐			62.22		P	17.2
7	☐			128.89		P	1.5
8	☐			317.78		P	7.4

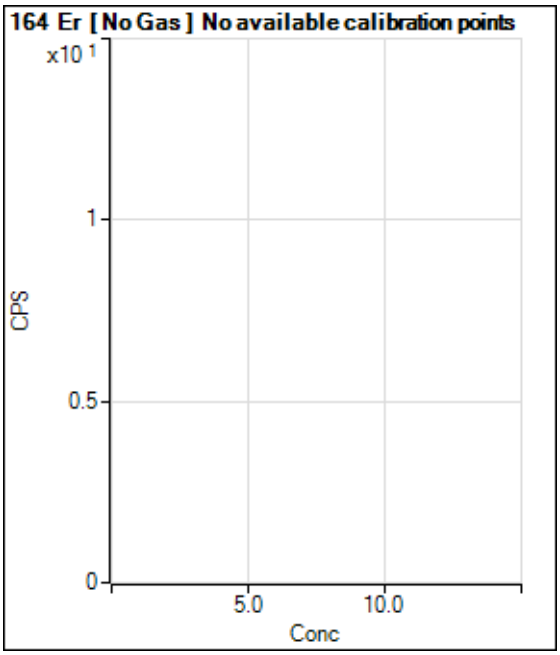


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1	☐			94.45		P	17.8
2	☐			87.78		P	17.9
3	☐			111.12		P	9.6
4	☐			126.67		P	18.4
5	☐			164.45		P	9.1
6	☐			213.34		P	15.6
7	☐			335.56		P	4.6
8	☐			860.04		P	4.0

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On:4/29/2025 5:43:52 PM
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LB :LB135513

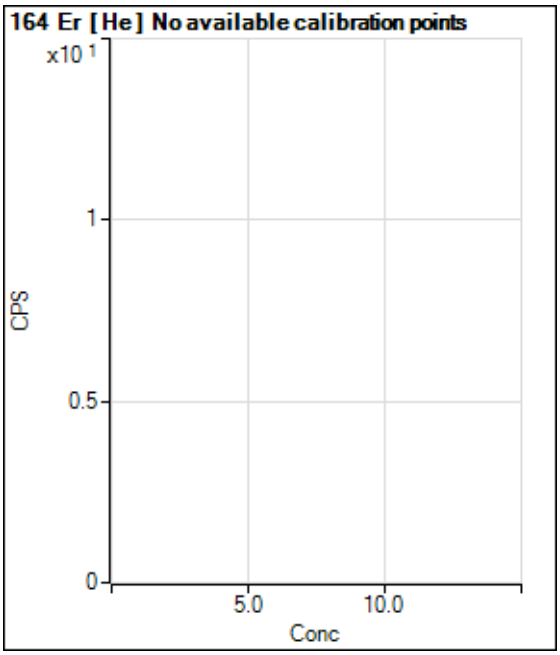


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			17.78		P	65.8
2	☐			22.22		P	8.7
3	☐			17.78		P	10.8
4	☐			37.78		P	44.4
5	☐			38.89		P	26.2
6	☐			83.33		P	14.4
7	☐			143.34		P	16.3
8	☐			375.57		P	3.1

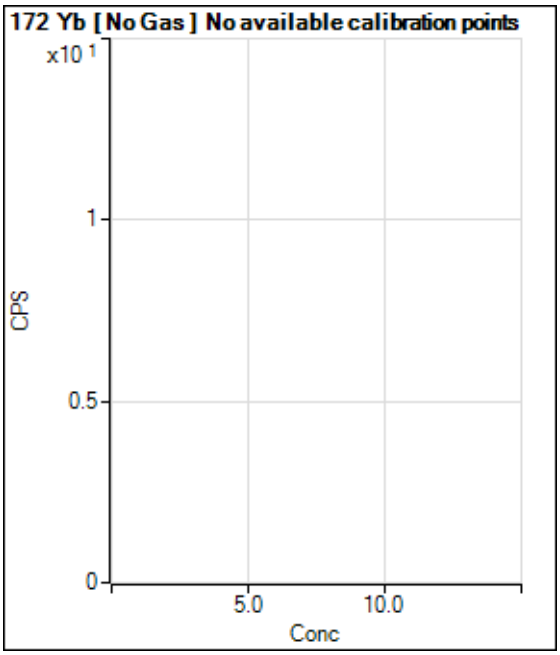


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			56.67		P	10.2
2	☐			68.89		P	48.5
3	☐			76.67		P	30.4
4	☐			118.89		P	5.8
5	☐			150.00		P	5.9
6	☐			233.34		P	16.1
7	☐			391.12		P	6.4
8	☐			1011.16		P	3.9

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

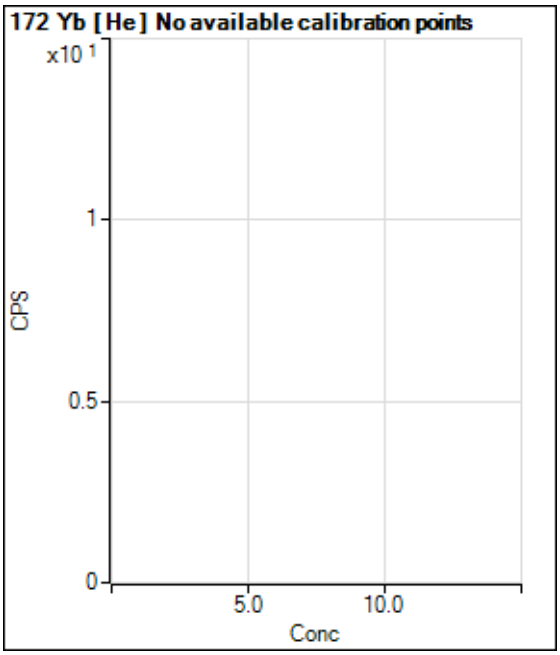


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			23.33		P	NaN
2	☐			28.89		P	29.0
3	☐			27.78		P	13.9
4	☐			42.22		P	16.4
5	☐			55.56		P	13.9
6	☐			91.11		P	20.2
7	☐			133.33		P	13.2
8	☐			373.34		P	4.7

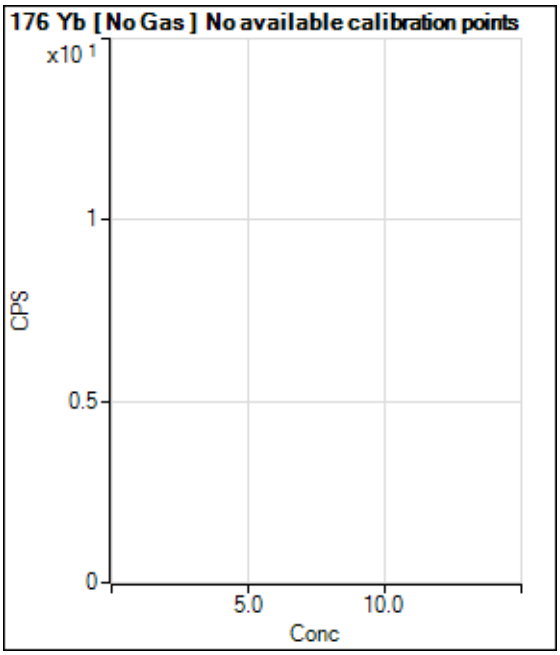


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			60.00		P	30.9
2	☐			67.78		P	5.7
3	☐			68.89		P	26.7
4	☐			128.89		P	15.8
5	☐			156.67		P	9.3
6	☐			278.90		P	9.7
7	☐			465.57		P	6.5
8	☐			1764.58		P	3.5

Reviewed By:mohan
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Inst Id :P8
LB :LB135513

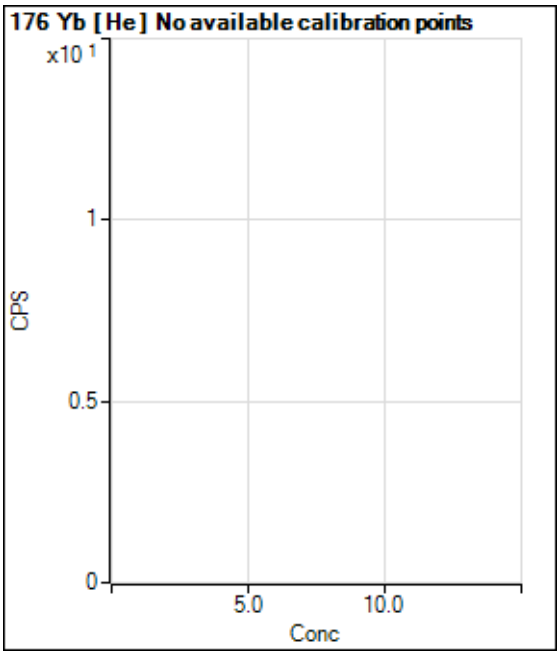


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			22.22		P	22.9
2	☐			20.00		P	60.1
3	☐			33.33		P	26.4
4	☐			58.89		P	31.2
5	☐			84.44		P	29.6
6	☐			97.78		P	24.7
7	☐			187.78		P	13.4
8	☐			764.48		P	5.2

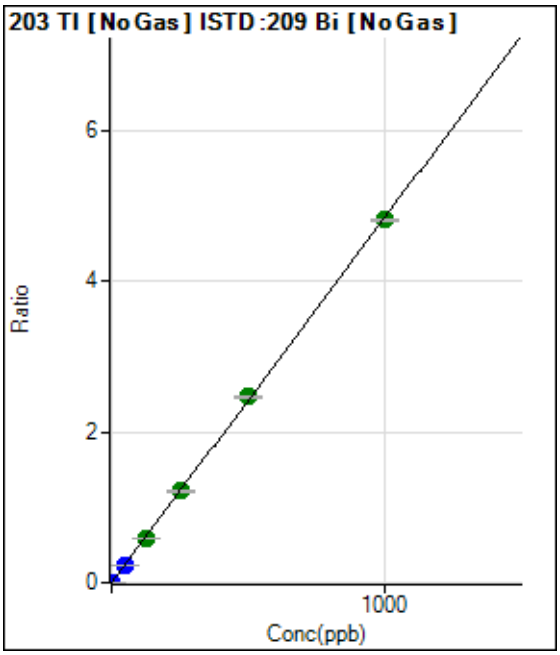


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1	☐			1263.41		P	4.1
2	☐			1368.98		P	5.5
3	☐			7294.30		P	0.8
4	☐			16889.80		P	2.3
5	☐			31624.48		P	1.9
6	☐			62344.02		P	0.9
7	☐			121458.04		P	0.6
8	☐			2338.01		P	2.5

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			290.01		P	12.0
2	☐			312.23		P	11.3
3	☐			2535.83		P	0.8
4	☐			5896.94		P	1.2
5	☐			11435.03		P	1.8
6	☐			22107.48		P	0.4
7	☐			43049.90		P	0.7
8	☐			691.14		P	6.0

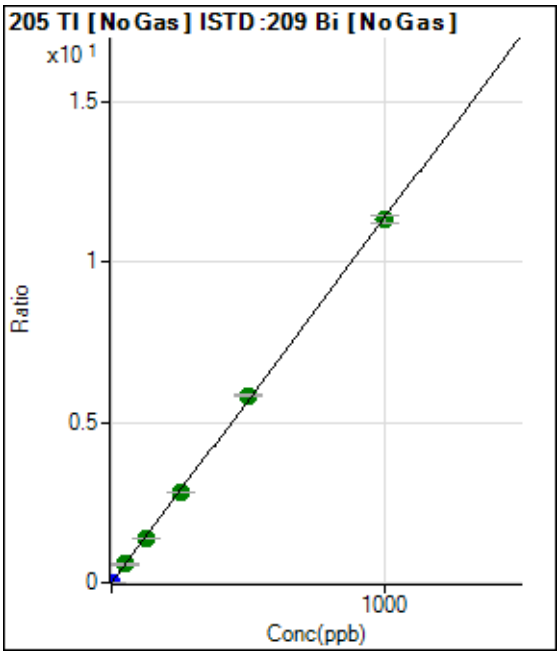


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	282.23	0.0001	P	8.1
2	☐	1.000	1.000	27420.13	0.0049	P	1.9
3	☐	50.000	46.541	1279269.87	0.2251	P	2.6
4	☐	125.000	123.144	3433255.57	0.5956	A	0.6
5	☐	250.000	251.076	6837537.53	1.2143	A	2.0
6	☐	500.000	510.648	13341478.41	2.4697	A	1.3
7	☐	1000.000	994.812	25384044.90	4.8112	A	0.9
8	☐			1977.96	0.0004	P	12.7

y = 0.0048 * x + 5.0057E-005
R = 0.9999
DL = 0.002527
BEC = 0.01035

Weight: <None>
Min Conc: 0

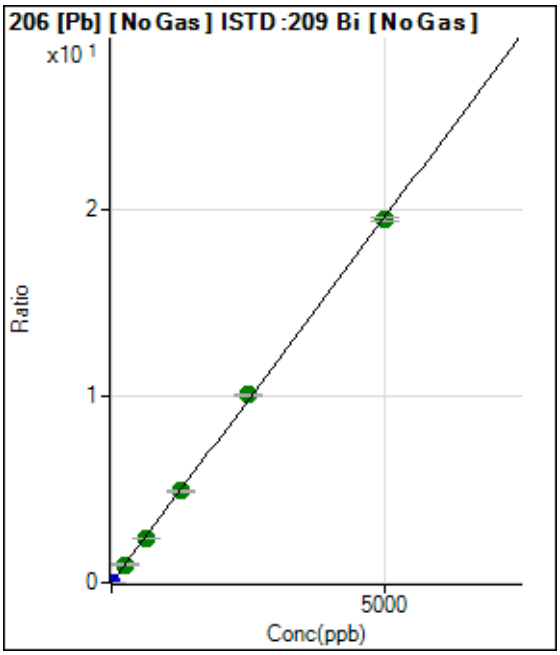
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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	663.36	0.0001	P	8.3
2	☐	1.000	1.004	64846.53	0.0116	P	1.4
3	☐	50.000	50.175	3247014.95	0.5714	A	2.4
4	☐	125.000	122.240	8023831.27	1.3919	A	1.0
5	☐	250.000	248.555	15936626.29	2.8302	A	1.0
6	☐	500.000	512.653	31536875.36	5.8372	A	0.5
7	☐	1000.000	994.371	59730937.44	11.3220	A	2.1
8	☐			4678.67	0.0010	P	9.8

y = 0.0114 * x + 1.1757E-004
R = 0.9999
DL = 0.002577
BEC = 0.01033

Weight: <None>
Min Conc: 0

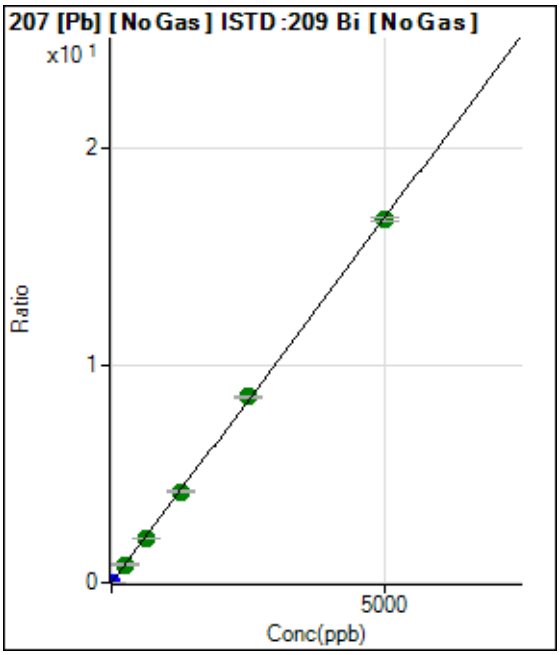


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1436.76	0.0003	P	8.1
2	☐	1.000	0.993	23216.41	0.0041	P	3.2
3	☐	250.000	249.648	5550180.75	0.9768	A	3.3
4	☐	625.000	612.904	13821817.30	2.3977	A	1.2
5	☐	1250.000	1251.752	27572629.87	4.8967	A	2.1
6	☐	2500.000	2567.658	54260562.52	10.0440	A	0.6
7	☐	5000.000	4967.263	102515437.36	19.4304	A	0.9
8	☐			101852.68	0.0220	P	0.0

y = 0.0039 * x + 2.5487E-004
R = 0.9999
DL = 0.01577
BEC = 0.06516

Weight: <None>
Min Conc: 0

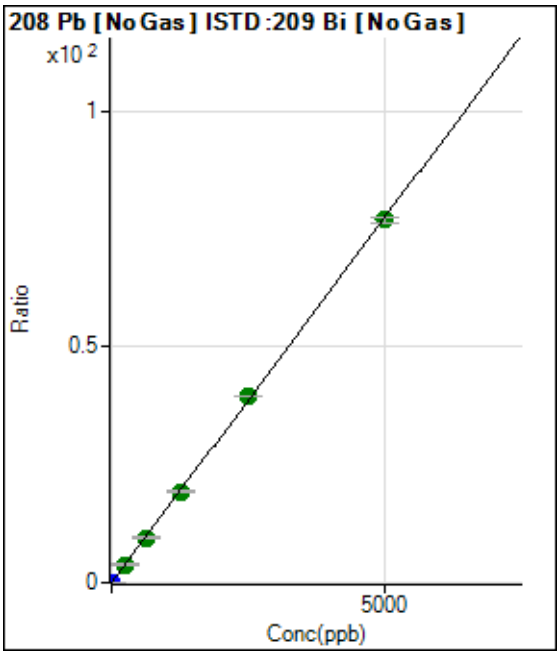
Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1225.63	0.0002	P	0.9
2	☐	1.000	1.012	20309.38	0.0036	P	0.7
3	☐	250.000	248.870	4751863.26	0.8363	A	2.6
4	☐	625.000	614.660	11904021.49	2.0651	A	0.9
5	☐	1250.000	1247.982	23608837.98	4.1926	A	2.1
6	☐	2500.000	2553.792	46345373.75	8.5792	A	0.9
7	☐	5000.000	4974.957	88176848.69	16.7127	A	1.1
8	☐			88077.77	0.0190	P	0.9

y = 0.0034 * x + 2.1732E-004
R = 0.9999
DL = 0.001812
BEC = 0.06469

Weight: <None>
Min Conc: 0

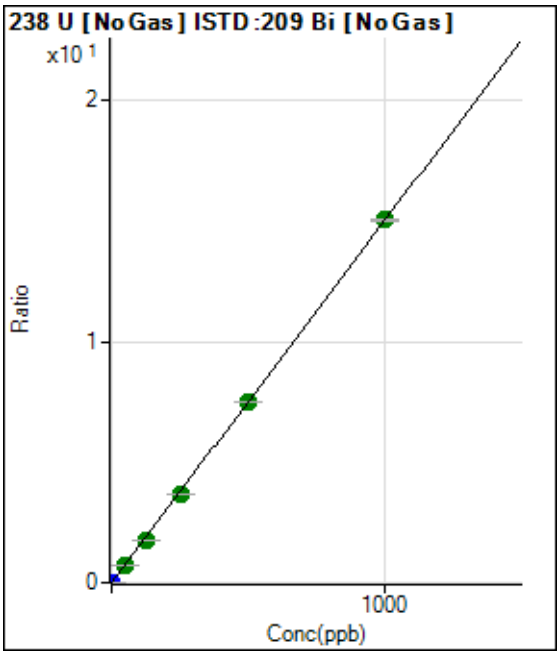


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5719.45	0.0010	P	2.5
2	☐	1.000	0.997	92224.68	0.0164	P	1.8
3	☐	250.000	248.026	21792910.78	3.8350	A	2.0
4	☐	625.000	618.619	55129938.35	9.5637	A	0.9
5	☐	1250.000	1248.444	108679290.33	19.2995	A	1.1
6	☐	2500.000	2558.978	213710462.37	39.5579	A	0.2
7	☐	5000.000	4971.796	405486898.40	76.8554	A	1.3
8	☐			402131.41	0.0869	P	0.7

y = 0.0155 * x + 0.0010
R = 0.9999
DL = 0.00496
BEC = 0.06561

Weight: <None>
Min Conc: 0

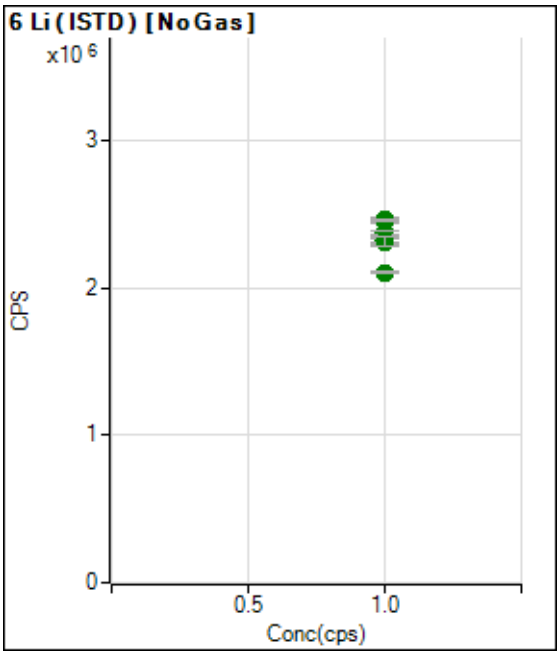
Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	468.90	0.0001	P	7.7
2	☐	1.000	0.995	84202.19	0.0150	P	2.2
3	☐	50.000	47.924	4084830.60	0.7188	A	0.7
4	☐	125.000	118.805	10270666.30	1.7817	A	0.5
5	☐	250.000	243.096	20529593.72	3.6457	A	0.6
6	☐	500.000	498.948	40422334.12	7.4825	A	0.6
7	☐	1000.000	1003.130	79370554.37	15.0434	A	0.6
8	☐			3511.64	0.0008	P	13.8

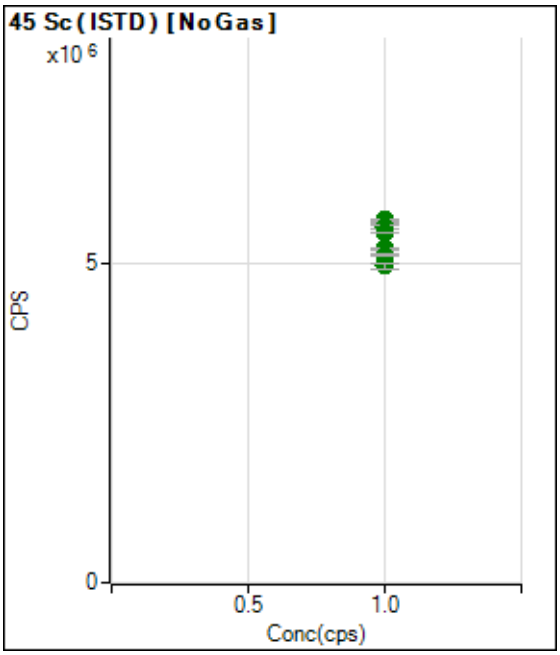
y = 0.0150 * x + 8.3128E-005
R = 1.0000
DL = 0.001282
BEC = 0.005543

Weight: <None>
Min Conc: 0

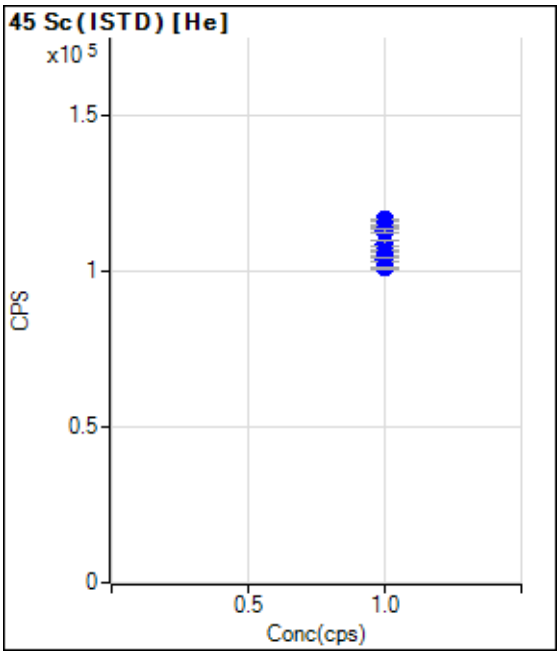


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2349509.62		A	0.7
2	☐	1.000		2305348.35		A	0.1
3	☐	1.000		2368168.20		A	2.1
4	☐	1.000		2462667.43		A	1.5
5	☐	1.000		2459826.09		A	0.9
6	☐	1.000		2378337.32		A	1.3
7	☐	1.000		2317089.48		A	2.7
8	☐	1.000		2105825.92		A	0.5

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

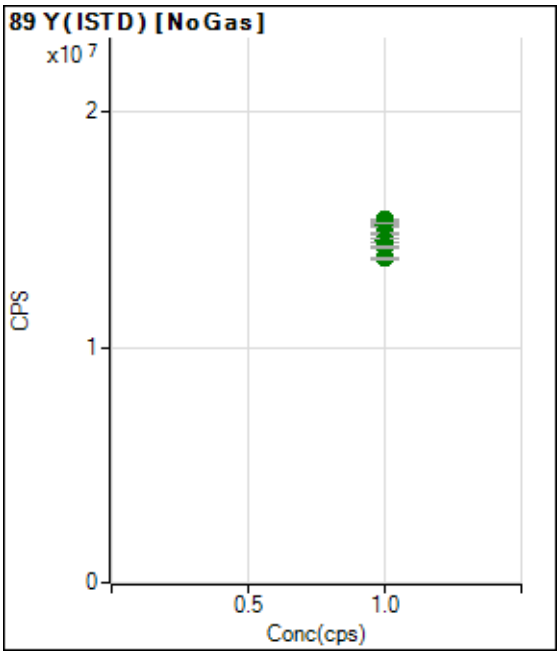


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5689980.54		A	0.7
2	☐	1.000		5662954.36		A	1.0
3	☐	1.000		5683786.58		A	0.8
4	☐	1.000		5578867.70		A	0.7
5	☐	1.000		5488732.14		A	0.3
6	☐	1.000		5237071.03		A	0.9
7	☐	1.000		5135988.40		A	0.7
8	☐	1.000		4966173.08		A	1.6

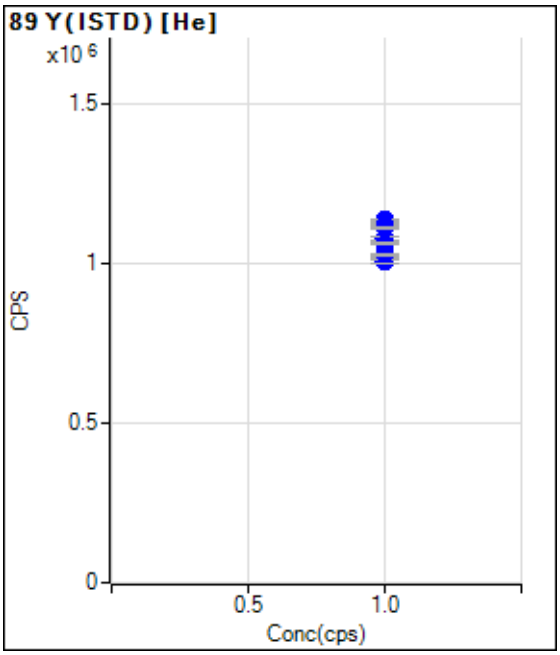


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1	☐	1.000		116572.39		P	0.4
2	☐	1.000		114699.87		P	0.3
3	☐	1.000		112885.16		P	1.1
4	☐	1.000		109039.37		P	1.8
5	☐	1.000		106442.38		P	0.4
6	☐	1.000		104797.15		P	0.9
7	☐	1.000		103926.70		P	1.4
8	☐	1.000		101127.82		P	0.3

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

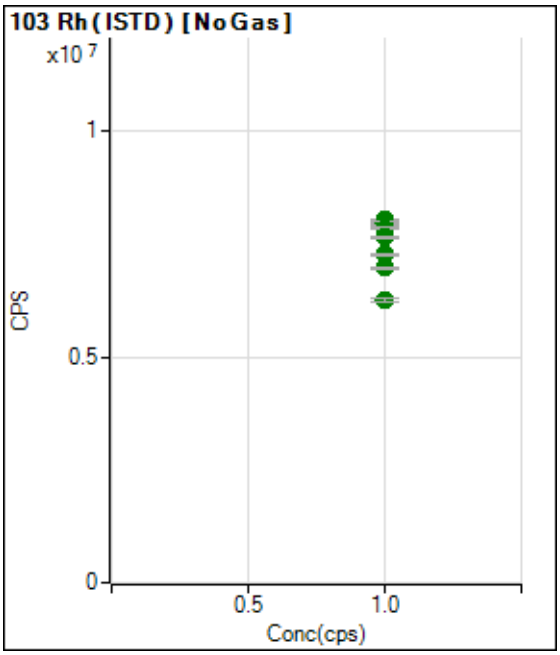


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1	☐	1.000		15421116.99		A	0.6
2	☐	1.000		15258121.72		A	0.8
3	☐	1.000		15252787.27		A	0.5
4	☐	1.000		15232814.91		A	1.0
5	☐	1.000		14845460.61		A	0.4
6	☐	1.000		14556371.17		A	0.9
7	☐	1.000		14276037.43		A	0.5
8	☐	1.000		13802401.60		A	0.8

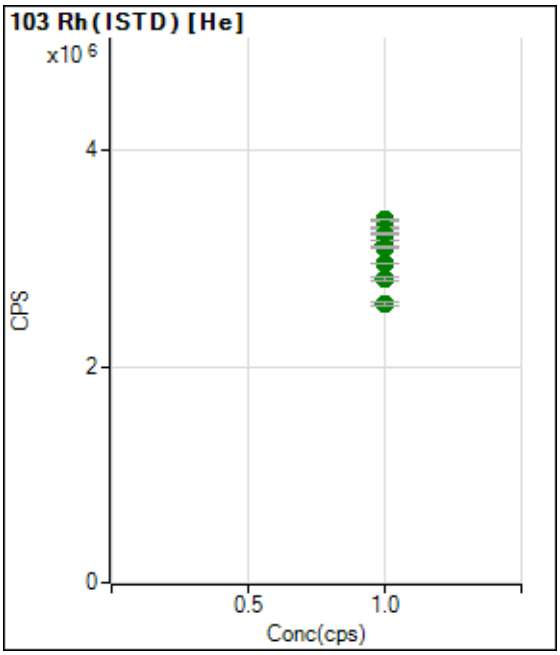


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1136320.30		P	0.4
2	☐	1.000		1122474.14		P	0.4
3	☐	1.000		1111556.62		P	0.5
4	☐	1.000		1078832.98		P	1.2
5	☐	1.000		1061332.50		P	0.8
6	☐	1.000		1025901.32		P	1.2
7	☐	1.000		1004720.46		P	1.3
8	☐	1.000		1027091.14		P	0.5

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LB :LB135513

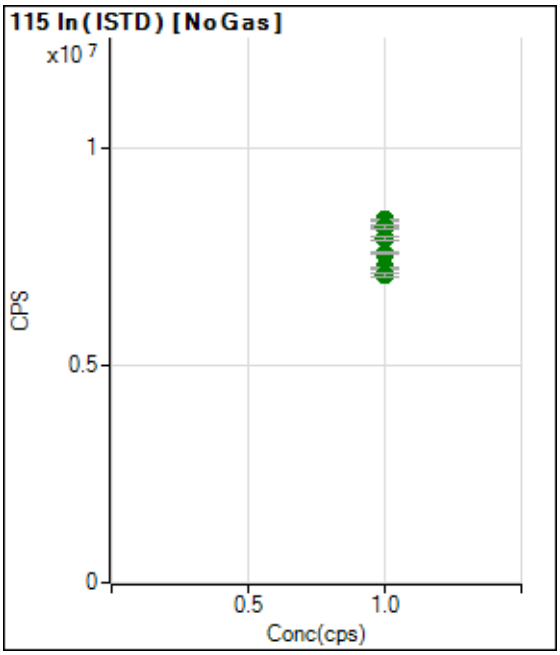


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		8042228.49		A	0.8
2	☐	1.000		7929195.09		A	1.0
3	☐	1.000		7984645.85		A	1.1
4	☐	1.000		7862291.48		A	0.5
5	☐	1.000		7654912.94		A	0.2
6	☐	1.000		7267846.70		A	0.8
7	☐	1.000		6976967.46		A	0.9
8	☐	1.000		6275189.63		A	1.4

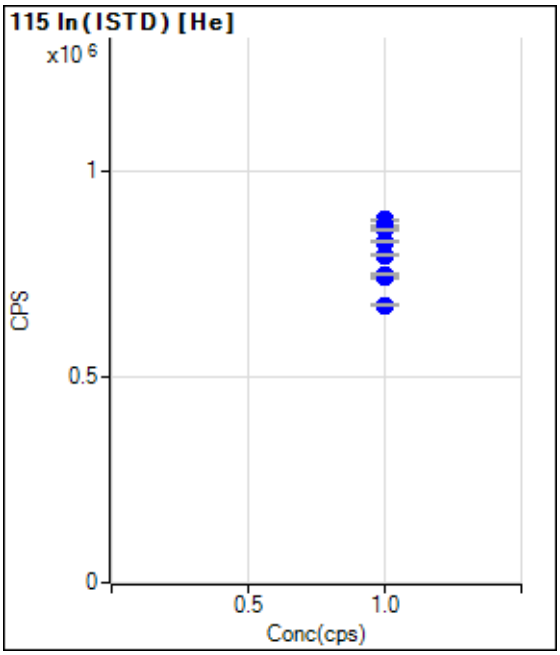


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2	☐	1.000		3281682.56		A	0.5
3	☐	1.000		3223468.25		A	0.5
4	☐	1.000		3135335.79		A	1.7
5	☐	1.000		3102424.71		A	0.9
6	☐	1.000		2956392.94		A	0.4
7	☐	1.000		2807298.19		A	1.0
8	☐	1.000		2584691.71		A	1.4

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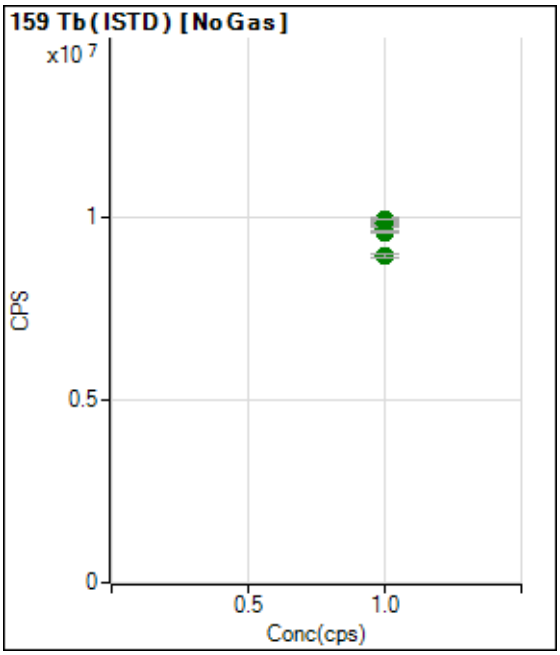


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1	☐	1.000		8340166.47		A	0.7
2	☐	1.000		8215223.34		A	0.9
3	☐	1.000		8352700.72		A	0.6
4	☐	1.000		8202808.99		A	1.3
5	☐	1.000		7941082.66		A	1.0
6	☐	1.000		7576413.47		A	0.7
7	☐	1.000		7238789.30		A	0.8
8	☐	1.000		7074613.63		A	1.1

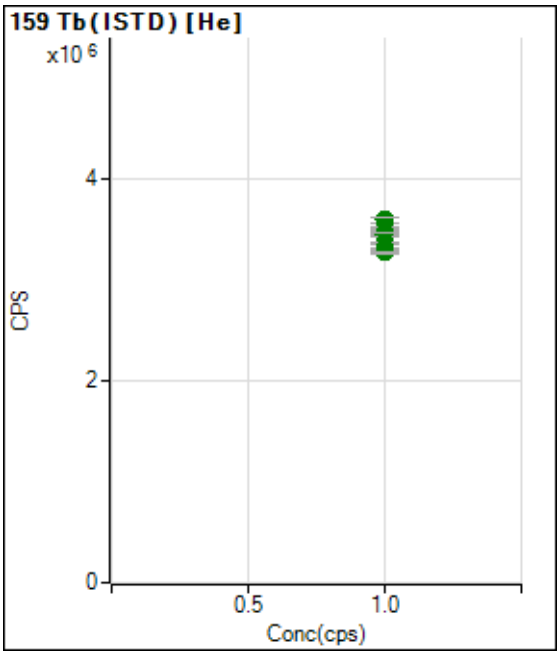


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		882126.08		P	0.5
2	☐	1.000		868603.67		P	0.3
3	☐	1.000		858098.02		P	0.2
4	☐	1.000		829188.08		P	0.4
5	☐	1.000		796214.70		P	0.5
6	☐	1.000		741394.91		P	0.8
7	☐	1.000		675620.37		P	0.3
8	☐	1.000		749975.12		P	0.5

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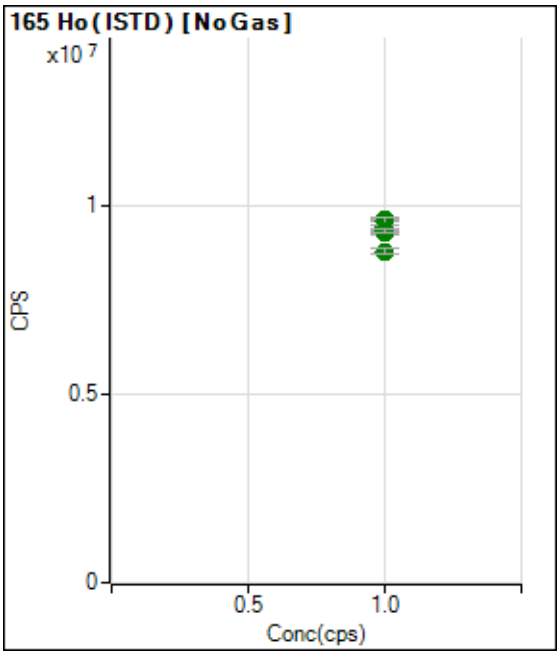


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		9829332.15		A	1.3
2	☐	1.000		9578566.11		A	0.2
3	☐	1.000		9928637.63		A	1.3
4	☐	1.000		9943246.31		A	1.2
5	☐	1.000		9877105.13		A	1.2
6	☐	1.000		9704381.31		A	0.9
7	☐	1.000		9604332.42		A	0.5
8	☐	1.000		8956278.06		A	1.1

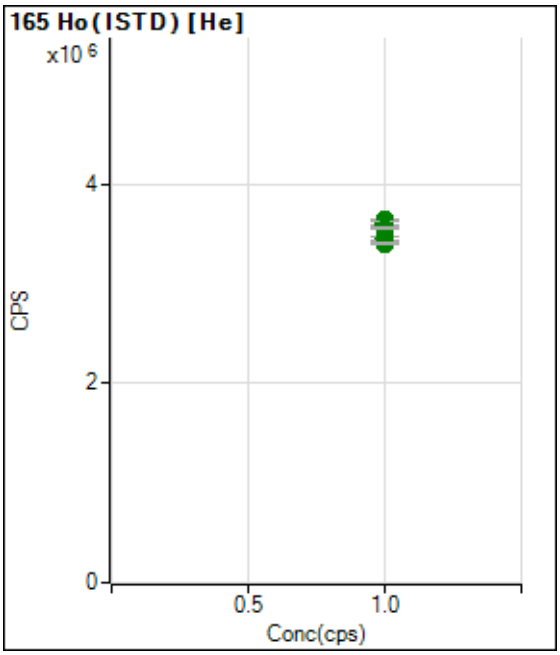


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3589133.49		A	1.8
2	☐	1.000		3512897.07		A	0.7
3	☐	1.000		3511589.25		A	0.2
4	☐	1.000		3458145.26		A	0.9
5	☐	1.000		3444988.04		A	0.9
6	☐	1.000		3364019.19		A	0.7
7	☐	1.000		3300830.51		A	0.2
8	☐	1.000		3263159.40		A	1.1

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LB :LB135513

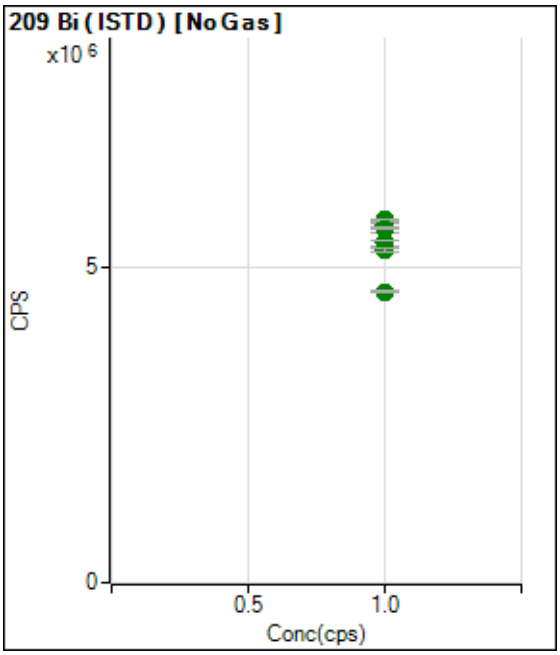


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		9391160.83		A	1.5
2	☐	1.000		9268542.85		A	1.3
3	☐	1.000		9468280.14		A	2.6
4	☐	1.000		9601709.72		A	0.2
5	☐	1.000		9562681.87		A	2.0
6	☐	1.000		9328948.89		A	1.3
7	☐	1.000		9325263.47		A	1.4
8	☐	1.000		8776111.33		A	1.6

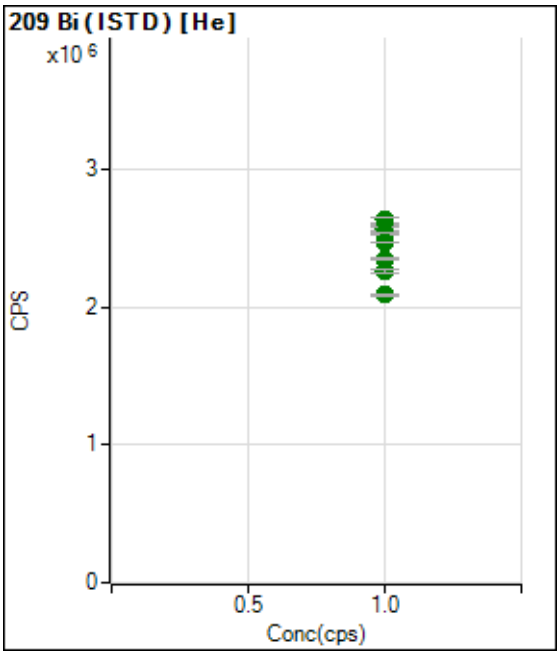


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3639399.53		A	0.8
2	☐	1.000		3611033.28		A	0.9
3	☐	1.000		3587598.94		A	1.8
4	☐	1.000		3599051.33		A	1.3
5	☐	1.000		3557213.11		A	1.0
6	☐	1.000		3450675.05		A	1.1
7	☐	1.000		3426434.15		A	0.1
8	☐	1.000		3402076.27		A	0.4

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		1.000		5639747.28		A	0.8
2		1.000		5613153.53		A	1.7
3		1.000		5683390.40		A	1.1
4		1.000		5764396.16		A	0.4
5		1.000		5631225.75		A	0.7
6		1.000		5402573.36		A	1.6
7		1.000		5276263.01		A	0.9
8		1.000		4625824.93		A	0.7



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		1.000		2637371.07		A	1.4
2		1.000		2589642.66		A	0.6
3		1.000		2576330.90		A	1.1
4		1.000		2538964.70		A	0.7
5		1.000		2478226.51		A	0.1
6		1.000		2353272.87		A	0.4
7		1.000		2261624.31		A	1.2
8		1.000		2090172.07		A	1.0

US EPA Tune Check Report

Reviewed By:moh
On:4/29/2025 5:43 PM
Inst Id :P8
LB :LB135513

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8042125- MS.b

Acq. Date-Time 2025-04-21 14:37:58

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		77063	770627.57			0.523	5.000
24		413163	4131628.60			0.575	5.000
25		55563	555625.82			0.194	5.000
26		63462	634621.09			0.250	5.000
59		378435	3784345.49			0.387	5.000
113		43020	430198.59			0.085	5.000
115		567533	5675326.95			0.802	5.000
206		118861	1188606.66			0.571	5.000
207		100335	1003346.54			0.993	5.000
208		242265	2422652.84			0.890	5.000
220		1	6.50			15.385	

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	77557	77413	76950	76725	76669
24	414205	412206	409520	414250	415633
25	55506	55589	55498	55740	55480
26	63663	63394	63599	63341	63314
59	380852	377557	377080	378102	378581
113	42988	43015	43028	42990	43078
115	569152	568137	559604	570995	569776
206	118370	119239	119121	119618	117956
207	98651	100683	100433	101299	100607
208	240185	241477	240576	244990	244099

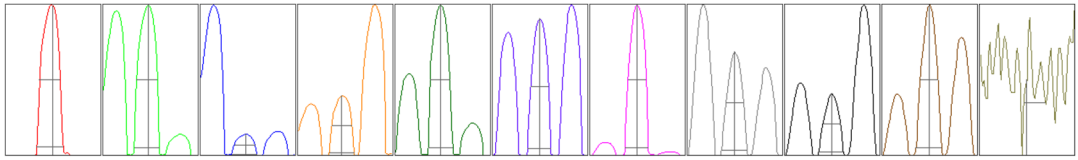
US EPA Tune Check Report

Reviewed By:moh
On:4/29/2025 5:43 PM
Inst Id :P8
LB :LB135513

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	125592.70	9.00	8.90 - 9.10	
24	664977.08	23.95	23.90 - 24.10	
25	90099.43	24.95	24.90 - 25.10	
26	103820.16	25.90	25.90 - 26.10	
59	649999.22	58.95	58.90 - 59.10	
113	80899.44	113.00	112.90 - 113.10	
115	1044053.03	115.00	114.90 - 115.10	
206	222218.69	206.00	205.90 - 206.10	
207	188833.58	207.00	206.90 - 207.10	
208	458101.11	208.00	207.90 - 208.10	
220	0.60	220.00	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.65	0.827	0.900	
24	0.67	0.791	0.900	
25	0.66	0.789	0.900	
26	0.64	0.787	0.900	
59	0.62	0.780	0.900	
113	0.56	0.731	0.900	
115	0.57	0.735	0.900	
206	0.55	0.808	0.900	
207	0.55	0.776	0.900	
208	0.56	0.808	0.900	
220	0.70			

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:4/29/2025 5:43 PM
Inst Id :P8
LB :LB135513

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	9.2 V	Deflect	13.4 V
Extract 2	-225.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-85 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	160 V		

QP Parameters

Mass Gain	105	Axis Gain	0.9967	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	0.01		

Hardware Settings

Torch

Torch H	0.5 mm	Torch V	-0.3 mm

EM

Discriminator	4.7 mV	Analog HV	2195 V	Pulse HV	949 V

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		72018	720179.62			0.648	
89		59893	598934.92			0.846	
205		74135	741353.42			0.222	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	72195	72005	71660	71527	72703
89	60255	59905	59343	59445	60520
205	74072	74055	73997	74136	74417

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	9.2 V	Deflect	2.8 V

US EPA Tune Check Report

Reviewed By:moh
On:4/29/2025 5:43
PM
Inst Id :P8
LB :LB135513

Extract 2	-225.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-85 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	0.9967	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	0.01		

Hardware Settings

Torch

Torch H	0.5 mm	Torch V	-0.3 mm		

EM

Discriminator	4.7 mV	Analog HV	2195 V	Pulse HV	949 V

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:14:05	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.54	-0.46	-0.08	0.00	N/A	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	N/A	ppb
Arsenic	75-2	0.02	-0.01	-0.01	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	-0.02	0.02	-0.01	0.00	N/A	ppb
Cadmium	106-1	-0.22	-0.19	0.42	0.00	N/A	ppb
Cadmium	111-1	-0.02	-0.02	0.03	0.00	N/A	ppb
Calcium	43-1	1.07	-0.78	-0.29	0.00	N/A	ppb
Calcium	44-1	-0.02	-0.11	0.13	0.00	N/A	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.01	0.00	0.00	0.00	N/A	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	N/A	ppb
Copper	63-2	0.00	-0.01	0.01	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	0.58	0.05	-0.62	0.00	N/A	ppb
Iron	56-2	-0.02	0.00	0.03	0.00	N/A	ppb
Iron	57-2	0.12	-0.33	0.21	0.00	N/A	ppb
Krypton	83-1						cps
Lead	206-1	0.00	-0.01	0.00	0.00	N/A	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:14:05	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	-0.08	0.04	0.04	0.00	N/A	ppb
Manganese	55-2	-0.06	0.03	0.02	0.00	N/A	ppb
Molybdenum	94-1	0.00	0.01	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	-0.02	0.01	0.00	N/A	ppb
Phosphorus	31-2	-23.76	-18.24	-23.22	-21.74		ppb
Potassium	39-2	0.82	0.48	-1.30	0.00	N/A	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	0.06	-0.01	-0.05	0.00	N/A	ppb
Selenium	77-2	0.13	-0.25	0.13	0.00	N/A	ppb
Selenium	78-2	-0.26	0.30	-0.04	0.00	N/A	ppb
Silicon	28-1	0.08	-0.01	-0.07	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	0.48	-0.56	0.08	0.00	N/A	ppb
Strontium	86-1	0.00	0.00	0.00	0.00	N/A	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	N/A	ppb
Sulfur	34-1	-76.69	-116.66	-131.70	-108.35		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	-0.03	-0.03	0.05	0.00	N/A	ppb
Titanium	47-1	-0.09	0.17	-0.09	0.00	N/A	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	N/A	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:14:05	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	-0.01	0.05	-0.04	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

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:20:51	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	23.78	21.81	22.68	22.75	4.33	ppb
Antimony	121-1	2.14	2.19	2.17	2.17	1.24	ppb
Arsenic	75-2	1.14	1.10	1.19	1.14	3.57	ppb
Barium	135-1	10.85	10.86	10.72	10.81	0.71	ppb
Barium	137-1	10.57	10.81	10.92	10.77	1.66	ppb
Beryllium	9-1	1.28	1.31	1.29	1.29	1.32	ppb
Bismuth	209-1				100		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	1.05	1.37	1.12	1.18	14.14	ppb
Cadmium	106-1	1.58	1.53	1.47	1.53	3.44	ppb
Cadmium	111-1	1.19	1.17	1.20	1.19	1.41	ppb
Calcium	43-1	553.01	572.65	565.23	563.63	1.76	ppb
Calcium	44-1	551.56	560.94	562.31	558.27	1.05	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.28	2.25	2.25	2.26	0.75	ppb
Cobalt	59-2	1.16	1.19	1.19	1.18	1.31	ppb
Copper	63-2	2.45	2.34	2.42	2.40	2.45	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				99		%
Indium	115-1				99		%
Indium	115-2				98		%
Iron	54-2	61.55	59.34	61.03	60.64	1.91	ppb
Iron	56-2	59.16	58.53	58.63	58.78	0.58	ppb
Iron	57-2	59.30	58.54	62.64	60.16	3.63	ppb
Krypton	83-1						cps
Lead	206-1	1.01	0.95	1.01	0.99	3.44	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:20:51	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.01	1.00	1.02	1.01	0.74	ppb
Lead	208-1	1.00	0.98	1.01	1.00	1.94	ppb
Lithium	6-1				98		%
Magnesium	24-2	606.20	601.27	598.62	602.03	0.64	ppb
Manganese	55-2	1.08	1.26	1.09	1.14	9.08	ppb
Molybdenum	94-1	6.04	6.18	6.29	6.17	1.97	ppb
Molybdenum	95-1	5.08	5.13	5.23	5.15	1.46	ppb
Molybdenum	96-1	5.14	5.16	5.28	5.19	1.48	ppb
Molybdenum	97-1	5.11	5.22	5.24	5.19	1.31	ppb
Molybdenum	98-1	4.97	5.24	5.12	5.11	2.60	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.16	1.14	1.16	1.15	0.90	ppb
Phosphorus	31-2	19.27	16.57	29.38	21.74	31.05	ppb
Potassium	39-2	549.47	551.08	558.01	552.85	0.82	ppb
Rhodium	103-1				99		%
Rhodium	103-2				98		%
Scandium	45-1				100		%
Scandium	45-2				98		%
Selenium	82-1	5.72	5.75	5.40	5.62	3.44	ppb
Selenium	77-2	4.75	8.59	6.62	6.65	28.87	ppb
Selenium	78-2	5.53	4.96	6.28	5.59	11.77	ppb
Silicon	28-1	2.52	2.56	2.53	2.54	0.98	ppb
Silver	107-1	1.10	1.12	1.12	1.11	0.82	ppb
Silver	109-1	1.13	1.13	1.12	1.13	0.27	ppb
Sodium	23-2	598.84	595.39	602.88	599.04	0.63	ppb
Strontium	86-1	1.03	1.02	1.07	1.04	2.86	ppb
Strontium	88-1	1.04	1.05	1.06	1.05	0.89	ppb
Sulfur	34-1	60.41	128.72	135.92	108.35	38.46	ppb
Terbium	159-1				97		%
Terbium	159-2				98		%
Thallium	203-1	1.01	0.98	1.01	1.00	1.94	ppb
Thallium	205-1	1.01	0.99	1.02	1.00	1.43	ppb
Tin	118-1	5.40	5.42	5.43	5.42	0.33	ppb
Titanium	47-1	5.36	5.36	5.64	5.45	2.94	ppb
Uranium	238-1	0.99	0.97	1.02	0.99	2.23	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:20:51	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.73	5.60	5.60	5.64	1.29	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				99		%
Zinc	66-2	6.08	5.50	5.74	5.77	5.00	ppb
Zirconium	90-1	1.04	1.06	1.07	1.05	1.68	ppb
Zirconium	91-1	0.98	1.04	1.04	1.02	3.20	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:24:13	DataFile Name :	007CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1048.40	1037.33	1052.64	1046.12	0.76	ppb
Antimony	121-1	50.77	52.37	51.84	51.66	1.58	ppb
Arsenic	75-2	51.38	52.07	52.37	51.94	0.98	ppb
Barium	135-1	257.22	265.56	259.86	260.88	1.63	ppb
Barium	137-1	253.59	261.16	254.70	256.48	1.59	ppb
Beryllium	9-1	58.36	56.92	57.54	57.61	1.25	ppb
Bismuth	209-1				101		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	52.33	54.13	53.33	53.26	1.69	ppb
Cadmium	106-1	51.94	54.49	53.20	53.21	2.40	ppb
Cadmium	111-1	49.99	51.86	50.74	50.86	1.85	ppb
Calcium	43-1	5166.58	5182.71	5155.13	5168.14	0.27	ppb
Calcium	44-1	5282.12	5114.96	5131.98	5176.35	1.78	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	50.98	49.72	50.23	50.31	1.25	ppb
Cobalt	59-2	52.18	51.63	51.38	51.73	0.79	ppb
Copper	63-2	553.76	535.35	543.38	544.16	1.70	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				99		%
Indium	115-1				100		%
Indium	115-2				97		%
Iron	54-2	2717.00	2699.63	2705.99	2707.54	0.32	ppb
Iron	56-2	2814.65	2724.31	2769.84	2769.60	1.63	ppb
Iron	57-2	2691.99	2656.23	2685.57	2677.93	0.71	ppb
Krypton	83-1						cps
Lead	206-1	240.13	254.11	254.70	249.65	3.31	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:24:13	DataFile Name :	007CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	241.44	253.01	252.16	248.87	2.59	ppb
Lead	208-1	242.33	250.37	251.38	248.03	2.00	ppb
Lithium	6-1				101		%
Magnesium	24-2	5481.84	5454.44	5637.77	5524.68	1.79	ppb
Manganese	55-2	534.37	516.91	524.77	525.35	1.66	ppb
Molybdenum	94-1	492.45	504.96	497.78	498.40	1.26	ppb
Molybdenum	95-1	491.04	497.45	497.24	495.24	0.74	ppb
Molybdenum	96-1	490.96	502.38	501.35	498.23	1.27	ppb
Molybdenum	97-1	488.70	509.09	494.28	497.36	2.12	ppb
Molybdenum	98-1	486.39	505.99	492.41	494.93	2.03	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	51.82	50.45	50.91	51.06	1.37	ppb
Phosphorus	31-2	1144.73	1043.54	1083.03	1090.43	4.68	ppb
Potassium	39-2	2583.73	2550.96	2556.78	2563.82	0.68	ppb
Rhodium	103-1				99		%
Rhodium	103-2				96		%
Scandium	45-1				100		%
Scandium	45-2				97		%
Selenium	82-1	52.60	51.24	51.13	51.66	1.58	ppb
Selenium	77-2	56.48	61.72	52.58	56.92	8.06	ppb
Selenium	78-2	54.66	57.32	48.68	53.55	8.26	ppb
Silicon	28-1	56.91	55.37	54.62	55.63	2.10	ppb
Silver	107-1	54.65	56.14	53.84	54.88	2.13	ppb
Silver	109-1	53.95	55.71	53.47	54.38	2.17	ppb
Sodium	23-2	5500.55	5449.22	5494.99	5481.58	0.51	ppb
Strontium	86-1	47.21	48.16	48.28	47.88	1.23	ppb
Strontium	88-1	50.36	51.62	50.49	50.82	1.37	ppb
Sulfur	34-1	1345.17	1225.56	1220.80	1263.85	5.58	ppb
Terbium	159-1				101		%
Terbium	159-2				98		%
Thallium	203-1	45.14	47.16	47.32	46.54	2.61	ppb
Thallium	205-1	48.80	50.76	50.96	50.18	2.38	ppb
Tin	118-1	48.32	49.58	49.68	49.20	1.54	ppb
Titanium	47-1	506.82	497.74	499.83	501.46	0.95	ppb
Uranium	238-1	47.52	48.05	48.20	47.92	0.74	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:24:13	DataFile Name :	007CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	51.44	50.57	50.82	50.94	0.88	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				98		%
Zinc	66-2	516.24	507.55	514.13	512.64	0.88	ppb
Zirconium	90-1	50.32	49.74	50.16	50.07	0.60	ppb
Zirconium	91-1	46.96	47.41	46.86	47.07	0.62	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:27:39	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2573.95	2558.67	2633.02	2588.55	1.52	ppb
Antimony	121-1	127.51	128.50	132.52	129.51	2.05	ppb
Arsenic	75-2	129.24	130.25	128.44	129.31	0.70	ppb
Barium	135-1	623.53	620.64	648.91	631.03	2.47	ppb
Barium	137-1	626.97	622.63	639.66	629.76	1.40	ppb
Beryllium	9-1	138.75	134.72	137.68	137.05	1.52	ppb
Bismuth	209-1				102		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	128.52	129.67	133.72	130.64	2.09	ppb
Cadmium	106-1	129.50	130.48	133.66	131.21	1.65	ppb
Cadmium	111-1	123.53	123.75	127.24	124.84	1.67	ppb
Calcium	43-1	13149.17	13102.67	12909.45	13053.76	0.97	ppb
Calcium	44-1	12853.31	13060.76	13074.38	12996.15	0.95	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	125.20	124.31	127.91	125.80	1.49	ppb
Cobalt	59-2	136.64	133.93	135.25	135.27	1.00	ppb
Copper	63-2	1333.17	1340.33	1364.90	1346.13	1.24	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				99		%
Indium	115-1				98		%
Indium	115-2				94		%
Iron	54-2	7139.12	6993.58	7230.36	7121.02	1.68	ppb
Iron	56-2	6878.59	6939.60	7137.33	6985.17	1.94	ppb
Iron	57-2	6700.36	6659.41	6841.55	6733.77	1.42	ppb
Krypton	83-1						cps
Lead	206-1	609.27	621.31	608.13	612.90	1.19	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:27:39	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	616.64	618.70	608.64	614.66	0.86	ppb
Lead	208-1	617.21	624.49	614.16	618.62	0.86	ppb
Lithium	6-1				105		%
Magnesium	24-2	13510.49	13558.00	13498.14	13522.21	0.23	ppb
Manganese	55-2	1306.98	1299.75	1330.20	1312.31	1.21	ppb
Molybdenum	94-1	1208.61	1250.00	1236.63	1231.75	1.72	ppb
Molybdenum	95-1	1212.50	1248.74	1244.58	1235.27	1.61	ppb
Molybdenum	96-1	1235.43	1268.57	1260.20	1254.73	1.37	ppb
Molybdenum	97-1	1244.18	1255.12	1239.85	1246.39	0.63	ppb
Molybdenum	98-1	1216.37	1242.89	1228.11	1229.13	1.08	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	125.65	124.26	129.05	126.32	1.95	ppb
Phosphorus	31-2	2616.41	2602.60	2747.48	2655.50	3.01	ppb
Potassium	39-2	6446.81	6458.01	6595.00	6499.94	1.27	ppb
Rhodium	103-1				98		%
Rhodium	103-2				93		%
Scandium	45-1				98		%
Scandium	45-2				94		%
Selenium	82-1	126.33	129.19	129.20	128.24	1.29	ppb
Selenium	77-2	124.81	139.06	116.64	126.84	8.95	ppb
Selenium	78-2	134.58	122.24	138.67	131.83	6.49	ppb
Silicon	28-1	138.84	142.43	136.72	139.33	2.07	ppb
Silver	107-1	132.73	132.17	136.65	133.85	1.82	ppb
Silver	109-1	131.88	136.35	138.05	135.43	2.35	ppb
Sodium	23-2	13481.98	13400.05	13594.58	13492.20	0.72	ppb
Strontium	86-1	117.71	118.47	119.45	118.54	0.74	ppb
Strontium	88-1	124.57	125.15	127.15	125.62	1.07	ppb
Sulfur	34-1	2404.01	2375.07	2351.62	2376.90	1.10	ppb
Terbium	159-1				101		%
Terbium	159-2				96		%
Thallium	203-1	123.94	122.52	122.97	123.14	0.59	ppb
Thallium	205-1	120.91	123.40	122.41	122.24	1.03	ppb
Tin	118-1	128.89	126.36	131.53	128.92	2.00	ppb
Titanium	47-1	1256.07	1272.26	1252.95	1260.43	0.82	ppb
Uranium	238-1	118.18	119.25	118.98	118.80	0.47	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:27:39	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	127.10	127.24	129.59	127.98	1.09	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				95		%
Zinc	66-2	1272.87	1281.73	1305.48	1286.70	1.31	ppb
Zirconium	90-1	120.73	124.36	122.67	122.59	1.48	ppb
Zirconium	91-1	120.80	125.44	123.31	123.18	1.89	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:30:32	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5141.79	5139.57	5159.48	5146.94	0.21	ppb
Antimony	121-1	252.06	259.86	252.34	254.75	1.74	ppb
Arsenic	75-2	255.37	256.22	259.63	257.07	0.88	ppb
Barium	135-1	1264.78	1282.85	1242.31	1263.31	1.61	ppb
Barium	137-1	1251.48	1253.34	1251.23	1252.02	0.09	ppb
Beryllium	9-1	263.08	258.93	257.87	259.96	1.06	ppb
Bismuth	209-1				100		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	255.77	262.00	254.67	257.48	1.53	ppb
Cadmium	106-1	255.17	258.99	257.45	257.20	0.75	ppb
Cadmium	111-1	262.02	266.45	258.52	262.33	1.51	ppb
Calcium	43-1	26344.98	25623.06	25986.44	25984.83	1.39	ppb
Calcium	44-1	25767.68	25505.02	25533.57	25602.09	0.56	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	264.36	263.59	263.83	263.92	0.15	ppb
Cobalt	59-2	262.35	267.47	268.94	266.25	1.30	ppb
Copper	63-2	2675.48	2692.64	2667.53	2678.55	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				102		%
Holmium	165-2				98		%
Indium	115-1				95		%
Indium	115-2				90		%
Iron	54-2	13930.97	13976.38	13705.19	13870.85	1.05	ppb
Iron	56-2	13600.89	13768.91	13628.87	13666.22	0.66	ppb
Iron	57-2	13841.46	14195.21	14099.11	14045.26	1.30	ppb
Krypton	83-1						cps
Lead	206-1	1221.27	1271.01	1262.98	1251.75	2.13	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:30:32	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1218.39	1257.61	1267.94	1247.98	2.09	ppb
Lead	208-1	1233.24	1251.72	1260.38	1248.44	1.11	ppb
Lithium	6-1				105		%
Magnesium	24-2	27091.96	26681.14	26798.60	26857.23	0.79	ppb
Manganese	55-2	2606.93	2589.59	2561.97	2586.16	0.88	ppb
Molybdenum	94-1	2502.60	2454.53	2566.67	2507.93	2.24	ppb
Molybdenum	95-1	2528.77	2447.08	2574.59	2516.81	2.57	ppb
Molybdenum	96-1	2525.40	2469.36	2562.89	2519.22	1.87	ppb
Molybdenum	97-1	2453.87	2478.26	2526.10	2486.08	1.48	ppb
Molybdenum	98-1	2479.65	2462.80	2557.18	2499.88	2.01	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	249.48	252.27	250.34	250.70	0.57	ppb
Phosphorus	31-2	5410.20	5304.73	5375.31	5363.41	1.00	ppb
Potassium	39-2	12907.35	12760.17	12877.97	12848.49	0.61	ppb
Rhodium	103-1				95		%
Rhodium	103-2				92		%
Scandium	45-1				96		%
Scandium	45-2				91		%
Selenium	82-1	250.51	262.55	256.19	256.42	2.35	ppb
Selenium	77-2	237.44	283.03	261.24	260.57	8.75	ppb
Selenium	78-2	264.55	258.01	252.60	258.39	2.32	ppb
Silicon	28-1	268.22	275.21	271.56	271.66	1.29	ppb
Silver	107-1	265.30	263.99	260.49	263.26	0.94	ppb
Silver	109-1	258.62	269.88	253.49	260.67	3.22	ppb
Sodium	23-2	26943.70	27196.49	26912.64	27017.61	0.58	ppb
Strontium	86-1	251.48	258.85	256.92	255.75	1.49	ppb
Strontium	88-1	252.75	248.98	254.98	252.23	1.20	ppb
Sulfur	34-1	4741.07	4731.86	4787.29	4753.40	0.62	ppb
Terbium	159-1				100		%
Terbium	159-2				96		%
Thallium	203-1	245.80	255.79	251.64	251.08	2.00	ppb
Thallium	205-1	246.08	251.01	248.57	248.55	0.99	ppb
Tin	118-1	253.72	261.04	253.34	256.03	1.69	ppb
Titanium	47-1	2476.17	2490.19	2473.68	2480.01	0.36	ppb
Uranium	238-1	241.83	242.93	244.52	243.10	0.56	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:30:32	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	252.63	255.17	252.93	253.58	0.55	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				96		%
Yttrium	89-2				93		%
Zinc	66-2	2709.06	2710.86	2685.84	2701.92	0.52	ppb
Zirconium	90-1	250.15	249.74	253.85	251.25	0.90	ppb
Zirconium	91-1	252.58	245.00	254.18	250.59	1.96	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:33:20	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9858.13	10080.52	9920.72	9953.12	1.15	ppb
Antimony	121-1	501.54	522.57	503.30	509.13	2.29	ppb
Arsenic	75-2	504.44	506.45	514.00	508.30	0.99	ppb
Barium	135-1	2504.13	2605.60	2523.49	2544.41	2.12	ppb
Barium	137-1	2493.72	2592.74	2546.99	2544.49	1.95	ppb
Beryllium	9-1	508.56	513.23	525.02	515.60	1.64	ppb
Bismuth	209-1				96		%
Bismuth	209-2				89		%
Bromine	81-1						cps
Cadmium	108-1	512.53	517.59	505.22	511.78	1.22	ppb
Cadmium	106-1	508.50	519.32	510.82	512.88	1.11	ppb
Cadmium	111-1	513.73	534.19	517.04	521.65	2.11	ppb
Calcium	43-1	52562.85	51556.84	52819.92	52313.21	1.28	ppb
Calcium	44-1	52500.83	51986.00	52743.94	52410.25	0.74	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	506.63	523.52	511.67	513.94	1.69	ppb
Cobalt	59-2	514.04	525.74	514.95	518.24	1.26	ppb
Copper	63-2	5088.82	5261.03	5196.80	5182.22	1.68	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				95		%
Indium	115-1				91		%
Indium	115-2				84		%
Iron	54-2	26733.59	27561.23	26959.71	27084.84	1.58	ppb
Iron	56-2	26811.12	27527.45	26923.85	27087.47	1.42	ppb
Iron	57-2	27089.39	27748.79	27247.89	27362.02	1.26	ppb
Krypton	83-1						cps
Lead	206-1	2580.30	2573.04	2549.64	2567.66	0.62	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:33:20	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2579.23	2548.49	2533.66	2553.79	0.91	ppb
Lead	208-1	2563.35	2558.97	2554.61	2558.98	0.17	ppb
Lithium	6-1				101		%
Magnesium	24-2	52218.09	53188.85	52246.28	52551.07	1.05	ppb
Manganese	55-2	5061.82	5219.42	5070.28	5117.17	1.73	ppb
Molybdenum	94-1	5060.11	4922.47	5031.07	5004.55	1.45	ppb
Molybdenum	95-1	5063.03	4939.74	5042.54	5015.10	1.32	ppb
Molybdenum	96-1	5063.04	5024.00	5107.70	5064.92	0.83	ppb
Molybdenum	97-1	5051.17	4964.92	5088.79	5034.96	1.26	ppb
Molybdenum	98-1	5064.92	4913.83	5007.97	4995.57	1.53	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	509.50	532.80	519.56	520.62	2.24	ppb
Phosphorus	31-2	10142.44	10290.99	10330.09	10254.51	0.97	ppb
Potassium	39-2	24521.63	24881.80	24726.86	24710.09	0.73	ppb
Rhodium	103-1				90		%
Rhodium	103-2				88		%
Scandium	45-1				92		%
Scandium	45-2				90		%
Selenium	82-1	507.67	504.51	512.81	508.33	0.82	ppb
Selenium	77-2	509.88	503.11	517.82	510.27	1.44	ppb
Selenium	78-2	496.74	523.56	505.24	508.51	2.70	ppb
Silicon	28-1	557.13	547.08	544.84	549.69	1.19	ppb
Silver	107-1	510.05	525.02	508.97	514.68	1.74	ppb
Silver	109-1	510.37	531.07	518.11	519.85	2.01	ppb
Sodium	23-2	52181.23	53993.68	52087.06	52753.99	2.04	ppb
Strontium	86-1	509.74	502.29	513.85	508.63	1.15	ppb
Strontium	88-1	502.03	511.19	508.29	507.17	0.92	ppb
Sulfur	34-1	10179.82	10205.46	9910.72	10098.67	1.62	ppb
Terbium	159-1				99		%
Terbium	159-2				94		%
Thallium	203-1	513.33	515.39	503.22	510.65	1.28	ppb
Thallium	205-1	511.33	510.74	515.89	512.65	0.55	ppb
Tin	118-1	506.55	515.10	502.80	508.15	1.24	ppb
Titanium	47-1	5072.63	5101.91	5139.25	5104.59	0.65	ppb
Uranium	238-1	502.13	497.84	496.88	498.95	0.56	ppb

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:33:20	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	515.78	522.27	518.68	518.91	0.63	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				94		%
Yttrium	89-2				90		%
Zinc	66-2	5176.80	5290.55	5155.32	5207.56	1.40	ppb
Zirconium	90-1	504.27	492.58	505.05	500.63	1.39	ppb
Zirconium	91-1	502.47	497.33	506.04	501.95	0.87	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:36:05	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19553.16	20008.39	19548.90	19703.49	1.34	ppb
Antimony	121-1	991.38	991.26	998.16	993.60	0.40	ppb
Arsenic	75-2	984.48	1001.18	994.68	993.45	0.85	ppb
Barium	135-1	5011.13	4922.71	4985.68	4973.17	0.92	ppb
Barium	137-1	5014.17	4909.86	5004.97	4976.33	1.16	ppb
Beryllium	9-1	1004.28	992.38	966.80	987.82	1.94	ppb
Bismuth	209-1				94		%
Bismuth	209-2				86		%
Bromine	81-1						cps
Cadmium	108-1	1001.01	994.19	978.93	991.37	1.14	ppb
Cadmium	106-1	987.44	988.05	996.98	990.82	0.54	ppb
Cadmium	111-1	982.23	989.19	986.78	986.07	0.36	ppb
Calcium	43-1	103131.66	103975.44	102103.74	103070.28	0.91	ppb
Calcium	44-1	101439.97	103021.09	102405.54	102288.87	0.78	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	982.36	1007.84	978.09	989.43	1.63	ppb
Cobalt	59-2	976.41	1007.34	972.58	985.44	1.93	ppb
Copper	63-2	9759.50	10078.70	9711.88	9850.03	2.03	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				99		%
Holmium	165-2				94		%
Indium	115-1				87		%
Indium	115-2				77		%
Iron	54-2	51859.09	53027.92	51472.19	52119.74	1.55	ppb
Iron	56-2	51428.52	53284.07	51520.55	52077.71	2.01	ppb
Iron	57-2	51713.32	53180.25	51695.46	52196.35	1.63	ppb
Krypton	83-1						cps
Lead	206-1	4941.08	4940.56	5020.14	4967.26	0.92	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:36:05	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	4934.42	4954.70	5035.75	4974.96	1.08	ppb
Lead	208-1	4921.33	4946.68	5047.38	4971.80	1.34	ppb
Lithium	6-1				99		%
Magnesium	24-2	99364.90	101894.35	100318.72	100525.99	1.27	ppb
Manganese	55-2	9847.22	10108.45	9776.78	9910.82	1.76	ppb
Molybdenum	94-1	9906.68	10138.04	9949.59	9998.10	1.23	ppb
Molybdenum	95-1	9810.65	10175.80	9984.52	9990.32	1.83	ppb
Molybdenum	96-1	9869.00	10056.55	9961.15	9962.23	0.94	ppb
Molybdenum	97-1	9883.37	10157.93	9918.45	9986.58	1.50	ppb
Molybdenum	98-1	9887.27	10185.48	9942.57	10005.11	1.59	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	977.19	1025.94	964.76	989.30	3.27	ppb
Phosphorus	31-2	19642.48	20018.17	19613.15	19757.93	1.14	ppb
Potassium	39-2	48244.47	48578.10	48071.89	48298.15	0.53	ppb
Rhodium	103-1				87		%
Rhodium	103-2				84		%
Scandium	45-1				90		%
Scandium	45-2				89		%
Selenium	82-1	987.39	1008.83	985.00	993.74	1.32	ppb
Selenium	77-2	1011.78	978.23	984.90	991.64	1.79	ppb
Selenium	78-2	990.57	1012.24	975.02	992.61	1.88	ppb
Silicon	28-1	981.31	963.21	958.71	967.74	1.24	ppb
Silver	107-1	993.27	982.40	988.32	988.00	0.55	ppb
Silver	109-1	990.51	994.47	972.68	985.89	1.18	ppb
Sodium	23-2	100571.97	102488.98	99899.39	100986.78	1.33	ppb
Strontium	86-1	978.24	986.29	1020.95	995.16	2.28	ppb
Strontium	88-1	984.91	999.14	1003.17	995.74	0.96	ppb
Sulfur	34-1	20432.21	20002.57	19608.75	20014.51	2.06	ppb
Terbium	159-1				98		%
Terbium	159-2				92		%
Thallium	203-1	988.81	990.76	1004.87	994.81	0.88	ppb
Thallium	205-1	987.25	978.19	1017.67	994.37	2.08	ppb
Tin	118-1	979.60	992.95	1009.35	993.97	1.50	ppb
Titanium	47-1	9946.13	9946.78	9961.06	9951.32	0.08	ppb
Uranium	238-1	999.48	999.25	1010.66	1003.13	0.65	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:36:05	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	987.45	1001.07	979.17	989.23	1.12	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				93		%
Yttrium	89-2				88		%
Zinc	66-2	9838.83	9905.09	9777.65	9840.52	0.65	ppb
Zirconium	90-1	994.14	1003.82	1001.04	999.67	0.50	ppb
Zirconium	91-1	991.38	1008.93	997.45	999.25	0.89	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:38:55	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	99760.62	99246.46	101154.83	100053.97	0.99	ppb
Antimony	121-1	0.61	0.60	0.61	0.61	0.83	ppb
Arsenic	75-2	0.46	0.51	0.53	0.50	6.86	ppb
Barium	135-1	1.96	1.91	1.89	1.92	1.88	ppb
Barium	137-1	1.94	1.98	1.98	1.97	1.24	ppb
Beryllium	9-1	0.13	0.11	0.10	0.12	13.02	ppb
Bismuth	209-1				82		%
Bismuth	209-2				79		%
Bromine	81-1						cps
Cadmium	108-1	0.41	0.42	0.35	0.39	8.98	ppb
Cadmium	106-1	0.37	0.55	0.18	0.37	50.00	ppb
Cadmium	111-1	0.15	0.16	0.13	0.15	11.04	ppb
Calcium	43-1	487581.70	504220.15	505467.53	499089.79	2.00	ppb
Calcium	44-1	493403.66	504666.95	499700.01	499256.87	1.13	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.10	8.20	7.99	8.10	1.30	ppb
Cobalt	59-2	2.05	2.08	2.01	2.05	1.71	ppb
Copper	63-2	2.44	2.47	2.37	2.43	2.11	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				93		%
Holmium	165-2				93		%
Indium	115-1				85		%
Indium	115-2				85		%
Iron	54-2	249396.53	250018.98	248410.01	249275.17	0.33	ppb
Iron	56-2	250714.85	249343.21	247830.90	249296.32	0.58	ppb
Iron	57-2	248463.83	250986.91	248249.44	249233.39	0.61	ppb
Krypton	83-1						cps
Lead	206-1	5.56	5.57	5.56	5.56	0.05	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:38:55	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	5.66	5.59	5.56	5.60	0.91	ppb
Lead	208-1	5.59	5.56	5.52	5.56	0.66	ppb
Lithium	6-1				90		%
Magnesium	24-2	505193.37	497693.13	495661.29	499515.93	1.01	ppb
Manganese	55-2	3.52	3.42	3.73	3.55	4.40	ppb
Molybdenum	94-1	1.94	1.88	1.84	1.88	2.71	ppb
Molybdenum	95-1	1.38	1.34	1.33	1.35	1.85	ppb
Molybdenum	96-1	2.31	2.15	2.16	2.21	3.98	ppb
Molybdenum	97-1	1.37	1.25	1.24	1.29	5.56	ppb
Molybdenum	98-1	1.30	1.20	1.18	1.22	5.36	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.38	4.34	4.46	4.40	1.31	ppb
Phosphorus	31-2	-3.08	-9.36	-5.71	-6.05		ppb
Potassium	39-2	250930.36	250065.58	250038.89	250344.94	0.20	ppb
Rhodium	103-1				78		%
Rhodium	103-2				77		%
Scandium	45-1				87		%
Scandium	45-2				87		%
Selenium	82-1	0.80	0.85	0.45	0.70	30.88	ppb
Selenium	77-2	-0.25	1.85	0.58	0.73	145.57	ppb
Selenium	78-2	0.30	0.31	-0.19	0.14	206.29	ppb
Silicon	28-1	5.69	5.35	4.69	5.24	9.66	ppb
Silver	107-1	0.12	0.10	0.09	0.10	12.46	ppb
Silver	109-1	0.12	0.10	0.09	0.10	13.13	ppb
Sodium	23-2	501958.42	499907.09	496324.42	499396.65	0.57	ppb
Strontium	86-1	3.06	2.99	3.10	3.05	1.74	ppb
Strontium	88-1	3.07	3.11	3.09	3.09	0.66	ppb
Sulfur	34-1	-643.27	-484.95	-502.18	-543.46		ppb
Terbium	159-1				91		%
Terbium	159-2				91		%
Thallium	203-1	0.09	0.08	0.07	0.08	14.41	ppb
Thallium	205-1	0.09	0.08	0.07	0.08	11.12	ppb
Tin	118-1	0.11	0.11	0.11	0.11	3.04	ppb
Titanium	47-1	1.01	1.05	1.05	1.04	2.33	ppb
Uranium	238-1	0.05	0.04	0.04	0.05	15.48	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:38:55	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.25	0.26	0.24	0.25	3.94	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				90		%
Yttrium	89-2				90		%
Zinc	66-2	57.88	58.38	57.13	57.80	1.09	ppb
Zirconium	90-1	0.43	0.43	0.44	0.44	1.75	ppb
Zirconium	91-1	0.44	0.42	0.43	0.43	3.05	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:46:35	DataFile Name :	013ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	503.01	494.68	450.63	482.78	5.83	ppb
Antimony	121-1	194.99	205.01	203.45	201.15	2.68	ppb
Arsenic	75-2	202.97	200.41	187.99	197.12	4.06	ppb
Barium	135-1	93.64	98.54	97.03	96.41	2.60	ppb
Barium	137-1	94.72	98.23	97.45	96.80	1.90	ppb
Beryllium	9-1	101.48	102.83	104.14	102.82	1.29	ppb
Bismuth	209-1				104		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	83.81	87.06	87.64	86.17	2.40	ppb
Cadmium	106-1	81.48	84.71	85.54	83.91	2.56	ppb
Cadmium	111-1	96.49	100.19	99.81	98.83	2.06	ppb
Calcium	43-1	1925.57	1947.46	1980.17	1951.06	1.41	ppb
Calcium	44-1	1981.25	1984.36	1972.45	1979.36	0.31	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	100.30	100.18	91.61	97.36	5.12	ppb
Cobalt	59-2	104.07	105.30	97.26	102.21	4.24	ppb
Copper	63-2	106.88	106.42	99.06	104.12	4.21	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				103		%
Indium	115-1				102		%
Indium	115-2				100		%
Iron	54-2	2161.52	2175.94	1985.60	2107.69	5.03	ppb
Iron	56-2	2165.94	2173.93	2000.44	2113.44	4.63	ppb
Iron	57-2	2080.02	2089.97	1919.87	2029.95	4.70	ppb
Krypton	83-1						cps
Lead	206-1	203.37	207.99	199.87	203.74	2.00	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:46:35	DataFile Name :	013ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	194.20	196.39	195.17	195.25	0.56	ppb
Lead	208-1	196.48	200.45	195.54	197.49	1.32	ppb
Lithium	6-1				108		%
Magnesium	24-2	1188.00	1195.07	1116.40	1166.49	3.73	ppb
Manganese	55-2	98.05	99.59	92.65	96.76	3.77	ppb
Molybdenum	94-1	0.08	0.08	0.08	0.08	3.24	ppb
Molybdenum	95-1	0.06	0.07	0.05	0.06	13.95	ppb
Molybdenum	96-1	0.07	0.07	0.06	0.07	9.96	ppb
Molybdenum	97-1	0.05	0.04	0.03	0.04	14.40	ppb
Molybdenum	98-1	0.05	0.04	0.04	0.04	10.41	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	104.09	103.02	97.32	101.48	3.58	ppb
Phosphorus	31-2	-22.57	-16.22	-17.37	-18.72		ppb
Potassium	39-2	1929.96	1927.86	1920.21	1926.01	0.27	ppb
Rhodium	103-1				101		%
Rhodium	103-2				99		%
Scandium	45-1				98		%
Scandium	45-2				95		%
Selenium	82-1	216.37	209.80	212.71	212.96	1.55	ppb
Selenium	77-2	219.94	210.40	200.02	210.12	4.74	ppb
Selenium	78-2	221.05	211.17	209.97	214.06	2.84	ppb
Silicon	28-1	0.36	0.33	0.65	0.45	39.66	ppb
Silver	107-1	51.42	54.23	54.83	53.50	3.41	ppb
Silver	109-1	51.58	54.25	53.48	53.10	2.60	ppb
Sodium	23-2	2085.13	2115.82	2063.41	2088.12	1.26	ppb
Strontium	86-1	0.24	0.26	0.24	0.25	4.23	ppb
Strontium	88-1	0.24	0.23	0.23	0.23	2.93	ppb
Sulfur	34-1	-436.11	-503.15	-413.06	-450.77		ppb
Terbium	159-1				103		%
Terbium	159-2				101		%
Thallium	203-1	199.05	204.26	198.70	200.67	1.55	ppb
Thallium	205-1	197.72	200.19	195.29	197.73	1.24	ppb
Tin	118-1	0.00	-0.03	-0.03	-0.02		ppb
Titanium	47-1	-0.03	-0.06	-0.05	-0.05		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:46:35	DataFile Name :	013ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	99.21	99.24	92.00	96.82	4.31	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				99		%
Zinc	66-2	208.32	209.57	194.70	204.20	4.04	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	13.70	ppb
Zirconium	91-1	0.08	0.08	0.08	0.08	2.86	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:54:11	DataFile Name :	014LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	23.39	21.11	22.21	22.24	5.14	ppb
Antimony	121-1	2.03	2.04	2.06	2.04	0.83	ppb
Arsenic	75-2	1.16	1.12	0.98	1.09	8.40	ppb
Barium	135-1	9.98	10.12	10.22	10.11	1.22	ppb
Barium	137-1	10.13	10.16	10.37	10.22	1.31	ppb
Beryllium	9-1	1.14	1.17	1.13	1.15	1.54	ppb
Bismuth	209-1				103		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	1.12	1.01	1.10	1.08	5.05	ppb
Cadmium	106-1	0.89	0.57	1.06	0.84	29.45	ppb
Cadmium	111-1	1.06	1.05	1.08	1.06	1.62	ppb
Calcium	43-1	528.60	544.67	532.86	535.38	1.56	ppb
Calcium	44-1	531.94	548.07	531.51	537.17	1.76	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.19	2.18	2.08	2.15	2.87	ppb
Cobalt	59-2	1.13	1.14	1.12	1.13	0.79	ppb
Copper	63-2	2.33	2.33	2.35	2.34	0.64	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				103		%
Holmium	165-2				103		%
Indium	115-1				101		%
Indium	115-2				100		%
Iron	54-2	58.03	59.08	57.21	58.11	1.62	ppb
Iron	56-2	58.16	58.25	57.45	57.96	0.76	ppb
Iron	57-2	58.82	56.18	55.83	56.94	2.88	ppb
Krypton	83-1						cps
Lead	206-1	0.96	0.99	0.99	0.98	1.87	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:54:11	DataFile Name :	014LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.99	1.00	1.02	1.00	1.84	ppb
Lead	208-1	0.98	0.99	1.01	0.99	1.50	ppb
Lithium	6-1				107		%
Magnesium	24-2	573.02	575.57	564.46	571.01	1.02	ppb
Manganese	55-2	1.08	1.21	1.19	1.16	6.17	ppb
Molybdenum	94-1	6.03	5.92	6.01	5.99	0.89	ppb
Molybdenum	95-1	5.02	4.95	4.92	4.96	1.01	ppb
Molybdenum	96-1	5.11	5.02	5.08	5.07	0.97	ppb
Molybdenum	97-1	5.02	4.98	5.01	5.00	0.41	ppb
Molybdenum	98-1	4.96	4.96	4.91	4.95	0.59	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.07	1.09	1.07	1.08	1.24	ppb
Phosphorus	31-2	18.77	8.09	12.90	13.25	40.38	ppb
Potassium	39-2	535.20	544.02	533.56	537.59	1.05	ppb
Rhodium	103-1				101		%
Rhodium	103-2				99		%
Scandium	45-1				99		%
Scandium	45-2				97		%
Selenium	82-1	5.50	5.06	5.20	5.25	4.28	ppb
Selenium	77-2	4.65	6.96	7.72	6.44	24.81	ppb
Selenium	78-2	5.63	4.77	4.78	5.06	9.75	ppb
Silicon	28-1	2.10	2.00	2.18	2.09	4.28	ppb
Silver	107-1	1.03	1.02	1.03	1.03	0.34	ppb
Silver	109-1	1.02	1.03	1.06	1.04	1.86	ppb
Sodium	23-2	571.33	573.94	569.07	571.44	0.43	ppb
Strontium	86-1	1.02	1.02	1.00	1.02	0.99	ppb
Strontium	88-1	1.03	1.02	1.03	1.03	0.36	ppb
Sulfur	34-1	-340.06	-289.59	-419.82	-349.82		ppb
Terbium	159-1				102		%
Terbium	159-2				100		%
Thallium	203-1	0.96	0.97	0.98	0.97	1.10	ppb
Thallium	205-1	0.95	1.00	0.98	0.98	2.44	ppb
Tin	118-1	5.04	5.04	5.10	5.06	0.66	ppb
Titanium	47-1	5.04	5.09	5.16	5.10	1.15	ppb
Uranium	238-1	0.94	0.95	0.93	0.94	0.67	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:54:11	DataFile Name :	014LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.53	5.42	5.43	5.46	1.01	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				100		%
Zinc	66-2	5.72	5.65	5.90	5.76	2.25	ppb
Zirconium	90-1	1.03	1.03	1.03	1.03	0.15	ppb
Zirconium	91-1	1.03	0.99	1.01	1.01	1.69	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:01:37	DataFile Name :	015CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2.22	3.42	3.21	2.95	21.62	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	5.21	ppb
Arsenic	75-2	0.00	-0.01	0.00	0.00		ppb
Barium	135-1	-0.01	-0.01	0.00	-0.01		ppb
Barium	137-1	0.00	0.00	0.00	0.00		ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	70.49	ppb
Bismuth	209-1				104		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.01	0.00	-0.01	0.00		ppb
Cadmium	106-1	0.30	0.13	-0.17	0.09	276.47	ppb
Cadmium	111-1	0.02	0.01	-0.01	0.01	266.06	ppb
Calcium	43-1	2.22	2.70	1.49	2.14	28.66	ppb
Calcium	44-1	-0.64	-0.31	-0.58	-0.51		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.06	-0.05	-0.03	-0.04		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	0.04	0.04	0.05	0.04	11.34	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				103		%
Holmium	165-2				102		%
Indium	115-1				103		%
Indium	115-2				101		%
Iron	54-2	0.20	0.24	0.06	0.17	56.46	ppb
Iron	56-2	0.20	0.23	0.13	0.18	28.07	ppb
Iron	57-2	0.27	0.38	0.33	0.33	17.34	ppb
Krypton	83-1						cps
Lead	206-1	0.02	0.02	0.02	0.02	16.42	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:01:37	DataFile Name :	015CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.01	0.02	0.01	0.01	30.15	ppb
Lead	208-1	0.02	0.02	0.01	0.02	16.39	ppb
Lithium	6-1				106		%
Magnesium	24-2	0.77	0.32	0.34	0.48	53.70	ppb
Manganese	55-2	-0.77	-0.76	-0.83	-0.79		ppb
Molybdenum	94-1	0.01	0.01	0.01	0.01	36.17	ppb
Molybdenum	95-1	0.01	0.00	0.01	0.01	17.21	ppb
Molybdenum	96-1	0.00	0.00	0.00	0.00	95.14	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00		ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	151.41	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.01	0.01	0.03	0.02	68.33	ppb
Phosphorus	31-2	-17.50	-15.39	-16.22	-16.37		ppb
Potassium	39-2	12.53	14.45	13.49	13.49	7.11	ppb
Rhodium	103-1				102		%
Rhodium	103-2				100		%
Scandium	45-1				101		%
Scandium	45-2				99		%
Selenium	82-1	-0.21	0.14	-0.05	-0.04		ppb
Selenium	77-2	-0.25	-0.25	-0.25	-0.25		ppb
Selenium	78-2	0.17	-0.38	0.29	0.03	1228.62	ppb
Silicon	28-1	-0.42	-0.34	-0.50	-0.42		ppb
Silver	107-1	0.00	0.00	0.01	0.00	34.30	ppb
Silver	109-1	0.00	0.00	0.00	0.00	18.24	ppb
Sodium	23-2	10.88	13.04	11.82	11.91	9.11	ppb
Strontium	86-1	0.01	0.01	-0.01	0.00	245.56	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	23.34	ppb
Sulfur	34-1	-211.84	-146.45	-232.83	-197.04		ppb
Terbium	159-1				101		%
Terbium	159-2				101		%
Thallium	203-1	0.01	0.01	0.01	0.01	22.51	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	13.64	ppb
Tin	118-1	-0.02	-0.01	-0.01	-0.01		ppb
Titanium	47-1	-0.08	-0.08	-0.08	-0.08		ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:01:37	DataFile Name :	015CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	-0.01	-0.01	-0.01	-0.01		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				101		%
Zinc	66-2	0.45	0.19	0.13	0.26	67.57	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	34.94	ppb
Zirconium	91-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:05:01	DataFile Name :	016ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	99274.02	99071.20	98709.55	99018.26	0.29	ppb
Antimony	121-1	1.12	1.13	1.11	1.12	0.88	ppb
Arsenic	75-2	0.30	0.24	0.28	0.27	12.46	ppb
Barium	135-1	1.47	1.45	1.47	1.46	0.95	ppb
Barium	137-1	1.44	1.43	1.40	1.42	1.41	ppb
Beryllium	9-1	0.33	0.29	0.31	0.31	6.41	ppb
Bismuth	209-1				94		%
Bismuth	209-2				89		%
Bromine	81-1						cps
Cadmium	108-1	15.14	14.64	15.08	14.95	1.81	ppb
Cadmium	106-1	0.03	-0.31	0.15	-0.04		ppb
Cadmium	111-1	0.55	0.50	0.55	0.53	5.80	ppb
Calcium	43-1	106560.13	105896.41	107571.54	106676.02	0.79	ppb
Calcium	44-1	105399.07	105611.80	107218.15	106076.34	0.94	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	20.44	20.17	20.15	20.25	0.82	ppb
Cobalt	59-2	1.20	1.17	1.14	1.17	2.16	ppb
Copper	63-2	7.81	7.85	7.83	7.83	0.21	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				97		%
Indium	115-1				96		%
Indium	115-2				91		%
Iron	54-2	110870.43	109589.96	110669.83	110376.74	0.62	ppb
Iron	56-2	110528.92	110703.72	111689.91	110974.18	0.56	ppb
Iron	57-2	111565.44	112263.55	111714.68	111847.89	0.33	ppb
Krypton	83-1						cps
Lead	206-1	4.78	4.66	4.64	4.69	1.63	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:05:01	DataFile Name :	016ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	4.31	4.25	4.21	4.26	1.22	ppb
Lead	208-1	4.47	4.41	4.35	4.41	1.33	ppb
Lithium	6-1				99		%
Magnesium	24-2	103711.32	103946.52	102588.21	103415.35	0.70	ppb
Manganese	55-2	6.90	6.73	6.73	6.79	1.44	ppb
Molybdenum	94-1	1641.79	1644.48	1577.96	1621.41	2.32	ppb
Molybdenum	95-1	1998.07	1994.75	1959.19	1984.00	1.09	ppb
Molybdenum	96-1	1965.81	1967.33	1948.77	1960.63	0.53	ppb
Molybdenum	97-1	1981.45	2019.54	1945.68	1982.23	1.86	ppb
Molybdenum	98-1	1977.36	2000.97	1937.25	1971.86	1.63	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	5.37	5.44	5.36	5.39	0.79	ppb
Phosphorus	31-2	112322.10	113037.03	112307.66	112555.59	0.37	ppb
Potassium	39-2	105065.63	105447.00	104093.49	104868.71	0.67	ppb
Rhodium	103-1				90		%
Rhodium	103-2				88		%
Scandium	45-1				97		%
Scandium	45-2				93		%
Selenium	82-1	0.25	0.00	0.18	0.14	88.04	ppb
Selenium	77-2	0.14	-0.25	0.55	0.15	274.35	ppb
Selenium	78-2	1.39	0.13	0.36	0.63	106.93	ppb
Silicon	28-1	8.81	8.28	8.00	8.36	4.90	ppb
Silver	107-1	0.06	0.06	0.05	0.06	7.00	ppb
Silver	109-1	0.06	0.06	0.06	0.06	3.86	ppb
Sodium	23-2	110848.27	109895.20	110764.91	110502.79	0.48	ppb
Strontium	86-1	33.22	33.00	32.55	32.92	1.04	ppb
Strontium	88-1	35.45	35.47	34.76	35.23	1.14	ppb
Sulfur	34-1	105052.46	103717.50	104249.44	104339.80	0.64	ppb
Terbium	159-1				98		%
Terbium	159-2				97		%
Thallium	203-1	0.10	0.15	0.16	0.14	22.27	ppb
Thallium	205-1	0.11	0.15	0.17	0.14	22.19	ppb
Tin	118-1	0.14	0.14	0.15	0.14	5.92	ppb
Titanium	47-1	2125.90	2105.18	2075.76	2102.28	1.20	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	9.93	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:05:01	DataFile Name :	016ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.16	0.14	0.13	0.14	8.64	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				95		%
Zinc	66-2	13.27	14.39	13.89	13.85	4.04	ppb
Zirconium	90-1	0.02	0.03	0.03	0.03	3.35	ppb
Zirconium	91-1	0.03	0.02	0.03	0.03	9.93	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:12:29	DataFile Name :	018ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	95016.83	94546.14	93996.61	94519.86	0.54	ppb
Antimony	121-1	20.23	19.82	20.18	20.08	1.10	ppb
Arsenic	75-2	20.29	20.29	20.30	20.29	0.04	ppb
Barium	135-1	21.01	20.22	20.79	20.67	1.96	ppb
Barium	137-1	20.61	20.68	21.05	20.78	1.16	ppb
Beryllium	9-1	21.73	20.74	21.17	21.21	2.35	ppb
Bismuth	209-1				93		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Cadmium	108-1	31.06	29.56	30.95	30.52	2.73	ppb
Cadmium	106-1	15.19	15.39	15.14	15.24	0.88	ppb
Cadmium	111-1	19.51	19.07	19.45	19.34	1.25	ppb
Calcium	43-1	102983.24	99856.07	99391.05	100743.46	1.94	ppb
Calcium	44-1	102674.32	100427.20	99863.15	100988.22	1.47	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	38.96	39.17	38.94	39.02	0.33	ppb
Cobalt	59-2	21.04	20.77	20.89	20.90	0.65	ppb
Copper	63-2	27.57	27.78	27.37	27.58	0.74	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				100		%
Holmium	165-2				97		%
Indium	115-1				94		%
Indium	115-2				91		%
Iron	54-2	104553.32	105500.52	105683.66	105245.83	0.58	ppb
Iron	56-2	105803.67	105640.08	106263.74	105902.50	0.31	ppb
Iron	57-2	105182.17	105749.67	107242.91	106058.25	1.00	ppb
Krypton	83-1						cps
Lead	206-1	23.43	23.94	23.38	23.59	1.30	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:12:29	DataFile Name :	018ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	22.45	23.54	22.73	22.90	2.46	ppb
Lead	208-1	22.75	23.44	22.96	23.05	1.52	ppb
Lithium	6-1				100		%
Magnesium	24-2	99335.08	99595.61	99224.27	99384.99	0.19	ppb
Manganese	55-2	26.53	26.42	26.48	26.48	0.22	ppb
Molybdenum	94-1	1623.33	1580.78	1559.90	1588.00	2.04	ppb
Molybdenum	95-1	1962.73	1932.10	1882.99	1925.94	2.09	ppb
Molybdenum	96-1	1948.69	1919.40	1876.74	1914.94	1.89	ppb
Molybdenum	97-1	1946.43	1942.26	1899.39	1929.36	1.35	ppb
Molybdenum	98-1	1954.76	1951.80	1880.60	1929.05	2.18	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	24.61	24.29	23.96	24.29	1.33	ppb
Phosphorus	31-2	107679.88	107476.05	107997.65	107717.86	0.24	ppb
Potassium	39-2	101203.70	100353.45	100205.17	100587.44	0.54	ppb
Rhodium	103-1				90		%
Rhodium	103-2				89		%
Scandium	45-1				98		%
Scandium	45-2				95		%
Selenium	82-1	21.19	21.22	19.86	20.76	3.73	ppb
Selenium	77-2	18.59	21.60	24.04	21.41	12.75	ppb
Selenium	78-2	21.42	19.10	22.21	20.91	7.71	ppb
Silicon	28-1	6.55	8.42	7.95	7.64	12.70	ppb
Silver	107-1	18.39	17.98	18.43	18.27	1.36	ppb
Silver	109-1	18.40	18.17	18.75	18.44	1.59	ppb
Sodium	23-2	107593.36	105349.52	106579.81	106507.56	1.06	ppb
Strontium	86-1	32.61	32.44	32.00	32.35	0.97	ppb
Strontium	88-1	35.40	34.81	33.95	34.72	2.11	ppb
Sulfur	34-1	102239.10	100497.37	99636.22	100790.90	1.32	ppb
Terbium	159-1				99		%
Terbium	159-2				96		%
Thallium	203-1	18.95	19.95	19.33	19.41	2.60	ppb
Thallium	205-1	19.46	20.15	19.46	19.69	2.01	ppb
Tin	118-1	0.15	0.14	0.14	0.14	3.94	ppb
Titanium	47-1	2048.55	1988.11	2003.39	2013.35	1.56	ppb
Uranium	238-1	0.02	0.03	0.02	0.02	3.25	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:12:29	DataFile Name :	018ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	20.15	19.90	20.12	20.05	0.69	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				95		%
Zinc	66-2	30.89	30.82	31.07	30.93	0.42	ppb
Zirconium	90-1	0.04	0.04	0.04	0.04	4.80	ppb
Zirconium	91-1	0.05	0.05	0.05	0.05	2.93	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:15:41	DataFile Name :	019CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	50485.43	51315.61	51435.75	51078.93	1.01	ppb
Antimony	121-1	482.04	506.24	497.53	495.27	2.47	ppb
Arsenic	75-2	496.71	498.11	499.03	497.95	0.23	ppb
Barium	135-1	2475.50	2526.53	2509.02	2503.68	1.04	ppb
Barium	137-1	2495.56	2518.44	2477.27	2497.09	0.83	ppb
Beryllium	9-1	519.71	517.99	527.28	521.66	0.95	ppb
Bismuth	209-1				88		%
Bismuth	209-2				85		%
Bromine	81-1						cps
Cadmium	108-1	484.71	501.06	482.90	489.56	2.04	ppb
Cadmium	106-1	486.93	499.11	488.79	491.61	1.33	ppb
Cadmium	111-1	482.23	492.82	490.64	488.56	1.14	ppb
Calcium	43-1	252578.25	252313.62	255548.99	253480.29	0.71	ppb
Calcium	44-1	251004.40	253059.44	256011.90	253358.58	0.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	500.80	505.46	497.99	501.42	0.75	ppb
Cobalt	59-2	468.53	487.00	469.19	474.91	2.21	ppb
Copper	63-2	4606.40	4676.90	4573.39	4618.90	1.14	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				97		%
Holmium	165-2				96		%
Indium	115-1				89		%
Indium	115-2				86		%
Iron	54-2	126036.00	125474.30	128660.95	126723.75	1.34	ppb
Iron	56-2	126850.12	128492.75	127231.18	127524.68	0.67	ppb
Iron	57-2	125887.45	130437.46	126160.03	127494.98	2.00	ppb
Krypton	83-1						cps
Lead	206-1	2535.95	2529.52	2549.32	2538.26	0.40	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:15:41	DataFile Name :	019CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2529.70	2520.54	2516.13	2522.12	0.27	ppb
Lead	208-1	2542.07	2524.95	2526.72	2531.25	0.37	ppb
Lithium	6-1				95		%
Magnesium	24-2	245609.98	254629.74	250189.01	250142.91	1.80	ppb
Manganese	55-2	4937.48	4986.87	4974.78	4966.38	0.52	ppb
Molybdenum	94-1	4956.49	4868.84	5027.89	4951.07	1.61	ppb
Molybdenum	95-1	5029.06	4843.25	4948.49	4940.27	1.89	ppb
Molybdenum	96-1	5021.53	4857.80	4970.43	4949.92	1.69	ppb
Molybdenum	97-1	4947.27	4836.00	4944.88	4909.38	1.29	ppb
Molybdenum	98-1	4982.07	4842.79	5000.50	4941.79	1.74	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	483.26	487.91	472.87	481.35	1.60	ppb
Phosphorus	31-2	10333.26	10388.76	10248.98	10323.67	0.68	ppb
Potassium	39-2	126023.70	125324.14	126050.13	125799.32	0.33	ppb
Rhodium	103-1				85		%
Rhodium	103-2				85		%
Scandium	45-1				95		%
Scandium	45-2				98		%
Selenium	82-1	480.28	478.15	476.70	478.38	0.38	ppb
Selenium	77-2	504.71	513.33	527.08	515.04	2.19	ppb
Selenium	78-2	500.93	488.17	494.70	494.60	1.29	ppb
Silicon	28-1	483.49	484.57	488.69	485.58	0.57	ppb
Silver	107-1	481.02	490.17	472.25	481.14	1.86	ppb
Silver	109-1	477.56	490.10	480.64	482.77	1.35	ppb
Sodium	23-2	247262.71	248865.10	248265.57	248131.13	0.33	ppb
Strontium	86-1	492.58	486.78	504.65	494.67	1.84	ppb
Strontium	88-1	510.37	498.98	503.71	504.35	1.13	ppb
Sulfur	34-1	10059.60	10285.92	10260.39	10201.97	1.22	ppb
Terbium	159-1				97		%
Terbium	159-2				95		%
Thallium	203-1	505.37	499.29	506.44	503.70	0.77	ppb
Thallium	205-1	503.03	500.24	511.91	505.06	1.21	ppb
Tin	118-1	487.47	501.86	498.53	495.95	1.52	ppb
Titanium	47-1	4907.53	4967.55	4976.38	4950.49	0.76	ppb
Uranium	238-1	520.55	508.60	512.14	513.77	1.19	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:15:41	DataFile Name :	019CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	505.47	509.68	513.34	509.50	0.77	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				94		%
Yttrium	89-2				96		%
Zinc	66-2	4670.98	4695.90	4746.25	4704.38	0.82	ppb
Zirconium	90-1	502.76	495.12	505.16	501.01	1.05	ppb
Zirconium	91-1	498.82	491.46	500.69	496.99	0.98	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:18:24	DataFile Name :	020CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20.05	19.13	19.89	19.69	2.50	ppb
Antimony	121-1	0.12	0.10	0.09	0.10	16.48	ppb
Arsenic	75-2	-0.01	0.01	0.02	0.01	191.91	ppb
Barium	135-1	0.08	0.04	0.03	0.05	49.43	ppb
Barium	137-1	0.06	0.04	0.04	0.05	25.86	ppb
Beryllium	9-1	0.04	0.04	0.03	0.04	14.68	ppb
Bismuth	209-1				106		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.05	0.02	-0.01	0.02	133.67	ppb
Cadmium	106-1	0.13	-0.17	0.25	0.07	316.07	ppb
Cadmium	111-1	0.03	0.00	0.03	0.02	69.46	ppb
Calcium	43-1	8.26	6.46	4.66	6.46	27.85	ppb
Calcium	44-1	7.45	3.83	2.71	4.67	53.10	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.04	0.00	-0.02	-0.02		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	206.70	ppb
Copper	63-2	0.16	0.18	0.16	0.17	9.16	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				106		%
Holmium	165-2				103		%
Indium	115-1				105		%
Indium	115-2				101		%
Iron	54-2	2.61	2.70	2.31	2.54	7.93	ppb
Iron	56-2	3.05	2.78	2.67	2.83	6.87	ppb
Iron	57-2	2.67	2.99	2.91	2.86	5.81	ppb
Krypton	83-1						cps
Lead	206-1	0.17	0.14	0.13	0.15	14.16	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:18:24	DataFile Name :	020CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.18	0.14	0.13	0.15	14.49	ppb
Lead	208-1	0.17	0.14	0.13	0.15	14.46	ppb
Lithium	6-1				108		%
Magnesium	24-2	4.14	3.82	4.07	4.01	4.20	ppb
Manganese	55-2	-0.88	-0.78	-0.87	-0.84		ppb
Molybdenum	94-1	0.25	0.20	0.16	0.20	21.85	ppb
Molybdenum	95-1	0.20	0.15	0.14	0.16	20.31	ppb
Molybdenum	96-1	0.20	0.15	0.12	0.16	24.47	ppb
Molybdenum	97-1	0.20	0.14	0.11	0.15	29.78	ppb
Molybdenum	98-1	0.20	0.14	0.12	0.15	26.73	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.01	0.02	0.02	0.02	40.03	ppb
Phosphorus	31-2	-20.37	-14.62	-14.73	-16.57		ppb
Potassium	39-2	27.98	30.88	30.22	29.69	5.13	ppb
Rhodium	103-1				103		%
Rhodium	103-2				101		%
Scandium	45-1				104		%
Scandium	45-2				101		%
Selenium	82-1	0.05	0.15	-0.16	0.01	1200.62	ppb
Selenium	77-2	-0.25	-0.25	-0.25	-0.25		ppb
Selenium	78-2	-0.05	0.39	0.74	0.36	109.37	ppb
Silicon	28-1	0.38	0.02	-0.11	0.10	263.75	ppb
Silver	107-1	0.07	0.04	0.04	0.05	28.46	ppb
Silver	109-1	0.05	0.04	0.04	0.05	16.38	ppb
Sodium	23-2	42.11	41.93	40.47	41.50	2.17	ppb
Strontium	86-1	0.01	0.02	0.01	0.01	31.94	ppb
Strontium	88-1	0.02	0.01	0.01	0.01	30.25	ppb
Sulfur	34-1	-155.88	-340.71	-405.37	-300.65		ppb
Terbium	159-1				105		%
Terbium	159-2				101		%
Thallium	203-1	0.07	0.06	0.06	0.06	9.24	ppb
Thallium	205-1	0.07	0.06	0.06	0.07	11.40	ppb
Tin	118-1	0.00	-0.01	0.29	0.10	176.61	ppb
Titanium	47-1	0.13	0.05	0.05	0.08	58.84	ppb
Uranium	238-1	0.01	0.01	0.00	0.01	48.42	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:18:24	DataFile Name :	020CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.01	0.01	0.01	62.88	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				101		%
Zinc	66-2	0.14	0.20	0.32	0.22	41.43	ppb
Zirconium	90-1	0.04	0.04	0.04	0.04	10.51	ppb
Zirconium	91-1	0.04	0.03	0.03	0.04	15.46	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:32:49	DataFile Name :	024LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	23.02	21.83	21.75	22.20	3.20	ppb
Antimony	121-1	1.95	1.94	2.04	1.98	2.70	ppb
Arsenic	75-2	1.18	1.10	1.05	1.11	6.17	ppb
Barium	135-1	9.66	9.67	10.16	9.83	2.89	ppb
Barium	137-1	9.70	9.73	10.11	9.85	2.33	ppb
Beryllium	9-1	1.13	1.11	1.10	1.11	1.51	ppb
Bismuth	209-1				103		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	1.10	1.07	1.06	1.08	1.70	ppb
Cadmium	106-1	0.79	1.34	1.40	1.18	28.42	ppb
Cadmium	111-1	1.05	1.07	1.09	1.07	1.72	ppb
Calcium	43-1	528.68	511.63	524.35	521.55	1.70	ppb
Calcium	44-1	523.31	512.07	519.12	518.17	1.10	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.10	2.02	2.00	2.04	2.77	ppb
Cobalt	59-2	1.09	1.05	1.08	1.07	1.67	ppb
Copper	63-2	2.20	2.21	2.16	2.19	1.30	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				100		%
Indium	115-1				104		%
Indium	115-2				99		%
Iron	54-2	55.82	53.77	54.65	54.75	1.88	ppb
Iron	56-2	54.44	53.71	53.22	53.79	1.15	ppb
Iron	57-2	51.53	54.38	54.47	53.46	3.13	ppb
Krypton	83-1						cps
Lead	206-1	0.91	0.94	0.94	0.93	2.14	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:32:49	DataFile Name :	024LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.91	0.95	0.93	0.93	2.01	ppb
Lead	208-1	0.92	0.94	0.93	0.93	0.97	ppb
Lithium	6-1				105		%
Magnesium	24-2	554.23	558.56	550.72	554.50	0.71	ppb
Manganese	55-2	1.09	1.10	1.11	1.10	1.06	ppb
Molybdenum	94-1	5.65	5.60	5.59	5.62	0.54	ppb
Molybdenum	95-1	4.68	4.60	4.63	4.64	0.82	ppb
Molybdenum	96-1	4.82	4.75	4.84	4.80	0.99	ppb
Molybdenum	97-1	4.67	4.58	4.64	4.63	1.08	ppb
Molybdenum	98-1	4.66	4.63	4.69	4.66	0.60	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.31	0.99	1.04	1.11	15.42	ppb
Phosphorus	31-2	25.30	10.55	11.66	15.84	51.86	ppb
Potassium	39-2	532.63	513.95	517.51	521.36	1.90	ppb
Rhodium	103-1				102		%
Rhodium	103-2				99		%
Scandium	45-1				104		%
Scandium	45-2				101		%
Selenium	82-1	4.90	5.11	5.04	5.02	2.18	ppb
Selenium	77-2	5.06	5.03	6.53	5.54	15.45	ppb
Selenium	78-2	7.46	5.30	5.29	6.02	20.81	ppb
Silicon	28-1	2.05	1.95	2.03	2.01	2.81	ppb
Silver	107-1	0.97	1.01	1.05	1.01	3.93	ppb
Silver	109-1	0.98	0.98	1.06	1.01	4.52	ppb
Sodium	23-2	584.52	583.65	576.33	581.50	0.77	ppb
Strontium	86-1	0.98	0.96	0.97	0.97	1.22	ppb
Strontium	88-1	0.98	0.98	0.96	0.97	1.11	ppb
Sulfur	34-1	174.72	-68.60	7.68	37.93	328.06	ppb
Terbium	159-1				103		%
Terbium	159-2				99		%
Thallium	203-1	0.91	0.92	0.89	0.91	1.53	ppb
Thallium	205-1	0.93	0.99	0.92	0.95	4.02	ppb
Tin	118-1	4.83	4.94	5.08	4.95	2.54	ppb
Titanium	47-1	4.99	4.77	4.90	4.89	2.28	ppb
Uranium	238-1	0.89	0.91	0.90	0.90	1.25	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:32:49	DataFile Name :	024LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.14	5.13	5.09	5.12	0.47	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				100		%
Zinc	66-2	5.19	5.32	5.21	5.24	1.33	ppb
Zirconium	90-1	0.98	0.97	0.96	0.97	1.14	ppb
Zirconium	91-1	0.97	0.95	0.98	0.97	1.39	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1816-01	Instrumnet Name :	P8
Client Sample ID :	441	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:36:13	DataFile Name :	025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1787.86	1826.71	1805.25	1806.60	1.08	ppb
Antimony	121-1	5.31	5.38	5.34	5.34	0.74	ppb
Arsenic	75-2	12.96	12.97	13.05	12.99	0.39	ppb
Barium	135-1	76.55	78.47	77.06	77.36	1.28	ppb
Barium	137-1	76.87	77.96	78.12	77.65	0.88	ppb
Beryllium	9-1	0.21	0.21	0.21	0.21	1.40	ppb
Bismuth	209-1				94		%
Bismuth	209-2				90		%
Bromine	81-1						cps
Cadmium	108-1	7.24	6.73	6.63	6.87	4.79	ppb
Cadmium	106-1	7.27	7.28	6.94	7.16	2.71	ppb
Cadmium	111-1	5.39	5.53	5.53	5.49	1.48	ppb
Calcium	43-1	23911.25	24334.12	24165.54	24136.97	0.88	ppb
Calcium	44-1	23688.65	24647.62	24104.78	24147.02	1.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	10.68	11.14	10.54	10.78	2.91	ppb
Cobalt	59-2	7.88	8.17	7.93	7.99	1.97	ppb
Copper	63-2	514.75	520.36	505.07	513.40	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				102		%
Holmium	165-2				99		%
Indium	115-1				97		%
Indium	115-2				93		%
Iron	54-2	4468.20	4607.43	4528.50	4534.71	1.54	ppb
Iron	56-2	4717.96	4884.82	4730.03	4777.60	1.95	ppb
Iron	57-2	4477.30	4631.60	4480.65	4529.85	1.95	ppb
Krypton	83-1						cps
Lead	206-1	13245.21	13769.50	13612.10	13542.27	1.99	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1816-01	Instrumnet Name :	P8
Client Sample ID :	441	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:36:13	DataFile Name :	025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	12822.75	13100.74	13173.25	13032.25	1.42	ppb
Lead	208-1	12936.62	13325.28	13364.83	13208.91	1.79	ppb
Lithium	6-1				99		%
Magnesium	24-2	6014.47	6210.03	6046.20	6090.23	1.72	ppb
Manganese	55-2	520.88	535.78	524.42	527.03	1.48	ppb
Molybdenum	94-1	14.32	14.59	14.43	14.45	0.94	ppb
Molybdenum	95-1	3.94	4.01	3.91	3.95	1.31	ppb
Molybdenum	96-1	4.81	4.83	4.88	4.84	0.68	ppb
Molybdenum	97-1	3.78	3.75	3.76	3.76	0.39	ppb
Molybdenum	98-1	3.71	3.64	3.68	3.68	0.99	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	25.06	25.65	25.24	25.31	1.19	ppb
Phosphorus	31-2	73986.69	77004.85	74652.49	75214.68	2.11	ppb
Potassium	39-2	274459.88	281321.20	270475.83	275418.97	1.99	ppb
Rhodium	103-1				94		%
Rhodium	103-2				92		%
Scandium	45-1				103		%
Scandium	45-2				94		%
Selenium	82-1	0.85	1.02	0.93	0.94	8.99	ppb
Selenium	77-2	4.31	5.98	3.96	4.75	22.71	ppb
Selenium	78-2	2.21	1.25	1.67	1.71	28.09	ppb
Silicon	28-1	5200.94	5371.64	5370.86	5314.48	1.85	ppb
Silver	107-1	0.65	0.65	0.66	0.65	0.78	ppb
Silver	109-1	0.63	0.63	0.65	0.64	1.58	ppb
Sodium	23-2	187271.79	191775.34	187233.46	188760.20	1.38	ppb
Strontium	86-1	91.15	93.69	93.32	92.72	1.48	ppb
Strontium	88-1	97.02	99.76	97.85	98.21	1.43	ppb
Sulfur	34-1	71750.71	73915.90	72696.48	72787.70	1.49	ppb
Terbium	159-1				101		%
Terbium	159-2				97		%
Thallium	203-1	0.05	0.04	0.03	0.04	26.92	ppb
Thallium	205-1	0.05	0.04	0.04	0.04	17.67	ppb
Tin	118-1	5.27	5.37	5.31	5.32	0.98	ppb
Titanium	47-1	78.32	81.50	78.20	79.34	2.35	ppb
Uranium	238-1	0.58	0.58	0.58	0.58	0.85	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1816-01	Instrumnet Name :	P8
Client Sample ID :	441	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:36:13	DataFile Name :	025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	15.29	15.76	15.31	15.45	1.72	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				99		%
Zinc	66-2	7127.38	7326.51	7064.56	7172.82	1.91	ppb
Zirconium	90-1	6.20	6.26	6.22	6.22	0.49	ppb
Zirconium	91-1	6.14	6.35	6.18	6.22	1.81	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-05	Instrumnet Name :	P8
Client Sample ID :	3828	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:39:27	DataFile Name :	026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	8475.28	9068.10	8970.53	8837.97	3.60	ppb
Antimony	121-1	19.38	19.29	19.04	19.24	0.92	ppb
Arsenic	75-2	60.94	69.89	69.36	66.73	7.53	ppb
Barium	135-1	231.56	228.97	225.57	228.70	1.31	ppb
Barium	137-1	223.79	225.42	224.61	224.61	0.36	ppb
Beryllium	9-1	1.13	1.17	1.12	1.14	2.62	ppb
Bismuth	209-1				97		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Cadmium	108-1	14.10	14.02	13.83	13.98	1.00	ppb
Cadmium	106-1	23.02	22.59	22.13	22.58	1.96	ppb
Cadmium	111-1	5.44	5.40	5.27	5.37	1.68	ppb
Calcium	43-1	32341.24	32130.96	32036.55	32169.58	0.48	ppb
Calcium	44-1	32783.87	32805.05	32570.64	32719.85	0.40	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	40.10	42.32	42.20	41.54	3.00	ppb
Cobalt	59-2	8.55	9.00	9.02	8.86	2.97	ppb
Copper	63-2	1602.73	1653.78	1687.68	1648.06	2.59	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				108		%
Indium	115-1				101		%
Indium	115-2				100		%
Iron	54-2	16504.72	17402.33	17292.33	17066.46	2.87	ppb
Iron	56-2	16707.23	17238.04	17495.26	17146.84	2.34	ppb
Iron	57-2	16980.34	17678.52	17747.66	17468.84	2.43	ppb
Krypton	83-1						cps
Lead	206-1	2803.92	2947.79	2978.72	2910.14	3.21	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-05	Instrumnet Name :	P8
Client Sample ID :	3828	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:39:27	DataFile Name :	026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2676.82	2790.80	2807.07	2758.23	2.57	ppb
Lead	208-1	2750.28	2816.54	2847.84	2804.89	1.78	ppb
Lithium	6-1				108		%
Magnesium	24-2	8098.97	8531.88	8517.91	8382.92	2.93	ppb
Manganese	55-2	218.00	228.45	226.90	224.45	2.51	ppb
Molybdenum	94-1	138.13	134.90	137.55	136.86	1.26	ppb
Molybdenum	95-1	5.20	5.04	5.08	5.11	1.65	ppb
Molybdenum	96-1	18.22	17.48	17.88	17.86	2.06	ppb
Molybdenum	97-1	5.19	5.04	5.17	5.13	1.66	ppb
Molybdenum	98-1	5.18	4.99	5.05	5.07	1.86	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	21.18	22.13	22.13	21.81	2.51	ppb
Phosphorus	31-2	2555.57	2577.05	2617.53	2583.38	1.22	ppb
Potassium	39-2	26662.84	27862.74	28337.17	27620.92	3.12	ppb
Rhodium	103-1				96		%
Rhodium	103-2				98		%
Scandium	45-1				133		%
Scandium	45-2				110		%
Selenium	82-1	1.66	1.69	1.86	1.74	6.25	ppb
Selenium	77-2	18.16	25.55	25.50	23.07	18.43	ppb
Selenium	78-2	4.24	5.51	4.03	4.59	17.34	ppb
Silicon	28-1	38589.69	38555.46	38264.89	38470.01	0.46	ppb
Silver	107-1	1.00	1.01	1.00	1.01	0.52	ppb
Silver	109-1	0.92	0.92	0.91	0.92	0.35	ppb
Sodium	23-2	689346.28	725745.07	722430.12	712507.16	2.82	ppb
Strontium	86-1	146.79	147.28	150.03	148.03	1.18	ppb
Strontium	88-1	146.57	144.69	150.36	147.21	1.96	ppb
Sulfur	34-1	33993.55	33952.98	33505.58	33817.37	0.80	ppb
Terbium	159-1				106		%
Terbium	159-2				106		%
Thallium	203-1	0.13	0.13	0.14	0.13	3.07	ppb
Thallium	205-1	0.13	0.13	0.14	0.14	3.84	ppb
Tin	118-1	27.04	26.90	26.60	26.85	0.85	ppb
Titanium	47-1	342.21	337.96	344.16	341.44	0.93	ppb
Uranium	238-1	1.49	1.50	1.54	1.51	1.63	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-05	Instrumnet Name :	P8
Client Sample ID :	3828	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:39:27	DataFile Name :	026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	58.41	61.27	61.16	60.28	2.69	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				116		%
Yttrium	89-2				120		%
Zinc	66-2	2909.14	3079.53	3085.13	3024.60	3.31	ppb
Zirconium	90-1	73.03	73.01	71.80	72.62	0.97	ppb
Zirconium	91-1	67.46	65.53	65.90	66.30	1.55	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-06	Instrumnet Name :	P8
Client Sample ID :	3829	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:42:34	DataFile Name :	027AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	8186.70	8047.76	8072.11	8102.19	0.92	ppb
Antimony	121-1	10.87	10.73	11.09	10.90	1.65	ppb
Arsenic	75-2	58.78	58.24	58.86	58.62	0.58	ppb
Barium	135-1	195.65	193.54	200.22	196.47	1.74	ppb
Barium	137-1	199.25	193.07	202.21	198.18	2.35	ppb
Beryllium	9-1	0.83	0.86	0.88	0.85	2.92	ppb
Bismuth	209-1				103		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	8.56	8.31	8.40	8.42	1.49	ppb
Cadmium	106-1	12.25	11.80	11.95	12.00	1.89	ppb
Cadmium	111-1	4.31	4.23	4.33	4.29	1.22	ppb
Calcium	43-1	30817.43	31086.52	30628.19	30844.05	0.75	ppb
Calcium	44-1	30271.52	31249.62	30970.14	30830.43	1.63	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	40.55	40.26	40.63	40.48	0.48	ppb
Cobalt	59-2	5.76	5.69	5.72	5.72	0.58	ppb
Copper	63-2	686.65	685.34	678.61	683.53	0.63	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				111		%
Holmium	165-2				110		%
Indium	115-1				107		%
Indium	115-2				103		%
Iron	54-2	15304.80	15098.49	15049.38	15150.89	0.89	ppb
Iron	56-2	15280.35	15060.38	15187.34	15176.02	0.73	ppb
Iron	57-2	15591.37	15435.45	15464.02	15496.94	0.54	ppb
Krypton	83-1						cps
Lead	206-1	2469.24	2467.68	2502.47	2479.80	0.79	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-06	Instrumnet Name :	P8
Client Sample ID :	3829	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:42:34	DataFile Name :	027AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2350.82	2316.18	2329.61	2332.21	0.75	ppb
Lead	208-1	2416.50	2372.86	2413.43	2400.93	1.01	ppb
Lithium	6-1				114		%
Magnesium	24-2	6585.01	6460.83	6468.90	6504.91	1.07	ppb
Manganese	55-2	153.78	151.76	152.86	152.80	0.66	ppb
Molybdenum	94-1	56.98	56.92	57.72	57.20	0.78	ppb
Molybdenum	95-1	4.40	4.32	4.45	4.39	1.48	ppb
Molybdenum	96-1	10.01	10.05	10.02	10.03	0.21	ppb
Molybdenum	97-1	4.35	4.39	4.44	4.39	0.99	ppb
Molybdenum	98-1	4.37	4.32	4.37	4.35	0.64	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	18.19	18.31	18.20	18.24	0.36	ppb
Phosphorus	31-2	2261.42	2290.62	2268.81	2273.61	0.67	ppb
Potassium	39-2	15128.38	14741.73	14776.76	14882.29	1.44	ppb
Rhodium	103-1				102		%
Rhodium	103-2				102		%
Scandium	45-1				129		%
Scandium	45-2				112		%
Selenium	82-1	1.28	1.46	1.45	1.40	7.47	ppb
Selenium	77-2	22.44	24.03	23.14	23.20	3.45	ppb
Selenium	78-2	5.57	3.75	4.53	4.62	19.79	ppb
Silicon	28-1	21183.41	21231.88	21381.29	21265.53	0.49	ppb
Silver	107-1	1.33	1.34	1.37	1.34	1.54	ppb
Silver	109-1	1.31	1.33	1.36	1.33	1.90	ppb
Sodium	23-2	376158.72	367160.10	363477.11	368931.98	1.77	ppb
Strontium	86-1	149.96	151.52	150.06	150.51	0.58	ppb
Strontium	88-1	151.52	147.98	152.40	150.63	1.56	ppb
Sulfur	34-1	19549.16	18741.19	19536.83	19275.73	2.40	ppb
Terbium	159-1				109		%
Terbium	159-2				110		%
Thallium	203-1	0.11	0.11	0.11	0.11	1.22	ppb
Thallium	205-1	0.11	0.11	0.11	0.11	2.36	ppb
Tin	118-1	13.06	12.69	13.12	12.95	1.81	ppb
Titanium	47-1	250.06	253.20	249.05	250.77	0.86	ppb
Uranium	238-1	1.46	1.47	1.48	1.47	0.81	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-06	Instrumnet Name :	P8
Client Sample ID :	3829	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:42:34	DataFile Name :	027AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	37.82	37.13	37.01	37.32	1.17	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				120		%
Yttrium	89-2				117		%
Zinc	66-2	2270.96	2216.81	2212.09	2233.29	1.46	ppb
Zirconium	90-1	32.18	33.62	33.60	33.13	2.49	ppb
Zirconium	91-1	29.69	29.57	29.79	29.69	0.36	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-07	Instrumnet Name :	P8
Client Sample ID :	3651	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:45:39	DataFile Name :	028AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	77.51	80.39	74.90	77.60	3.53	ppb
Antimony	121-1	1.46	1.48	1.48	1.47	0.90	ppb
Arsenic	75-2	8.00	7.83	7.69	7.84	1.98	ppb
Barium	135-1	21.08	21.42	21.28	21.26	0.82	ppb
Barium	137-1	21.06	21.83	21.66	21.52	1.88	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	1.95	ppb
Bismuth	209-1				100		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.31	0.41	0.29	0.33	19.03	ppb
Cadmium	106-1	-0.07	0.57	0.05	0.18	185.64	ppb
Cadmium	111-1	0.06	0.10	0.06	0.07	32.81	ppb
Calcium	43-1	25040.41	25458.61	24874.55	25124.52	1.20	ppb
Calcium	44-1	24727.52	24913.52	24890.72	24843.92	0.41	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.43	1.41	1.39	1.41	1.57	ppb
Cobalt	59-2	0.68	0.68	0.69	0.68	0.84	ppb
Copper	63-2	15.16	14.83	14.85	14.95	1.23	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				107		%
Indium	115-1				107		%
Indium	115-2				102		%
Iron	54-2	411.44	406.23	413.21	410.29	0.89	ppb
Iron	56-2	450.15	447.24	445.99	447.79	0.48	ppb
Iron	57-2	409.82	420.46	406.51	412.26	1.77	ppb
Krypton	83-1						cps
Lead	206-1	2.88	2.89	2.93	2.90	0.92	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-07	Instrumnet Name :	P8
Client Sample ID :	3651	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:45:39	DataFile Name :	028AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2.78	2.83	2.87	2.83	1.59	ppb
Lead	208-1	2.80	2.84	2.85	2.83	0.98	ppb
Lithium	6-1				111		%
Magnesium	24-2	1081.47	1071.64	1068.37	1073.83	0.64	ppb
Manganese	55-2	67.02	66.84	67.32	67.06	0.36	ppb
Molybdenum	94-1	5.26	5.15	5.25	5.22	1.14	ppb
Molybdenum	95-1	5.98	5.94	6.01	5.98	0.58	ppb
Molybdenum	96-1	5.98	5.85	5.95	5.92	1.15	ppb
Molybdenum	97-1	5.93	5.97	6.06	5.99	1.04	ppb
Molybdenum	98-1	5.94	5.85	5.95	5.91	0.93	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.96	2.85	2.90	2.90	1.83	ppb
Phosphorus	31-2	457.68	424.17	432.35	438.06	3.99	ppb
Potassium	39-2	47448.20	47155.67	47345.10	47316.32	0.31	ppb
Rhodium	103-1				103		%
Rhodium	103-2				102		%
Scandium	45-1				112		%
Scandium	45-2				105		%
Selenium	82-1	0.52	0.32	0.22	0.35	43.76	ppb
Selenium	77-2	-0.25	0.11	0.48	0.11	326.88	ppb
Selenium	78-2	0.47	0.67	-0.29	0.28	178.39	ppb
Silicon	28-1	657.26	682.73	664.14	668.04	1.97	ppb
Silver	107-1	0.04	0.04	0.04	0.04	6.04	ppb
Silver	109-1	0.04	0.04	0.04	0.04	8.13	ppb
Sodium	23-2	161713.09	157307.53	157050.03	158690.22	1.65	ppb
Strontium	86-1	90.07	87.59	89.16	88.94	1.41	ppb
Strontium	88-1	97.39	96.58	97.29	97.09	0.45	ppb
Sulfur	34-1	4843.94	5354.29	5252.60	5150.28	5.24	ppb
Terbium	159-1				108		%
Terbium	159-2				107		%
Thallium	203-1	0.01	0.01	0.01	0.01	13.67	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	6.42	ppb
Tin	118-1	0.96	1.05	1.02	1.01	4.38	ppb
Titanium	47-1	2.31	2.48	2.58	2.46	5.49	ppb
Uranium	238-1	0.22	0.23	0.23	0.23	0.85	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-07	Instrumnet Name :	P8
Client Sample ID :	3651	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:45:39	DataFile Name :	028AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	1.60	1.63	1.66	1.63	1.66	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				104		%
Zinc	66-2	277.99	275.79	277.91	277.23	0.45	ppb
Zirconium	90-1	0.16	0.15	0.16	0.16	3.82	ppb
Zirconium	91-1	0.17	0.16	0.15	0.16	7.24	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04	Instrumnet Name :	P8
Client Sample ID :	285	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:48:57	DataFile Name :	029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	630.40	635.31	629.63	631.78	0.49	ppb
Antimony	121-1	0.55	0.54	0.55	0.55	0.41	ppb
Arsenic	75-2	2.60	2.52	2.53	2.55	1.75	ppb
Barium	135-1	35.22	34.47	34.61	34.76	1.15	ppb
Barium	137-1	35.14	34.50	34.96	34.87	0.95	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	31.10	ppb
Bismuth	209-1				105		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.49	0.43	0.43	0.45	8.43	ppb
Cadmium	106-1	0.79	0.78	0.95	0.84	10.96	ppb
Cadmium	111-1	0.17	0.19	0.20	0.19	6.38	ppb
Calcium	43-1	13405.80	13577.32	13610.28	13531.13	0.81	ppb
Calcium	44-1	13325.23	13402.61	13349.23	13359.02	0.30	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7.27	7.23	7.32	7.28	0.59	ppb
Cobalt	59-2	1.99	2.01	1.96	1.98	1.32	ppb
Copper	63-2	59.44	59.27	59.44	59.38	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				111		%
Holmium	165-2				108		%
Indium	115-1				107		%
Indium	115-2				103		%
Iron	54-2	13034.00	12831.06	12763.28	12876.11	1.09	ppb
Iron	56-2	12975.35	12850.14	12734.69	12853.39	0.94	ppb
Iron	57-2	13267.67	12848.48	12955.43	13023.86	1.67	ppb
Krypton	83-1						cps
Lead	206-1	387.01	392.90	394.12	391.34	0.97	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04	Instrumnet Name :	P8
Client Sample ID :	285	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:48:57	DataFile Name :	029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	388.97	386.37	395.83	390.39	1.25	ppb
Lead	208-1	392.45	389.81	394.77	392.34	0.63	ppb
Lithium	6-1				114		%
Magnesium	24-2	1205.91	1197.77	1187.63	1197.11	0.76	ppb
Manganese	55-2	536.94	527.77	533.26	532.66	0.87	ppb
Molybdenum	94-1	2.01	2.12	2.08	2.07	2.73	ppb
Molybdenum	95-1	2.08	2.11	2.10	2.10	0.55	ppb
Molybdenum	96-1	2.15	2.14	2.18	2.16	0.99	ppb
Molybdenum	97-1	2.09	2.11	2.12	2.11	0.60	ppb
Molybdenum	98-1	2.10	2.11	2.05	2.09	1.55	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	10.32	10.39	10.43	10.38	0.57	ppb
Phosphorus	31-2	44.81	45.93	34.80	41.84	14.65	ppb
Potassium	39-2	6591.81	6616.32	6778.49	6662.21	1.52	ppb
Rhodium	103-1				105		%
Rhodium	103-2				103		%
Scandium	45-1				114		%
Scandium	45-2				106		%
Selenium	82-1	0.21	0.16	0.10	0.16	34.19	ppb
Selenium	77-2	0.81	0.11	-0.25	0.22	243.49	ppb
Selenium	78-2	0.33	0.33	0.77	0.48	53.36	ppb
Silicon	28-1	569.35	565.17	559.32	564.62	0.89	ppb
Silver	107-1	0.06	0.06	0.06	0.06	2.00	ppb
Silver	109-1	0.06	0.06	0.07	0.07	2.79	ppb
Sodium	23-2	247965.89	246742.28	248069.80	247592.66	0.30	ppb
Strontium	86-1	61.47	61.49	62.64	61.87	1.08	ppb
Strontium	88-1	66.45	68.02	68.09	67.52	1.38	ppb
Sulfur	34-1	7399.89	7435.50	7572.29	7469.23	1.22	ppb
Terbium	159-1				109		%
Terbium	159-2				107		%
Thallium	203-1	0.03	0.02	0.03	0.03	9.78	ppb
Thallium	205-1	0.02	0.03	0.03	0.03	6.89	ppb
Tin	118-1	10.25	10.11	10.39	10.25	1.36	ppb
Titanium	47-1	15.11	14.30	14.32	14.58	3.17	ppb
Uranium	238-1	0.05	0.05	0.05	0.05	2.65	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04	Instrumnet Name :	P8
Client Sample ID :	285	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:48:57	DataFile Name :	029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	4.17	4.15	4.17	4.16	0.31	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				106		%
Zinc	66-2	1166.01	1160.85	1171.38	1166.08	0.45	ppb
Zirconium	90-1	0.19	0.19	0.19	0.19	1.07	ppb
Zirconium	91-1	0.19	0.19	0.19	0.19	0.91	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04DUP	Instrumnet Name :	P8
Client Sample ID :	285DUP	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:52:08	DataFile Name :	030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	624.00	622.80	628.52	625.11	0.48	ppb
Antimony	121-1	0.55	0.56	0.55	0.55	0.72	ppb
Arsenic	75-2	2.35	2.15	2.25	2.25	4.31	ppb
Barium	135-1	33.68	34.04	34.50	34.07	1.20	ppb
Barium	137-1	34.03	34.18	34.91	34.37	1.38	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	38.78	ppb
Bismuth	209-1				103		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	0.48	0.49	0.49	0.49	1.44	ppb
Cadmium	106-1	0.42	0.47	0.49	0.46	8.54	ppb
Cadmium	111-1	0.14	0.16	0.17	0.16	10.10	ppb
Calcium	43-1	13189.82	12915.68	13581.50	13229.00	2.53	ppb
Calcium	44-1	13123.68	13068.84	13162.78	13118.44	0.36	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	6.33	6.17	6.37	6.29	1.72	ppb
Cobalt	59-2	1.91	1.91	1.89	1.90	0.78	ppb
Copper	63-2	54.24	54.51	54.57	54.44	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				108		%
Holmium	165-2				106		%
Indium	115-1				105		%
Indium	115-2				100		%
Iron	54-2	11151.91	11188.34	11344.31	11228.19	0.91	ppb
Iron	56-2	11062.31	11020.81	11069.17	11050.76	0.24	ppb
Iron	57-2	11223.14	11328.80	11220.85	11257.60	0.55	ppb
Krypton	83-1						cps
Lead	206-1	385.37	383.22	386.55	385.05	0.44	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04DUP	Instrumnet Name :	P8
Client Sample ID :	285DUP	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:52:08	DataFile Name :	030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	381.37	373.83	391.24	382.15	2.28	ppb
Lead	208-1	385.39	380.82	387.96	384.72	0.94	ppb
Lithium	6-1				111		%
Magnesium	24-2	1165.34	1158.37	1164.40	1162.70	0.32	ppb
Manganese	55-2	529.01	522.60	525.62	525.75	0.61	ppb
Molybdenum	94-1	1.86	1.84	1.92	1.87	2.26	ppb
Molybdenum	95-1	1.79	1.86	1.86	1.84	2.07	ppb
Molybdenum	96-1	1.88	1.89	1.85	1.87	1.11	ppb
Molybdenum	97-1	1.84	1.88	1.87	1.87	1.13	ppb
Molybdenum	98-1	1.79	1.84	1.85	1.83	1.71	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	9.83	9.54	9.56	9.65	1.65	ppb
Phosphorus	31-2	44.51	33.10	43.76	40.45	15.78	ppb
Potassium	39-2	6702.14	6745.89	6685.24	6711.09	0.47	ppb
Rhodium	103-1				102		%
Rhodium	103-2				100		%
Scandium	45-1				112		%
Scandium	45-2				103		%
Selenium	82-1	0.13	0.09	-0.02	0.07	110.85	ppb
Selenium	77-2	0.49	0.85	-0.25	0.36	155.29	ppb
Selenium	78-2	-0.06	0.48	0.79	0.40	107.29	ppb
Silicon	28-1	535.14	529.71	532.15	532.33	0.51	ppb
Silver	107-1	0.05	0.06	0.06	0.06	3.31	ppb
Silver	109-1	0.20	0.06	0.06	0.11	78.12	ppb
Sodium	23-2	247216.11	244270.90	245314.31	245600.44	0.61	ppb
Strontium	86-1	60.61	61.36	61.19	61.06	0.65	ppb
Strontium	88-1	66.64	66.92	67.20	66.92	0.42	ppb
Sulfur	34-1	7455.42	7377.33	7766.90	7533.22	2.74	ppb
Terbium	159-1				108		%
Terbium	159-2				103		%
Thallium	203-1	0.03	0.03	0.03	0.03	5.29	ppb
Thallium	205-1	0.02	0.03	0.03	0.03	4.85	ppb
Tin	118-1	8.85	8.96	9.15	8.98	1.70	ppb
Titanium	47-1	12.87	12.96	12.96	12.93	0.39	ppb
Uranium	238-1	0.05	0.05	0.05	0.05	1.46	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04DUP	Instrumnet Name :	P8
Client Sample ID :	285DUP	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:52:08	DataFile Name :	030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	3.87	3.89	3.89	3.88	0.20	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				103		%
Zinc	66-2	1147.99	1141.51	1153.04	1147.51	0.50	ppb
Zirconium	90-1	0.18	0.19	0.19	0.19	2.67	ppb
Zirconium	91-1	0.17	0.17	0.18	0.17	5.06	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04LX5	Instrumnet Name :	P8
Client Sample ID :	285L	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 16:55:21	DataFile Name :	031AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	126.86	131.15	125.61	127.88	2.27	ppb
Antimony	121-1	0.11	0.11	0.12	0.11	3.32	ppb
Arsenic	75-2	0.60	0.60	0.51	0.57	9.20	ppb
Barium	135-1	7.01	7.13	7.06	7.06	0.85	ppb
Barium	137-1	6.96	7.29	7.20	7.15	2.41	ppb
Beryllium	9-1	-0.01	0.00	0.00	0.00		ppb
Bismuth	209-1				105		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	0.12	0.10	0.16	0.13	22.88	ppb
Cadmium	106-1	-0.35	-0.19	0.10	-0.15		ppb
Cadmium	111-1	0.00	0.01	0.03	0.01	118.22	ppb
Calcium	43-1	2650.30	2625.71	2662.81	2646.27	0.71	ppb
Calcium	44-1	2735.49	2722.33	2773.45	2743.76	0.97	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.45	1.49	1.39	1.44	3.61	ppb
Cobalt	59-2	0.41	0.42	0.39	0.41	3.15	ppb
Copper	63-2	12.67	12.61	12.28	12.52	1.68	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				106		%
Indium	115-1				107		%
Indium	115-2				102		%
Iron	54-2	2553.29	2580.05	2452.77	2528.71	2.65	ppb
Iron	56-2	2725.61	2744.03	2624.88	2698.17	2.38	ppb
Iron	57-2	2553.17	2567.18	2470.19	2530.18	2.07	ppb
Krypton	83-1						cps
Lead	206-1	80.47	82.72	81.75	81.65	1.38	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04LX5	Instrumnet Name :	P8
Client Sample ID :	285L	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 16:55:21	DataFile Name :	031AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	73.39	75.26	73.57	74.07	1.39	ppb
Lead	208-1	78.94	80.72	79.32	79.66	1.18	ppb
Lithium	6-1				110		%
Magnesium	24-2	247.21	250.96	241.26	246.48	1.98	ppb
Manganese	55-2	100.73	103.73	97.92	100.79	2.88	ppb
Molybdenum	94-1	0.45	0.46	0.47	0.46	2.38	ppb
Molybdenum	95-1	0.42	0.44	0.46	0.44	4.44	ppb
Molybdenum	96-1	0.43	0.45	0.45	0.44	2.53	ppb
Molybdenum	97-1	0.45	0.46	0.42	0.44	4.07	ppb
Molybdenum	98-1	0.41	0.43	0.42	0.42	1.42	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	2.26	2.18	2.13	2.19	2.93	ppb
Phosphorus	31-2	-9.40	-13.93	-1.00	-8.11		ppb
Potassium	39-2	1302.89	1303.39	1286.08	1297.46	0.76	ppb
Rhodium	103-1				106		%
Rhodium	103-2				103		%
Scandium	45-1				109		%
Scandium	45-2				103		%
Selenium	82-1	-0.04	0.08	-0.07	-0.01		ppb
Selenium	77-2	0.49	0.12	0.12	0.24	89.47	ppb
Selenium	78-2	0.16	0.27	0.26	0.23	25.92	ppb
Silicon	28-1	116.97	117.71	116.53	117.07	0.51	ppb
Silver	107-1	0.01	0.01	0.01	0.01	11.96	ppb
Silver	109-1	0.01	0.01	0.01	0.01	7.22	ppb
Sodium	23-2	50530.10	50983.61	50001.37	50505.03	0.97	ppb
Strontium	86-1	12.54	13.00	12.93	12.82	1.91	ppb
Strontium	88-1	12.57	12.97	12.99	12.84	1.84	ppb
Sulfur	34-1	1300.84	1424.83	1414.47	1380.04	4.98	ppb
Terbium	159-1				107		%
Terbium	159-2				103		%
Thallium	203-1	0.01	0.01	0.01	0.01	10.22	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	16.89	ppb
Tin	118-1	2.21	2.14	2.14	2.16	1.99	ppb
Titanium	47-1	2.98	2.96	2.94	2.96	0.73	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	14.05	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04LX5	Instrumnet Name :	P8
Client Sample ID :	285L	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 16:55:21	DataFile Name :	031AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.82	0.84	0.78	0.81	3.42	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				103		%
Zinc	66-2	247.87	249.07	238.84	245.26	2.28	ppb
Zirconium	90-1	0.05	0.05	0.05	0.05	4.05	ppb
Zirconium	91-1	0.03	0.04	0.05	0.04	17.70	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04MS	Instrumnet Name :	P8
Client Sample ID :	285MS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:58:37	DataFile Name :	032AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9884.70	9535.63	9479.69	9633.34	2.28	ppb
Antimony	121-1	490.25	505.71	501.69	499.22	1.61	ppb
Arsenic	75-2	2.59	2.54	2.73	2.62	3.78	ppb
Barium	135-1	2245.81	2308.30	2255.69	2269.93	1.48	ppb
Barium	137-1	2232.62	2303.94	2255.62	2264.06	1.61	ppb
Beryllium	9-1	542.80	557.49	540.14	546.81	1.71	ppb
Bismuth	209-1				99		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	448.84	456.65	455.33	453.61	0.92	ppb
Cadmium	106-1	472.13	488.21	475.53	478.62	1.77	ppb
Cadmium	111-1	489.62	485.30	488.66	487.86	0.46	ppb
Calcium	43-1	60629.77	61544.38	62391.13	61521.76	1.43	ppb
Calcium	44-1	61277.81	61640.68	61368.76	61429.08	0.31	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	478.79	476.83	482.01	479.21	0.55	ppb
Cobalt	59-2	480.46	485.92	494.79	487.05	1.49	ppb
Copper	63-2	4828.98	4833.68	4949.02	4870.56	1.40	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				104		%
Indium	115-1				99		%
Indium	115-2				93		%
Iron	54-2	30979.80	31035.86	30997.84	31004.50	0.09	ppb
Iron	56-2	31083.67	31299.09	30702.61	31028.46	0.97	ppb
Iron	57-2	30885.45	31310.08	31560.06	31251.86	1.09	ppb
Krypton	83-1						cps
Lead	206-1	2738.77	2741.68	2736.40	2738.95	0.10	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04MS	Instrumnet Name :	P8
Client Sample ID :	285MS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:58:37	DataFile Name :	032AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2764.38	2766.76	2720.35	2750.50	0.95	ppb
Lead	208-1	2748.32	2773.43	2716.15	2745.97	1.05	ppb
Lithium	6-1				100		%
Magnesium	24-2	52362.46	53670.55	52273.04	52768.68	1.48	ppb
Manganese	55-2	5231.14	5269.06	5250.78	5250.33	0.36	ppb
Molybdenum	94-1	2252.43	2250.64	2285.21	2262.76	0.86	ppb
Molybdenum	95-1	1736.57	1675.72	1701.54	1704.61	1.79	ppb
Molybdenum	96-1	1810.31	1752.20	1770.65	1777.72	1.67	ppb
Molybdenum	97-1	1727.00	1710.85	1731.71	1723.19	0.63	ppb
Molybdenum	98-1	1713.32	1682.21	1726.16	1707.23	1.32	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	504.72	493.45	498.36	498.84	1.13	ppb
Phosphorus	31-2	35.50	24.51	32.23	30.75	18.36	ppb
Potassium	39-2	28429.34	28550.24	28588.92	28522.83	0.29	ppb
Rhodium	103-1				98		%
Rhodium	103-2				96		%
Scandium	45-1				109		%
Scandium	45-2				106		%
Selenium	82-1	475.63	468.66	482.75	475.68	1.48	ppb
Selenium	77-2	525.32	514.53	502.01	513.95	2.27	ppb
Selenium	78-2	505.51	505.46	494.76	501.91	1.23	ppb
Silicon	28-1	482.94	480.46	473.12	478.84	1.07	ppb
Silver	107-1	83.71	83.36	82.31	83.13	0.87	ppb
Silver	109-1	81.47	82.15	83.21	82.28	1.07	ppb
Sodium	23-2	267028.45	272584.76	270634.54	270082.58	1.04	ppb
Strontium	86-1	627.94	632.28	625.83	628.68	0.52	ppb
Strontium	88-1	634.22	632.72	623.12	630.02	0.96	ppb
Sulfur	34-1	6718.29	6826.27	7098.58	6881.05	2.85	ppb
Terbium	159-1				105		%
Terbium	159-2				102		%
Thallium	203-1	473.43	469.57	468.55	470.51	0.55	ppb
Thallium	205-1	472.52	479.98	471.59	474.70	0.97	ppb
Tin	118-1	443.37	452.47	446.86	447.57	1.03	ppb
Titanium	47-1	12.94	12.98	13.14	13.02	0.82	ppb
Uranium	238-1	468.46	479.83	475.25	474.51	1.20	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04MS	Instrumnet Name :	P8
Client Sample ID :	285MS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:58:37	DataFile Name :	032AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	509.11	512.08	507.50	509.56	0.46	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				101		%
Zinc	66-2	5884.81	6011.32	5986.24	5960.79	1.12	ppb
Zirconium	90-1	476.55	469.91	472.89	473.12	0.70	ppb
Zirconium	91-1	479.16	462.11	469.41	470.23	1.82	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:01:26	DataFile Name :	033CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51081.08	52254.21	51575.58	51636.96	1.14	ppb
Antimony	121-1	505.32	506.66	503.46	505.15	0.32	ppb
Arsenic	75-2	501.14	498.42	500.00	499.85	0.27	ppb
Barium	135-1	2505.77	2543.39	2514.91	2521.36	0.78	ppb
Barium	137-1	2533.02	2501.66	2454.19	2496.29	1.59	ppb
Beryllium	9-1	532.25	537.17	528.93	532.79	0.78	ppb
Bismuth	209-1				90		%
Bismuth	209-2				86		%
Bromine	81-1						cps
Cadmium	108-1	488.85	485.54	476.88	483.76	1.28	ppb
Cadmium	106-1	490.68	499.18	485.26	491.70	1.43	ppb
Cadmium	111-1	501.55	496.49	480.98	493.01	2.17	ppb
Calcium	43-1	248243.34	254623.87	254609.71	252492.31	1.46	ppb
Calcium	44-1	249126.40	252895.45	252214.72	251412.19	0.80	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	506.21	504.15	498.68	503.01	0.77	ppb
Cobalt	59-2	486.71	485.43	482.00	484.71	0.50	ppb
Copper	63-2	4704.94	4665.78	4681.07	4683.93	0.42	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				99		%
Indium	115-1				91		%
Indium	115-2				86		%
Iron	54-2	127934.95	126427.93	125342.31	126568.40	1.03	ppb
Iron	56-2	129160.69	126934.86	127335.83	127810.46	0.93	ppb
Iron	57-2	128925.44	127171.87	126259.23	127452.18	1.06	ppb
Krypton	83-1						cps
Lead	206-1	2474.71	2549.19	2558.45	2527.45	1.82	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:01:26	DataFile Name :	033CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2468.36	2491.23	2550.33	2503.31	1.69	ppb
Lead	208-1	2473.46	2517.77	2548.48	2513.24	1.50	ppb
Lithium	6-1				94		%
Magnesium	24-2	256914.61	257334.59	252941.38	255730.19	0.95	ppb
Manganese	55-2	5018.03	4914.30	4960.63	4964.32	1.05	ppb
Molybdenum	94-1	4970.84	4833.24	4905.15	4903.08	1.40	ppb
Molybdenum	95-1	4942.45	4790.29	4937.07	4889.94	1.77	ppb
Molybdenum	96-1	4965.94	4859.08	4899.97	4908.33	1.10	ppb
Molybdenum	97-1	4960.12	4846.43	4886.81	4897.79	1.18	ppb
Molybdenum	98-1	4916.28	4805.56	4902.05	4874.63	1.24	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	496.36	483.07	486.96	488.80	1.40	ppb
Phosphorus	31-2	10318.77	10486.80	10237.03	10347.53	1.23	ppb
Potassium	39-2	129388.14	127563.47	128231.24	128394.28	0.72	ppb
Rhodium	103-1				89		%
Rhodium	103-2				88		%
Scandium	45-1				99		%
Scandium	45-2				100		%
Selenium	82-1	473.28	459.74	469.62	467.55	1.50	ppb
Selenium	77-2	486.60	496.36	486.04	489.67	1.19	ppb
Selenium	78-2	503.04	500.14	495.11	499.43	0.80	ppb
Silicon	28-1	528.12	537.55	539.35	535.01	1.13	ppb
Silver	107-1	489.42	493.53	482.91	488.62	1.10	ppb
Silver	109-1	498.01	495.37	478.32	490.57	2.18	ppb
Sodium	23-2	259934.41	254032.40	257485.00	257150.60	1.15	ppb
Strontium	86-1	493.41	486.61	492.83	490.95	0.77	ppb
Strontium	88-1	487.46	490.75	497.76	491.99	1.07	ppb
Sulfur	34-1	10009.77	10351.81	10453.73	10271.77	2.26	ppb
Terbium	159-1				98		%
Terbium	159-2				96		%
Thallium	203-1	494.42	501.99	508.71	501.71	1.42	ppb
Thallium	205-1	506.15	509.33	506.87	507.45	0.33	ppb
Tin	118-1	504.30	514.98	502.00	507.10	1.37	ppb
Titanium	47-1	4844.35	4955.61	4979.10	4926.35	1.46	ppb
Uranium	238-1	499.94	505.28	508.09	504.44	0.82	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:01:26	DataFile Name :	033CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	519.74	512.86	509.92	514.17	0.98	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	4789.76	4757.46	4751.74	4766.32	0.43	ppb
Zirconium	90-1	495.37	489.21	496.18	493.58	0.77	ppb
Zirconium	91-1	494.63	484.22	491.72	490.19	1.10	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:04:23	DataFile Name :	034CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20.19	18.68	19.10	19.32	4.04	ppb
Antimony	121-1	0.11	0.10	0.09	0.10	11.29	ppb
Arsenic	75-2	0.01	0.00	0.03	0.01	140.02	ppb
Barium	135-1	0.06	0.06	0.05	0.05	6.07	ppb
Barium	137-1	0.06	0.06	0.06	0.06	4.83	ppb
Beryllium	9-1	0.07	0.05	0.04	0.05	25.35	ppb
Bismuth	209-1				108		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.06	0.02	0.03	73.05	ppb
Cadmium	106-1	0.22	0.28	-0.11	0.13	160.91	ppb
Cadmium	111-1	0.04	0.04	0.01	0.03	64.35	ppb
Calcium	43-1	8.54	5.63	5.13	6.43	28.66	ppb
Calcium	44-1	4.31	3.60	3.02	3.64	17.75	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.02	-0.02	-0.01	-0.02		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	44.14	ppb
Copper	63-2	0.20	0.15	0.16	0.17	17.02	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				105		%
Indium	115-1				109		%
Indium	115-2				103		%
Iron	54-2	1.98	2.22	2.41	2.20	9.73	ppb
Iron	56-2	2.81	2.67	2.50	2.66	5.93	ppb
Iron	57-2	3.41	3.18	2.86	3.15	8.83	ppb
Krypton	83-1						cps
Lead	206-1	0.19	0.17	0.16	0.17	9.09	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:04:23	DataFile Name :	034CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.19	0.18	0.16	0.18	8.08	ppb
Lead	208-1	0.19	0.17	0.16	0.18	8.60	ppb
Lithium	6-1				106		%
Magnesium	24-2	4.63	4.42	4.26	4.43	4.19	ppb
Manganese	55-2	-0.81	-0.85	-0.77	-0.81		ppb
Molybdenum	94-1	0.21	0.20	0.18	0.20	8.75	ppb
Molybdenum	95-1	0.17	0.14	0.13	0.15	13.11	ppb
Molybdenum	96-1	0.17	0.16	0.13	0.15	14.39	ppb
Molybdenum	97-1	0.18	0.15	0.12	0.15	20.36	ppb
Molybdenum	98-1	0.16	0.13	0.12	0.14	13.19	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.03	0.04	0.02	0.03	30.73	ppb
Phosphorus	31-2	-23.52	-26.02	-18.48	-22.67		ppb
Potassium	39-2	31.38	29.25	30.49	30.37	3.54	ppb
Rhodium	103-1				107		%
Rhodium	103-2				105		%
Scandium	45-1				109		%
Scandium	45-2				103		%
Selenium	82-1	-0.07	-0.09	0.11	-0.02		ppb
Selenium	77-2	-0.25	-0.25	0.13	-0.13		ppb
Selenium	78-2	0.82	0.23	0.30	0.45	71.74	ppb
Silicon	28-1	6.41	5.96	5.61	6.00	6.65	ppb
Silver	107-1	0.05	0.05	0.04	0.04	11.44	ppb
Silver	109-1	0.05	0.05	0.04	0.05	15.59	ppb
Sodium	23-2	103.47	99.00	101.40	101.29	2.21	ppb
Strontium	86-1	0.02	0.02	0.02	0.02	3.08	ppb
Strontium	88-1	0.02	0.01	0.01	0.01	11.79	ppb
Sulfur	34-1	-392.20	-308.28	-249.23	-316.57		ppb
Terbium	159-1				107		%
Terbium	159-2				103		%
Thallium	203-1	0.05	0.04	0.04	0.04	11.61	ppb
Thallium	205-1	0.05	0.05	0.04	0.05	10.04	ppb
Tin	118-1	0.02	0.03	0.01	0.02	43.50	ppb
Titanium	47-1	0.12	0.09	0.10	0.10	15.17	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	29.03	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:04:23	DataFile Name :	034CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.01	0.01	0.01	21.21	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				102		%
Zinc	66-2	0.31	0.42	0.14	0.29	48.65	ppb
Zirconium	90-1	0.05	0.04	0.04	0.04	8.06	ppb
Zirconium	91-1	0.04	0.04	0.04	0.04	10.47	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04MSD	Instrumnet Name :	P8
Client Sample ID :	285MSD	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:07:47	DataFile Name :	035AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9348.49	9562.99	9449.81	9453.76	1.14	ppb
Antimony	121-1	499.56	499.85	502.95	500.78	0.37	ppb
Arsenic	75-2	2.48	2.57	2.31	2.45	5.47	ppb
Barium	135-1	2299.92	2267.54	2308.10	2291.85	0.94	ppb
Barium	137-1	2281.94	2273.43	2285.48	2280.29	0.27	ppb
Beryllium	9-1	543.38	554.86	553.44	550.56	1.14	ppb
Bismuth	209-1				100		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	460.05	459.20	459.00	459.42	0.12	ppb
Cadmium	106-1	493.82	486.74	489.62	490.06	0.73	ppb
Cadmium	111-1	495.37	498.26	500.04	497.89	0.47	ppb
Calcium	43-1	59836.56	60358.18	61532.36	60575.70	1.43	ppb
Calcium	44-1	60016.67	60419.23	61474.05	60636.65	1.24	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	483.92	489.72	477.35	483.66	1.28	ppb
Cobalt	59-2	493.02	486.57	479.47	486.35	1.39	ppb
Copper	63-2	4863.14	4884.58	4759.05	4835.59	1.39	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				104		%
Indium	115-1				100		%
Indium	115-2				92		%
Iron	54-2	30739.30	31242.70	30521.19	30834.40	1.20	ppb
Iron	56-2	30668.09	31321.03	30520.06	30836.39	1.38	ppb
Iron	57-2	31099.52	31067.45	30756.30	30974.42	0.61	ppb
Krypton	83-1						cps
Lead	206-1	2742.65	2700.79	2797.92	2747.12	1.77	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04MSD	Instrumnet Name :	P8
Client Sample ID :	285MSD	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:07:47	DataFile Name :	035AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2766.51	2727.13	2796.54	2763.40	1.26	ppb
Lead	208-1	2758.59	2731.79	2787.48	2759.29	1.01	ppb
Lithium	6-1				99		%
Magnesium	24-2	53017.91	53943.09	53730.60	53563.87	0.90	ppb
Manganese	55-2	5245.36	5365.60	5218.25	5276.40	1.49	ppb
Molybdenum	94-1	2230.11	2256.92	2263.61	2250.21	0.79	ppb
Molybdenum	95-1	1675.01	1722.02	1710.51	1702.51	1.44	ppb
Molybdenum	96-1	1746.65	1799.96	1812.83	1786.48	1.96	ppb
Molybdenum	97-1	1674.89	1731.70	1714.88	1707.16	1.71	ppb
Molybdenum	98-1	1659.56	1714.48	1702.12	1692.05	1.70	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	497.72	490.27	493.70	493.90	0.76	ppb
Phosphorus	31-2	30.19	43.58	35.92	36.56	18.37	ppb
Potassium	39-2	27994.93	28278.70	28203.67	28159.10	0.52	ppb
Rhodium	103-1				99		%
Rhodium	103-2				96		%
Scandium	45-1				110		%
Scandium	45-2				106		%
Selenium	82-1	467.75	486.46	482.71	478.97	2.07	ppb
Selenium	77-2	502.72	515.42	531.91	516.68	2.83	ppb
Selenium	78-2	518.32	514.09	504.94	512.45	1.33	ppb
Silicon	28-1	466.67	464.10	478.16	469.64	1.59	ppb
Silver	107-1	83.58	84.53	82.76	83.62	1.06	ppb
Silver	109-1	84.41	84.07	84.42	84.30	0.24	ppb
Sodium	23-2	269291.62	275088.60	271234.23	271871.48	1.09	ppb
Strontium	86-1	613.97	627.09	632.10	624.39	1.50	ppb
Strontium	88-1	625.97	638.06	640.85	634.96	1.25	ppb
Sulfur	34-1	7257.10	7047.72	7246.78	7183.87	1.64	ppb
Terbium	159-1				105		%
Terbium	159-2				101		%
Thallium	203-1	467.62	463.76	479.37	470.25	1.73	ppb
Thallium	205-1	473.01	473.28	477.20	474.50	0.49	ppb
Tin	118-1	445.48	443.97	441.94	443.80	0.40	ppb
Titanium	47-1	12.20	12.69	12.65	12.51	2.16	ppb
Uranium	238-1	480.84	467.57	480.79	476.40	1.61	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04MSD	Instrumnet Name :	P8
Client Sample ID :	285MSD	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:07:47	DataFile Name :	035AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	509.05	510.62	513.41	511.03	0.43	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				101		%
Zinc	66-2	5922.73	6022.53	5928.86	5958.04	0.94	ppb
Zirconium	90-1	469.53	476.19	475.82	473.84	0.79	ppb
Zirconium	91-1	467.69	470.53	479.03	472.42	1.25	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04A	Instrumnet Name :	P8
Client Sample ID :	285A	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:10:34	DataFile Name :	036AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9633.18	9448.47	9412.40	9498.02	1.25	ppb
Antimony	121-1	506.03	493.27	508.01	502.44	1.59	ppb
Arsenic	75-2	2.46	2.40	2.39	2.41	1.64	ppb
Barium	135-1	2281.43	2245.68	2346.21	2291.11	2.22	ppb
Barium	137-1	2262.44	2261.20	2298.62	2274.09	0.93	ppb
Beryllium	9-1	536.24	545.76	561.38	547.79	2.32	ppb
Bismuth	209-1				97		%
Bismuth	209-2				93		%
Bromine	81-1						cps
Cadmium	108-1	459.26	457.98	462.74	459.99	0.54	ppb
Cadmium	106-1	488.24	484.39	500.16	490.93	1.67	ppb
Cadmium	111-1	500.51	494.37	497.20	497.36	0.62	ppb
Calcium	43-1	60535.09	61980.71	61918.93	61478.24	1.33	ppb
Calcium	44-1	60688.72	62066.82	61142.04	61299.19	1.15	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	489.54	477.54	475.28	480.79	1.59	ppb
Cobalt	59-2	497.05	488.62	483.40	489.69	1.41	ppb
Copper	63-2	4912.05	4824.79	4812.91	4849.92	1.12	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				101		%
Indium	115-1				98		%
Indium	115-2				91		%
Iron	54-2	31007.36	30863.32	31278.65	31049.78	0.68	ppb
Iron	56-2	31037.59	31029.44	30497.91	30854.98	1.00	ppb
Iron	57-2	31225.86	30776.47	30948.87	30983.73	0.73	ppb
Krypton	83-1						cps
Lead	206-1	2852.33	2797.07	2717.55	2788.98	2.43	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04A	Instrumnet Name :	P8
Client Sample ID :	285A	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:10:34	DataFile Name :	036AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2841.42	2846.97	2733.71	2807.37	2.27	ppb
Lead	208-1	2811.74	2821.64	2730.70	2788.02	1.79	ppb
Lithium	6-1				97		%
Magnesium	24-2	53151.95	53673.12	52318.09	53047.72	1.29	ppb
Manganese	55-2	5317.70	5242.42	5221.44	5260.52	0.96	ppb
Molybdenum	94-1	2242.40	2325.22	2219.29	2262.30	2.46	ppb
Molybdenum	95-1	1721.24	1776.43	1680.16	1725.94	2.80	ppb
Molybdenum	96-1	1785.68	1830.73	1758.99	1791.80	2.02	ppb
Molybdenum	97-1	1700.30	1755.47	1686.15	1713.97	2.14	ppb
Molybdenum	98-1	1686.57	1752.93	1675.24	1704.91	2.46	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	499.85	500.29	492.81	497.65	0.84	ppb
Phosphorus	31-2	24.17	42.22	31.61	32.67	27.77	ppb
Potassium	39-2	28392.88	28322.08	28631.65	28448.87	0.57	ppb
Rhodium	103-1				98		%
Rhodium	103-2				93		%
Scandium	45-1				107		%
Scandium	45-2				104		%
Selenium	82-1	482.12	490.95	478.03	483.70	1.36	ppb
Selenium	77-2	514.19	547.00	528.03	529.74	3.11	ppb
Selenium	78-2	521.95	524.52	504.70	517.06	2.08	ppb
Silicon	28-1	487.50	483.40	488.91	486.60	0.59	ppb
Silver	107-1	83.32	82.77	85.56	83.88	1.76	ppb
Silver	109-1	83.32	83.68	84.64	83.88	0.81	ppb
Sodium	23-2	278277.15	275943.34	269567.70	274596.06	1.64	ppb
Strontium	86-1	626.42	631.51	636.31	631.41	0.78	ppb
Strontium	88-1	643.62	640.24	643.65	642.50	0.31	ppb
Sulfur	34-1	7410.45	7382.09	7437.22	7409.92	0.37	ppb
Terbium	159-1				104		%
Terbium	159-2				100		%
Thallium	203-1	497.55	483.66	477.77	486.32	2.09	ppb
Thallium	205-1	485.60	483.99	475.15	481.58	1.17	ppb
Tin	118-1	444.46	445.47	449.60	446.51	0.61	ppb
Titanium	47-1	12.91	12.91	13.16	12.99	1.10	ppb
Uranium	238-1	477.67	483.68	471.77	477.71	1.25	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04A	Instrumnet Name :	P8
Client Sample ID :	285A	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:10:34	DataFile Name :	036AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	518.32	513.48	508.12	513.31	0.99	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				105		%
Yttrium	89-2				99		%
Zinc	66-2	6059.05	5965.47	6020.50	6015.01	0.78	ppb
Zirconium	90-1	473.19	481.96	476.60	477.25	0.93	ppb
Zirconium	91-1	477.34	479.58	464.33	473.75	1.74	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1816-01DLX5	Instrumnet Name :	P8
Client Sample ID :	441DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:13:24	DataFile Name :	037AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	373.40	370.70	347.83	363.98	3.86	ppb
Antimony	121-1	1.13	1.08	1.10	1.11	2.15	ppb
Arsenic	75-2	2.53	2.64	2.48	2.55	3.18	ppb
Barium	135-1	15.90	15.00	15.43	15.44	2.91	ppb
Barium	137-1	15.66	15.39	15.54	15.53	0.86	ppb
Beryllium	9-1	0.12	0.12	0.10	0.11	10.37	ppb
Bismuth	209-1				103		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	1.39	1.49	1.48	1.45	3.89	ppb
Cadmium	106-1	1.63	1.59	1.77	1.66	5.64	ppb
Cadmium	111-1	1.23	1.14	1.14	1.17	4.10	ppb
Calcium	43-1	4789.50	4924.96	4806.02	4840.16	1.53	ppb
Calcium	44-1	4976.00	5206.95	4873.97	5018.97	3.40	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.24	2.14	2.06	2.15	4.20	ppb
Cobalt	59-2	1.60	1.60	1.51	1.57	3.39	ppb
Copper	63-2	104.62	103.06	98.24	101.97	3.26	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				103		%
Indium	115-1				106		%
Indium	115-2				97		%
Iron	54-2	915.59	921.65	854.54	897.26	4.14	ppb
Iron	56-2	988.34	972.02	924.06	961.48	3.48	ppb
Iron	57-2	918.21	916.90	861.04	898.72	3.63	ppb
Krypton	83-1						cps
Lead	206-1	2615.04	2659.21	2619.94	2631.40	0.92	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1816-01DLX5	Instrumnet Name :	P8
Client Sample ID :	441DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:13:24	DataFile Name :	037AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2567.49	2584.59	2572.45	2574.84	0.34	ppb
Lead	208-1	2580.44	2578.81	2596.51	2585.26	0.38	ppb
Lithium	6-1				104		%
Magnesium	24-2	1247.93	1241.41	1168.08	1219.14	3.64	ppb
Manganese	55-2	99.87	99.13	94.02	97.67	3.26	ppb
Molybdenum	94-1	3.23	3.31	3.29	3.28	1.27	ppb
Molybdenum	95-1	0.81	0.82	0.82	0.82	0.69	ppb
Molybdenum	96-1	1.07	1.08	1.02	1.06	3.05	ppb
Molybdenum	97-1	0.81	0.81	0.80	0.81	0.96	ppb
Molybdenum	98-1	0.79	0.81	0.78	0.79	1.84	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	6.44	6.34	6.00	6.26	3.70	ppb
Phosphorus	31-2	14898.88	15006.30	14398.90	14768.03	2.19	ppb
Potassium	39-2	57300.76	56097.45	55677.07	56358.43	1.50	ppb
Rhodium	103-1				102		%
Rhodium	103-2				100		%
Scandium	45-1				109		%
Scandium	45-2				101		%
Selenium	82-1	0.18	0.20	0.16	0.18	11.00	ppb
Selenium	77-2	1.28	0.88	2.00	1.38	41.00	ppb
Selenium	78-2	0.98	0.29	0.62	0.63	54.90	ppb
Silicon	28-1	1064.47	1077.47	1072.15	1071.36	0.61	ppb
Silver	107-1	0.15	0.15	0.14	0.15	3.63	ppb
Silver	109-1	0.15	0.15	0.15	0.15	2.59	ppb
Sodium	23-2	40198.32	39755.05	38296.08	39416.48	2.53	ppb
Strontium	86-1	18.37	18.87	18.62	18.62	1.33	ppb
Strontium	88-1	20.54	21.14	20.27	20.65	2.17	ppb
Sulfur	34-1	14240.00	14948.89	14086.40	14425.10	3.19	ppb
Terbium	159-1				106		%
Terbium	159-2				101		%
Thallium	203-1	0.11	0.10	0.09	0.10	13.22	ppb
Thallium	205-1	0.11	0.09	0.08	0.09	15.14	ppb
Tin	118-1	1.21	1.21	1.23	1.21	1.06	ppb
Titanium	47-1	15.75	16.53	15.74	16.01	2.81	ppb
Uranium	238-1	0.12	0.12	0.12	0.12	3.08	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1816-01DLX5	Instrumnet Name :	P8
Client Sample ID :	441DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:13:24	DataFile Name :	037AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	3.04	3.00	2.80	2.95	4.47	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				100		%
Zinc	66-2	1494.45	1470.48	1416.79	1460.57	2.72	ppb
Zirconium	90-1	1.43	1.48	1.43	1.45	2.27	ppb
Zirconium	91-1	1.41	1.47	1.42	1.43	2.38	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-05DLX5	Instrumnet Name :	P8
Client Sample ID :	3828DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:16:35	DataFile Name :	038AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1781.74	1777.45	1698.33	1752.51	2.68	ppb
Antimony	121-1	3.95	3.85	3.87	3.89	1.36	ppb
Arsenic	75-2	12.97	13.42	12.98	13.12	1.95	ppb
Barium	135-1	41.69	40.89	40.70	41.10	1.27	ppb
Barium	137-1	41.37	41.10	40.73	41.07	0.78	ppb
Beryllium	9-1	0.28	0.28	0.27	0.28	3.02	ppb
Bismuth	209-1				104		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	2.93	2.83	3.09	2.95	4.44	ppb
Cadmium	106-1	4.34	4.21	4.61	4.39	4.69	ppb
Cadmium	111-1	1.08	1.09	1.09	1.09	0.34	ppb
Calcium	43-1	7422.96	7337.01	7251.80	7337.26	1.17	ppb
Calcium	44-1	7701.59	7773.22	7795.05	7756.62	0.63	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.73	8.59	8.49	8.61	1.41	ppb
Cobalt	59-2	1.90	1.91	1.85	1.89	1.56	ppb
Copper	63-2	359.04	356.74	343.79	353.19	2.33	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				106		%
Indium	115-1				107		%
Indium	115-2				99		%
Iron	54-2	3359.01	3359.32	3241.14	3319.82	2.05	ppb
Iron	56-2	3644.14	3598.84	3392.95	3545.31	3.78	ppb
Iron	57-2	3395.62	3388.79	3228.06	3337.49	2.84	ppb
Krypton	83-1						cps
Lead	206-1	575.26	552.34	571.63	566.41	2.18	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-05DLX5	Instrumnet Name :	P8
Client Sample ID :	3828DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:16:35	DataFile Name :	038AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	541.06	535.66	537.54	538.09	0.51	ppb
Lead	208-1	554.31	548.71	547.79	550.27	0.64	ppb
Lithium	6-1				105		%
Magnesium	24-2	1735.73	1722.76	1656.36	1704.95	2.50	ppb
Manganese	55-2	47.71	48.13	46.33	47.39	1.99	ppb
Molybdenum	94-1	27.21	27.52	27.43	27.38	0.58	ppb
Molybdenum	95-1	1.14	1.10	1.08	1.11	2.56	ppb
Molybdenum	96-1	3.92	3.87	3.85	3.88	0.92	ppb
Molybdenum	97-1	1.12	1.12	1.10	1.11	1.31	ppb
Molybdenum	98-1	1.12	1.09	1.10	1.10	1.21	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.74	4.52	4.39	4.55	3.90	ppb
Phosphorus	31-2	486.74	522.72	445.06	484.84	8.02	ppb
Potassium	39-2	5752.85	5812.63	5853.76	5806.41	0.87	ppb
Rhodium	103-1				103		%
Rhodium	103-2				101		%
Scandium	45-1				115		%
Scandium	45-2				103		%
Selenium	82-1	0.31	0.27	0.39	0.32	19.94	ppb
Selenium	77-2	3.79	3.40	5.93	4.37	31.08	ppb
Selenium	78-2	0.91	1.33	0.57	0.94	40.79	ppb
Silicon	28-1	8927.43	8951.62	8800.41	8893.15	0.91	ppb
Silver	107-1	0.21	0.22	0.22	0.22	1.57	ppb
Silver	109-1	0.20	0.19	0.20	0.20	2.37	ppb
Sodium	23-2	150924.19	151737.25	147716.38	150125.94	1.42	ppb
Strontium	86-1	29.47	29.37	29.03	29.29	0.79	ppb
Strontium	88-1	32.32	32.54	32.66	32.51	0.53	ppb
Sulfur	34-1	7625.36	7220.95	7509.04	7451.79	2.79	ppb
Terbium	159-1				108		%
Terbium	159-2				103		%
Thallium	203-1	0.04	0.04	0.04	0.04	4.53	ppb
Thallium	205-1	0.05	0.05	0.04	0.04	5.87	ppb
Tin	118-1	5.43	5.04	4.99	5.15	4.61	ppb
Titanium	47-1	76.44	75.18	75.38	75.66	0.89	ppb
Uranium	238-1	0.29	0.28	0.28	0.29	2.21	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-05DLX5	Instrumnet Name :	P8
Client Sample ID :	3828DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:16:35	DataFile Name :	038AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	12.59	12.41	11.89	12.30	2.96	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				104		%
Zinc	66-2	579.13	584.28	562.00	575.14	2.03	ppb
Zirconium	90-1	14.48	14.68	14.70	14.62	0.81	ppb
Zirconium	91-1	14.24	14.46	14.64	14.45	1.38	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-06DLX5	Instrumnet Name :	P8
Client Sample ID :	3829DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:19:51	DataFile Name :	039AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1673.62	1633.99	1492.29	1599.97	5.96	ppb
Antimony	121-1	2.20	2.27	2.22	2.23	1.56	ppb
Arsenic	75-2	11.45	11.52	11.23	11.40	1.34	ppb
Barium	135-1	35.03	35.55	34.86	35.15	1.02	ppb
Barium	137-1	35.14	36.04	35.57	35.58	1.27	ppb
Beryllium	9-1	0.18	0.19	0.18	0.18	2.49	ppb
Bismuth	209-1				106		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	1.49	1.60	1.56	1.55	3.50	ppb
Cadmium	106-1	1.99	1.70	1.68	1.79	9.77	ppb
Cadmium	111-1	0.86	0.84	0.80	0.83	3.49	ppb
Calcium	43-1	6351.13	6373.69	6244.82	6323.21	1.09	ppb
Calcium	44-1	6743.31	6676.65	6601.80	6673.92	1.06	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.56	8.41	7.75	8.24	5.18	ppb
Cobalt	59-2	1.23	1.20	1.13	1.18	4.35	ppb
Copper	63-2	135.00	146.58	125.28	135.62	7.86	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				105		%
Indium	115-1				109		%
Indium	115-2				101		%
Iron	54-2	2962.08	2915.47	2683.98	2853.84	5.22	ppb
Iron	56-2	3169.60	3056.42	2859.50	3028.51	5.18	ppb
Iron	57-2	2951.65	2897.69	2680.61	2843.31	5.05	ppb
Krypton	83-1						cps
Lead	206-1	489.31	481.74	470.84	480.63	1.93	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-06DLX5	Instrumnet Name :	P8
Client Sample ID :	3829DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:19:51	DataFile Name :	039AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	462.50	456.68	449.01	456.06	1.48	ppb
Lead	208-1	474.96	467.99	460.66	467.87	1.53	ppb
Lithium	6-1				106		%
Magnesium	24-2	1303.00	1286.82	1204.73	1264.85	4.17	ppb
Manganese	55-2	33.68	32.86	31.20	32.58	3.87	ppb
Molybdenum	94-1	10.68	11.00	11.18	10.95	2.30	ppb
Molybdenum	95-1	0.91	0.92	0.96	0.93	2.87	ppb
Molybdenum	96-1	1.94	2.02	2.01	1.99	2.12	ppb
Molybdenum	97-1	0.92	0.91	0.96	0.93	2.87	ppb
Molybdenum	98-1	0.91	0.92	0.95	0.92	2.30	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	3.99	3.93	3.63	3.85	5.10	ppb
Phosphorus	31-2	441.10	436.86	375.03	417.66	8.85	ppb
Potassium	39-2	2848.81	2816.79	2742.08	2802.56	1.95	ppb
Rhodium	103-1				106		%
Rhodium	103-2				102		%
Scandium	45-1				113		%
Scandium	45-2				103		%
Selenium	82-1	0.32	0.17	0.12	0.20	51.34	ppb
Selenium	77-2	3.76	5.16	4.48	4.47	15.66	ppb
Selenium	78-2	0.36	1.09	1.43	0.96	57.04	ppb
Silicon	28-1	4383.32	4379.95	4361.44	4374.90	0.27	ppb
Silver	107-1	0.27	0.29	0.27	0.28	4.08	ppb
Silver	109-1	0.27	0.28	0.27	0.27	1.50	ppb
Sodium	23-2	75927.80	74980.88	72913.95	74607.54	2.07	ppb
Strontium	86-1	28.23	28.95	29.39	28.86	2.04	ppb
Strontium	88-1	31.36	32.11	32.48	31.99	1.79	ppb
Sulfur	34-1	3419.93	3563.33	3261.07	3414.78	4.43	ppb
Terbium	159-1				108		%
Terbium	159-2				103		%
Thallium	203-1	0.03	0.03	0.03	0.03	4.34	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	3.92	ppb
Tin	118-1	2.09	2.16	2.16	2.13	1.90	ppb
Titanium	47-1	49.90	51.00	50.25	50.38	1.11	ppb
Uranium	238-1	0.27	0.27	0.27	0.27	0.69	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-06DLX5	Instrumnet Name :	P8
Client Sample ID :	3829DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:19:51	DataFile Name :	039AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	7.61	7.64	7.11	7.45	4.00	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				104		%
Zinc	66-2	426.02	423.70	393.56	414.43	4.37	ppb
Zirconium	90-1	5.45	5.65	5.75	5.61	2.72	ppb
Zirconium	91-1	5.38	5.61	5.72	5.57	3.11	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	PB167626BS	Instrumnet Name :	P8
Client Sample ID :	PB167626BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:26:29	DataFile Name :	041LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10075.73	10064.11	10388.25	10176.03	1.81	ppb
Antimony	121-1	530.75	538.48	527.71	532.31	1.04	ppb
Arsenic	75-2	534.84	541.20	530.52	535.52	1.00	ppb
Barium	135-1	2622.86	2647.95	2627.81	2632.87	0.50	ppb
Barium	137-1	2587.86	2637.91	2623.28	2616.35	0.98	ppb
Beryllium	9-1	561.79	559.41	553.75	558.32	0.74	ppb
Bismuth	209-1				98		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	507.67	532.42	520.60	520.23	2.38	ppb
Cadmium	106-1	513.22	528.08	532.70	524.67	1.94	ppb
Cadmium	111-1	531.51	546.33	541.73	539.86	1.41	ppb
Calcium	43-1	52025.69	51611.39	52667.92	52101.66	1.02	ppb
Calcium	44-1	52466.73	52922.26	52552.00	52647.00	0.46	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	521.55	526.98	525.89	524.81	0.55	ppb
Cobalt	59-2	525.72	526.29	532.57	528.19	0.72	ppb
Copper	63-2	5292.98	5200.64	5296.17	5263.27	1.03	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				103		%
Holmium	165-2				101		%
Indium	115-1				98		%
Indium	115-2				88		%
Iron	54-2	27643.03	27166.94	27683.70	27497.89	1.04	ppb
Iron	56-2	27399.72	27251.44	27002.28	27217.81	0.74	ppb
Iron	57-2	28123.16	27556.59	27183.39	27621.05	1.71	ppb
Krypton	83-1						cps
Lead	206-1	2576.25	2609.68	2552.82	2579.59	1.11	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	PB167626BS	Instrumnet Name :	P8
Client Sample ID :	PB167626BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:26:29	DataFile Name :	041LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2561.43	2586.79	2552.14	2566.79	0.70	ppb
Lead	208-1	2551.74	2585.93	2567.06	2568.24	0.67	ppb
Lithium	6-1				97		%
Magnesium	24-2	55637.58	55138.42	54532.82	55102.94	1.00	ppb
Manganese	55-2	5146.70	5187.67	5199.44	5177.94	0.53	ppb
Molybdenum	94-1	4938.10	4964.66	4989.08	4963.95	0.51	ppb
Molybdenum	95-1	4959.55	4934.77	4951.49	4948.61	0.26	ppb
Molybdenum	96-1	5066.09	5035.01	4976.98	5026.03	0.90	ppb
Molybdenum	97-1	5057.42	5073.83	5014.76	5048.67	0.60	ppb
Molybdenum	98-1	5005.34	4967.96	4937.08	4970.13	0.69	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	550.14	528.62	542.14	540.30	2.01	ppb
Phosphorus	31-2	10608.70	10636.40	10452.90	10566.00	0.94	ppb
Potassium	39-2	26977.33	26630.83	26318.39	26642.18	1.24	ppb
Rhodium	103-1				97		%
Rhodium	103-2				95		%
Scandium	45-1				105		%
Scandium	45-2				101		%
Selenium	82-1	492.47	500.17	496.65	496.43	0.78	ppb
Selenium	77-2	526.83	521.71	546.07	531.54	2.42	ppb
Selenium	78-2	553.12	546.11	542.82	547.35	0.96	ppb
Silicon	28-1	312.50	319.50	321.04	317.68	1.43	ppb
Silver	107-1	524.64	545.28	542.06	537.33	2.07	ppb
Silver	109-1	526.72	554.74	545.27	542.24	2.63	ppb
Sodium	23-2	55639.40	55529.41	55931.99	55700.27	0.37	ppb
Strontium	86-1	508.78	512.34	500.57	507.23	1.19	ppb
Strontium	88-1	505.73	509.01	507.14	507.29	0.32	ppb
Sulfur	34-1	10647.25	10433.82	10595.66	10558.91	1.05	ppb
Terbium	159-1				102		%
Terbium	159-2				97		%
Thallium	203-1	502.93	523.85	504.63	510.47	2.28	ppb
Thallium	205-1	508.20	516.63	511.59	512.14	0.83	ppb
Tin	118-1	520.86	527.92	526.69	525.16	0.72	ppb
Titanium	47-1	5004.78	5076.67	5042.23	5041.23	0.71	ppb
Uranium	238-1	480.93	501.37	503.78	495.36	2.53	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	PB167626BS	Instrumnet Name :	P8
Client Sample ID :	PB167626BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:26:29	DataFile Name :	041LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	534.27	530.45	525.72	530.15	0.81	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				103		%
Yttrium	89-2				96		%
Zinc	66-2	5273.05	5278.84	5285.27	5279.05	0.12	ppb
Zirconium	90-1	492.27	504.28	504.18	500.24	1.38	ppb
Zirconium	91-1	489.93	489.12	492.74	490.60	0.39	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	PB167626BL	Instrumnet Name :	P8
Client Sample ID :	PB167626BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:33:49	DataFile Name :	043CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.80	0.35	1.10	0.75	49.89	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	10.48	ppb
Arsenic	75-2	0.00	-0.01	-0.01	0.00		ppb
Barium	135-1	0.00	0.00	0.00	0.00		ppb
Barium	137-1	0.00	0.00	0.00	0.00	139.30	ppb
Beryllium	9-1	0.01	0.01	0.01	0.01	2.80	ppb
Bismuth	209-1				107		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.00	0.02	0.01	81.12	ppb
Cadmium	106-1	0.08	0.08	-0.05	0.03	217.61	ppb
Cadmium	111-1	0.01	0.00	0.00	0.00	146.19	ppb
Calcium	43-1	-0.37	-1.73	-1.22	-1.10		ppb
Calcium	44-1	-3.62	-3.92	-3.97	-3.84		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	0.00	-0.02	-0.01		ppb
Cobalt	59-2	0.00	-0.01	-0.01	-0.01		ppb
Copper	63-2	0.02	0.03	0.03	0.03	24.72	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				101		%
Indium	115-1				106		%
Indium	115-2				97		%
Iron	54-2	0.03	0.28	0.15	0.16	77.78	ppb
Iron	56-2	0.22	0.14	0.16	0.18	25.24	ppb
Iron	57-2	0.27	0.25	0.53	0.35	44.80	ppb
Krypton	83-1						cps
Lead	206-1	0.08	0.08	0.08	0.08	0.56	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	PB167626BL	Instrumnet Name :	P8
Client Sample ID :	PB167626BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:33:49	DataFile Name :	043CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.08	0.08	0.08	0.08	1.02	ppb
Lead	208-1	0.08	0.07	0.07	0.08	3.14	ppb
Lithium	6-1				102		%
Magnesium	24-2	0.35	0.27	0.38	0.34	17.10	ppb
Manganese	55-2	0.25	0.33	0.19	0.26	27.90	ppb
Molybdenum	94-1	0.05	0.04	0.04	0.04	12.73	ppb
Molybdenum	95-1	0.02	0.02	0.02	0.02	3.34	ppb
Molybdenum	96-1	0.02	0.02	0.01	0.02	15.74	ppb
Molybdenum	97-1	0.02	0.01	0.01	0.01	13.67	ppb
Molybdenum	98-1	0.02	0.02	0.01	0.01	15.12	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.05	-0.02	0.01	-0.02		ppb
Phosphorus	31-2	-19.83	-22.38	-22.33	-21.51		ppb
Potassium	39-2	13.60	12.46	14.31	13.46	6.93	ppb
Rhodium	103-1				105		%
Rhodium	103-2				101		%
Scandium	45-1				107		%
Scandium	45-2				98		%
Selenium	82-1	0.01	0.19	-0.11	0.03	530.64	ppb
Selenium	77-2	-0.25	-0.25	-0.25	-0.25		ppb
Selenium	78-2	0.32	0.21	-0.02	0.17	99.76	ppb
Silicon	28-1	2.41	2.19	1.17	1.92	34.57	ppb
Silver	107-1	0.01	0.01	0.01	0.01	5.42	ppb
Silver	109-1	0.01	0.01	0.01	0.01	11.21	ppb
Sodium	23-2	91.70	90.10	90.28	90.69	0.97	ppb
Strontium	86-1	0.00	0.00	0.00	0.00	159.20	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	73.04	ppb
Sulfur	34-1	-281.96	-410.11	-446.95	-379.67		ppb
Terbium	159-1				105		%
Terbium	159-2				99		%
Thallium	203-1	0.01	0.01	0.01	0.01	23.15	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	4.55	ppb
Tin	118-1	-0.02	0.00	-0.01	-0.01		ppb
Titanium	47-1	0.01	0.01	-0.01	0.00	794.97	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	PB167626BL	Instrumnet Name :	P8
Client Sample ID :	PB167626BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:33:49	DataFile Name :	043CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	-0.01	-0.01		ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				98		%
Zinc	66-2	0.06	-0.01	0.15	0.06	124.31	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	2.58	ppb
Zirconium	91-1	0.01	0.01	0.01	0.01	28.73	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-01	Instrumnet Name :	P8
Client Sample ID :	3822	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:37:39	DataFile Name :	044AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2149.58	2164.35	2171.45	2161.79	0.52	ppb
Antimony	121-1	11.22	11.49	11.30	11.34	1.22	ppb
Arsenic	75-2	7.34	7.07	7.12	7.18	1.97	ppb
Barium	135-1	2801.76	2869.11	2775.99	2815.62	1.71	ppb
Barium	137-1	2813.83	2854.50	2746.97	2805.10	1.94	ppb
Beryllium	9-1	0.11	0.10	0.11	0.11	1.68	ppb
Bismuth	209-1				108		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Cadmium	108-1	15.77	15.68	15.54	15.66	0.72	ppb
Cadmium	106-1	15.37	15.35	15.17	15.30	0.74	ppb
Cadmium	111-1	15.59	15.75	15.70	15.68	0.52	ppb
Calcium	43-1	11523.50	11639.62	11982.07	11715.06	2.04	ppb
Calcium	44-1	11558.71	11523.92	11496.57	11526.40	0.27	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	132.12	133.21	132.39	132.58	0.43	ppb
Cobalt	59-2	6.12	6.15	6.19	6.15	0.58	ppb
Copper	63-2	326.44	325.19	325.44	325.69	0.20	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				101		%
Indium	115-1				106		%
Indium	115-2				96		%
Iron	54-2	54931.90	54646.01	54259.16	54612.36	0.62	ppb
Iron	56-2	54534.06	55185.30	55341.68	55020.35	0.78	ppb
Iron	57-2	55173.50	54593.55	55097.25	54954.77	0.57	ppb
Krypton	83-1						cps
Lead	206-1	64.04	63.03	65.48	64.18	1.92	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-01	Instrumnet Name :	P8
Client Sample ID :	3822	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:37:39	DataFile Name :	044AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	62.99	62.10	63.23	62.77	0.95	ppb
Lead	208-1	67.00	66.02	67.51	66.84	1.13	ppb
Lithium	6-1				100		%
Magnesium	24-2	1784.41	1800.31	1798.60	1794.44	0.49	ppb
Manganese	55-2	343.21	344.20	342.63	343.35	0.23	ppb
Molybdenum	94-1	55.04	56.15	55.29	55.49	1.04	ppb
Molybdenum	95-1	51.07	51.63	51.56	51.42	0.59	ppb
Molybdenum	96-1	52.21	51.95	52.18	52.11	0.27	ppb
Molybdenum	97-1	51.17	52.79	52.48	52.15	1.66	ppb
Molybdenum	98-1	54.85	56.30	57.75	56.30	2.58	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	52.37	53.11	52.71	52.73	0.70	ppb
Phosphorus	31-2	1793.31	1744.92	1793.98	1777.40	1.58	ppb
Potassium	39-2	1535.80	1545.66	1538.65	1540.04	0.33	ppb
Rhodium	103-1				102		%
Rhodium	103-2				100		%
Scandium	45-1				106		%
Scandium	45-2				100		%
Selenium	82-1	0.51	0.62	0.46	0.53	15.25	ppb
Selenium	77-2	4.65	3.55	4.99	4.39	17.16	ppb
Selenium	78-2	0.18	1.53	1.17	0.96	72.95	ppb
Silicon	28-1	389.17	398.95	399.77	395.96	1.49	ppb
Silver	107-1	0.60	0.62	0.62	0.61	2.42	ppb
Silver	109-1	0.60	0.63	0.61	0.61	2.07	ppb
Sodium	23-2	27430.25	27573.80	27540.14	27514.73	0.27	ppb
Strontium	86-1	66.77	67.39	66.95	67.04	0.47	ppb
Strontium	88-1	71.29	72.17	73.05	72.17	1.22	ppb
Sulfur	34-1	35977.70	37253.10	38526.67	37252.49	3.42	ppb
Terbium	159-1				105		%
Terbium	159-2				99		%
Thallium	203-1	0.07	0.06	0.07	0.07	8.15	ppb
Thallium	205-1	0.07	0.07	0.07	0.07	0.39	ppb
Tin	118-1	28.19	29.19	28.73	28.70	1.73	ppb
Titanium	47-1	145.47	148.39	148.56	147.48	1.18	ppb
Uranium	238-1	0.17	0.16	0.17	0.17	3.22	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-01	Instrumnet Name :	P8
Client Sample ID :	3822	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:37:39	DataFile Name :	044AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	11.58	11.66	11.48	11.57	0.79	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				100		%
Zinc	66-2	2206.29	2231.03	2225.05	2220.79	0.58	ppb
Zirconium	90-1	7.22	7.12	6.81	7.05	3.01	ppb
Zirconium	91-1	7.35	7.00	6.69	7.01	4.68	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P8
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:44:42	DataFile Name :	046CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51000.82	50716.62	48866.59	50194.68	2.31	ppb
Antimony	121-1	490.91	475.26	485.00	483.72	1.63	ppb
Arsenic	75-2	479.44	484.94	468.68	477.69	1.73	ppb
Barium	135-1	2478.51	2405.44	2405.58	2429.84	1.73	ppb
Barium	137-1	2457.06	2401.01	2365.72	2407.93	1.91	ppb
Beryllium	9-1	519.53	548.92	520.90	529.78	3.13	ppb
Bismuth	209-1				89		%
Bismuth	209-2				86		%
Bromine	81-1						cps
Cadmium	108-1	477.51	458.39	458.57	464.82	2.36	ppb
Cadmium	106-1	475.95	463.54	465.89	468.46	1.41	ppb
Cadmium	111-1	476.14	473.33	473.29	474.26	0.34	ppb
Calcium	43-1	238628.87	243983.33	239618.80	240743.67	1.18	ppb
Calcium	44-1	237270.83	245366.17	238782.80	240473.27	1.79	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	491.47	490.17	469.58	483.74	2.54	ppb
Cobalt	59-2	474.04	466.84	457.12	466.00	1.82	ppb
Copper	63-2	4641.50	4508.20	4363.58	4504.43	3.09	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				97		%
Indium	115-1				90		%
Indium	115-2				86		%
Iron	54-2	126190.29	122734.94	120644.70	123189.98	2.27	ppb
Iron	56-2	127048.60	122483.94	118755.67	122762.74	3.38	ppb
Iron	57-2	125373.90	122128.52	119538.90	122347.11	2.39	ppb
Krypton	83-1						cps
Lead	206-1	2400.92	2391.63	2417.92	2403.49	0.55	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P8
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:44:42	DataFile Name :	046CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2400.23	2398.20	2426.45	2408.29	0.65	ppb
Lead	208-1	2406.59	2430.49	2427.92	2421.67	0.54	ppb
Lithium	6-1				91		%
Magnesium	24-2	252164.57	248230.72	243669.90	248021.73	1.71	ppb
Manganese	55-2	4930.68	4841.24	4680.16	4817.36	2.64	ppb
Molybdenum	94-1	4676.21	4738.98	4744.04	4719.74	0.80	ppb
Molybdenum	95-1	4704.43	4680.80	4695.18	4693.47	0.25	ppb
Molybdenum	96-1	4748.33	4800.22	4664.38	4737.64	1.45	ppb
Molybdenum	97-1	4662.06	4802.15	4609.80	4691.34	2.12	ppb
Molybdenum	98-1	4593.04	4738.40	4697.11	4676.18	1.60	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	470.89	464.31	447.12	460.77	2.66	ppb
Phosphorus	31-2	10223.87	9933.82	9669.44	9942.38	2.79	ppb
Potassium	39-2	125522.91	122682.74	119513.39	122573.01	2.45	ppb
Rhodium	103-1				88		%
Rhodium	103-2				88		%
Scandium	45-1				99		%
Scandium	45-2				98		%
Selenium	82-1	448.80	452.61	451.31	450.91	0.43	ppb
Selenium	77-2	459.23	476.11	462.58	465.98	1.92	ppb
Selenium	78-2	468.95	484.06	465.97	472.99	2.05	ppb
Silicon	28-1	517.87	513.88	516.28	516.01	0.39	ppb
Silver	107-1	483.89	460.71	458.49	467.70	3.01	ppb
Silver	109-1	479.65	464.26	459.38	467.76	2.26	ppb
Sodium	23-2	259084.04	251163.45	242478.84	250908.78	3.31	ppb
Strontium	86-1	475.65	482.66	480.28	479.53	0.74	ppb
Strontium	88-1	479.33	477.98	471.86	476.39	0.84	ppb
Sulfur	34-1	9737.39	9955.92	9914.71	9869.34	1.18	ppb
Terbium	159-1				97		%
Terbium	159-2				96		%
Thallium	203-1	484.89	477.68	486.32	482.96	0.96	ppb
Thallium	205-1	487.79	483.43	484.31	485.18	0.48	ppb
Tin	118-1	484.83	475.89	483.73	481.49	1.01	ppb
Titanium	47-1	4674.93	4767.10	4737.42	4726.48	1.00	ppb
Uranium	238-1	480.06	488.30	490.34	486.23	1.12	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P8
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:44:42	DataFile Name :	046CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	504.64	498.41	478.34	493.80	2.78	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				95		%
Zinc	66-2	4735.10	4603.56	4553.94	4630.87	2.02	ppb
Zirconium	90-1	472.10	474.78	486.48	477.79	1.60	ppb
Zirconium	91-1	470.94	472.48	478.79	474.07	0.88	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P8
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:48:37	DataFile Name :	047CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	7.00	7.25	7.72	7.32	5.01	ppb
Antimony	121-1	0.08	0.07	0.07	0.07	11.90	ppb
Arsenic	75-2	0.00	0.01	0.01	0.01	113.56	ppb
Barium	135-1	0.02	0.02	0.02	0.02	2.74	ppb
Barium	137-1	0.04	0.03	0.03	0.03	22.51	ppb
Beryllium	9-1	0.04	0.04	0.05	0.04	12.35	ppb
Bismuth	209-1				105		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	-0.01	0.01	0.01	0.01	194.91	ppb
Cadmium	106-1	-0.25	0.15	0.03	-0.02		ppb
Cadmium	111-1	0.00	0.03	0.01	0.01	131.78	ppb
Calcium	43-1	2.40	2.15	3.13	2.56	19.79	ppb
Calcium	44-1	-0.36	0.00	-0.85	-0.40		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	0.02	-0.01	0.00		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	0.07	0.10	0.09	0.09	19.22	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				105		%
Holmium	165-2				102		%
Indium	115-1				106		%
Indium	115-2				99		%
Iron	54-2	1.72	1.11	1.29	1.37	22.61	ppb
Iron	56-2	1.63	1.81	1.48	1.64	9.85	ppb
Iron	57-2	1.92	1.74	1.46	1.71	13.87	ppb
Krypton	83-1						cps
Lead	206-1	0.13	0.12	0.11	0.12	8.88	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P8
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:48:37	DataFile Name :	047CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.13	0.12	0.12	0.12	8.39	ppb
Lead	208-1	0.13	0.11	0.11	0.12	10.02	ppb
Lithium	6-1				107		%
Magnesium	24-2	2.90	2.45	2.69	2.68	8.43	ppb
Manganese	55-2	0.17	0.09	0.04	0.10	67.94	ppb
Molybdenum	94-1	0.16	0.15	0.13	0.15	7.58	ppb
Molybdenum	95-1	0.09	0.08	0.07	0.08	15.10	ppb
Molybdenum	96-1	0.10	0.09	0.08	0.09	13.21	ppb
Molybdenum	97-1	0.09	0.08	0.08	0.08	10.26	ppb
Molybdenum	98-1	0.09	0.07	0.06	0.07	18.84	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.02	0.03	-0.02	-0.01		ppb
Phosphorus	31-2	-15.29	-11.91	-18.68	-15.29		ppb
Potassium	39-2	29.89	31.18	26.90	29.32	7.49	ppb
Rhodium	103-1				105		%
Rhodium	103-2				103		%
Scandium	45-1				106		%
Scandium	45-2				99		%
Selenium	82-1	-0.20	-0.03	0.17	-0.02		ppb
Selenium	77-2	-0.25	-0.25	0.13	-0.12		ppb
Selenium	78-2	0.75	-0.03	-0.15	0.19	256.58	ppb
Silicon	28-1	2.39	2.27	2.25	2.31	3.39	ppb
Silver	107-1	0.03	0.03	0.03	0.03	10.71	ppb
Silver	109-1	0.03	0.02	0.03	0.03	9.21	ppb
Sodium	23-2	86.15	86.73	87.46	86.78	0.76	ppb
Strontium	86-1	0.01	0.01	0.01	0.01	18.66	ppb
Strontium	88-1	0.01	0.00	0.00	0.01	34.88	ppb
Sulfur	34-1	-155.09	6.20	-95.43	-81.44		ppb
Terbium	159-1				106		%
Terbium	159-2				100		%
Thallium	203-1	0.02	0.03	0.02	0.03	6.53	ppb
Thallium	205-1	0.03	0.02	0.02	0.02	8.94	ppb
Tin	118-1	0.00	0.00	-0.01	0.00		ppb
Titanium	47-1	0.03	0.02	0.00	0.02	75.56	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	58.76	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P8
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:48:37	DataFile Name :	047CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	211.79	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				100		%
Zinc	66-2	0.26	0.28	0.24	0.26	7.13	ppb
Zirconium	90-1	0.04	0.04	0.04	0.04	4.33	ppb
Zirconium	91-1	0.03	0.04	0.03	0.03	16.10	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-02	Instrumnet Name :	P8
Client Sample ID :	3833	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:52:00	DataFile Name :	048AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	435.79	448.29	437.47	440.52	1.54	ppb
Antimony	121-1	5.60	5.47	5.47	5.51	1.31	ppb
Arsenic	75-2	1.09	1.40	1.23	1.24	12.60	ppb
Barium	135-1	688.49	678.15	671.65	679.43	1.25	ppb
Barium	137-1	679.11	665.83	667.04	670.66	1.09	ppb
Beryllium	9-1	0.04	0.04	0.04	0.04	3.53	ppb
Bismuth	209-1				104		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	5.97	5.71	5.52	5.73	3.99	ppb
Cadmium	106-1	6.32	5.86	5.60	5.93	6.20	ppb
Cadmium	111-1	6.00	5.88	5.70	5.86	2.55	ppb
Calcium	43-1	2148.42	2100.98	2147.06	2132.15	1.27	ppb
Calcium	44-1	2232.70	2202.08	2225.86	2220.22	0.72	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	34.23	35.38	34.79	34.80	1.65	ppb
Cobalt	59-2	1.36	1.38	1.33	1.35	1.94	ppb
Copper	63-2	80.37	82.84	81.81	81.67	1.52	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				100		%
Indium	115-1				104		%
Indium	115-2				96		%
Iron	54-2	15164.71	15405.47	14809.19	15126.46	1.98	ppb
Iron	56-2	15082.30	15398.22	14906.97	15129.16	1.65	ppb
Iron	57-2	15365.24	15711.12	15597.37	15557.91	1.13	ppb
Krypton	83-1						cps
Lead	206-1	15.38	15.44	15.28	15.37	0.54	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-02	Instrumnet Name :	P8
Client Sample ID :	3833	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:52:00	DataFile Name :	048AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	14.84	14.72	14.70	14.75	0.49	ppb
Lead	208-1	15.07	14.96	14.84	14.96	0.76	ppb
Lithium	6-1				107		%
Magnesium	24-2	333.50	347.41	339.32	340.07	2.05	ppb
Manganese	55-2	96.49	99.59	96.16	97.41	1.94	ppb
Molybdenum	94-1	20.09	18.35	17.86	18.77	6.23	ppb
Molybdenum	95-1	15.41	14.73	14.94	15.03	2.32	ppb
Molybdenum	96-1	15.76	15.32	15.18	15.42	1.98	ppb
Molybdenum	97-1	15.33	14.93	15.02	15.09	1.38	ppb
Molybdenum	98-1	15.10	14.58	14.71	14.80	1.83	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	14.53	14.77	14.25	14.52	1.78	ppb
Phosphorus	31-2	781.47	865.57	829.90	825.64	5.11	ppb
Potassium	39-2	277.37	289.32	282.25	282.98	2.12	ppb
Rhodium	103-1				103		%
Rhodium	103-2				101		%
Scandium	45-1				105		%
Scandium	45-2				99		%
Selenium	82-1	0.02	0.13	0.00	0.05	148.49	ppb
Selenium	77-2	1.28	0.53	0.13	0.65	89.96	ppb
Selenium	78-2	0.31	-0.35	0.20	0.05	664.40	ppb
Silicon	28-1	141.19	139.20	141.33	140.57	0.85	ppb
Silver	107-1	0.12	0.12	0.12	0.12	1.17	ppb
Silver	109-1	0.13	0.12	0.12	0.12	3.31	ppb
Sodium	23-2	1888.60	1995.57	1917.93	1934.03	2.86	ppb
Strontium	86-1	23.59	23.02	23.03	23.22	1.42	ppb
Strontium	88-1	26.83	25.57	25.66	26.02	2.69	ppb
Sulfur	34-1	9714.66	9605.89	9310.43	9543.66	2.19	ppb
Terbium	159-1				104		%
Terbium	159-2				99		%
Thallium	203-1	0.05	0.04	0.05	0.05	5.38	ppb
Thallium	205-1	0.05	0.04	0.05	0.04	3.62	ppb
Tin	118-1	9.03	8.70	8.62	8.78	2.48	ppb
Titanium	47-1	26.35	26.02	25.02	25.80	2.69	ppb
Uranium	238-1	0.03	0.03	0.03	0.03	4.36	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-02	Instrumnet Name :	P8
Client Sample ID :	3833	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:52:00	DataFile Name :	048AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	2.68	2.68	2.70	2.69	0.55	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				104		%
Yttrium	89-2				98		%
Zinc	66-2	411.11	424.43	407.58	414.37	2.14	ppb
Zirconium	90-1	4.10	3.38	2.93	3.47	16.98	ppb
Zirconium	91-1	4.11	3.29	2.88	3.42	18.27	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03	Instrumnet Name :	P8
Client Sample ID :	RT-3873	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:55:15	DataFile Name :	049AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	90930.26	90072.86	91515.39	90839.50	0.80	ppb
Antimony	121-1	0.49	0.48	0.52	0.50	3.76	ppb
Arsenic	75-2	41.91	40.93	41.56	41.47	1.20	ppb
Barium	135-1	992.86	1000.47	1022.81	1005.38	1.55	ppb
Barium	137-1	998.92	991.72	1017.89	1002.84	1.35	ppb
Beryllium	9-1	9.03	9.00	8.71	8.91	1.97	ppb
Bismuth	209-1				99		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Cadmium	108-1	17.88	18.03	18.39	18.10	1.45	ppb
Cadmium	106-1	32.10	31.60	32.61	32.10	1.57	ppb
Cadmium	111-1	10.70	10.73	10.97	10.80	1.36	ppb
Calcium	43-1	21335.16	20968.81	20877.88	21060.62	1.15	ppb
Calcium	44-1	21200.86	20815.05	20671.68	20895.86	1.31	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	138.52	138.75	141.22	139.50	1.07	ppb
Cobalt	59-2	101.68	102.21	100.79	101.56	0.71	ppb
Copper	63-2	423.77	429.88	434.98	429.54	1.31	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				110		%
Holmium	165-2				107		%
Indium	115-1				101		%
Indium	115-2				94		%
Iron	54-2	133707.03	134790.06	136568.10	135021.73	1.07	ppb
Iron	56-2	134425.72	133289.62	135783.64	134499.66	0.93	ppb
Iron	57-2	134729.79	134539.50	135582.67	134950.65	0.41	ppb
Krypton	83-1						cps
Lead	206-1	1343.59	1316.93	1376.60	1345.71	2.22	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03	Instrumnet Name :	P8
Client Sample ID :	RT-3873	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:55:15	DataFile Name :	049AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1289.14	1270.65	1340.70	1300.17	2.79	ppb
Lead	208-1	1309.08	1295.05	1348.42	1317.52	2.10	ppb
Lithium	6-1				107		%
Magnesium	24-2	36553.83	36237.15	36844.76	36545.25	0.83	ppb
Manganese	55-2	5638.15	5632.19	5694.84	5655.06	0.61	ppb
Molybdenum	94-1	72.79	72.00	71.32	72.04	1.02	ppb
Molybdenum	95-1	2.72	2.69	2.69	2.70	0.58	ppb
Molybdenum	96-1	9.76	9.58	9.83	9.72	1.34	ppb
Molybdenum	97-1	2.74	2.62	2.66	2.68	2.29	ppb
Molybdenum	98-1	2.66	2.57	2.64	2.62	1.61	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	144.70	143.74	146.16	144.87	0.84	ppb
Phosphorus	31-2	7178.96	7067.21	7282.03	7176.06	1.50	ppb
Potassium	39-2	10950.70	10850.97	11087.86	10963.18	1.08	ppb
Rhodium	103-1				97		%
Rhodium	103-2				94		%
Scandium	45-1				171		%
Scandium	45-2				160		%
Selenium	82-1	2.48	2.28	2.44	2.40	4.38	ppb
Selenium	77-2	126.48	119.04	135.62	127.05	6.54	ppb
Selenium	78-2	20.75	19.49	21.56	20.60	5.05	ppb
Silicon	28-1	825.11	820.17	820.70	821.99	0.33	ppb
Silver	107-1	1.21	1.25	1.27	1.24	2.67	ppb
Silver	109-1	1.15	1.17	1.18	1.16	1.57	ppb
Sodium	23-2	4744.91	4684.38	4819.23	4749.51	1.42	ppb
Strontium	86-1	91.26	89.00	90.32	90.19	1.26	ppb
Strontium	88-1	89.59	88.66	90.85	89.70	1.22	ppb
Sulfur	34-1	-1221.37	-1351.43	-1410.42	-1327.74		ppb
Terbium	159-1				110		%
Terbium	159-2				107		%
Thallium	203-1	2.09	2.07	2.17	2.11	2.45	ppb
Thallium	205-1	2.09	2.10	2.18	2.12	2.25	ppb
Tin	118-1	9.54	9.62	9.79	9.65	1.34	ppb
Titanium	47-1	1379.79	1374.24	1361.67	1371.90	0.68	ppb
Uranium	238-1	10.98	11.12	11.32	11.14	1.57	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03	Instrumnet Name :	P8
Client Sample ID :	RT-3873	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:55:15	DataFile Name :	049AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	247.04	245.24	248.97	247.08	0.76	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				222		%
Yttrium	89-2				228		%
Zinc	66-2	1898.60	1907.66	1946.34	1917.53	1.32	ppb
Zirconium	90-1	39.30	37.76	38.09	38.38	2.12	ppb
Zirconium	91-1	35.35	35.06	35.20	35.20	0.42	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUP	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUP	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:58:15	DataFile Name :	050AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	94279.10	96735.76	94862.01	95292.29	1.35	ppb
Antimony	121-1	0.54	0.56	0.56	0.55	1.60	ppb
Arsenic	75-2	33.44	34.42	34.67	34.18	1.90	ppb
Barium	135-1	1002.45	984.76	989.85	992.35	0.92	ppb
Barium	137-1	1018.46	991.56	994.17	1001.40	1.48	ppb
Beryllium	9-1	9.34	8.90	9.54	9.26	3.51	ppb
Bismuth	209-1				100		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Cadmium	108-1	13.42	13.12	12.87	13.14	2.08	ppb
Cadmium	106-1	26.76	26.45	27.41	26.87	1.81	ppb
Cadmium	111-1	6.18	6.10	6.19	6.16	0.82	ppb
Calcium	43-1	19108.82	19333.35	18663.53	19035.23	1.79	ppb
Calcium	44-1	19265.18	19183.46	18740.23	19062.95	1.48	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	151.05	154.19	153.69	152.98	1.10	ppb
Cobalt	59-2	60.88	61.43	60.54	60.95	0.74	ppb
Copper	63-2	344.05	342.06	349.48	345.20	1.11	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				112		%
Holmium	165-2				108		%
Indium	115-1				100		%
Indium	115-2				94		%
Iron	54-2	127606.92	129337.61	126657.34	127867.29	1.06	ppb
Iron	56-2	127119.81	127858.42	128202.84	127727.03	0.43	ppb
Iron	57-2	128314.96	129972.84	130246.16	129511.32	0.81	ppb
Krypton	83-1						cps
Lead	206-1	951.74	948.14	935.74	945.21	0.89	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUP	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUP	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:58:15	DataFile Name :	050AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	925.57	919.85	921.57	922.33	0.32	ppb
Lead	208-1	934.28	937.02	935.30	935.53	0.15	ppb
Lithium	6-1				116		%
Magnesium	24-2	31171.99	31807.85	31161.26	31380.37	1.18	ppb
Manganese	55-2	4045.05	4123.07	4067.31	4078.48	0.99	ppb
Molybdenum	94-1	65.41	66.54	66.54	66.17	0.98	ppb
Molybdenum	95-1	2.03	2.08	2.08	2.06	1.40	ppb
Molybdenum	96-1	8.49	8.78	8.61	8.63	1.65	ppb
Molybdenum	97-1	2.04	2.09	2.04	2.06	1.51	ppb
Molybdenum	98-1	1.98	2.03	2.01	2.01	1.19	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	110.94	110.91	110.48	110.77	0.23	ppb
Phosphorus	31-2	6285.70	6209.48	6300.37	6265.19	0.78	ppb
Potassium	39-2	12231.21	12519.29	12300.22	12350.24	1.22	ppb
Rhodium	103-1				96		%
Rhodium	103-2				94		%
Scandium	45-1				179		%
Scandium	45-2				166		%
Selenium	82-1	3.06	2.89	2.86	2.94	3.69	ppb
Selenium	77-2	139.89	145.62	150.56	145.36	3.67	ppb
Selenium	78-2	19.90	23.63	20.80	21.44	9.07	ppb
Silicon	28-1	1134.49	1168.55	1111.15	1138.06	2.54	ppb
Silver	107-1	1.20	1.22	1.21	1.21	0.75	ppb
Silver	109-1	1.15	1.17	1.17	1.16	0.84	ppb
Sodium	23-2	4286.15	4340.34	4273.53	4300.01	0.83	ppb
Strontium	86-1	80.75	81.94	79.87	80.85	1.29	ppb
Strontium	88-1	81.40	82.63	81.06	81.70	1.01	ppb
Sulfur	34-1	-1749.08	-1736.86	-1858.68	-1781.54		ppb
Terbium	159-1				111		%
Terbium	159-2				106		%
Thallium	203-1	2.16	2.19	2.19	2.18	0.87	ppb
Thallium	205-1	2.15	2.23	2.18	2.19	1.72	ppb
Tin	118-1	7.70	7.78	7.77	7.75	0.55	ppb
Titanium	47-1	1422.18	1427.76	1379.53	1409.82	1.87	ppb
Uranium	238-1	14.67	14.95	14.76	14.80	0.98	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUP	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUP	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:58:15	DataFile Name :	050AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	223.13	222.80	225.42	223.78	0.64	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				223		%
Yttrium	89-2				234		%
Zinc	66-2	1736.25	1753.20	1756.44	1748.63	0.62	ppb
Zirconium	90-1	35.47	35.45	35.13	35.35	0.53	ppb
Zirconium	91-1	31.72	32.91	32.32	32.32	1.84	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873L	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:01:18	DataFile Name :	051AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	26116.65	26595.39	26091.63	26267.89	1.08	ppb
Antimony	121-1	0.10	0.11	0.11	0.11	3.51	ppb
Arsenic	75-2	14.81	14.52	13.88	14.41	3.30	ppb
Barium	135-1	215.38	211.71	217.76	214.95	1.42	ppb
Barium	137-1	219.16	214.72	215.89	216.59	1.06	ppb
Beryllium	9-1	1.88	1.78	1.91	1.86	3.73	ppb
Bismuth	209-1				104		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	3.96	3.77	3.86	3.86	2.48	ppb
Cadmium	106-1	5.94	5.84	6.26	6.01	3.71	ppb
Cadmium	111-1	2.24	2.18	2.27	2.23	1.91	ppb
Calcium	43-1	5885.34	5963.40	5939.83	5929.53	0.68	ppb
Calcium	44-1	6103.76	6184.47	6124.85	6137.69	0.68	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	38.10	38.18	37.26	37.85	1.35	ppb
Cobalt	59-2	28.12	27.96	27.62	27.90	0.92	ppb
Copper	63-2	122.44	121.70	118.95	121.03	1.52	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				104		%
Indium	115-1				106		%
Indium	115-2				99		%
Iron	54-2	40055.61	39520.79	38811.25	39462.55	1.58	ppb
Iron	56-2	40671.55	40129.89	39340.15	40047.20	1.67	ppb
Iron	57-2	40323.78	40357.53	39274.92	39985.41	1.54	ppb
Krypton	83-1						cps
Lead	206-1	277.80	278.84	279.77	278.80	0.35	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873L	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:01:18	DataFile Name :	051AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	271.87	269.44	269.24	270.18	0.54	ppb
Lead	208-1	272.99	271.56	271.27	271.94	0.34	ppb
Lithium	6-1				110		%
Magnesium	24-2	10590.55	10660.92	10269.48	10506.98	1.99	ppb
Manganese	55-2	1675.90	1687.96	1620.39	1661.42	2.17	ppb
Molybdenum	94-1	23.03	23.88	22.85	23.25	2.36	ppb
Molybdenum	95-1	0.93	0.97	0.96	0.95	2.46	ppb
Molybdenum	96-1	3.38	3.47	3.41	3.42	1.28	ppb
Molybdenum	97-1	0.95	0.97	0.94	0.95	1.97	ppb
Molybdenum	98-1	0.94	0.93	0.93	0.93	0.78	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	44.51	44.24	43.44	44.06	1.27	ppb
Phosphorus	31-2	2036.47	1996.36	2095.02	2042.61	2.43	ppb
Potassium	39-2	3003.98	3007.00	2919.95	2976.98	1.66	ppb
Rhodium	103-1				103		%
Rhodium	103-2				101		%
Scandium	45-1				118		%
Scandium	45-2				111		%
Selenium	82-1	0.86	0.93	0.62	0.80	19.96	ppb
Selenium	77-2	43.89	51.53	45.73	47.05	8.47	ppb
Selenium	78-2	8.69	6.62	8.64	7.98	14.79	ppb
Silicon	28-1	239.54	238.83	242.46	240.28	0.80	ppb
Silver	107-1	0.29	0.27	0.28	0.28	2.83	ppb
Silver	109-1	0.26	0.26	0.27	0.26	2.17	ppb
Sodium	23-2	1401.36	1420.70	1348.89	1390.32	2.67	ppb
Strontium	86-1	28.80	29.74	28.68	29.07	1.99	ppb
Strontium	88-1	31.41	31.91	30.48	31.27	2.32	ppb
Sulfur	34-1	-1304.07	-1313.37	-1293.43	-1303.62		ppb
Terbium	159-1				109		%
Terbium	159-2				105		%
Thallium	203-1	0.43	0.43	0.43	0.43	0.27	ppb
Thallium	205-1	0.43	0.43	0.42	0.43	1.69	ppb
Tin	118-1	2.02	1.98	1.97	1.99	1.22	ppb
Titanium	47-1	403.32	406.97	405.93	405.40	0.46	ppb
Uranium	238-1	2.21	2.21	2.23	2.22	0.56	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873L	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:01:18	DataFile Name :	051AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	67.73	67.60	66.63	67.32	0.89	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				130		%
Yttrium	89-2				134		%
Zinc	66-2	541.87	535.33	526.05	534.42	1.49	ppb
Zirconium	90-1	12.36	12.59	12.31	12.42	1.21	ppb
Zirconium	91-1	12.34	12.49	12.05	12.29	1.82	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MS	Instrumnet Name :	P8
Client Sample ID :	RT-3873MS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:04:26	DataFile Name :	052AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	95986.45	93545.03	93799.70	94443.73	1.42	ppb
Antimony	121-1	709.22	441.27	451.26	533.92	28.45	ppb
Arsenic	75-2	38.54	37.59	36.62	37.58	2.55	ppb
Barium	135-1	4718.39	2925.34	2961.80	3535.18	28.99	ppb
Barium	137-1	4613.65	2886.85	2945.37	3481.96	28.16	ppb
Beryllium	9-1	721.48	464.98	480.05	555.50	25.91	ppb
Bismuth	209-1				86		%
Bismuth	209-2				89		%
Bromine	81-1						cps
Cadmium	108-1	663.76	421.53	430.11	505.13	27.21	ppb
Cadmium	106-1	727.86	456.80	471.87	552.17	27.59	ppb
Cadmium	111-1	712.71	444.73	461.60	539.68	27.81	ppb
Calcium	43-1	68105.01	49814.42	50886.71	56268.71	18.24	ppb
Calcium	44-1	68776.70	49429.31	50777.25	56327.75	19.18	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	449.47	438.73	434.97	441.06	1.71	ppb
Cobalt	59-2	373.88	367.15	359.97	367.00	1.89	ppb
Copper	63-2	3430.79	3327.96	3282.53	3347.09	2.27	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				96		%
Holmium	165-2				104		%
Indium	115-1				82		%
Indium	115-2				84		%
Iron	54-2	137572.75	134138.69	132584.71	134765.38	1.89	ppb
Iron	56-2	139364.78	136138.52	133811.28	136438.19	2.04	ppb
Iron	57-2	138536.43	135587.64	134704.30	136276.12	1.47	ppb
Krypton	83-1						cps
Lead	206-1	5484.08	3357.09	3434.27	4091.81	29.48	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MS	Instrumnet Name :	P8
Client Sample ID :	RT-3873MS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:04:26	DataFile Name :	052AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	5450.80	3311.49	3467.01	4076.43	29.26	ppb
Lead	208-1	5480.50	3336.24	3448.31	4088.35	29.52	ppb
Lithium	6-1				98		%
Magnesium	24-2	65246.10	64216.59	63409.07	64290.59	1.43	ppb
Manganese	55-2	7236.40	7084.54	6992.65	7104.53	1.73	ppb
Molybdenum	94-1	1427.36	1117.32	1153.10	1232.59	13.76	ppb
Molybdenum	95-1	1027.77	798.32	821.25	882.45	14.32	ppb
Molybdenum	96-1	1066.74	844.71	845.67	919.04	13.92	ppb
Molybdenum	97-1	1011.80	799.86	807.59	873.08	13.77	ppb
Molybdenum	98-1	1010.86	795.22	820.56	875.54	13.46	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	440.39	432.85	413.90	429.05	3.18	ppb
Phosphorus	31-2	7118.05	6790.55	6785.06	6897.89	2.76	ppb
Potassium	39-2	25466.05	24264.11	24611.04	24780.40	2.50	ppb
Rhodium	103-1				81		%
Rhodium	103-2				89		%
Scandium	45-1				153		%
Scandium	45-2				155		%
Selenium	82-1	280.49	222.17	227.74	243.46	13.22	ppb
Selenium	77-2	341.62	339.37	347.44	342.81	1.21	ppb
Selenium	78-2	247.27	235.20	222.92	235.13	5.18	ppb
Silicon	28-1	1791.05	1305.54	1295.00	1463.86	19.36	ppb
Silver	107-1	121.55	77.53	77.79	92.29	27.46	ppb
Silver	109-1	120.46	77.57	77.37	91.80	27.04	ppb
Sodium	23-2	37560.91	36822.42	37267.59	37216.97	1.00	ppb
Strontium	86-1	444.77	354.51	358.72	386.00	13.20	ppb
Strontium	88-1	447.06	354.47	356.40	385.97	13.71	ppb
Sulfur	34-1	477.08	-1077.77	-1010.05	-536.91		ppb
Terbium	159-1				96		%
Terbium	159-2				101		%
Thallium	203-1	742.19	447.20	460.47	549.95	30.30	ppb
Thallium	205-1	736.48	455.13	464.11	551.91	28.97	ppb
Tin	118-1	650.99	408.56	419.30	492.95	27.79	ppb
Titanium	47-1	1913.87	1711.47	1424.17	1683.17	14.62	ppb
Uranium	238-1	745.60	453.88	471.86	557.11	29.35	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MS	Instrumnet Name :	P8
Client Sample ID :	RT-3873MS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:04:26	DataFile Name :	052AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	533.63	524.76	529.32	529.24	0.84	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				195		%
Yttrium	89-2				213		%
Zinc	66-2	4984.90	4850.97	4893.79	4909.89	1.39	ppb
Zirconium	90-1	329.40	259.07	267.82	285.43	13.43	ppb
Zirconium	91-1	324.24	258.50	265.63	282.79	12.76	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSD	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSD	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:07:13	DataFile Name :	053AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	101274.15	102486.21	101307.08	101689.15	0.68	ppb
Antimony	121-1	444.55	442.84	457.05	448.15	1.73	ppb
Arsenic	75-2	40.47	41.92	39.72	40.71	2.75	ppb
Barium	135-1	3016.88	2967.14	3031.94	3005.32	1.13	ppb
Barium	137-1	2961.57	3005.58	2980.01	2982.39	0.74	ppb
Beryllium	9-1	471.73	445.05	456.69	457.82	2.92	ppb
Bismuth	209-1				96		%
Bismuth	209-2				90		%
Bromine	81-1						cps
Cadmium	108-1	426.22	426.53	433.95	428.90	1.02	ppb
Cadmium	106-1	459.13	464.30	465.75	463.06	0.75	ppb
Cadmium	111-1	453.16	457.00	458.58	456.24	0.61	ppb
Calcium	43-1	53082.34	54168.02	52930.80	53393.72	1.26	ppb
Calcium	44-1	53747.35	53351.00	53708.90	53602.42	0.41	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	454.48	456.75	456.97	456.07	0.30	ppb
Cobalt	59-2	364.51	374.26	369.90	369.55	1.32	ppb
Copper	63-2	3241.97	3309.26	3302.19	3284.47	1.13	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				103		%
Indium	115-1				94		%
Indium	115-2				85		%
Iron	54-2	145978.60	147349.61	148360.85	147229.69	0.81	ppb
Iron	56-2	146379.15	148835.79	148943.02	148052.65	0.98	ppb
Iron	57-2	147534.35	148845.47	146945.80	147775.21	0.66	ppb
Krypton	83-1						cps
Lead	206-1	3457.84	3577.92	3513.42	3516.39	1.71	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSD	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSD	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:07:13	DataFile Name :	053AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	3426.05	3521.70	3505.45	3484.40	1.47	ppb
Lead	208-1	3465.83	3516.38	3503.61	3495.27	0.75	ppb
Lithium	6-1				112		%
Magnesium	24-2	70720.37	71812.13	71879.10	71470.53	0.91	ppb
Manganese	55-2	7314.97	7262.81	7330.45	7302.74	0.49	ppb
Molybdenum	94-1	1155.45	1144.73	1151.68	1150.62	0.47	ppb
Molybdenum	95-1	824.96	820.25	827.46	824.22	0.44	ppb
Molybdenum	96-1	867.22	865.36	869.39	867.32	0.23	ppb
Molybdenum	97-1	822.33	820.48	826.22	823.01	0.36	ppb
Molybdenum	98-1	825.15	814.31	828.53	822.66	0.90	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	425.70	444.17	437.62	435.83	2.15	ppb
Phosphorus	31-2	7493.12	7560.50	7510.98	7521.53	0.46	ppb
Potassium	39-2	26450.89	26867.29	26506.71	26608.30	0.85	ppb
Rhodium	103-1				92		%
Rhodium	103-2				89		%
Scandium	45-1				166		%
Scandium	45-2				156		%
Selenium	82-1	224.73	224.10	228.76	225.86	1.12	ppb
Selenium	77-2	330.90	354.30	336.36	340.52	3.60	ppb
Selenium	78-2	235.74	239.36	228.52	234.54	2.35	ppb
Silicon	28-1	2177.77	2186.03	2603.67	2322.49	10.49	ppb
Silver	107-1	76.98	75.18	78.80	76.99	2.35	ppb
Silver	109-1	77.40	77.50	78.87	77.92	1.06	ppb
Sodium	23-2	37002.63	38040.02	37531.74	37524.80	1.38	ppb
Strontium	86-1	358.93	359.85	373.96	364.25	2.31	ppb
Strontium	88-1	361.58	364.69	365.93	364.07	0.62	ppb
Sulfur	34-1	-1209.81	-1201.39	-1206.47	-1205.89		ppb
Terbium	159-1				108		%
Terbium	159-2				102		%
Thallium	203-1	457.40	474.66	462.01	464.69	1.92	ppb
Thallium	205-1	467.17	474.44	465.17	468.92	1.04	ppb
Tin	118-1	408.05	410.08	413.69	410.61	0.70	ppb
Titanium	47-1	1805.13	1832.55	1816.64	1818.11	0.76	ppb
Uranium	238-1	468.07	471.04	482.70	473.94	1.63	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSD	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSD	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:07:13	DataFile Name :	053AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	552.27	559.28	561.54	557.70	0.87	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				205		%
Yttrium	89-2				215		%
Zinc	66-2	4961.19	4977.44	4974.35	4970.99	0.17	ppb
Zirconium	90-1	264.10	264.11	265.71	264.64	0.35	ppb
Zirconium	91-1	263.52	261.47	264.06	263.01	0.52	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03A	Instrumnet Name :	P8
Client Sample ID :	RT-3873A	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:09:57	DataFile Name :	054AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	96682.33	95819.56	96838.40	96446.76	0.57	ppb
Antimony	121-1	458.40	462.21	435.81	452.14	3.16	ppb
Arsenic	75-2	39.08	39.40	39.25	39.24	0.40	ppb
Barium	135-1	3025.98	3073.92	2966.19	3022.03	1.79	ppb
Barium	137-1	2942.05	2957.59	2939.08	2946.24	0.34	ppb
Beryllium	9-1	459.72	476.62	454.72	463.68	2.48	ppb
Bismuth	209-1				98		%
Bismuth	209-2				91		%
Bromine	81-1						cps
Cadmium	108-1	432.83	430.24	426.45	429.84	0.75	ppb
Cadmium	106-1	464.51	466.79	465.27	465.53	0.25	ppb
Cadmium	111-1	452.64	454.43	454.61	453.90	0.24	ppb
Calcium	43-1	51604.55	51807.12	52423.78	51945.15	0.82	ppb
Calcium	44-1	51145.71	51790.79	52814.22	51916.91	1.62	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	447.75	436.12	436.39	440.09	1.51	ppb
Cobalt	59-2	364.61	355.83	355.49	358.64	1.44	ppb
Copper	63-2	3256.87	3186.87	3212.72	3218.82	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				109		%
Holmium	165-2				105		%
Indium	115-1				94		%
Indium	115-2				85		%
Iron	54-2	140882.11	136927.89	137470.72	138426.91	1.55	ppb
Iron	56-2	141316.71	138187.70	138113.07	139205.83	1.31	ppb
Iron	57-2	140369.09	140037.61	140028.51	140145.07	0.14	ppb
Krypton	83-1						cps
Lead	206-1	3409.56	3431.73	3403.35	3414.88	0.44	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03A	Instrumnet Name :	P8
Client Sample ID :	RT-3873A	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:09:57	DataFile Name :	054AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	3376.00	3414.32	3410.21	3400.18	0.62	ppb
Lead	208-1	3413.93	3425.67	3398.70	3412.77	0.40	ppb
Lithium	6-1				111		%
Magnesium	24-2	67394.04	65810.52	67045.54	66750.03	1.25	ppb
Manganese	55-2	7159.36	6933.59	6981.29	7024.75	1.69	ppb
Molybdenum	94-1	1146.36	1098.32	1154.57	1133.08	2.68	ppb
Molybdenum	95-1	810.82	788.82	840.29	813.31	3.18	ppb
Molybdenum	96-1	857.76	857.39	867.66	860.94	0.68	ppb
Molybdenum	97-1	812.00	821.11	822.28	818.46	0.69	ppb
Molybdenum	98-1	816.22	798.81	822.17	812.40	1.49	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	427.21	429.67	426.87	427.91	0.36	ppb
Phosphorus	31-2	7200.53	7055.43	7209.47	7155.14	1.21	ppb
Potassium	39-2	25804.07	24955.25	25388.24	25382.52	1.67	ppb
Rhodium	103-1				93		%
Rhodium	103-2				90		%
Scandium	45-1				165		%
Scandium	45-2				158		%
Selenium	82-1	226.59	223.12	227.15	225.62	0.97	ppb
Selenium	77-2	339.97	343.48	324.49	335.98	3.01	ppb
Selenium	78-2	232.63	232.40	231.69	232.24	0.21	ppb
Silicon	28-1	1808.00	1874.92	1859.96	1847.63	1.90	ppb
Silver	107-1	76.89	78.50	78.36	77.91	1.14	ppb
Silver	109-1	77.99	79.50	76.88	78.13	1.68	ppb
Sodium	23-2	36720.55	35995.96	36104.77	36273.76	1.08	ppb
Strontium	86-1	361.26	364.08	353.75	359.70	1.48	ppb
Strontium	88-1	358.10	362.24	360.22	360.19	0.57	ppb
Sulfur	34-1	-1100.67	-1097.98	-1137.61	-1112.09		ppb
Terbium	159-1				107		%
Terbium	159-2				102		%
Thallium	203-1	458.54	452.31	459.20	456.68	0.83	ppb
Thallium	205-1	460.61	466.61	460.61	462.61	0.75	ppb
Tin	118-1	412.88	412.90	401.87	409.22	1.55	ppb
Titanium	47-1	1655.68	1661.86	1650.45	1656.00	0.35	ppb
Uranium	238-1	461.04	463.50	458.30	460.95	0.56	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03A	Instrumnet Name :	P8
Client Sample ID :	RT-3873A	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:09:57	DataFile Name :	054AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	546.38	533.73	526.63	535.58	1.87	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				206		%
Yttrium	89-2				214		%
Zinc	66-2	4873.15	4714.63	4796.87	4794.88	1.65	ppb
Zirconium	90-1	259.10	257.21	263.05	259.79	1.15	ppb
Zirconium	91-1	254.54	252.05	261.36	255.98	1.88	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-01	Instrumnet Name :	P8
Client Sample ID :	284	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:12:44	DataFile Name :	055AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1804.62	1759.71	1722.18	1762.17	2.34	ppb
Antimony	121-1	54.76	53.28	54.21	54.08	1.39	ppb
Arsenic	75-2	2.82	3.00	3.08	2.96	4.41	ppb
Barium	135-1	215.28	209.59	212.93	212.60	1.35	ppb
Barium	137-1	214.73	208.03	210.20	210.98	1.62	ppb
Beryllium	9-1	0.14	0.12	0.12	0.13	7.77	ppb
Bismuth	209-1				123		%
Bismuth	209-2				114		%
Bromine	81-1						cps
Cadmium	108-1	33.99	32.85	34.44	33.76	2.44	ppb
Cadmium	106-1	12.98	12.09	12.54	12.54	3.53	ppb
Cadmium	111-1	7.48	7.43	7.37	7.43	0.72	ppb
Calcium	43-1	66962.38	68531.62	69507.35	68333.78	1.88	ppb
Calcium	44-1	68242.86	68359.72	69358.68	68653.75	0.89	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	50.93	50.92	48.93	50.26	2.30	ppb
Cobalt	59-2	4.08	4.03	3.90	4.00	2.32	ppb
Copper	63-2	631.70	619.62	601.94	617.75	2.42	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				114		%
Holmium	165-2				107		%
Indium	115-1				114		%
Indium	115-2				101		%
Iron	54-2	32374.35	32520.78	31609.03	32168.06	1.52	ppb
Iron	56-2	32884.90	32141.24	31139.10	32055.08	2.73	ppb
Iron	57-2	33402.99	32576.11	31817.46	32598.85	2.43	ppb
Krypton	83-1						cps
Lead	206-1	315.77	323.37	322.77	320.64	1.32	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-01	Instrumnet Name :	P8
Client Sample ID :	284	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:12:44	DataFile Name :	055AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	309.23	306.69	311.45	309.12	0.77	ppb
Lead	208-1	312.83	312.74	315.17	313.58	0.44	ppb
Lithium	6-1				115		%
Magnesium	24-2	12157.26	12070.86	11485.29	11904.47	3.07	ppb
Manganese	55-2	160.57	159.99	155.44	158.67	1.77	ppb
Molybdenum	94-1	2249.09	2228.09	2248.03	2241.74	0.53	ppb
Molybdenum	95-1	2712.64	2691.13	2692.98	2698.92	0.44	ppb
Molybdenum	96-1	2674.45	2651.53	2646.27	2657.42	0.56	ppb
Molybdenum	97-1	2743.48	2680.35	2699.51	2707.78	1.20	ppb
Molybdenum	98-1	2719.28	2659.99	2699.05	2692.77	1.12	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	51.17	50.55	48.61	50.11	2.66	ppb
Phosphorus	31-2	18472.50	18601.18	17993.85	18355.84	1.74	ppb
Potassium	39-2	3253.22	3222.05	3119.04	3198.10	2.20	ppb
Rhodium	103-1				108		%
Rhodium	103-2				105		%
Scandium	45-1				111		%
Scandium	45-2				101		%
Selenium	82-1	1.00	0.92	0.79	0.90	12.12	ppb
Selenium	77-2	0.50	1.24	2.65	1.46	74.94	ppb
Selenium	78-2	0.72	0.61	1.10	0.81	32.06	ppb
Silicon	28-1	668.11	707.57	747.68	707.79	5.62	ppb
Silver	107-1	0.95	0.94	0.94	0.95	0.55	ppb
Silver	109-1	0.92	0.94	0.93	0.93	1.07	ppb
Sodium	23-2	4035.02	3993.00	3849.45	3959.16	2.46	ppb
Strontium	86-1	23.00	23.38	23.48	23.29	1.10	ppb
Strontium	88-1	25.27	25.74	25.72	25.57	1.04	ppb
Sulfur	34-1	51118.59	51718.28	52843.01	51893.29	1.69	ppb
Terbium	159-1				112		%
Terbium	159-2				105		%
Thallium	203-1	0.23	0.19	0.18	0.20	12.66	ppb
Thallium	205-1	0.22	0.20	0.19	0.20	7.50	ppb
Tin	118-1	61.63	60.43	60.28	60.78	1.22	ppb
Titanium	47-1	111.87	110.77	114.16	112.27	1.54	ppb
Uranium	238-1	0.34	0.33	0.33	0.33	1.77	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-01	Instrumnet Name :	P8
Client Sample ID :	284	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:12:44	DataFile Name :	055AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	9.29	9.36	8.82	9.16	3.18	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				102		%
Zinc	66-2	23164.49	22923.01	22195.67	22761.06	2.22	ppb
Zirconium	90-1	7.41	7.28	7.31	7.33	0.95	ppb
Zirconium	91-1	7.35	7.26	7.27	7.29	0.69	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-03	Instrumnet Name :	P8
Client Sample ID :	288	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:15:45	DataFile Name :	056AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	898.01	896.40	895.57	896.66	0.14	ppb
Antimony	121-1	3.03	3.02	3.02	3.02	0.27	ppb
Arsenic	75-2	2.90	2.54	2.88	2.78	7.35	ppb
Barium	135-1	95.80	97.12	96.27	96.39	0.70	ppb
Barium	137-1	95.14	96.37	97.29	96.27	1.12	ppb
Beryllium	9-1	0.10	0.09	0.10	0.10	6.49	ppb
Bismuth	209-1				103		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Cadmium	108-1	4.16	4.13	3.97	4.09	2.49	ppb
Cadmium	106-1	4.49	4.11	4.52	4.38	5.29	ppb
Cadmium	111-1	3.80	3.86	3.89	3.85	1.13	ppb
Calcium	43-1	210664.34	215102.52	206683.56	210816.81	2.00	ppb
Calcium	44-1	210176.69	216667.22	206421.26	211088.39	2.46	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	88.61	87.99	87.96	88.19	0.42	ppb
Cobalt	59-2	1.13	1.13	1.15	1.14	0.99	ppb
Copper	63-2	94.92	93.65	92.56	93.71	1.26	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				102		%
Indium	115-1				105		%
Indium	115-2				96		%
Iron	54-2	5909.43	5776.76	5809.34	5831.84	1.19	ppb
Iron	56-2	5791.84	5703.24	5617.51	5704.20	1.53	ppb
Iron	57-2	5307.30	5358.62	5307.39	5324.44	0.56	ppb
Krypton	83-1						cps
Lead	206-1	583.39	588.77	603.21	591.79	1.73	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-03	Instrumnet Name :	P8
Client Sample ID :	288	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:15:45	DataFile Name :	056AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	572.14	576.78	585.02	577.98	1.13	ppb
Lead	208-1	583.64	585.20	593.02	587.28	0.86	ppb
Lithium	6-1				104		%
Magnesium	24-2	1473.06	1476.47	1457.27	1468.94	0.70	ppb
Manganese	55-2	175.75	175.28	173.96	174.99	0.53	ppb
Molybdenum	94-1	12.79	12.66	12.61	12.69	0.73	ppb
Molybdenum	95-1	7.37	7.36	7.36	7.36	0.09	ppb
Molybdenum	96-1	7.99	7.93	8.07	8.00	0.88	ppb
Molybdenum	97-1	7.48	7.41	7.37	7.42	0.75	ppb
Molybdenum	98-1	7.30	7.29	7.31	7.30	0.16	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	15.73	15.51	15.30	15.51	1.38	ppb
Phosphorus	31-2	260.31	263.07	242.01	255.13	4.49	ppb
Potassium	39-2	384.95	379.28	377.43	380.55	1.03	ppb
Rhodium	103-1				101		%
Rhodium	103-2				98		%
Scandium	45-1				107		%
Scandium	45-2				100		%
Selenium	82-1	0.35	0.18	0.25	0.26	32.75	ppb
Selenium	77-2	0.89	0.13	2.42	1.14	102.04	ppb
Selenium	78-2	0.75	0.41	-0.03	0.37	104.23	ppb
Silicon	28-1	337.63	408.37	414.00	386.67	11.01	ppb
Silver	107-1	0.10	0.09	0.09	0.09	10.14	ppb
Silver	109-1	0.07	0.09	0.10	0.09	14.06	ppb
Sodium	23-2	9132.63	9056.67	8967.03	9052.11	0.92	ppb
Strontium	86-1	466.80	472.15	461.25	466.73	1.17	ppb
Strontium	88-1	468.76	477.50	466.64	470.97	1.22	ppb
Sulfur	34-1	10002.43	10256.32	9873.48	10044.07	1.94	ppb
Terbium	159-1				106		%
Terbium	159-2				100		%
Thallium	203-1	0.08	0.07	0.07	0.07	4.76	ppb
Thallium	205-1	0.08	0.08	0.08	0.08	1.22	ppb
Tin	118-1	9.45	9.58	9.55	9.53	0.69	ppb
Titanium	47-1	246.60	268.13	253.20	255.98	4.31	ppb
Uranium	238-1	0.35	0.35	0.36	0.36	0.93	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-03	Instrumnet Name :	P8
Client Sample ID :	288	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:15:45	DataFile Name :	056AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	3.46	3.48	3.57	3.51	1.69	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				100		%
Zinc	66-2	896.97	891.58	882.40	890.32	0.83	ppb
Zirconium	90-1	3.65	3.60	3.63	3.63	0.74	ppb
Zirconium	91-1	3.54	3.59	3.61	3.58	0.96	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P8
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:18:57	DataFile Name :	057CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	49612.47	49842.93	49816.37	49757.26	0.25	ppb
Antimony	121-1	487.04	491.62	482.26	486.97	0.96	ppb
Arsenic	75-2	480.70	480.09	481.68	480.82	0.17	ppb
Barium	135-1	2444.48	2461.05	2412.61	2439.38	1.01	ppb
Barium	137-1	2430.93	2466.41	2406.60	2434.65	1.24	ppb
Beryllium	9-1	520.40	526.82	518.68	521.97	0.82	ppb
Bismuth	209-1				91		%
Bismuth	209-2				85		%
Bromine	81-1						cps
Cadmium	108-1	468.22	475.26	467.83	470.44	0.89	ppb
Cadmium	106-1	468.68	475.17	469.89	471.24	0.73	ppb
Cadmium	111-1	479.23	475.91	476.37	477.17	0.38	ppb
Calcium	43-1	239976.76	244959.27	243354.49	242763.51	1.05	ppb
Calcium	44-1	240592.18	242351.61	243249.93	242064.57	0.56	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	486.00	492.44	491.92	490.12	0.73	ppb
Cobalt	59-2	477.38	478.17	473.03	476.19	0.58	ppb
Copper	63-2	4559.83	4605.69	4572.95	4579.49	0.52	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				96		%
Indium	115-1				92		%
Indium	115-2				83		%
Iron	54-2	123022.71	123653.96	125729.23	124135.30	1.14	ppb
Iron	56-2	123094.84	123367.30	123365.21	123275.78	0.13	ppb
Iron	57-2	123726.07	125611.01	124427.04	124588.04	0.76	ppb
Krypton	83-1						cps
Lead	206-1	2387.80	2443.76	2408.02	2413.20	1.17	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P8
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:18:57	DataFile Name :	057CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2348.49	2408.31	2400.92	2385.90	1.37	ppb
Lead	208-1	2376.95	2421.01	2408.55	2402.17	0.95	ppb
Lithium	6-1				92		%
Magnesium	24-2	246853.65	247622.08	248403.11	247626.28	0.31	ppb
Manganese	55-2	4775.87	4812.72	4845.25	4811.28	0.72	ppb
Molybdenum	94-1	4688.62	4683.85	4770.78	4714.42	1.04	ppb
Molybdenum	95-1	4713.69	4813.44	4770.39	4765.84	1.05	ppb
Molybdenum	96-1	4816.41	4790.50	4756.80	4787.90	0.62	ppb
Molybdenum	97-1	4734.49	4702.78	4745.95	4727.74	0.47	ppb
Molybdenum	98-1	4695.84	4700.93	4754.40	4717.05	0.69	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	480.66	477.56	465.57	474.60	1.68	ppb
Phosphorus	31-2	9767.06	9857.54	9819.99	9814.86	0.46	ppb
Potassium	39-2	123587.76	123633.12	122525.29	123248.73	0.51	ppb
Rhodium	103-1				88		%
Rhodium	103-2				86		%
Scandium	45-1				98		%
Scandium	45-2				96		%
Selenium	82-1	455.16	457.30	451.81	454.76	0.61	ppb
Selenium	77-2	485.58	522.87	478.08	495.51	4.84	ppb
Selenium	78-2	465.21	467.52	492.00	474.91	3.13	ppb
Silicon	28-1	555.87	564.43	568.95	563.08	1.18	ppb
Silver	107-1	470.21	480.26	466.93	472.47	1.47	ppb
Silver	109-1	472.06	478.01	471.80	473.95	0.74	ppb
Sodium	23-2	251026.46	251406.81	249718.19	250717.16	0.35	ppb
Strontium	86-1	476.70	480.33	480.55	479.19	0.45	ppb
Strontium	88-1	477.40	486.82	480.82	481.68	0.99	ppb
Sulfur	34-1	9759.47	10210.91	10086.03	10018.80	2.33	ppb
Terbium	159-1				98		%
Terbium	159-2				94		%
Thallium	203-1	478.69	488.81	484.88	484.13	1.05	ppb
Thallium	205-1	486.71	491.16	485.58	487.82	0.60	ppb
Tin	118-1	481.39	488.48	475.27	481.71	1.37	ppb
Titanium	47-1	4704.94	4707.02	4764.22	4725.39	0.71	ppb
Uranium	238-1	473.12	483.91	487.97	481.67	1.59	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P8
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:18:57	DataFile Name :	057CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	504.30	495.58	506.29	502.06	1.14	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				93		%
Zinc	66-2	4670.62	4696.18	4727.69	4698.16	0.61	ppb
Zirconium	90-1	472.83	478.19	479.51	476.84	0.74	ppb
Zirconium	91-1	470.81	481.13	476.65	476.19	1.09	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P8
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:21:41	DataFile Name :	058CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9.08	9.22	7.70	8.67	9.69	ppb
Antimony	121-1	0.13	0.11	0.10	0.11	15.80	ppb
Arsenic	75-2	0.01	0.00	0.02	0.01	64.88	ppb
Barium	135-1	0.05	0.04	0.04	0.04	13.66	ppb
Barium	137-1	0.07	0.05	0.05	0.05	19.36	ppb
Beryllium	9-1	0.08	0.07	0.06	0.07	13.42	ppb
Bismuth	209-1				106		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.05	0.05	0.06	0.05	10.63	ppb
Cadmium	106-1	-0.35	-0.20	0.00	-0.18		ppb
Cadmium	111-1	-0.01	0.00	0.02	0.00	613.80	ppb
Calcium	43-1	8.66	6.54	3.66	6.29	39.92	ppb
Calcium	44-1	6.12	2.94	1.90	3.66	60.13	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.02	0.00	0.00	0.00	380.91	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	123.50	ppb
Copper	63-2	0.16	0.13	0.13	0.14	10.83	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				101		%
Indium	115-1				106		%
Indium	115-2				98		%
Iron	54-2	3.35	1.96	2.69	2.67	26.15	ppb
Iron	56-2	2.93	2.61	2.39	2.65	10.35	ppb
Iron	57-2	2.11	2.69	2.34	2.38	12.17	ppb
Krypton	83-1						cps
Lead	206-1	0.21	0.18	0.17	0.19	9.97	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P8
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:21:41	DataFile Name :	058CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.20	0.18	0.17	0.18	8.92	ppb
Lead	208-1	0.21	0.18	0.17	0.18	9.94	ppb
Lithium	6-1				105		%
Magnesium	24-2	4.73	4.40	3.70	4.28	12.29	ppb
Manganese	55-2	0.04	0.06	-0.03	0.03	177.59	ppb
Molybdenum	94-1	0.24	0.18	0.17	0.20	18.77	ppb
Molybdenum	95-1	0.18	0.15	0.12	0.15	18.48	ppb
Molybdenum	96-1	0.17	0.14	0.11	0.14	19.98	ppb
Molybdenum	97-1	0.18	0.14	0.11	0.14	24.56	ppb
Molybdenum	98-1	0.17	0.13	0.11	0.14	21.03	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.02	0.00	-0.02	-0.01		ppb
Phosphorus	31-2	-18.41	-21.70	-19.90	-20.00		ppb
Potassium	39-2	28.04	27.80	24.96	26.93	6.37	ppb
Rhodium	103-1				106		%
Rhodium	103-2				102		%
Scandium	45-1				105		%
Scandium	45-2				98		%
Selenium	82-1	-0.14	0.03	-0.11	-0.07		ppb
Selenium	77-2	-0.25	-0.25	-0.25	-0.25		ppb
Selenium	78-2	0.21	0.20	0.33	0.25	29.06	ppb
Silicon	28-1	17.94	14.87	12.81	15.21	16.98	ppb
Silver	107-1	0.05	0.04	0.03	0.04	17.69	ppb
Silver	109-1	0.04	0.04	0.04	0.04	10.20	ppb
Sodium	23-2	82.52	78.02	77.58	79.37	3.45	ppb
Strontium	86-1	0.03	0.01	0.02	0.02	46.52	ppb
Strontium	88-1	0.01	0.01	0.01	0.01	16.36	ppb
Sulfur	34-1	-50.46	-139.52	-172.81	-120.93		ppb
Terbium	159-1				106		%
Terbium	159-2				100		%
Thallium	203-1	0.05	0.04	0.05	0.05	4.63	ppb
Thallium	205-1	0.05	0.05	0.04	0.05	4.50	ppb
Tin	118-1	0.02	0.01	0.02	0.01	9.72	ppb
Titanium	47-1	0.17	0.10	0.08	0.12	37.30	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	24.84	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P8
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:21:41	DataFile Name :	058CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.00	0.01	0.01	84.46	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				106		%
Yttrium	89-2				98		%
Zinc	66-2	0.55	0.52	0.53	0.53	2.39	ppb
Zirconium	90-1	0.05	0.04	0.04	0.04	11.28	ppb
Zirconium	91-1	0.04	0.04	0.04	0.04	3.51	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:25:22	DataFile Name :	059AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	26271.80	26381.81	26069.81	26241.14	0.60	ppb
Antimony	121-1	0.13	0.13	0.13	0.13	0.79	ppb
Arsenic	75-2	14.52	13.90	14.49	14.30	2.45	ppb
Barium	135-1	217.26	216.31	214.03	215.87	0.77	ppb
Barium	137-1	215.13	214.78	212.72	214.21	0.61	ppb
Beryllium	9-1	1.86	1.95	1.93	1.91	2.45	ppb
Bismuth	209-1				102		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	4.09	3.72	3.90	3.90	4.77	ppb
Cadmium	106-1	6.52	6.84	6.47	6.61	3.05	ppb
Cadmium	111-1	2.24	2.34	2.33	2.30	2.40	ppb
Calcium	43-1	5955.55	5838.19	5699.18	5830.98	2.20	ppb
Calcium	44-1	6127.31	6010.13	6022.99	6053.47	1.06	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	37.72	37.18	37.12	37.34	0.88	ppb
Cobalt	59-2	27.68	27.45	27.04	27.39	1.18	ppb
Copper	63-2	120.51	118.57	117.26	118.78	1.38	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				106		%
Holmium	165-2				102		%
Indium	115-1				105		%
Indium	115-2				99		%
Iron	54-2	39972.45	38779.31	38740.01	39163.92	1.79	ppb
Iron	56-2	40403.66	38976.16	38886.81	39422.21	2.16	ppb
Iron	57-2	40546.72	39110.82	38876.88	39511.47	2.29	ppb
Krypton	83-1						cps
Lead	206-1	272.92	270.59	270.89	271.47	0.47	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:25:22	DataFile Name :	059AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	262.43	261.18	264.92	262.84	0.72	ppb
Lead	208-1	265.52	264.01	266.71	265.41	0.51	ppb
Lithium	6-1				102		%
Magnesium	24-2	10664.87	10597.80	10487.34	10583.34	0.85	ppb
Manganese	55-2	1686.76	1633.81	1642.08	1654.22	1.72	ppb
Molybdenum	94-1	23.11	23.17	22.99	23.09	0.41	ppb
Molybdenum	95-1	0.94	0.93	0.96	0.95	1.38	ppb
Molybdenum	96-1	3.46	3.43	3.39	3.42	1.02	ppb
Molybdenum	97-1	0.99	0.95	0.93	0.96	3.26	ppb
Molybdenum	98-1	0.92	0.93	0.92	0.92	0.57	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	43.57	42.81	42.66	43.01	1.14	ppb
Phosphorus	31-2	2082.00	2032.86	1949.50	2021.45	3.31	ppb
Potassium	39-2	3049.27	2995.41	2973.83	3006.17	1.29	ppb
Rhodium	103-1				102		%
Rhodium	103-2				100		%
Scandium	45-1				121		%
Scandium	45-2				114		%
Selenium	82-1	0.77	0.60	0.80	0.72	14.91	ppb
Selenium	77-2	47.47	43.33	43.88	44.89	5.01	ppb
Selenium	78-2	7.35	5.54	7.31	6.73	15.37	ppb
Silicon	28-1	244.07	246.47	228.43	239.66	4.09	ppb
Silver	107-1	0.26	0.28	0.27	0.27	2.64	ppb
Silver	109-1	0.26	0.28	0.26	0.27	3.87	ppb
Sodium	23-2	1440.06	1419.75	1429.65	1429.82	0.71	ppb
Strontium	86-1	28.26	28.72	28.52	28.50	0.82	ppb
Strontium	88-1	31.15	32.02	31.31	31.49	1.46	ppb
Sulfur	34-1	-531.11	-705.48	-953.61	-730.06		ppb
Terbium	159-1				106		%
Terbium	159-2				102		%
Thallium	203-1	0.45	0.44	0.43	0.44	1.56	ppb
Thallium	205-1	0.45	0.44	0.44	0.44	0.90	ppb
Tin	118-1	2.00	2.03	2.02	2.01	0.79	ppb
Titanium	47-1	407.64	394.64	395.92	399.40	1.79	ppb
Uranium	238-1	2.18	2.13	2.18	2.16	1.25	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:25:22	DataFile Name :	059AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	66.96	66.61	66.07	66.54	0.67	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				129		%
Yttrium	89-2				136		%
Zinc	66-2	524.36	514.32	508.23	515.64	1.58	ppb
Zirconium	90-1	12.46	12.49	12.29	12.41	0.86	ppb
Zirconium	91-1	12.21	12.40	12.04	12.22	1.47	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUPDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUPDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:28:31	DataFile Name :	060AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	29958.31	29393.49	29649.47	29667.09	0.95	ppb
Antimony	121-1	0.13	0.13	0.14	0.13	4.34	ppb
Arsenic	75-2	12.85	12.29	12.34	12.49	2.48	ppb
Barium	135-1	223.86	219.47	219.77	221.03	1.11	ppb
Barium	137-1	220.36	219.54	223.15	221.01	0.86	ppb
Beryllium	9-1	2.11	2.08	2.16	2.12	1.87	ppb
Bismuth	209-1				102		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	2.79	2.67	3.05	2.84	6.91	ppb
Cadmium	106-1	5.30	5.03	5.89	5.41	8.17	ppb
Cadmium	111-1	1.35	1.28	1.37	1.33	3.45	ppb
Calcium	43-1	5675.99	5510.98	5672.54	5619.84	1.68	ppb
Calcium	44-1	5742.49	5733.73	5882.81	5786.34	1.45	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	42.55	42.26	42.71	42.51	0.53	ppb
Cobalt	59-2	18.89	18.98	19.00	18.96	0.31	ppb
Copper	63-2	99.03	99.92	100.83	99.93	0.90	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				102		%
Indium	115-1				102		%
Indium	115-2				98		%
Iron	54-2	39514.47	38513.72	39416.74	39148.31	1.41	ppb
Iron	56-2	38960.71	39089.86	39308.75	39119.77	0.45	ppb
Iron	57-2	39211.18	39169.15	39773.37	39384.57	0.86	ppb
Krypton	83-1						cps
Lead	206-1	189.54	195.98	194.41	193.31	1.74	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUPDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUPDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:28:31	DataFile Name :	060AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	182.44	191.49	189.06	187.66	2.50	ppb
Lead	208-1	186.15	192.23	190.55	189.64	1.66	ppb
Lithium	6-1				103		%
Magnesium	24-2	9920.51	9783.38	9859.25	9854.38	0.70	ppb
Manganese	55-2	1239.30	1244.95	1261.28	1248.51	0.91	ppb
Molybdenum	94-1	21.00	21.51	21.59	21.37	1.49	ppb
Molybdenum	95-1	0.72	0.75	0.76	0.75	2.75	ppb
Molybdenum	96-1	2.99	3.03	3.09	3.04	1.74	ppb
Molybdenum	97-1	0.69	0.74	0.75	0.73	4.67	ppb
Molybdenum	98-1	0.71	0.72	0.74	0.72	1.93	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	34.81	34.35	35.24	34.80	1.28	ppb
Phosphorus	31-2	1900.49	1830.35	1871.98	1867.61	1.89	ppb
Potassium	39-2	3601.53	3587.21	3642.00	3610.25	0.79	ppb
Rhodium	103-1				102		%
Rhodium	103-2				99		%
Scandium	45-1				123		%
Scandium	45-2				115		%
Selenium	82-1	1.02	1.22	0.95	1.06	12.85	ppb
Selenium	77-2	50.84	53.46	45.02	49.77	8.69	ppb
Selenium	78-2	9.75	8.06	7.31	8.37	14.93	ppb
Silicon	28-1	348.10	331.49	352.85	344.14	3.26	ppb
Silver	107-1	0.27	0.27	0.28	0.28	1.48	ppb
Silver	109-1	0.27	0.26	0.26	0.26	1.39	ppb
Sodium	23-2	1371.63	1385.66	1389.52	1382.27	0.68	ppb
Strontium	86-1	26.25	26.58	26.98	26.60	1.39	ppb
Strontium	88-1	29.35	29.24	29.42	29.34	0.31	ppb
Sulfur	34-1	-1039.59	-1247.62	-1117.82	-1135.01		ppb
Terbium	159-1				105		%
Terbium	159-2				102		%
Thallium	203-1	0.43	0.45	0.44	0.44	2.24	ppb
Thallium	205-1	0.44	0.46	0.46	0.45	1.79	ppb
Tin	118-1	1.67	1.68	1.70	1.68	0.77	ppb
Titanium	47-1	429.89	431.38	446.26	435.84	2.08	ppb
Uranium	238-1	2.87	2.91	2.97	2.91	1.68	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUPDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUPDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:28:31	DataFile Name :	060AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	62.63	63.33	63.07	63.01	0.56	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				130		%
Yttrium	89-2				135		%
Zinc	66-2	491.36	500.51	488.41	493.43	1.28	ppb
Zirconium	90-1	11.27	11.53	11.70	11.50	1.86	ppb
Zirconium	91-1	11.14	11.39	11.58	11.37	1.95	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LDLX25	Instrumnet Name :	P8
Client Sample ID :	RT-3873LDL	Dilution Factor :	25
Date & Time Acquired :	2025-04-21 18:31:42	DataFile Name :	061AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5658.05	5575.07	5587.64	5606.92	0.80	ppb
Antimony	121-1	0.03	0.03	0.03	0.03	10.36	ppb
Arsenic	75-2	3.42	3.85	4.08	3.78	8.84	ppb
Barium	135-1	41.17	40.95	40.56	40.89	0.76	ppb
Barium	137-1	41.01	41.08	40.43	40.84	0.88	ppb
Beryllium	9-1	0.42	0.39	0.39	0.40	5.03	ppb
Bismuth	209-1				102		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.73	0.80	0.77	0.77	4.43	ppb
Cadmium	106-1	0.91	0.98	0.62	0.83	22.75	ppb
Cadmium	111-1	0.47	0.48	0.44	0.46	5.36	ppb
Calcium	43-1	1276.78	1285.55	1274.86	1279.06	0.45	ppb
Calcium	44-1	1368.50	1348.82	1325.08	1347.47	1.61	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.51	8.42	8.29	8.41	1.32	ppb
Cobalt	59-2	6.24	6.16	6.25	6.22	0.78	ppb
Copper	63-2	27.45	27.08	27.15	27.23	0.72	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				102		%
Indium	115-1				105		%
Indium	115-2				99		%
Iron	54-2	9077.93	8900.33	8759.19	8912.48	1.79	ppb
Iron	56-2	8814.03	8775.59	8806.71	8798.78	0.23	ppb
Iron	57-2	8332.80	8276.70	8252.11	8287.21	0.50	ppb
Krypton	83-1						cps
Lead	206-1	50.73	48.87	49.93	49.84	1.87	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LDLX25	Instrumnet Name :	P8
Client Sample ID :	RT-3873LDL	Dilution Factor :	25
Date & Time Acquired :	2025-04-21 18:31:42	DataFile Name :	061AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	50.00	48.65	48.89	49.18	1.46	ppb
Lead	208-1	52.81	51.95	51.66	52.14	1.15	ppb
Lithium	6-1				101		%
Magnesium	24-2	2286.08	2288.91	2285.04	2286.68	0.09	ppb
Manganese	55-2	343.65	339.91	341.96	341.84	0.55	ppb
Molybdenum	94-1	5.51	5.49	5.34	5.45	1.62	ppb
Molybdenum	95-1	0.23	0.23	0.23	0.23	1.46	ppb
Molybdenum	96-1	0.79	0.80	0.82	0.80	1.69	ppb
Molybdenum	97-1	0.21	0.23	0.22	0.22	2.82	ppb
Molybdenum	98-1	0.22	0.22	0.22	0.22	1.67	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	9.86	9.69	9.78	9.77	0.84	ppb
Phosphorus	31-2	462.00	412.88	429.81	434.90	5.74	ppb
Potassium	39-2	680.35	684.54	684.86	683.25	0.37	ppb
Rhodium	103-1				104		%
Rhodium	103-2				101		%
Scandium	45-1				110		%
Scandium	45-2				102		%
Selenium	82-1	0.25	0.30	0.11	0.22	46.01	ppb
Selenium	77-2	15.90	8.10	8.77	10.92	39.56	ppb
Selenium	78-2	2.03	2.92	1.41	2.12	35.82	ppb
Silicon	28-1	53.40	52.75	53.33	53.16	0.68	ppb
Silver	107-1	0.06	0.07	0.06	0.06	6.75	ppb
Silver	109-1	0.06	0.05	0.05	0.06	5.74	ppb
Sodium	23-2	325.39	323.38	324.59	324.45	0.31	ppb
Strontium	86-1	6.84	6.73	6.77	6.78	0.79	ppb
Strontium	88-1	6.81	6.83	6.86	6.83	0.41	ppb
Sulfur	34-1	-1039.36	-1105.51	-1055.30	-1066.72		ppb
Terbium	159-1				103		%
Terbium	159-2				101		%
Thallium	203-1	0.09	0.09	0.10	0.10	4.24	ppb
Thallium	205-1	0.10	0.09	0.10	0.10	1.54	ppb
Tin	118-1	0.41	0.41	0.40	0.41	0.93	ppb
Titanium	47-1	83.42	83.19	83.25	83.28	0.14	ppb
Uranium	238-1	0.43	0.42	0.43	0.43	1.38	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LDLX25	Instrumnet Name :	P8
Client Sample ID :	RT-3873LDL	Dilution Factor :	25
Date & Time Acquired :	2025-04-21 18:31:42	DataFile Name :	061AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	14.89	14.68	14.77	14.78	0.70	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				110		%
Yttrium	89-2				105		%
Zinc	66-2	125.09	126.37	126.08	125.85	0.53	ppb
Zirconium	90-1	2.94	2.91	2.88	2.91	0.98	ppb
Zirconium	91-1	2.90	2.88	2.81	2.86	1.65	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:35:01	DataFile Name :	062AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	27798.84	27871.99	27377.14	27682.66	0.96	ppb
Antimony	121-1	97.29	96.75	96.31	96.79	0.51	ppb
Arsenic	75-2	13.76	13.80	14.12	13.89	1.41	ppb
Barium	135-1	627.38	641.84	627.80	632.34	1.30	ppb
Barium	137-1	622.44	638.16	616.92	625.84	1.76	ppb
Beryllium	9-1	103.90	107.55	105.74	105.73	1.73	ppb
Bismuth	209-1				101		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Cadmium	108-1	93.79	95.49	92.54	93.94	1.58	ppb
Cadmium	106-1	100.82	101.61	100.02	100.82	0.79	ppb
Cadmium	111-1	91.86	92.99	90.12	91.66	1.58	ppb
Calcium	43-1	15155.81	14942.26	14931.86	15009.98	0.84	ppb
Calcium	44-1	14604.84	14946.13	14922.13	14824.37	1.28	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	120.98	120.58	119.38	120.31	0.69	ppb
Cobalt	59-2	112.31	110.88	109.44	110.88	1.29	ppb
Copper	63-2	1027.67	1009.77	1025.02	1020.82	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				101		%
Indium	115-1				102		%
Indium	115-2				95		%
Iron	54-2	40064.33	40113.39	39753.67	39977.13	0.49	ppb
Iron	56-2	39489.06	39716.76	39448.26	39551.36	0.37	ppb
Iron	57-2	40363.97	39707.07	38997.46	39689.50	1.72	ppb
Krypton	83-1						cps
Lead	206-1	687.88	693.67	675.89	685.81	1.32	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:35:01	DataFile Name :	062AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	682.97	685.77	676.83	681.86	0.67	ppb
Lead	208-1	684.38	688.95	680.97	684.77	0.58	ppb
Lithium	6-1				100		%
Magnesium	24-2	19073.66	18935.47	18784.15	18931.09	0.76	ppb
Manganese	55-2	2062.15	2077.39	2059.51	2066.35	0.47	ppb
Molybdenum	94-1	383.67	391.36	391.12	388.72	1.13	ppb
Molybdenum	95-1	278.02	283.98	283.89	281.96	1.21	ppb
Molybdenum	96-1	291.81	290.17	292.45	291.48	0.40	ppb
Molybdenum	97-1	279.51	279.37	283.33	280.74	0.80	ppb
Molybdenum	98-1	274.36	276.50	277.71	276.19	0.61	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	116.41	115.81	114.40	115.54	0.90	ppb
Phosphorus	31-2	1942.10	1987.35	1938.62	1956.02	1.39	ppb
Potassium	39-2	7159.83	7294.77	7111.20	7188.60	1.32	ppb
Rhodium	103-1				100		%
Rhodium	103-2				98		%
Scandium	45-1				118		%
Scandium	45-2				111		%
Selenium	82-1	77.70	78.99	79.11	78.60	0.99	ppb
Selenium	77-2	123.85	137.67	118.84	126.79	7.69	ppb
Selenium	78-2	90.17	91.42	87.33	89.64	2.34	ppb
Silicon	28-1	381.69	392.29	384.66	386.21	1.42	ppb
Silver	107-1	15.61	15.70	15.31	15.54	1.33	ppb
Silver	109-1	15.61	15.57	15.53	15.57	0.25	ppb
Sodium	23-2	11024.74	10959.79	10956.02	10980.18	0.35	ppb
Strontium	86-1	122.66	124.20	121.44	122.77	1.13	ppb
Strontium	88-1	119.85	122.62	122.56	121.68	1.30	ppb
Sulfur	34-1	-786.51	-659.18	-744.54	-730.08		ppb
Terbium	159-1				105		%
Terbium	159-2				100		%
Thallium	203-1	94.71	94.29	91.85	93.62	1.65	ppb
Thallium	205-1	92.20	92.98	92.51	92.56	0.43	ppb
Tin	118-1	89.30	89.85	90.12	89.76	0.47	ppb
Titanium	47-1	413.67	418.02	419.42	417.04	0.72	ppb
Uranium	238-1	90.33	90.66	90.62	90.54	0.20	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:35:01	DataFile Name :	062AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	146.59	144.75	142.44	144.59	1.44	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				125		%
Yttrium	89-2				118		%
Zinc	66-2	1531.25	1520.93	1492.41	1514.86	1.33	ppb
Zirconium	90-1	88.09	88.89	89.42	88.80	0.76	ppb
Zirconium	91-1	80.95	82.27	88.44	83.89	4.76	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:37:57	DataFile Name :	063AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	30737.99	30194.39	29774.23	30235.54	1.60	ppb
Antimony	121-1	98.86	103.31	99.33	100.50	2.43	ppb
Arsenic	75-2	16.12	15.80	15.92	15.95	1.00	ppb
Barium	135-1	639.55	686.39	652.35	659.43	3.67	ppb
Barium	137-1	624.94	673.35	645.10	647.80	3.75	ppb
Beryllium	9-1	107.21	104.87	102.49	104.86	2.25	ppb
Bismuth	209-1				102		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	94.32	98.77	94.67	95.92	2.58	ppb
Cadmium	106-1	99.86	105.68	102.48	102.68	2.84	ppb
Cadmium	111-1	92.45	96.41	93.94	94.27	2.12	ppb
Calcium	43-1	16271.61	15659.04	16620.70	16183.79	3.01	ppb
Calcium	44-1	15789.82	15497.99	15935.38	15741.06	1.41	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	126.87	124.86	123.23	124.99	1.46	ppb
Cobalt	59-2	118.77	114.87	110.26	114.63	3.72	ppb
Copper	63-2	1040.71	1011.69	998.43	1016.94	2.13	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				103		%
Indium	115-1				102		%
Indium	115-2				94		%
Iron	54-2	44675.04	44862.41	43453.09	44330.18	1.73	ppb
Iron	56-2	44476.85	44439.41	43648.70	44188.32	1.06	ppb
Iron	57-2	44824.53	44303.45	43296.88	44141.62	1.76	ppb
Krypton	83-1						cps
Lead	206-1	713.10	706.05	721.73	713.63	1.10	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:37:57	DataFile Name :	063AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	702.71	695.62	712.88	703.74	1.23	ppb
Lead	208-1	707.75	702.05	712.47	707.42	0.74	ppb
Lithium	6-1				103		%
Magnesium	24-2	21575.99	21362.32	20909.99	21282.77	1.60	ppb
Manganese	55-2	2192.15	2191.90	2120.21	2168.09	1.91	ppb
Molybdenum	94-1	396.80	404.69	400.49	400.66	0.99	ppb
Molybdenum	95-1	283.55	288.45	287.19	286.40	0.89	ppb
Molybdenum	96-1	295.06	300.86	292.12	296.01	1.50	ppb
Molybdenum	97-1	286.97	289.59	285.75	287.44	0.68	ppb
Molybdenum	98-1	281.27	290.62	283.32	285.07	1.72	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	122.47	121.67	119.96	121.37	1.06	ppb
Phosphorus	31-2	2304.19	2344.58	2165.03	2271.27	4.15	ppb
Potassium	39-2	8118.14	8004.16	7835.79	7986.03	1.78	ppb
Rhodium	103-1				100		%
Rhodium	103-2				96		%
Scandium	45-1				119		%
Scandium	45-2				112		%
Selenium	82-1	79.22	81.63	80.35	80.40	1.50	ppb
Selenium	77-2	122.45	130.32	132.35	128.37	4.07	ppb
Selenium	78-2	95.65	89.29	91.51	92.15	3.50	ppb
Silicon	28-1	717.01	943.69	728.82	796.51	16.02	ppb
Silver	107-1	15.44	16.19	15.80	15.81	2.37	ppb
Silver	109-1	15.40	16.21	15.82	15.81	2.54	ppb
Sodium	23-2	11282.57	11027.14	11176.52	11162.08	1.15	ppb
Strontium	86-1	126.55	127.23	125.69	126.49	0.61	ppb
Strontium	88-1	125.90	127.66	125.54	126.37	0.90	ppb
Sulfur	34-1	-766.98	-966.60	-842.60	-858.72		ppb
Terbium	159-1				104		%
Terbium	159-2				100		%
Thallium	203-1	94.31	94.42	97.58	95.44	1.95	ppb
Thallium	205-1	93.76	94.36	95.63	94.58	1.01	ppb
Tin	118-1	91.73	94.57	90.68	92.33	2.18	ppb
Titanium	47-1	543.30	549.79	547.51	546.86	0.60	ppb
Uranium	238-1	91.90	92.08	92.79	92.26	0.51	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:37:57	DataFile Name :	063AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	157.95	158.01	153.58	156.51	1.62	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				125		%
Yttrium	89-2				118		%
Zinc	66-2	1566.45	1541.11	1540.13	1549.23	0.96	ppb
Zirconium	90-1	89.88	92.88	89.57	90.77	2.01	ppb
Zirconium	91-1	88.85	93.21	90.83	90.97	2.40	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03ADLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873ADL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:40:51	DataFile Name :	064AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	28806.10	28762.04	29443.35	29003.83	1.31	ppb
Antimony	121-1	100.29	99.68	97.99	99.32	1.20	ppb
Arsenic	75-2	14.72	15.14	14.21	14.69	3.19	ppb
Barium	135-1	671.01	653.39	639.59	654.66	2.41	ppb
Barium	137-1	650.24	652.20	632.45	644.96	1.69	ppb
Beryllium	9-1	102.18	105.77	104.74	104.23	1.78	ppb
Bismuth	209-1				100		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	94.67	94.04	94.03	94.25	0.39	ppb
Cadmium	106-1	102.46	102.69	102.48	102.54	0.13	ppb
Cadmium	111-1	93.97	95.18	93.43	94.19	0.95	ppb
Calcium	43-1	15447.66	15436.18	15899.74	15594.53	1.70	ppb
Calcium	44-1	15112.15	15356.64	15353.07	15273.95	0.92	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	123.63	123.15	124.30	123.69	0.47	ppb
Cobalt	59-2	115.76	111.14	111.51	112.80	2.28	ppb
Copper	63-2	1020.84	1033.68	1024.37	1026.30	0.65	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				101		%
Indium	115-1				102		%
Indium	115-2				94		%
Iron	54-2	42580.89	42122.45	42495.01	42399.45	0.57	ppb
Iron	56-2	42441.70	42835.72	42908.68	42728.70	0.59	ppb
Iron	57-2	43053.61	42241.86	42861.72	42719.06	0.99	ppb
Krypton	83-1						cps
Lead	206-1	698.71	712.47	723.64	711.61	1.75	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03ADLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873ADL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:40:51	DataFile Name :	064AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	691.56	703.02	727.04	707.21	2.56	ppb
Lead	208-1	696.25	708.66	724.16	709.69	1.97	ppb
Lithium	6-1				103		%
Magnesium	24-2	20228.79	20025.04	20085.62	20113.15	0.52	ppb
Manganese	55-2	2166.57	2131.01	2103.80	2133.79	1.48	ppb
Molybdenum	94-1	392.38	391.69	379.81	387.96	1.82	ppb
Molybdenum	95-1	282.47	281.22	276.39	280.03	1.15	ppb
Molybdenum	96-1	296.64	297.48	287.93	294.01	1.80	ppb
Molybdenum	97-1	281.70	288.88	281.00	283.86	1.54	ppb
Molybdenum	98-1	275.55	284.24	280.25	280.01	1.55	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	119.24	119.46	119.78	119.49	0.23	ppb
Phosphorus	31-2	2161.81	2176.54	2186.37	2174.91	0.57	ppb
Potassium	39-2	7715.34	7639.98	7754.03	7703.12	0.75	ppb
Rhodium	103-1				101		%
Rhodium	103-2				97		%
Scandium	45-1				118		%
Scandium	45-2				111		%
Selenium	82-1	81.63	81.16	79.58	80.79	1.33	ppb
Selenium	77-2	122.26	124.49	106.92	117.89	8.11	ppb
Selenium	78-2	91.34	88.80	79.86	86.67	6.96	ppb
Silicon	28-1	543.94	562.37	542.70	549.67	2.00	ppb
Silver	107-1	15.80	15.90	15.76	15.82	0.44	ppb
Silver	109-1	15.86	16.03	15.91	15.93	0.54	ppb
Sodium	23-2	10957.19	10897.93	10982.76	10945.96	0.40	ppb
Strontium	86-1	126.36	128.04	123.18	125.86	1.96	ppb
Strontium	88-1	124.77	125.79	122.44	124.33	1.38	ppb
Sulfur	34-1	-917.76	-843.85	-878.94	-880.18		ppb
Terbium	159-1				104		%
Terbium	159-2				100		%
Thallium	203-1	93.07	95.53	97.39	95.33	2.27	ppb
Thallium	205-1	94.43	94.47	97.03	95.31	1.56	ppb
Tin	118-1	92.69	91.23	90.21	91.38	1.37	ppb
Titanium	47-1	493.54	492.00	493.76	493.10	0.19	ppb
Uranium	238-1	92.87	92.79	95.06	93.57	1.38	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03ADLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873ADL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:40:51	DataFile Name :	064AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	152.49	150.45	153.33	152.09	0.98	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				125		%
Yttrium	89-2				122		%
Zinc	66-2	1550.94	1524.95	1557.29	1544.39	1.11	ppb
Zirconium	90-1	89.47	88.18	88.80	88.82	0.73	ppb
Zirconium	91-1	82.46	88.26	86.09	85.60	3.42	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-01DLX5	Instrumnet Name :	P8
Client Sample ID :	284DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:43:46	DataFile Name :	065AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	362.21	359.93	356.02	359.39	0.87	ppb
Antimony	121-1	10.65	10.78	10.54	10.66	1.11	ppb
Arsenic	75-2	0.50	0.51	0.58	0.53	7.93	ppb
Barium	135-1	38.72	38.54	38.24	38.50	0.63	ppb
Barium	137-1	39.11	39.17	38.97	39.08	0.26	ppb
Beryllium	9-1	0.03	0.03	0.03	0.03	2.01	ppb
Bismuth	209-1				109		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Cadmium	108-1	6.80	6.67	6.61	6.69	1.45	ppb
Cadmium	106-1	2.21	2.21	2.10	2.17	3.09	ppb
Cadmium	111-1	1.49	1.45	1.46	1.47	1.22	ppb
Calcium	43-1	14129.18	14124.85	13805.95	14019.99	1.32	ppb
Calcium	44-1	13774.27	13969.49	13722.89	13822.22	0.94	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	10.31	10.32	10.24	10.29	0.43	ppb
Cobalt	59-2	0.83	0.84	0.79	0.82	2.82	ppb
Copper	63-2	117.54	117.13	115.99	116.89	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				107		%
Holmium	165-2				102		%
Indium	115-1				110		%
Indium	115-2				99		%
Iron	54-2	6692.98	6575.03	6559.56	6609.19	1.10	ppb
Iron	56-2	6601.30	6624.62	6500.60	6575.51	1.00	ppb
Iron	57-2	6162.36	6112.44	6125.56	6133.46	0.42	ppb
Krypton	83-1						cps
Lead	206-1	62.30	63.20	63.46	62.99	0.96	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-01DLX5	Instrumnet Name :	P8
Client Sample ID :	284DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:43:46	DataFile Name :	065AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	60.49	61.62	60.51	60.87	1.07	ppb
Lead	208-1	64.73	65.41	65.01	65.05	0.52	ppb
Lithium	6-1				109		%
Magnesium	24-2	2393.63	2357.03	2345.91	2365.52	1.06	ppb
Manganese	55-2	32.92	32.84	32.25	32.67	1.12	ppb
Molybdenum	94-1	457.87	442.51	465.80	455.39	2.60	ppb
Molybdenum	95-1	544.79	533.39	558.12	545.43	2.27	ppb
Molybdenum	96-1	541.57	532.21	549.64	541.14	1.61	ppb
Molybdenum	97-1	539.11	543.12	557.40	546.54	1.76	ppb
Molybdenum	98-1	547.07	536.57	565.05	549.56	2.62	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	10.13	10.16	10.20	10.16	0.37	ppb
Phosphorus	31-2	3627.95	3530.71	3602.01	3586.89	1.40	ppb
Potassium	39-2	670.96	657.46	656.15	661.52	1.24	ppb
Rhodium	103-1				108		%
Rhodium	103-2				103		%
Scandium	45-1				110		%
Scandium	45-2				99		%
Selenium	82-1	0.46	0.20	0.07	0.24	82.25	ppb
Selenium	77-2	-0.25	-0.25	0.13	-0.12		ppb
Selenium	78-2	-0.49	0.19	0.31	0.00	11134.89	ppb
Silicon	28-1	129.80	132.67	134.68	132.39	1.85	ppb
Silver	107-1	0.21	0.20	0.19	0.20	2.66	ppb
Silver	109-1	0.21	0.21	0.20	0.20	3.62	ppb
Sodium	23-2	798.31	785.24	785.58	789.71	0.94	ppb
Strontium	86-1	4.76	4.58	4.68	4.68	1.92	ppb
Strontium	88-1	4.67	4.66	4.78	4.70	1.44	ppb
Sulfur	34-1	9802.34	10128.00	10178.55	10036.30	2.03	ppb
Terbium	159-1				108		%
Terbium	159-2				102		%
Thallium	203-1	0.05	0.05	0.05	0.05	2.68	ppb
Thallium	205-1	0.06	0.05	0.05	0.05	11.18	ppb
Tin	118-1	11.07	11.14	11.03	11.08	0.50	ppb
Titanium	47-1	22.36	22.66	22.00	22.34	1.47	ppb
Uranium	238-1	0.07	0.07	0.07	0.07	0.91	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-01DLX5	Instrumnet Name :	P8
Client Sample ID :	284DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:43:46	DataFile Name :	065AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	1.86	1.84	1.87	1.86	0.86	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				108		%
Yttrium	89-2				100		%
Zinc	66-2	4555.80	4519.97	4470.53	4515.44	0.95	ppb
Zirconium	90-1	1.94	1.74	1.65	1.78	8.19	ppb
Zirconium	91-1	1.95	1.70	1.69	1.78	8.13	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P8
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:46:56	DataFile Name :	066CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	49779.00	50623.99	48980.79	49794.59	1.65	ppb
Antimony	121-1	476.75	479.50	479.47	478.57	0.33	ppb
Arsenic	75-2	483.57	486.97	489.80	486.78	0.64	ppb
Barium	135-1	2364.71	2390.89	2438.43	2398.01	1.56	ppb
Barium	137-1	2370.74	2413.86	2447.53	2410.71	1.60	ppb
Beryllium	9-1	539.95	537.60	522.33	533.30	1.79	ppb
Bismuth	209-1				88		%
Bismuth	209-2				84		%
Bromine	81-1						cps
Cadmium	108-1	453.06	458.64	465.06	458.92	1.31	ppb
Cadmium	106-1	459.28	460.49	470.16	463.31	1.29	ppb
Cadmium	111-1	462.65	479.12	478.20	473.32	1.96	ppb
Calcium	43-1	241745.25	238286.12	243828.46	241286.61	1.16	ppb
Calcium	44-1	241550.36	239440.00	240555.24	240515.20	0.44	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	491.24	497.98	489.59	492.93	0.90	ppb
Cobalt	59-2	481.80	486.10	473.71	480.54	1.31	ppb
Copper	63-2	4613.17	4617.31	4546.84	4592.44	0.86	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				97		%
Holmium	165-2				95		%
Indium	115-1				91		%
Indium	115-2				83		%
Iron	54-2	122982.89	124282.11	122436.18	123233.73	0.77	ppb
Iron	56-2	122701.79	123495.94	123251.91	123149.88	0.33	ppb
Iron	57-2	125063.28	125031.77	124714.43	124936.50	0.15	ppb
Krypton	83-1						cps
Lead	206-1	2393.06	2432.99	2456.33	2427.46	1.32	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P8
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:46:56	DataFile Name :	066CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2428.14	2440.57	2452.60	2440.44	0.50	ppb
Lead	208-1	2428.91	2444.62	2446.58	2440.04	0.40	ppb
Lithium	6-1				89		%
Magnesium	24-2	247564.58	247718.92	245193.86	246825.78	0.57	ppb
Manganese	55-2	4812.04	4864.11	4775.45	4817.20	0.92	ppb
Molybdenum	94-1	4747.65	4736.60	4736.66	4740.30	0.13	ppb
Molybdenum	95-1	4691.01	4769.69	4815.44	4758.71	1.32	ppb
Molybdenum	96-1	4699.87	4844.06	4840.96	4794.96	1.72	ppb
Molybdenum	97-1	4628.17	4790.77	4723.63	4714.19	1.73	ppb
Molybdenum	98-1	4733.04	4704.18	4718.46	4718.56	0.31	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	470.50	473.18	470.27	471.32	0.34	ppb
Phosphorus	31-2	9977.66	9978.45	9876.28	9944.13	0.59	ppb
Potassium	39-2	122550.01	123451.05	122694.82	122898.63	0.39	ppb
Rhodium	103-1				87		%
Rhodium	103-2				85		%
Scandium	45-1				98		%
Scandium	45-2				96		%
Selenium	82-1	454.24	458.25	457.91	456.80	0.49	ppb
Selenium	77-2	481.24	463.97	487.23	477.48	2.53	ppb
Selenium	78-2	481.94	480.63	483.70	482.09	0.32	ppb
Silicon	28-1	524.28	539.25	535.29	532.94	1.46	ppb
Silver	107-1	452.54	464.75	470.26	462.52	1.96	ppb
Silver	109-1	454.02	470.77	460.68	461.82	1.83	ppb
Sodium	23-2	248568.06	253338.23	251828.17	251244.82	0.97	ppb
Strontium	86-1	480.06	483.77	479.54	481.12	0.48	ppb
Strontium	88-1	472.52	480.63	486.63	479.93	1.48	ppb
Sulfur	34-1	10159.67	10147.79	9897.78	10068.41	1.47	ppb
Terbium	159-1				98		%
Terbium	159-2				94		%
Thallium	203-1	480.51	486.06	490.51	485.70	1.03	ppb
Thallium	205-1	488.02	492.59	489.31	489.97	0.48	ppb
Tin	118-1	467.86	475.59	478.22	473.89	1.14	ppb
Titanium	47-1	4618.57	4800.46	4794.15	4737.73	2.18	ppb
Uranium	238-1	498.13	490.23	485.09	491.15	1.34	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P8
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:46:56	DataFile Name :	066CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	498.06	504.93	501.03	501.34	0.69	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				96		%
Yttrium	89-2				93		%
Zinc	66-2	4608.97	4737.87	4662.80	4669.88	1.39	ppb
Zirconium	90-1	475.82	477.90	481.87	478.53	0.64	ppb
Zirconium	91-1	475.27	473.97	482.92	477.38	1.01	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P8
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:49:42	DataFile Name :	067CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	4.63	3.95	3.54	4.04	13.54	ppb
Antimony	121-1	0.13	0.11	0.09	0.11	18.24	ppb
Arsenic	75-2	0.01	0.01	0.00	0.01	57.62	ppb
Barium	135-1	0.05	0.04	0.03	0.04	24.84	ppb
Barium	137-1	0.06	0.04	0.04	0.05	28.27	ppb
Beryllium	9-1	0.07	0.06	0.04	0.06	23.36	ppb
Bismuth	209-1				105		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	0.06	0.03	0.00	0.03	92.06	ppb
Cadmium	106-1	-0.22	0.12	-0.07	-0.06		ppb
Cadmium	111-1	-0.01	0.03	0.00	0.01	202.24	ppb
Calcium	43-1	9.09	6.44	5.31	6.95	27.96	ppb
Calcium	44-1	4.54	2.45	2.56	3.18	36.98	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	0.00	-0.01	0.00		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	3539.59	ppb
Copper	63-2	0.11	0.08	0.11	0.10	19.87	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				101		%
Indium	115-1				107		%
Indium	115-2				97		%
Iron	54-2	1.79	1.98	2.13	1.97	8.81	ppb
Iron	56-2	2.31	2.06	1.96	2.11	8.55	ppb
Iron	57-2	2.97	2.46	2.52	2.65	10.65	ppb
Krypton	83-1						cps
Lead	206-1	0.15	0.13	0.11	0.13	16.71	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P8
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:49:42	DataFile Name :	067CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.15	0.13	0.11	0.13	16.75	ppb
Lead	208-1	0.15	0.12	0.11	0.13	17.08	ppb
Lithium	6-1				105		%
Magnesium	24-2	3.98	3.92	3.52	3.81	6.53	ppb
Manganese	55-2	0.48	0.29	0.35	0.37	25.00	ppb
Molybdenum	94-1	0.25	0.19	0.17	0.20	21.61	ppb
Molybdenum	95-1	0.18	0.14	0.11	0.14	24.49	ppb
Molybdenum	96-1	0.18	0.14	0.12	0.15	21.13	ppb
Molybdenum	97-1	0.17	0.13	0.12	0.14	18.64	ppb
Molybdenum	98-1	0.17	0.14	0.10	0.14	23.99	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.03	0.00	-0.01	0.00	355.24	ppb
Phosphorus	31-2	-16.36	-20.59	-17.89	-18.28		ppb
Potassium	39-2	30.74	28.62	30.86	30.08	4.18	ppb
Rhodium	103-1				104		%
Rhodium	103-2				100		%
Scandium	45-1				106		%
Scandium	45-2				98		%
Selenium	82-1	-0.16	-0.02	-0.10	-0.09		ppb
Selenium	77-2	-0.25	0.13	-0.25	-0.12		ppb
Selenium	78-2	0.65	0.54	-0.13	0.35	120.02	ppb
Silicon	28-1	5.57	6.53	5.73	5.94	8.60	ppb
Silver	107-1	0.05	0.04	0.03	0.04	22.64	ppb
Silver	109-1	0.05	0.04	0.03	0.04	20.58	ppb
Sodium	23-2	85.03	78.83	81.54	81.80	3.80	ppb
Strontium	86-1	0.02	0.01	0.01	0.01	59.53	ppb
Strontium	88-1	0.01	0.01	0.01	0.01	31.17	ppb
Sulfur	34-1	-98.11	-230.32	-33.46	-120.63		ppb
Terbium	159-1				104		%
Terbium	159-2				99		%
Thallium	203-1	0.05	0.04	0.04	0.04	13.28	ppb
Thallium	205-1	0.05	0.04	0.04	0.04	10.25	ppb
Tin	118-1	0.09	0.00	0.00	0.03	170.64	ppb
Titanium	47-1	0.12	0.10	0.04	0.09	49.27	ppb
Uranium	238-1	0.01	0.01	0.00	0.01	59.26	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P8
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:49:42	DataFile Name :	067CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	94.75	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				98		%
Zinc	66-2	0.39	0.36	0.49	0.42	16.52	ppb
Zirconium	90-1	0.06	0.04	0.04	0.05	15.25	ppb
Zirconium	91-1	0.04	0.04	0.04	0.04	8.63	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873DL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 18:53:04	DataFile Name :	068AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	14014.76	13939.28	13605.20	13853.08	1.57	ppb
Antimony	121-1	0.08	0.07	0.08	0.08	7.91	ppb
Arsenic	75-2	8.80	8.86	8.55	8.73	1.85	ppb
Barium	135-1	97.89	98.28	98.85	98.34	0.49	ppb
Barium	137-1	98.59	97.28	100.41	98.76	1.59	ppb
Beryllium	9-1	0.94	0.95	0.94	0.94	0.45	ppb
Bismuth	209-1				103		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	1.92	1.97	2.02	1.97	2.61	ppb
Cadmium	106-1	3.14	3.13	3.17	3.15	0.67	ppb
Cadmium	111-1	1.14	1.10	1.18	1.14	3.39	ppb
Calcium	43-1	3087.82	3006.61	3063.01	3052.48	1.36	ppb
Calcium	44-1	3219.14	3156.87	3170.04	3182.02	1.03	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	19.73	19.72	19.69	19.71	0.12	ppb
Cobalt	59-2	14.47	14.37	14.40	14.41	0.36	ppb
Copper	63-2	63.31	63.00	63.45	63.26	0.36	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				103		%
Indium	115-1				105		%
Indium	115-2				99		%
Iron	54-2	20416.27	20627.07	20476.29	20506.54	0.53	ppb
Iron	56-2	20866.13	20563.04	20282.70	20570.62	1.42	ppb
Iron	57-2	20789.33	20946.41	20732.47	20822.74	0.53	ppb
Krypton	83-1						cps
Lead	206-1	141.12	138.14	135.23	138.17	2.13	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873DL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 18:53:04	DataFile Name :	068AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	136.55	132.42	132.32	133.76	1.81	ppb
Lead	208-1	136.09	134.03	133.16	134.43	1.12	ppb
Lithium	6-1				104		%
Magnesium	24-2	5518.07	5539.85	5558.21	5538.71	0.36	ppb
Manganese	55-2	868.57	856.60	858.17	861.11	0.76	ppb
Molybdenum	94-1	12.33	12.62	12.86	12.60	2.10	ppb
Molybdenum	95-1	0.52	0.54	0.57	0.55	4.14	ppb
Molybdenum	96-1	1.83	1.92	1.93	1.89	2.79	ppb
Molybdenum	97-1	0.52	0.54	0.52	0.53	1.57	ppb
Molybdenum	98-1	0.52	0.54	0.53	0.53	1.98	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	22.87	22.93	22.79	22.86	0.31	ppb
Phosphorus	31-2	1039.23	1037.78	1040.01	1039.01	0.11	ppb
Potassium	39-2	1594.92	1580.52	1573.49	1582.98	0.69	ppb
Rhodium	103-1				104		%
Rhodium	103-2				101		%
Scandium	45-1				115		%
Scandium	45-2				108		%
Selenium	82-1	0.26	0.49	0.34	0.36	32.34	ppb
Selenium	77-2	25.67	29.24	22.72	25.88	12.60	ppb
Selenium	78-2	3.04	4.31	4.65	4.00	21.20	ppb
Silicon	28-1	125.12	127.36	125.63	126.03	0.93	ppb
Silver	107-1	0.14	0.14	0.15	0.14	2.94	ppb
Silver	109-1	0.13	0.13	0.14	0.13	3.18	ppb
Sodium	23-2	747.74	737.94	734.43	740.04	0.93	ppb
Strontium	86-1	15.46	15.75	15.86	15.69	1.29	ppb
Strontium	88-1	16.95	17.19	17.42	17.19	1.36	ppb
Sulfur	34-1	-257.66	-536.24	-467.85	-420.58		ppb
Terbium	159-1				106		%
Terbium	159-2				101		%
Thallium	203-1	0.23	0.22	0.23	0.23	1.14	ppb
Thallium	205-1	0.23	0.24	0.24	0.23	2.14	ppb
Tin	118-1	1.08	1.05	1.08	1.07	1.23	ppb
Titanium	47-1	201.69	196.62	198.83	199.05	1.28	ppb
Uranium	238-1	1.08	1.07	1.08	1.08	0.74	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873DL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 18:53:04	DataFile Name :	068AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	34.52	34.90	34.54	34.65	0.62	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				118		%
Yttrium	89-2				113		%
Zinc	66-2	276.89	274.04	276.06	275.66	0.53	ppb
Zirconium	90-1	6.58	6.79	6.91	6.76	2.53	ppb
Zirconium	91-1	6.55	6.73	6.88	6.72	2.44	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUPDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUPDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 18:56:17	DataFile Name :	069AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	15963.46	15670.98	15309.01	15647.82	2.10	ppb
Antimony	121-1	0.07	0.08	0.07	0.07	7.09	ppb
Arsenic	75-2	7.67	7.44	7.61	7.57	1.59	ppb
Barium	135-1	100.55	102.70	103.01	102.09	1.31	ppb
Barium	137-1	100.76	103.46	102.77	102.33	1.37	ppb
Beryllium	9-1	1.14	1.10	1.09	1.11	2.62	ppb
Bismuth	209-1				102		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	1.43	1.55	1.54	1.51	4.44	ppb
Cadmium	106-1	2.63	2.66	2.50	2.60	3.19	ppb
Cadmium	111-1	0.65	0.68	0.70	0.68	3.98	ppb
Calcium	43-1	2995.12	3006.49	3007.15	3002.92	0.23	ppb
Calcium	44-1	3152.55	3102.06	3161.59	3138.73	1.02	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	22.77	22.78	23.05	22.87	0.69	ppb
Cobalt	59-2	10.02	10.29	10.26	10.19	1.42	ppb
Copper	63-2	53.34	53.93	54.04	53.77	0.70	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				102		%
Indium	115-1				104		%
Indium	115-2				98		%
Iron	54-2	20746.03	20984.57	20943.76	20891.45	0.61	ppb
Iron	56-2	20707.81	20843.86	20890.89	20814.19	0.46	ppb
Iron	57-2	21283.69	21549.54	21280.17	21371.13	0.72	ppb
Krypton	83-1						cps
Lead	206-1	97.80	96.65	98.96	97.80	1.18	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUPDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUPDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 18:56:17	DataFile Name :	069AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	94.60	94.42	96.02	95.01	0.92	ppb
Lead	208-1	95.09	95.12	96.96	95.72	1.12	ppb
Lithium	6-1				100		%
Magnesium	24-2	5231.25	5281.59	5236.94	5249.93	0.53	ppb
Manganese	55-2	664.80	669.68	674.86	669.78	0.75	ppb
Molybdenum	94-1	11.86	11.99	12.02	11.96	0.71	ppb
Molybdenum	95-1	0.44	0.42	0.43	0.43	1.81	ppb
Molybdenum	96-1	1.71	1.71	1.71	1.71	0.24	ppb
Molybdenum	97-1	0.44	0.43	0.43	0.44	1.07	ppb
Molybdenum	98-1	0.42	0.41	0.40	0.41	2.43	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	18.35	18.19	18.68	18.41	1.35	ppb
Phosphorus	31-2	958.03	1027.22	937.40	974.22	4.83	ppb
Potassium	39-2	1914.94	1928.76	1909.47	1917.72	0.52	ppb
Rhodium	103-1				103		%
Rhodium	103-2				101		%
Scandium	45-1				115		%
Scandium	45-2				109		%
Selenium	82-1	0.44	0.63	0.49	0.52	18.35	ppb
Selenium	77-2	34.32	29.38	26.09	29.93	13.84	ppb
Selenium	78-2	6.00	4.63	5.74	5.46	13.32	ppb
Silicon	28-1	184.16	186.11	183.66	184.64	0.70	ppb
Silver	107-1	0.14	0.14	0.14	0.14	1.85	ppb
Silver	109-1	0.14	0.14	0.14	0.14	1.22	ppb
Sodium	23-2	718.65	717.22	726.21	720.69	0.67	ppb
Strontium	86-1	14.83	14.86	14.95	14.88	0.43	ppb
Strontium	88-1	16.39	15.91	16.08	16.13	1.53	ppb
Sulfur	34-1	-680.36	-729.31	-867.10	-758.92		ppb
Terbium	159-1				104		%
Terbium	159-2				100		%
Thallium	203-1	0.23	0.24	0.23	0.24	2.94	ppb
Thallium	205-1	0.23	0.24	0.24	0.24	2.12	ppb
Tin	118-1	0.86	0.88	0.91	0.88	2.96	ppb
Titanium	47-1	235.62	230.13	231.65	232.46	1.22	ppb
Uranium	238-1	1.45	1.46	1.46	1.46	0.63	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUPDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUPDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 18:56:17	DataFile Name :	069AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	33.68	33.79	33.91	33.79	0.34	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				117		%
Yttrium	89-2				113		%
Zinc	66-2	264.27	263.52	266.84	264.88	0.66	ppb
Zirconium	90-1	6.39	6.47	6.53	6.46	1.14	ppb
Zirconium	91-1	6.39	6.37	6.35	6.37	0.33	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LDL2X50	Instrumnet Name :	P8
Client Sample ID :	RT-3873LDL2	Dilution Factor :	50
Date & Time Acquired :	2025-04-21 18:59:27	DataFile Name :	070AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2836.22	2811.99	2833.93	2827.38	0.47	ppb
Antimony	121-1	0.02	0.02	0.02	0.02	14.06	ppb
Arsenic	75-2	1.75	1.77	1.85	1.79	3.06	ppb
Barium	135-1	19.68	20.09	20.09	19.95	1.19	ppb
Barium	137-1	19.66	20.05	20.12	19.95	1.23	ppb
Beryllium	9-1	0.21	0.20	0.20	0.20	2.77	ppb
Bismuth	209-1				103		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Cadmium	108-1	0.31	0.40	0.37	0.36	12.43	ppb
Cadmium	106-1	0.34	0.28	-0.03	0.20	99.43	ppb
Cadmium	111-1	0.21	0.22	0.18	0.20	9.97	ppb
Calcium	43-1	642.47	644.85	643.23	643.52	0.19	ppb
Calcium	44-1	687.28	679.81	680.67	682.59	0.60	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4.23	4.18	4.23	4.21	0.68	ppb
Cobalt	59-2	3.05	3.15	3.08	3.09	1.71	ppb
Copper	63-2	13.63	13.56	13.58	13.59	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				104		%
Holmium	165-2				103		%
Indium	115-1				106		%
Indium	115-2				99		%
Iron	54-2	4122.37	4123.03	4159.50	4134.97	0.51	ppb
Iron	56-2	4523.66	4420.34	4358.46	4434.15	1.88	ppb
Iron	57-2	4145.61	4134.14	4092.70	4124.15	0.67	ppb
Krypton	83-1						cps
Lead	206-1	24.10	25.41	24.71	24.74	2.65	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LDL2X50	Instrumnet Name :	P8
Client Sample ID :	RT-3873LDL2	Dilution Factor :	50
Date & Time Acquired :	2025-04-21 18:59:27	DataFile Name :	070AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	23.99	24.85	24.27	24.37	1.81	ppb
Lead	208-1	23.97	24.92	24.44	24.45	1.94	ppb
Lithium	6-1				99		%
Magnesium	24-2	1146.84	1157.43	1142.68	1148.99	0.66	ppb
Manganese	55-2	174.42	173.55	171.48	173.15	0.87	ppb
Molybdenum	94-1	2.76	2.76	2.82	2.78	1.19	ppb
Molybdenum	95-1	0.13	0.12	0.13	0.13	4.48	ppb
Molybdenum	96-1	0.43	0.42	0.43	0.42	1.21	ppb
Molybdenum	97-1	0.12	0.13	0.13	0.13	5.36	ppb
Molybdenum	98-1	0.12	0.13	0.12	0.12	3.31	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.88	4.89	4.85	4.88	0.44	ppb
Phosphorus	31-2	196.86	224.61	204.62	208.69	6.86	ppb
Potassium	39-2	344.85	344.57	347.50	345.64	0.47	ppb
Rhodium	103-1				105		%
Rhodium	103-2				102		%
Scandium	45-1				108		%
Scandium	45-2				102		%
Selenium	82-1	0.03	-0.01	-0.04	-0.01		ppb
Selenium	77-2	4.92	5.62	3.79	4.78	19.34	ppb
Selenium	78-2	0.70	1.45	1.78	1.31	42.13	ppb
Silicon	28-1	26.90	27.57	26.47	26.98	2.05	ppb
Silver	107-1	0.03	0.03	0.03	0.03	3.52	ppb
Silver	109-1	0.03	0.03	0.03	0.03	3.24	ppb
Sodium	23-2	179.09	180.49	179.16	179.58	0.44	ppb
Strontium	86-1	3.45	3.44	3.49	3.46	0.72	ppb
Strontium	88-1	3.43	3.47	3.55	3.48	1.71	ppb
Sulfur	34-1	-891.38	-949.85	-920.23	-920.49		ppb
Terbium	159-1				105		%
Terbium	159-2				100		%
Thallium	203-1	0.05	0.05	0.06	0.05	5.70	ppb
Thallium	205-1	0.05	0.06	0.06	0.05	6.51	ppb
Tin	118-1	0.24	0.25	0.25	0.25	2.67	ppb
Titanium	47-1	41.84	41.52	42.27	41.88	0.90	ppb
Uranium	238-1	0.21	0.22	0.21	0.21	3.45	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LDL2X50	Instrumnet Name :	P8
Client Sample ID :	RT-3873LDL2	Dilution Factor :	50
Date & Time Acquired :	2025-04-21 18:59:27	DataFile Name :	070AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	7.45	7.47	7.43	7.45	0.22	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				103		%
Zinc	66-2	58.94	58.12	58.59	58.55	0.71	ppb
Zirconium	90-1	1.46	1.47	1.50	1.47	1.51	ppb
Zirconium	91-1	1.41	1.44	1.47	1.44	2.15	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:02:49	DataFile Name :	071AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	14517.67	14900.42	14820.26	14746.12	1.37	ppb
Antimony	121-1	44.70	45.27	45.43	45.13	0.85	ppb
Arsenic	75-2	7.82	7.81	7.61	7.75	1.52	ppb
Barium	135-1	314.64	326.29	328.64	323.19	2.32	ppb
Barium	137-1	319.14	320.29	325.61	321.68	1.07	ppb
Beryllium	9-1	52.63	53.09	53.59	53.10	0.90	ppb
Bismuth	209-1				103		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Cadmium	108-1	47.53	48.29	48.29	48.04	0.91	ppb
Cadmium	106-1	51.45	50.46	51.57	51.16	1.18	ppb
Cadmium	111-1	46.63	46.81	47.64	47.03	1.15	ppb
Calcium	43-1	7363.01	7435.61	7480.67	7426.43	0.80	ppb
Calcium	44-1	7634.27	7670.71	7784.25	7696.41	1.02	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	64.17	63.67	63.71	63.85	0.43	ppb
Cobalt	59-2	54.07	53.97	54.56	54.20	0.58	ppb
Copper	63-2	544.77	549.76	540.37	544.97	0.86	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				101		%
Indium	115-1				103		%
Indium	115-2				97		%
Iron	54-2	21187.43	20779.50	20988.20	20985.04	0.97	ppb
Iron	56-2	21329.20	20578.18	21343.80	21083.73	2.08	ppb
Iron	57-2	21526.57	20820.83	21291.85	21213.09	1.69	ppb
Krypton	83-1						cps
Lead	206-1	347.56	334.50	344.87	342.31	2.01	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:02:49	DataFile Name :	071AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	345.83	335.97	339.32	340.38	1.47	ppb
Lead	208-1	343.41	336.09	339.53	339.68	1.08	ppb
Lithium	6-1				99		%
Magnesium	24-2	9898.46	9927.89	9989.12	9938.49	0.47	ppb
Manganese	55-2	1110.21	1081.25	1097.98	1096.48	1.33	ppb
Molybdenum	94-1	208.00	214.88	209.10	210.66	1.75	ppb
Molybdenum	95-1	153.43	152.59	152.68	152.90	0.30	ppb
Molybdenum	96-1	161.42	160.61	160.62	160.88	0.29	ppb
Molybdenum	97-1	154.47	156.79	156.25	155.84	0.78	ppb
Molybdenum	98-1	149.14	153.74	152.25	151.71	1.55	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	61.72	62.08	62.02	61.94	0.31	ppb
Phosphorus	31-2	1078.96	1060.03	1083.84	1074.28	1.17	ppb
Potassium	39-2	3658.49	3607.14	3638.21	3634.61	0.71	ppb
Rhodium	103-1				103		%
Rhodium	103-2				100		%
Scandium	45-1				114		%
Scandium	45-2				107		%
Selenium	82-1	43.69	44.53	44.24	44.16	0.96	ppb
Selenium	77-2	74.80	70.40	74.41	73.20	3.33	ppb
Selenium	78-2	49.22	47.70	47.78	48.23	1.77	ppb
Silicon	28-1	204.10	201.91	198.11	201.37	1.51	ppb
Silver	107-1	7.75	7.96	8.01	7.91	1.74	ppb
Silver	109-1	7.84	7.91	8.06	7.93	1.41	ppb
Sodium	23-2	5709.45	5766.31	5727.17	5734.31	0.51	ppb
Strontium	86-1	61.73	62.29	62.26	62.09	0.50	ppb
Strontium	88-1	66.99	66.85	67.18	67.01	0.24	ppb
Sulfur	34-1	-919.17	-849.60	-870.63	-879.80		ppb
Terbium	159-1				103		%
Terbium	159-2				100		%
Thallium	203-1	41.78	41.31	42.92	42.00	1.96	ppb
Thallium	205-1	46.76	46.01	46.81	46.53	0.96	ppb
Tin	118-1	41.24	42.04	42.09	41.79	1.14	ppb
Titanium	47-1	204.55	207.89	209.31	207.25	1.18	ppb
Uranium	238-1	45.18	44.76	44.13	44.69	1.18	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:02:49	DataFile Name :	071AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	76.76	76.09	76.94	76.60	0.58	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				115		%
Yttrium	89-2				109		%
Zinc	66-2	737.10	722.28	726.04	728.47	1.06	ppb
Zirconium	90-1	49.20	47.87	48.64	48.57	1.37	ppb
Zirconium	91-1	44.02	44.74	44.30	44.35	0.81	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:05:49	DataFile Name :	072AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	16575.92	16794.31	16950.85	16773.69	1.12	ppb
Antimony	121-1	49.86	48.69	51.12	49.89	2.43	ppb
Arsenic	75-2	8.37	8.89	9.04	8.77	3.99	ppb
Barium	135-1	329.13	332.61	335.61	332.45	0.98	ppb
Barium	137-1	325.97	334.66	332.30	330.98	1.36	ppb
Beryllium	9-1	52.33	55.03	54.49	53.95	2.65	ppb
Bismuth	209-1				102		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Cadmium	108-1	47.77	49.18	49.01	48.65	1.58	ppb
Cadmium	106-1	51.90	53.17	51.05	52.04	2.05	ppb
Cadmium	111-1	47.61	48.19	47.84	47.88	0.61	ppb
Calcium	43-1	8201.56	8046.25	8276.98	8174.93	1.44	ppb
Calcium	44-1	8571.92	8401.35	8642.90	8538.72	1.45	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	67.71	68.73	68.08	68.17	0.75	ppb
Cobalt	59-2	56.06	57.45	56.73	56.75	1.23	ppb
Copper	63-2	552.83	566.36	564.63	561.27	1.31	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				102		%
Indium	115-1				103		%
Indium	115-2				97		%
Iron	54-2	23599.62	24141.37	23870.53	23870.51	1.13	ppb
Iron	56-2	23937.12	24293.30	24056.61	24095.68	0.75	ppb
Iron	57-2	24123.88	24474.05	24715.07	24437.67	1.22	ppb
Krypton	83-1						cps
Lead	206-1	363.83	358.29	358.82	360.31	0.85	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:05:49	DataFile Name :	072AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	355.80	359.41	358.19	357.80	0.51	ppb
Lead	208-1	359.20	359.92	358.53	359.22	0.19	ppb
Lithium	6-1				102		%
Magnesium	24-2	11336.74	11539.89	11356.96	11411.20	0.98	ppb
Manganese	55-2	1184.29	1188.46	1175.64	1182.79	0.55	ppb
Molybdenum	94-1	220.20	220.68	222.20	221.03	0.47	ppb
Molybdenum	95-1	160.15	158.55	158.84	159.18	0.54	ppb
Molybdenum	96-1	168.52	167.51	164.80	166.94	1.15	ppb
Molybdenum	97-1	159.18	159.87	159.34	159.46	0.23	ppb
Molybdenum	98-1	154.64	157.97	154.65	155.75	1.23	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	65.98	66.79	66.56	66.44	0.63	ppb
Phosphorus	31-2	1205.96	1190.19	1224.44	1206.86	1.42	ppb
Potassium	39-2	4544.07	4428.42	4279.52	4417.34	3.00	ppb
Rhodium	103-1				103		%
Rhodium	103-2				99		%
Scandium	45-1				114		%
Scandium	45-2				107		%
Selenium	82-1	44.29	43.52	44.90	44.24	1.56	ppb
Selenium	77-2	70.57	68.50	83.00	74.02	10.59	ppb
Selenium	78-2	49.00	53.90	52.50	51.80	4.87	ppb
Silicon	28-1	708.56	370.21	437.48	505.42	35.44	ppb
Silver	107-1	7.94	7.99	8.05	7.99	0.70	ppb
Silver	109-1	7.90	8.11	8.26	8.09	2.22	ppb
Sodium	23-2	5970.91	6110.18	5948.88	6009.99	1.46	ppb
Strontium	86-1	64.61	65.36	64.98	64.98	0.58	ppb
Strontium	88-1	69.22	70.04	69.88	69.71	0.62	ppb
Sulfur	34-1	-879.12	-1027.13	-901.54	-935.93		ppb
Terbium	159-1				105		%
Terbium	159-2				99		%
Thallium	203-1	43.89	43.83	43.92	43.88	0.11	ppb
Thallium	205-1	49.84	48.48	48.20	48.84	1.80	ppb
Tin	118-1	42.46	43.02	43.55	43.01	1.27	ppb
Titanium	47-1	295.05	288.20	294.93	292.73	1.34	ppb
Uranium	238-1	47.01	46.93	47.40	47.11	0.53	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:05:49	DataFile Name :	072AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	84.44	85.60	84.52	84.85	0.76	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				115		%
Yttrium	89-2				109		%
Zinc	66-2	764.38	778.50	768.61	770.50	0.94	ppb
Zirconium	90-1	50.46	50.25	50.25	50.32	0.24	ppb
Zirconium	91-1	46.04	45.51	45.87	45.81	0.59	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03ADL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873ADL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:08:50	DataFile Name :	073AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	16376.33	15874.59	15704.94	15985.29	2.18	ppb
Antimony	121-1	50.62	49.70	50.96	50.43	1.30	ppb
Arsenic	75-2	8.61	8.34	8.17	8.37	2.62	ppb
Barium	135-1	340.66	322.00	346.65	336.44	3.82	ppb
Barium	137-1	335.11	320.81	333.92	329.94	2.40	ppb
Beryllium	9-1	53.23	53.47	54.85	53.85	1.63	ppb
Bismuth	209-1				101		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Cadmium	108-1	48.39	47.20	49.22	48.27	2.11	ppb
Cadmium	106-1	51.53	52.13	53.11	52.25	1.53	ppb
Cadmium	111-1	48.46	47.11	49.10	48.22	2.11	ppb
Calcium	43-1	7876.61	8061.15	8122.20	8019.99	1.59	ppb
Calcium	44-1	8292.56	8284.76	8408.42	8328.58	0.83	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	67.42	66.29	65.43	66.38	1.50	ppb
Cobalt	59-2	57.43	56.14	55.42	56.33	1.81	ppb
Copper	63-2	560.07	558.76	555.10	557.98	0.46	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				103		%
Holmium	165-2				100		%
Indium	115-1				102		%
Indium	115-2				95		%
Iron	54-2	23269.77	23030.45	22469.83	22923.35	1.79	ppb
Iron	56-2	23141.86	23220.60	22711.20	23024.55	1.19	ppb
Iron	57-2	23770.75	23592.58	23020.73	23461.35	1.67	ppb
Krypton	83-1						cps
Lead	206-1	355.00	360.18	352.46	355.88	1.11	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03ADL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873ADL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:08:50	DataFile Name :	073AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	350.91	354.89	353.85	353.22	0.58	ppb
Lead	208-1	351.81	356.75	354.97	354.51	0.71	ppb
Lithium	6-1				101		%
Magnesium	24-2	11166.42	10965.62	10941.49	11024.51	1.12	ppb
Manganese	55-2	1158.23	1170.66	1151.02	1159.97	0.86	ppb
Molybdenum	94-1	222.64	222.30	217.54	220.82	1.29	ppb
Molybdenum	95-1	162.31	160.64	156.73	159.89	1.79	ppb
Molybdenum	96-1	168.62	169.79	161.47	166.62	2.70	ppb
Molybdenum	97-1	163.22	160.46	155.56	159.75	2.43	ppb
Molybdenum	98-1	159.73	156.14	154.01	156.63	1.85	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	66.10	64.73	65.22	65.35	1.07	ppb
Phosphorus	31-2	1175.27	1146.44	1147.45	1156.39	1.42	ppb
Potassium	39-2	3980.04	3871.20	3841.22	3897.49	1.87	ppb
Rhodium	103-1				100		%
Rhodium	103-2				98		%
Scandium	45-1				111		%
Scandium	45-2				105		%
Selenium	82-1	44.65	44.62	44.37	44.54	0.35	ppb
Selenium	77-2	70.42	65.91	83.89	73.40	12.74	ppb
Selenium	78-2	54.39	49.19	47.27	50.28	7.32	ppb
Silicon	28-1	287.58	319.28	283.32	296.72	6.62	ppb
Silver	107-1	8.14	7.95	8.41	8.16	2.83	ppb
Silver	109-1	8.17	8.09	8.36	8.21	1.69	ppb
Sodium	23-2	6035.70	5926.98	5846.80	5936.49	1.60	ppb
Strontium	86-1	64.76	65.39	64.14	64.76	0.97	ppb
Strontium	88-1	69.90	70.25	69.94	70.03	0.27	ppb
Sulfur	34-1	-867.99	-811.17	-845.01	-841.39		ppb
Terbium	159-1				103		%
Terbium	159-2				98		%
Thallium	203-1	43.16	44.38	43.38	43.64	1.49	ppb
Thallium	205-1	47.30	48.48	47.82	47.86	1.23	ppb
Tin	118-1	43.00	42.72	43.57	43.10	1.01	ppb
Titanium	47-1	266.95	267.81	268.48	267.75	0.29	ppb
Uranium	238-1	45.88	47.49	46.27	46.55	1.81	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03ADL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873ADL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:08:50	DataFile Name :	073AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	82.52	82.71	81.05	82.09	1.11	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				113		%
Yttrium	89-2				109		%
Zinc	66-2	774.16	762.42	758.12	764.90	1.09	ppb
Zirconium	90-1	49.33	51.72	49.56	50.20	2.63	ppb
Zirconium	91-1	45.76	46.67	45.57	46.00	1.28	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV06	Instrumnet Name :	P8
Client Sample ID :	CCV06	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 19:11:48	DataFile Name :	074CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	49955.32	48911.16	50269.29	49711.92	1.43	ppb
Antimony	121-1	488.35	499.90	482.20	490.15	1.83	ppb
Arsenic	75-2	485.73	492.24	488.41	488.79	0.67	ppb
Barium	135-1	2439.69	2519.38	2445.35	2468.14	1.80	ppb
Barium	137-1	2426.95	2541.41	2406.14	2458.17	2.96	ppb
Beryllium	9-1	515.86	543.75	512.84	524.15	3.25	ppb
Bismuth	209-1				89		%
Bismuth	209-2				84		%
Bromine	81-1						cps
Cadmium	108-1	467.59	492.74	470.91	477.08	2.86	ppb
Cadmium	106-1	477.94	495.23	473.80	482.32	2.36	ppb
Cadmium	111-1	476.55	495.56	481.72	484.61	2.03	ppb
Calcium	43-1	238334.64	244200.79	241827.62	241454.35	1.22	ppb
Calcium	44-1	238300.98	242476.75	241810.90	240862.88	0.93	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	486.47	484.81	492.83	488.04	0.87	ppb
Cobalt	59-2	477.71	467.19	472.34	472.41	1.11	ppb
Copper	63-2	4575.12	4561.31	4551.92	4562.78	0.26	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				95		%
Indium	115-1				90		%
Indium	115-2				83		%
Iron	54-2	123823.19	122259.62	122382.43	122821.74	0.71	ppb
Iron	56-2	123541.12	122483.49	123378.62	123134.41	0.46	ppb
Iron	57-2	124128.07	122749.88	123662.75	123513.57	0.57	ppb
Krypton	83-1						cps
Lead	206-1	2489.35	2394.08	2477.29	2453.57	2.11	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV06	Instrumnet Name :	P8
Client Sample ID :	CCV06	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 19:11:48	DataFile Name :	074CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2451.91	2377.45	2471.43	2433.60	2.04	ppb
Lead	208-1	2449.75	2416.62	2457.90	2441.42	0.90	ppb
Lithium	6-1				92		%
Magnesium	24-2	246209.63	245829.69	246951.77	246330.37	0.23	ppb
Manganese	55-2	4806.95	4831.77	4825.63	4821.45	0.27	ppb
Molybdenum	94-1	4743.18	4736.89	4672.63	4717.56	0.83	ppb
Molybdenum	95-1	4707.87	4748.27	4657.27	4704.47	0.97	ppb
Molybdenum	96-1	4743.73	4797.68	4676.35	4739.25	1.28	ppb
Molybdenum	97-1	4695.37	4740.29	4671.61	4702.43	0.74	ppb
Molybdenum	98-1	4744.32	4707.78	4678.81	4710.30	0.70	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	477.44	461.97	465.33	468.25	1.74	ppb
Phosphorus	31-2	9940.49	9876.88	9989.60	9935.66	0.57	ppb
Potassium	39-2	124420.76	122078.81	121599.60	122699.72	1.23	ppb
Rhodium	103-1				88		%
Rhodium	103-2				85		%
Scandium	45-1				99		%
Scandium	45-2				96		%
Selenium	82-1	457.47	462.81	451.85	457.38	1.20	ppb
Selenium	77-2	475.10	490.22	480.97	482.10	1.58	ppb
Selenium	78-2	475.46	489.38	478.71	481.18	1.51	ppb
Silicon	28-1	516.42	516.05	518.73	517.06	0.28	ppb
Silver	107-1	472.04	490.20	471.06	477.77	2.26	ppb
Silver	109-1	472.99	490.33	470.90	478.07	2.23	ppb
Sodium	23-2	251950.64	251782.78	248126.41	250619.94	0.86	ppb
Strontium	86-1	477.47	474.81	473.45	475.25	0.43	ppb
Strontium	88-1	480.00	482.59	478.05	480.21	0.47	ppb
Sulfur	34-1	10379.47	10267.50	10047.84	10231.60	1.65	ppb
Terbium	159-1				96		%
Terbium	159-2				93		%
Thallium	203-1	492.77	477.63	493.00	487.80	1.81	ppb
Thallium	205-1	491.83	487.31	496.24	491.79	0.91	ppb
Tin	118-1	482.30	491.52	483.09	485.64	1.05	ppb
Titanium	47-1	4671.49	4817.99	4742.38	4743.96	1.54	ppb
Uranium	238-1	485.82	491.62	491.55	489.66	0.68	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV06	Instrumnet Name :	P8
Client Sample ID :	CCV06	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 19:11:48	DataFile Name :	074CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	500.16	493.61	494.04	495.94	0.74	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				92		%
Zinc	66-2	4683.89	4577.89	4553.58	4605.12	1.50	ppb
Zirconium	90-1	481.31	478.89	474.36	478.19	0.74	ppb
Zirconium	91-1	477.59	475.69	470.13	474.47	0.82	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB06	Instrumnet Name :	P8
Client Sample ID :	CCB06	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 19:14:34	DataFile Name :	075CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	4.61	5.12	3.95	4.56	12.78	ppb
Antimony	121-1	0.12	0.10	0.09	0.11	14.54	ppb
Arsenic	75-2	0.03	0.02	0.00	0.02	95.67	ppb
Barium	135-1	0.06	0.05	0.04	0.05	24.91	ppb
Barium	137-1	0.06	0.05	0.05	0.05	12.39	ppb
Beryllium	9-1	0.06	0.05	0.04	0.05	15.00	ppb
Bismuth	209-1				106		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Cadmium	108-1	0.01	0.03	0.04	0.03	56.47	ppb
Cadmium	106-1	-0.13	0.07	-0.35	-0.14		ppb
Cadmium	111-1	0.01	0.02	-0.01	0.01	200.49	ppb
Calcium	43-1	7.35	5.85	5.83	6.34	13.73	ppb
Calcium	44-1	5.21	2.61	1.96	3.26	52.70	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	0.01	0.00	0.00	725.57	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	73.23	ppb
Copper	63-2	0.13	0.09	0.09	0.10	23.19	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				102		%
Indium	115-1				106		%
Indium	115-2				97		%
Iron	54-2	2.55	2.57	2.31	2.48	5.74	ppb
Iron	56-2	2.56	2.50	2.21	2.42	7.76	ppb
Iron	57-2	2.75	2.65	2.50	2.63	4.75	ppb
Krypton	83-1						cps
Lead	206-1	0.14	0.11	0.10	0.12	18.07	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB06	Instrumnet Name :	P8
Client Sample ID :	CCB06	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 19:14:34	DataFile Name :	075CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.14	0.13	0.11	0.13	10.66	ppb
Lead	208-1	0.14	0.12	0.11	0.12	14.84	ppb
Lithium	6-1				106		%
Magnesium	24-2	4.35	4.29	4.29	4.31	0.78	ppb
Manganese	55-2	0.29	0.31	0.35	0.31	9.44	ppb
Molybdenum	94-1	0.22	0.18	0.16	0.19	15.80	ppb
Molybdenum	95-1	0.17	0.14	0.11	0.14	22.64	ppb
Molybdenum	96-1	0.18	0.15	0.11	0.15	22.23	ppb
Molybdenum	97-1	0.18	0.14	0.10	0.14	28.23	ppb
Molybdenum	98-1	0.17	0.14	0.11	0.14	20.51	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.01	-0.01	0.00	-0.01		ppb
Phosphorus	31-2	-14.19	-21.81	-24.80	-20.26		ppb
Potassium	39-2	29.28	26.47	27.90	27.88	5.04	ppb
Rhodium	103-1				105		%
Rhodium	103-2				103		%
Scandium	45-1				106		%
Scandium	45-2				98		%
Selenium	82-1	0.00	0.02	-0.09	-0.02		ppb
Selenium	77-2	0.14	0.13	-0.25	0.00	4480.65	ppb
Selenium	78-2	0.33	0.08	-0.25	0.05	551.73	ppb
Silicon	28-1	2.30	1.80	1.52	1.87	21.13	ppb
Silver	107-1	0.05	0.04	0.04	0.04	18.73	ppb
Silver	109-1	0.05	0.04	0.03	0.04	19.66	ppb
Sodium	23-2	77.58	74.46	75.48	75.84	2.10	ppb
Strontium	86-1	0.02	0.01	0.01	0.01	21.77	ppb
Strontium	88-1	0.01	0.01	0.01	0.01	22.45	ppb
Sulfur	34-1	64.31	-22.72	-62.18	-6.86		ppb
Terbium	159-1				105		%
Terbium	159-2				101		%
Thallium	203-1	0.05	0.04	0.04	0.05	18.17	ppb
Thallium	205-1	0.05	0.05	0.05	0.05	6.12	ppb
Tin	118-1	0.00	0.00	-0.01	0.00		ppb
Titanium	47-1	0.13	0.06	0.04	0.07	63.92	ppb
Uranium	238-1	0.01	0.01	0.00	0.01	43.42	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB06	Instrumnet Name :	P8
Client Sample ID :	CCB06	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 19:14:34	DataFile Name :	075CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.01	0.00	95.94	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				98		%
Zinc	66-2	0.36	0.27	0.39	0.34	18.11	ppb
Zirconium	90-1	0.04	0.04	0.03	0.04	11.23	ppb
Zirconium	91-1	0.03	0.04	0.03	0.03	13.55	ppb

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:14:05	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	297	187	230	238	23.30	cps
Antimony	121-1	153	120	143	139	12.32	cps
Arsenic	75-2	20	3	0	8	137.80	cps
Barium	135-1	233	203	173	203	14.75	cps
Barium	137-1	287	303	323	304	6.03	cps
Beryllium	9-1	126	140	145	137	7.21	cps
Bismuth	209-1	5626561	5691019	5601661	5639747	0.82	cps
Bismuth	209-2	2596522	2645901	2669691	2637371	1.42	cps
Bromine	81-1	35214	35010	35595	35273	0.84	cps
Cadmium	108-1	7	30	13	17	72.11	cps
Cadmium	106-1	4974	5128	5565	5222	5.86	cps
Cadmium	111-1	3521	3608	3912	3681	5.59	cps
Calcium	43-1	1337	1163	1207	1236	7.30	cps
Calcium	44-1	38545	38890	39057	38831	0.67	cps
Carbon	12-1	3928701	3785293	3680563	3798186	3.28	cps
Carbon	12-2	26040	25926	26010	25992	0.23	cps
Chlorine	35-1	133273	132554	133643	133157	0.42	cps
Chlorine	35-2	543	523	600	556	7.16	cps
Chromium	52-2	1840	1773	1773	1796	2.14	cps
Cobalt	59-2	170	193	150	171	12.68	cps
Copper	63-2	2210	2187	2347	2248	3.85	cps
Dysprosium	156-1	20	13	10	14	35.26	cps
Dysprosium	156-2	7	0	17	8	107.84	cps
Erbium	164-1	50	60	60	57	10.19	cps
Erbium	164-2	23	23	23	23	0.00	cps
Gadolinium	160-1	97	77	110	94	17.76	cps
Gadolinium	160-2	30	7	17	18	65.83	cps
Holmium	165-1	9430085	9236029	9507369	9391161	1.49	cps
Holmium	165-2	3672728	3632590	3612880	3639400	0.84	cps
Indium	115-1	8400681	8326990	8292829	8340166	0.66	cps
Indium	115-2	885840	883254	877284	882126	0.50	cps
Iron	54-2	1157	1013	837	1002	16.00	cps
Iron	56-2	12279	12362	12592	12411	1.31	cps
Iron	57-2	290	233	303	276	13.49	cps
Krypton	83-1	320	343	353	339	5.05	cps
Lead	206-1	1483	1317	1510	1437	7.29	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:14:05	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1210	1240	1227	1226	1.23	cps
Lead	208-1	5737	5614	5807	5719	1.71	cps
Lithium	6-1	2365191	2332639	2350699	2349510	0.69	cps
Magnesium	24-2	420	463	467	450	5.79	cps
Manganese	55-2	5188	5464	5468	5373	2.99	cps
Molybdenum	94-1	510	623	537	557	10.64	cps
Molybdenum	95-1	237	297	267	267	11.25	cps
Molybdenum	96-1	390	357	393	380	5.34	cps
Molybdenum	97-1	167	153	210	177	16.77	cps
Molybdenum	98-1	513	433	443	463	9.41	cps
Neodymium	150-1	17	7	3	9	78.08	cps
Neodymium	150-2	3	3	0	2	86.60	cps
Nickel	60-2	883	760	887	843	8.56	cps
Phosphorus	31-2	63	93	67	74	22.09	cps
Potassium	39-2	19046	18946	18582	18858	1.29	cps
Rhodium	103-1	8001075	8011624	8113987	8042228	0.78	cps
Rhodium	103-2	3344786	3353275	3374523	3357528	0.46	cps
Scandium	45-1	5652367	5726710	5690865	5689981	0.65	cps
Scandium	45-2	116333	116299	117085	116572	0.38	cps
Selenium	82-1	63	27	7	32	89.18	cps
Selenium	77-2	3	0	3	2	86.60	cps
Selenium	78-2	20	37	27	28	30.20	cps
Silicon	28-1	522376	523788	516849	521005	0.70	cps
Silver	107-1	140	197	160	166	17.36	cps
Silver	109-1	113	67	117	99	28.27	cps
Sodium	23-2	59433	58620	59507	59187	0.83	cps
Strontium	86-1	527	583	563	558	5.15	cps
Strontium	88-1	640	620	620	627	1.84	cps
Sulfur	34-1	668682	672529	666469	669227	0.46	cps
Terbium	159-1	9711640	9960708	9815648	9829332	1.27	cps
Terbium	159-2	3658016	3583580	3525805	3589133	1.85	cps
Thallium	203-1	267	273	307	282	7.59	cps
Thallium	205-1	630	733	627	663	9.14	cps
Tin	118-1	4544	4694	6669	5302	22.36	cps
Titanium	47-1	360	1615	373	783	92.09	cps
Uranium	238-1	427	500	480	469	8.08	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:14:05	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	73	57	37	56	33.04	cps
Ytterbium	172-1	77	63	40	60	30.93	cps
Ytterbium	172-2	27	23	17	22	22.91	cps
Ytterbium	176-1	1260	1317	1213	1263	4.10	cps
Ytterbium	176-2	330	267	273	290	12.00	cps
Yttrium	89-1	15531691	15362730	15368931	15421117	0.62	cps
Yttrium	89-2	1139586	1131387	1137988	1136320	0.38	cps
Zinc	66-2	1880	1947	1857	1895	2.47	cps
Zirconium	90-1	1173	1213	1357	1248	7.73	cps
Zirconium	91-1	250	340	297	296	15.23	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:20:51	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2827	2624	2700	2717	3.78	cps
Antimony	121-1	64029	65436	64927	64797	1.10	cps
Arsenic	75-2	773	750	810	778	3.89	cps
Barium	135-1	78781	78596	77919	78432	0.58	cps
Barium	137-1	132222	134754	136719	134565	1.68	cps
Beryllium	9-1	8058	8274	8122	8152	1.36	cps
Bismuth	209-1	5567361	5721352	5550748	5613154	1.68	cps
Bismuth	209-2	2588026	2605254	2575648	2589643	0.57	cps
Bromine	81-1	35067	35839	35328	35412	1.11	cps
Cadmium	108-1	627	807	663	699	13.61	cps
Cadmium	106-1	6382	6325	6302	6336	0.65	cps
Cadmium	111-1	12471	12295	12593	12453	1.20	cps
Calcium	43-1	58150	59298	58351	58600	1.05	cps
Calcium	44-1	959083	960576	959627	959762	0.08	cps
Carbon	12-1	4008132	3913636	3923217	3948328	1.32	cps
Carbon	12-2	26521	26965	26534	26673	0.95	cps
Chlorine	35-1	149290	148586	148276	148718	0.35	cps
Chlorine	35-2	690	627	637	651	5.23	cps
Chromium	52-2	17748	17624	17491	17621	0.73	cps
Cobalt	59-2	15091	15458	15425	15325	1.32	cps
Copper	63-2	26528	25496	26114	26046	1.99	cps
Dysprosium	156-1	23	20	40	28	38.58	cps
Dysprosium	156-2	13	10	3	9	57.30	cps
Erbium	164-1	43	57	107	69	48.47	cps
Erbium	164-2	37	30	20	29	29.04	cps
Gadolinium	160-1	70	100	93	88	17.95	cps
Gadolinium	160-2	20	23	23	22	8.65	cps
Holmium	165-1	9132224	9336473	9336932	9268543	1.27	cps
Holmium	165-2	3630502	3630410	3572188	3611033	0.93	cps
Indium	115-1	8134612	8233938	8277120	8215223	0.89	cps
Indium	115-2	865798	868575	871438	868604	0.32	cps
Iron	54-2	17441	16920	17257	17206	1.53	cps
Iron	56-2	304428	302572	301015	302672	0.56	cps
Iron	57-2	7632	7569	8026	7742	3.20	cps
Krypton	83-1	333	310	367	337	8.46	cps
Lead	206-1	23448	22790	23411	23216	1.59	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:20:51	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	20156	20553	20219	20309	1.05	cps
Lead	208-1	92021	92105	92549	92225	0.31	cps
Lithium	6-1	2301944	2306013	2308089	2305348	0.14	cps
Magnesium	24-2	228997	228098	225562	227552	0.78	cps
Manganese	55-2	8476	9056	8476	8669	3.87	cps
Molybdenum	94-1	70836	71537	72685	71686	1.30	cps
Molybdenum	95-1	85390	85159	86711	85753	0.98	cps
Molybdenum	96-1	94190	93441	95545	94392	1.13	cps
Molybdenum	97-1	52880	53278	53479	53213	0.57	cps
Molybdenum	98-1	134659	140022	136904	137195	1.96	cps
Neodymium	150-1	13	17	17	16	12.40	cps
Neodymium	150-2	3	3	0	2	86.60	cps
Nickel	60-2	4941	4901	4934	4925	0.44	cps
Phosphorus	31-2	293	280	347	307	11.50	cps
Potassium	39-2	167331	168474	169209	168338	0.56	cps
Rhodium	103-1	7990352	7961051	7836182	7929195	1.03	cps
Rhodium	103-2	3267441	3278520	3299086	3281683	0.49	cps
Scandium	45-1	5724604	5641505	5622754	5662954	0.96	cps
Scandium	45-2	114636	115120	114344	114700	0.34	cps
Selenium	82-1	2794	2770	2604	2723	3.81	cps
Selenium	77-2	43	77	60	60	27.78	cps
Selenium	78-2	190	173	213	192	10.45	cps
Silicon	28-1	671634	664696	660546	665626	0.84	cps
Silver	107-1	42010	42539	42572	42374	0.74	cps
Silver	109-1	40473	40316	40306	40365	0.23	cps
Sodium	23-2	511071	510609	512819	511500	0.23	cps
Strontium	86-1	11652	11415	11999	11688	2.51	cps
Strontium	88-1	98404	97356	98692	98151	0.72	cps
Sulfur	34-1	694193	692447	691021	692554	0.23	cps
Terbium	159-1	9585221	9556535	9593943	9578566	0.20	cps
Terbium	159-2	3529035	3526662	3482994	3512897	0.74	cps
Thallium	203-1	27409	27345	27506	27420	0.30	cps
Thallium	205-1	64483	65102	64955	64847	0.50	cps
Tin	118-1	138560	138640	139560	138920	0.40	cps
Titanium	47-1	26324	25944	27156	26475	2.34	cps
Uranium	238-1	83234	84109	85264	84202	1.21	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:20:51	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	30282	29738	29540	29853	1.29	cps
Ytterbium	172-1	63	70	70	68	5.68	cps
Ytterbium	172-2	17	33	10	20	60.08	cps
Ytterbium	176-1	1400	1423	1283	1369	5.48	cps
Ytterbium	176-2	307	350	280	312	11.32	cps
Yttrium	89-1	15390296	15195464	15188606	15258122	0.75	cps
Yttrium	89-2	1119538	1120246	1127639	1122474	0.40	cps
Zinc	66-2	8529	7932	8142	8201	3.69	cps
Zirconium	90-1	61261	61682	62472	61805	1.00	cps
Zirconium	91-1	13006	13560	13560	13375	2.39	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:24:13	DataFile Name :	007CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	112074	113065	112598	112579	0.44	cps
Antimony	121-1	1585452	1597467	1614363	1599094	0.91	cps
Arsenic	75-2	34185	34963	34853	34667	1.22	cps
Barium	135-1	1946569	1963069	1961267	1956968	0.46	cps
Barium	137-1	3307124	3326876	3312719	3315573	0.31	cps
Beryllium	9-1	362720	367938	370384	367014	1.07	cps
Bismuth	209-1	5753503	5631936	5664732	5683390	1.11	cps
Bismuth	209-2	2590333	2594551	2544109	2576331	1.09	cps
Bromine	81-1	34352	35421	34202	34658	1.92	cps
Cadmium	108-1	31670	31994	32187	31950	0.82	cps
Cadmium	106-1	49599	50572	50536	50235	1.10	cps
Cadmium	111-1	394554	399680	399320	397851	0.72	cps
Calcium	43-1	523918	533425	530454	529266	0.92	cps
Calcium	44-1	8700524	8552671	8578764	8610653	0.92	cps
Carbon	12-1	4081748	4081434	3941470	4034884	2.00	cps
Carbon	12-2	27840	27189	26891	27306	1.78	cps
Chlorine	35-1	150422	148078	150139	149546	0.86	cps
Chlorine	35-2	653	670	567	630	8.81	cps
Chromium	52-2	350782	348917	345876	348525	0.71	cps
Cobalt	59-2	654309	660125	644710	653048	1.19	cps
Copper	63-2	5376002	5299237	5278681	5317973	0.96	cps
Dysprosium	156-1	30	33	40	34	14.78	cps
Dysprosium	156-2	3	3	13	7	86.65	cps
Erbium	164-1	87	50	93	77	30.43	cps
Erbium	164-2	30	30	23	28	13.86	cps
Gadolinium	160-1	103	107	123	111	9.64	cps
Gadolinium	160-2	17	20	17	18	10.81	cps
Holmium	165-1	9318805	9328116	9757919	9468280	2.65	cps
Holmium	165-2	3569324	3659872	3533600	3587599	1.81	cps
Indium	115-1	8399905	8303318	8354880	8352701	0.58	cps
Indium	115-2	856585	860062	857647	858098	0.21	cps
Iron	54-2	711392	720699	708959	713683	0.87	cps
Iron	56-2	13609998	13431605	13401955	13481186	0.83	cps
Iron	57-2	327105	329088	326533	327575	0.41	cps
Krypton	83-1	330	347	327	334	3.20	cps
Lead	206-1	5405658	5599612	5645272	5550181	2.29	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:24:13	DataFile Name :	007CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4667871	4787985	4799734	4751863	1.54	cps
Lead	208-1	21557888	21802775	22018070	21792911	1.06	cps
Lithium	6-1	2309863	2402397	2392245	2368168	2.14	cps
Magnesium	24-2	2022056	2051368	2080871	2051432	1.43	cps
Manganese	55-2	1549826	1528728	1523031	1533861	0.92	cps
Molybdenum	94-1	5657129	5807091	5766280	5743500	1.35	cps
Molybdenum	95-1	8128764	8243797	8300397	8224319	1.06	cps
Molybdenum	96-1	8861353	9077417	9124659	9021143	1.56	cps
Molybdenum	97-1	4975757	5189016	5074732	5079835	2.10	cps
Molybdenum	98-1	12975408	13513079	13246141	13244876	2.03	cps
Neodymium	150-1	150	183	160	164	10.40	cps
Neodymium	150-2	7	3	3	4	43.40	cps
Nickel	60-2	181202	179895	178129	179742	0.86	cps
Phosphorus	31-2	6195	5775	5875	5948	3.69	cps
Potassium	39-2	702459	707370	695759	701863	0.83	cps
Rhodium	103-1	7901702	7972764	8079472	7984646	1.12	cps
Rhodium	103-2	3232891	3233398	3204116	3223468	0.52	cps
Scandium	45-1	5628059	5712394	5710906	5683787	0.85	cps
Scandium	45-2	112129	114326	112200	112885	1.11	cps
Selenium	82-1	25106	24485	24612	24735	1.33	cps
Selenium	77-2	487	537	453	492	8.52	cps
Selenium	78-2	1617	1710	1443	1590	8.51	cps
Silicon	28-1	3795236	3761866	3717343	3758148	1.04	cps
Silver	107-1	2170172	2177563	2131957	2159897	1.13	cps
Silver	109-1	2016039	2033683	1992898	2014207	1.02	cps
Sodium	23-2	4125728	4167841	4124219	4139263	0.60	cps
Strontium	86-1	504701	515384	520503	513529	1.57	cps
Strontium	88-1	4658988	4781425	4710787	4717067	1.30	cps
Sulfur	34-1	838791	836590	835785	837055	0.19	cps
Terbium	159-1	10015178	9782665	9988070	9928638	1.28	cps
Terbium	159-2	3517119	3512666	3504983	3511589	0.17	cps
Thallium	203-1	1256280	1284852	1296678	1279270	1.62	cps
Thallium	205-1	3197673	3255938	3287434	3247015	1.40	cps
Tin	118-1	1252750	1255345	1284325	1264140	1.39	cps
Titanium	47-1	2375569	2367975	2377314	2373619	0.21	cps
Uranium	238-1	4100938	4058846	4094708	4084831	0.56	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:24:13	DataFile Name :	007CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	265570	266207	262531	264769	0.74	cps
Ytterbium	172-1	70	50	87	69	26.65	cps
Ytterbium	172-2	30	43	27	33	26.45	cps
Ytterbium	176-1	7342	7309	7232	7294	0.77	cps
Ytterbium	176-2	2544	2550	2514	2536	0.77	cps
Yttrium	89-1	15204756	15221384	15332221	15252787	0.45	cps
Yttrium	89-2	1107993	1118364	1108313	1111557	0.53	cps
Zinc	66-2	555792	557176	553879	555616	0.30	cps
Zirconium	90-1	2880262	2850318	2895619	2875400	0.80	cps
Zirconium	91-1	599578	605951	603300	602943	0.53	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:27:39	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	270016	268438	267694	268716	0.44	cps
Antimony	121-1	3956660	4029803	4056138	4014200	1.28	cps
Arsenic	75-2	84132	85058	82077	83756	1.82	cps
Barium	135-1	4689153	4717209	4813745	4740036	1.38	cps
Barium	137-1	8125370	8155193	8177166	8152576	0.32	cps
Beryllium	9-1	907501	907491	908353	907782	0.05	cps
Bismuth	209-1	5754500	5788801	5749888	5764396	0.37	cps
Bismuth	209-2	2543676	2554872	2518347	2538965	0.74	cps
Bromine	81-1	32919	32869	32758	32849	0.25	cps
Cadmium	108-1	77268	78787	79303	78453	1.35	cps
Cadmium	106-1	114998	117064	116907	116323	0.99	cps
Cadmium	111-1	963464	975486	978820	972590	0.83	cps
Calcium	43-1	1318748	1307213	1304798	1310253	0.57	cps
Calcium	44-1	20914171	21139920	21438688	21164259	1.24	cps
Carbon	12-1	4295807	4269187	4155191	4240062	1.76	cps
Carbon	12-2	28655	28314	28144	28371	0.92	cps
Chlorine	35-1	154696	154915	153463	154358	0.51	cps
Chlorine	35-2	590	720	620	643	10.58	cps
Chromium	52-2	843978	838064	835651	839231	0.51	cps
Cobalt	59-2	1683169	1649928	1614699	1649265	2.08	cps
Copper	63-2	12713358	12782774	12614734	12703622	0.66	cps
Dysprosium	156-1	157	127	93	126	25.24	cps
Dysprosium	156-2	17	17	17	17	0.00	cps
Erbium	164-1	113	127	117	119	5.84	cps
Erbium	164-2	50	40	37	42	16.43	cps
Gadolinium	160-1	153	117	110	127	18.42	cps
Gadolinium	160-2	40	53	20	38	44.41	cps
Holmium	165-1	9578630	9617400	9609099	9601710	0.21	cps
Holmium	165-2	3643229	3548378	3605547	3599051	1.33	cps
Indium	115-1	8321169	8122275	8164982	8202809	1.28	cps
Indium	115-2	831566	830530	825468	829188	0.39	cps
Iron	54-2	1834993	1797767	1801159	1811307	1.14	cps
Iron	56-2	32661984	32954615	32845715	32820771	0.45	cps
Iron	57-2	799535	794722	791218	795158	0.53	cps
Krypton	83-1	390	363	370	374	3.71	cps
Lead	206-1	13715899	14070363	13679190	13821817	1.56	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:27:39	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	11921664	12032733	11757667	11904021	1.16	cps
Lead	208-1	54908510	55887613	54593693	55129938	1.22	cps
Lithium	6-1	2431350	2504040	2452613	2462667	1.52	cps
Magnesium	24-2	4895733	4913396	4740518	4849882	1.96	cps
Manganese	55-2	3716942	3696752	3666307	3693334	0.69	cps
Molybdenum	94-1	14071391	14265075	14183923	14173463	0.69	cps
Molybdenum	95-1	20343494	20536426	20571695	20483871	0.60	cps
Molybdenum	96-1	22599911	22746543	22710798	22685751	0.34	cps
Molybdenum	97-1	12839151	12695467	12604521	12713046	0.93	cps
Molybdenum	98-1	32888297	32939623	32712751	32846890	0.36	cps
Neodymium	150-1	373	317	417	369	13.60	cps
Neodymium	150-2	10	10	7	9	21.63	cps
Nickel	60-2	430538	425817	428529	428294	0.55	cps
Phosphorus	31-2	13676	13606	13910	13731	1.16	cps
Potassium	39-2	1695433	1698502	1680558	1691498	0.57	cps
Rhodium	103-1	7853214	7826016	7907645	7862291	0.53	cps
Rhodium	103-2	3166432	3166870	3072705	3135336	1.73	cps
Scandium	45-1	5574138	5544974	5617491	5578868	0.65	cps
Scandium	45-2	110168	110178	106773	109039	1.80	cps
Selenium	82-1	61074	61221	61533	61276	0.38	cps
Selenium	77-2	1050	1173	963	1062	9.94	cps
Selenium	78-2	3857	3517	3901	3758	5.59	cps
Silicon	28-1	8435884	8595279	8379477	8470214	1.32	cps
Silver	107-1	5237477	5270816	5318576	5275623	0.77	cps
Silver	109-1	4897567	5117603	5056931	5024034	2.26	cps
Sodium	23-2	9854195	9795545	9629820	9759853	1.19	cps
Strontium	86-1	1274575	1257391	1274245	1268737	0.77	cps
Strontium	88-1	11680829	11502755	11745076	11642887	1.08	cps
Sulfur	34-1	958339	949855	959431	955875	0.55	cps
Terbium	159-1	9952929	10059058	9817752	9943246	1.22	cps
Terbium	159-2	3487191	3426770	3460475	3458145	0.88	cps
Thallium	203-1	3449544	3430428	3419795	3433256	0.44	cps
Thallium	205-1	7922516	8134174	8014805	8023831	1.32	cps
Tin	118-1	3311453	3281318	3333300	3308690	0.79	cps
Titanium	47-1	5829937	5874204	5860705	5854948	0.39	cps
Uranium	238-1	10199435	10352325	10260238	10270666	0.75	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:27:39	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	644643	645420	637026	642363	0.72	cps
Ytterbium	172-1	147	107	133	129	15.80	cps
Ytterbium	172-2	40	60	77	59	31.18	cps
Ytterbium	176-1	16457	16978	17235	16890	2.35	cps
Ytterbium	176-2	5871	5845	5975	5897	1.16	cps
Yttrium	89-1	15410821	15105564	15182059	15232815	1.04	cps
Yttrium	89-2	1084344	1087768	1064387	1078833	1.17	cps
Zinc	66-2	1343802	1353263	1335712	1344259	0.65	cps
Zirconium	90-1	7002807	7070622	7010124	7027851	0.53	cps
Zirconium	91-1	1562763	1590626	1571554	1574981	0.90	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:30:32	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	523240	520338	520783	521453	0.30	cps
Antimony	121-1	7684243	7979372	7870014	7844543	1.90	cps
Arsenic	75-2	163273	164107	163982	163787	0.27	cps
Barium	135-1	9344425	9546765	9390031	9427074	1.13	cps
Barium	137-1	15933819	16073451	16298042	16101771	1.14	cps
Beryllium	9-1	1725738	1729825	1704357	1719973	0.80	cps
Bismuth	209-1	5652086	5584462	5657129	5631226	0.72	cps
Bismuth	209-2	2478734	2480017	2475928	2478227	0.08	cps
Bromine	81-1	32087	33119	32611	32606	1.58	cps
Cadmium	108-1	151054	155856	153871	153594	1.57	cps
Cadmium	106-1	217575	222353	224534	221487	1.61	cps
Cadmium	111-1	2003654	2052269	2022532	2026152	1.21	cps
Calcium	43-1	2593348	2528312	2573136	2564932	1.30	cps
Calcium	44-1	41134311	40812170	41000984	40982489	0.39	cps
Carbon	12-1	4240180	4274341	4276629	4263717	0.48	cps
Carbon	12-2	29109	29172	28812	29031	0.66	cps
Chlorine	35-1	160107	159130	159332	159523	0.32	cps
Chlorine	35-2	680	573	643	632	8.57	cps
Chromium	52-2	1727622	1713758	1710186	1717189	0.54	cps
Cobalt	59-2	3136044	3180908	3188837	3168597	0.90	cps
Copper	63-2	24758087	24789398	24484474	24677320	0.68	cps
Dysprosium	156-1	200	200	193	198	1.94	cps
Dysprosium	156-2	37	33	30	33	10.01	cps
Erbium	164-1	160	147	143	150	5.88	cps
Erbium	164-2	60	60	47	56	13.85	cps
Gadolinium	160-1	180	163	150	164	9.14	cps
Gadolinium	160-2	37	30	50	39	26.18	cps
Holmium	165-1	9546287	9757681	9384078	9562682	1.96	cps
Holmium	165-2	3517382	3576270	3577988	3557213	0.97	cps
Indium	115-1	7881973	8034121	7907154	7941083	1.03	cps
Indium	115-2	793674	800684	794286	796215	0.49	cps
Iron	54-2	3474082	3467569	3390090	3443914	1.36	cps
Iron	56-2	62663154	63112511	62283079	62686248	0.66	cps
Iron	57-2	1602606	1635147	1619202	1618985	1.01	cps
Krypton	83-1	343	407	380	377	8.44	cps
Lead	206-1	27002441	27765843	27949605	27572630	1.82	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:30:32	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	23135093	23594055	24097366	23608838	2.04	cps
Lead	208-1	107754068	108060113	110223689	108679290	1.24	cps
Lithium	6-1	2438716	2483653	2457110	2459826	0.92	cps
Magnesium	24-2	9526789	9334323	9347258	9402790	1.14	cps
Manganese	55-2	7189984	7105634	7008788	7101468	1.28	cps
Molybdenum	94-1	28098090	27611273	28667752	28125705	1.88	cps
Molybdenum	95-1	40915858	39670094	41440867	40675606	2.24	cps
Molybdenum	96-1	44550941	43646038	44977564	44391514	1.53	cps
Molybdenum	97-1	24419830	24709910	25008071	24712604	1.19	cps
Molybdenum	98-1	64655141	64339199	66330531	65108290	1.64	cps
Neodymium	150-1	593	637	663	631	5.60	cps
Neodymium	150-2	30	20	57	36	53.31	cps
Nickel	60-2	828802	833771	824916	829163	0.54	cps
Phosphorus	31-2	27256	26591	26862	26903	1.24	cps
Potassium	39-2	3276878	3223133	3242959	3247657	0.84	cps
Rhodium	103-1	7643866	7652068	7668805	7654913	0.17	cps
Rhodium	103-2	3134210	3084747	3088318	3102425	0.89	cps
Scandium	45-1	5473650	5486660	5505887	5488732	0.30	cps
Scandium	45-2	106914	106366	106047	106442	0.41	cps
Selenium	82-1	116764	122610	118788	119388	2.49	cps
Selenium	77-2	1960	2340	2130	2144	8.88	cps
Selenium	78-2	7422	7252	7002	7225	2.93	cps
Silicon	28-1	15536004	15965609	15815756	15772456	1.38	cps
Silver	107-1	10284387	10307984	10330868	10307746	0.23	cps
Silver	109-1	9435619	9917881	9461657	9605052	2.82	cps
Sodium	23-2	19057669	19137525	18881480	19025558	0.69	cps
Strontium	86-1	2625446	2707538	2668344	2667109	1.54	cps
Strontium	88-1	22854554	22556580	22936057	22782397	0.88	cps
Sulfur	34-1	1217588	1219390	1230260	1222413	0.56	cps
Terbium	159-1	9778277	9849320	10003718	9877105	1.17	cps
Terbium	159-2	3445584	3412463	3476917	3444988	0.94	cps
Thallium	203-1	6719187	6908548	6884878	6837538	1.51	cps
Thallium	205-1	15836744	15961287	16011848	15936626	0.57	cps
Tin	118-1	6399381	6631495	6537009	6522629	1.79	cps
Titanium	47-1	11285020	11375872	11340078	11333657	0.40	cps
Uranium	238-1	20498290	20345495	20744996	20529594	0.98	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:30:32	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1243458	1249501	1234819	1242593	0.59	cps
Ytterbium	172-1	167	140	163	157	9.28	cps
Ytterbium	172-2	83	110	60	84	29.63	cps
Ytterbium	176-1	31210	31340	32323	31624	1.92	cps
Ytterbium	176-2	11201	11518	11585	11435	1.79	cps
Yttrium	89-1	14861672	14890208	14784502	14845461	0.37	cps
Yttrium	89-2	1065007	1066910	1052081	1061333	0.76	cps
Zinc	66-2	2773581	2761214	2727527	2754107	0.87	cps
Zirconium	90-1	13991897	13995435	14124712	14037348	0.54	cps
Zirconium	91-1	3150932	3062213	3154455	3122533	1.67	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:33:20	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	990695	994882	992014	992530	0.22	cps
Antimony	121-1	15160237	15668236	15377176	15401883	1.65	cps
Arsenic	75-2	313857	312847	312345	313016	0.25	cps
Barium	135-1	18344528	18933605	18685426	18654520	1.59	cps
Barium	137-1	31481655	32467270	32500450	32149792	1.80	cps
Beryllium	9-1	3249610	3327848	3316757	3298072	1.28	cps
Bismuth	209-1	5301769	5435102	5470849	5402573	1.65	cps
Bismuth	209-2	2360938	2341951	2356930	2353273	0.43	cps
Bromine	81-1	32615	32451	32698	32588	0.39	cps
Cadmium	108-1	300123	300634	299026	299927	0.27	cps
Cadmium	106-1	424799	430224	431308	428777	0.81	cps
Cadmium	111-1	3891885	4014049	3959068	3955001	1.55	cps
Calcium	43-1	4897259	4889339	4990554	4925717	1.14	cps
Calcium	44-1	79305752	79930879	80795565	80010732	0.94	cps
Carbon	12-1	4503945	4459005	4459212	4474054	0.58	cps
Carbon	12-2	31881	31216	31123	31407	1.32	cps
Chlorine	35-1	179042	179318	180685	179682	0.49	cps
Chlorine	35-2	727	707	773	736	4.65	cps
Chromium	52-2	3268849	3317212	3284887	3290316	0.75	cps
Cobalt	59-2	6069293	6096218	6049752	6071754	0.38	cps
Copper	63-2	46511674	47223709	47261779	46999054	0.90	cps
Dysprosium	156-1	367	380	343	363	5.11	cps
Dysprosium	156-2	67	50	70	62	17.22	cps
Erbium	164-1	277	210	213	233	16.10	cps
Erbium	164-2	73	110	90	91	20.15	cps
Gadolinium	160-1	247	213	180	213	15.63	cps
Gadolinium	160-2	87	70	93	83	14.42	cps
Holmium	165-1	9191638	9401581	9393628	9328949	1.28	cps
Holmium	165-2	3407550	3465237	3479238	3450675	1.10	cps
Indium	115-1	7518521	7624723	7585997	7576413	0.71	cps
Indium	115-2	743366	746027	734792	741395	0.79	cps
Iron	54-2	6584257	6666395	6606840	6619164	0.64	cps
Iron	56-2	122001928	123015975	121904075	122307326	0.50	cps
Iron	57-2	3097821	3116343	3100412	3104859	0.32	cps
Krypton	83-1	380	350	343	358	5.46	cps
Lead	206-1	53513219	54704763	54563706	54260563	1.20	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:33:20	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	45938128	46532316	46565678	46345374	0.76	cps
Lead	208-1	210085062	215000683	216045642	213710462	1.49	cps
Lithium	6-1	2375604	2410702	2348706	2378337	1.31	cps
Magnesium	24-2	18136935	18142963	18056263	18112054	0.27	cps
Manganese	55-2	13785002	13959262	13739201	13827822	0.84	cps
Molybdenum	94-1	55195599	54642594	55249996	55029396	0.61	cps
Molybdenum	95-1	79589307	79022954	79803485	79471915	0.51	cps
Molybdenum	96-1	86776122	87627892	88133689	87512568	0.78	cps
Molybdenum	97-1	48836519	48850518	49532951	49073329	0.81	cps
Molybdenum	98-1	128306285	126677568	127721638	127568497	0.65	cps
Neodymium	150-1	1230	1150	1220	1200	3.63	cps
Neodymium	150-2	53	60	47	53	12.50	cps
Nickel	60-2	1671083	1716153	1695574	1694270	1.33	cps
Phosphorus	31-2	50317	50136	50989	50481	0.89	cps
Potassium	39-2	6133824	6112109	6154183	6133372	0.34	cps
Rhodium	103-1	7254609	7220947	7327984	7267847	0.75	cps
Rhodium	103-2	2969929	2950553	2948698	2956393	0.40	cps
Scandium	45-1	5181882	5274427	5254905	5237071	0.93	cps
Scandium	45-2	105604	103711	105077	104797	0.93	cps
Selenium	82-1	229861	232466	233760	232029	0.86	cps
Selenium	77-2	4094	4011	4061	4055	1.03	cps
Selenium	78-2	13540	14167	13450	13719	2.85	cps
Silicon	28-1	30039242	30032949	29801196	29957796	0.45	cps
Silver	107-1	19605013	20017273	19774158	19798815	1.05	cps
Silver	109-1	18462831	19056476	18944983	18821430	1.68	cps
Sodium	23-2	36406079	36993549	36159315	36519648	1.17	cps
Strontium	86-1	5169730	5184196	5246657	5200195	0.79	cps
Strontium	88-1	44103294	45700496	44955166	44919652	1.78	cps
Sulfur	34-1	1761910	1796300	1756170	1771460	1.23	cps
Terbium	159-1	9695684	9617352	9800109	9704381	0.94	cps
Terbium	159-2	3378575	3375948	3337534	3364019	0.68	cps
Thallium	203-1	13162327	13547558	13314551	13341478	1.45	cps
Thallium	205-1	30867511	31607150	32135965	31536875	2.02	cps
Tin	118-1	12663031	12772531	12704684	12713416	0.43	cps
Titanium	47-1	21885206	22404613	22485052	22258291	1.46	cps
Uranium	238-1	39923676	40577535	40765791	40422334	1.09	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:33:20	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2507484	2493536	2509042	2503354	0.34	cps
Ytterbium	172-1	260	267	310	279	9.73	cps
Ytterbium	172-2	113	110	70	98	24.66	cps
Ytterbium	176-1	61770	62349	62912	62344	0.92	cps
Ytterbium	176-2	22209	22048	22065	22107	0.40	cps
Yttrium	89-1	14438802	14693846	14536465	14556371	0.88	cps
Yttrium	89-2	1036445	1029002	1012257	1025901	1.21	cps
Zinc	66-2	5233582	5252676	5185890	5224049	0.66	cps
Zirconium	90-1	27401691	27239401	27629528	27423540	0.71	cps
Zirconium	91-1	6089703	6133780	6174432	6132639	0.69	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:36:05	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1954490	1947079	1943071	1948213	0.30	cps
Antimony	121-1	29504834	29766094	29982020	29750983	0.80	cps
Arsenic	75-2	602758	599874	594814	599149	0.67	cps
Barium	135-1	36144059	35825177	36293875	36087704	0.66	cps
Barium	137-1	62324791	61576329	62787244	62229455	0.98	cps
Beryllium	9-1	6091056	6177674	6193933	6154221	0.90	cps
Bismuth	209-1	5267800	5329678	5231311	5276263	0.94	cps
Bismuth	209-2	2290798	2255743	2238332	2261624	1.18	cps
Bromine	81-1	33353	31632	33290	32758	2.98	cps
Cadmium	108-1	577111	578327	569613	575017	0.82	cps
Cadmium	106-1	807413	815167	822728	815103	0.94	cps
Cadmium	111-1	7323113	7441240	7425277	7396543	0.87	cps
Calcium	43-1	9467030	9579866	9502859	9516585	0.61	cps
Calcium	44-1	150956131	153876964	154509278	153114124	1.24	cps
Carbon	12-1	5102935	5159842	5200792	5154523	0.95	cps
Carbon	12-2	38637	38360	38126	38374	0.67	cps
Chlorine	35-1	223662	227306	229864	226944	1.37	cps
Chlorine	35-2	927	970	890	929	4.31	cps
Chromium	52-2	6303579	6295902	6240872	6280118	0.54	cps
Cobalt	59-2	11467989	11518255	11358720	11448322	0.71	cps
Copper	63-2	88732082	89209992	87802445	88581506	0.81	cps
Dysprosium	156-1	687	693	700	693	0.96	cps
Dysprosium	156-2	130	130	127	129	1.49	cps
Erbium	164-1	367	390	417	391	6.40	cps
Erbium	164-2	147	140	113	133	13.23	cps
Gadolinium	160-1	353	327	327	336	4.59	cps
Gadolinium	160-2	170	133	127	143	16.28	cps
Holmium	165-1	9177717	9400901	9397173	9325263	1.37	cps
Holmium	165-2	3426650	3423934	3428718	3426434	0.07	cps
Indium	115-1	7173439	7278663	7264266	7238789	0.79	cps
Indium	115-2	675506	677420	673935	675620	0.26	cps
Iron	54-2	12704656	12647304	12538939	12630300	0.67	cps
Iron	56-2	232784590	234802570	231889177	233158779	0.64	cps
Iron	57-2	5882482	5889305	5847368	5873052	0.38	cps
Krypton	83-1	433	340	353	376	13.44	cps
Lead	206-1	101816188	103001342	102728782	102515437	0.61	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:36:05	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	87321932	88710829	88497785	88176849	0.85	cps
Lead	208-1	400748964	407545327	408166404	405486898	1.01	cps
Lithium	6-1	2254930	2314432	2381906	2317089	2.74	cps
Magnesium	24-2	34331194	34273771	34465744	34356903	0.29	cps
Manganese	55-2	26672083	26655191	26332327	26553200	0.72	cps
Molybdenum	94-1	106996468	108721618	107757325	107825137	0.80	cps
Molybdenum	95-1	152700564	157265031	155836981	155267525	1.50	cps
Molybdenum	96-1	167478791	169455817	169510604	168815071	0.69	cps
Molybdenum	97-1	94614102	96555339	95212779	95460740	1.04	cps
Molybdenum	98-1	247998883	253673670	250076430	250582994	1.15	cps
Neodymium	150-1	2550	2207	2404	2387	7.22	cps
Neodymium	150-2	83	93	170	116	41.03	cps
Nickel	60-2	3187542	3257976	3129305	3191608	2.02	cps
Phosphorus	31-2	96773	96012	96085	96290	0.44	cps
Potassium	39-2	11988144	11751594	11878118	11872618	1.00	cps
Rhodium	103-1	6922357	7043228	6965318	6976967	0.88	cps
Rhodium	103-2	2829941	2815904	2776050	2807298	1.00	cps
Scandium	45-1	5106038	5124971	5176956	5135988	0.71	cps
Scandium	45-2	105050	102271	104459	103927	1.41	cps
Selenium	82-1	442635	449050	442788	444824	0.82	cps
Selenium	77-2	7992	7562	7599	7718	3.09	cps
Selenium	78-2	26545	26545	25520	26203	2.26	cps
Silicon	28-1	51779456	51021308	51300603	51367122	0.75	cps
Silver	107-1	37590306	37512624	37749511	37617481	0.32	cps
Silver	109-1	35280015	35739228	34966043	35328429	1.10	cps
Sodium	23-2	69750347	69198449	68894461	69281086	0.63	cps
Strontium	86-1	9822912	9833839	10280205	9978985	2.61	cps
Strontium	88-1	85670129	86293949	87500192	86488090	1.08	cps
Sulfur	34-1	2867739	2830775	2815416	2837977	0.95	cps
Terbium	159-1	9546254	9631984	9634759	9604332	0.52	cps
Terbium	159-2	3297242	3310198	3295052	3300831	0.25	cps
Thallium	203-1	25191459	25537559	25423117	25384045	0.69	cps
Thallium	205-1	59215281	59360679	60616852	59730937	1.29	cps
Tin	118-1	24106268	24654210	25068624	24609700	1.96	cps
Titanium	47-1	42282568	42442089	42934139	42552932	0.80	cps
Uranium	238-1	78957379	79866849	79287435	79370554	0.58	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:36:05	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	4775368	4713124	4708643	4732378	0.79	cps
Ytterbium	172-1	497	437	463	466	6.46	cps
Ytterbium	172-2	170	217	177	188	13.44	cps
Ytterbium	176-1	120779	122186	121409	121458	0.58	cps
Ytterbium	176-2	43301	42746	43103	43050	0.65	cps
Yttrium	89-1	14296519	14195502	14336091	14276037	0.51	cps
Yttrium	89-2	1019910	998104	996147	1004720	1.31	cps
Zinc	66-2	9893077	9696201	9776252	9788510	1.01	cps
Zirconium	90-1	53487288	53626526	54007784	53707199	0.50	cps
Zirconium	91-1	11896363	12021356	12002291	11973336	0.56	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:38:55	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	9623015	9559461	9697706	9626727	0.72	cps
Antimony	121-1	17191	17087	17041	17106	0.45	cps
Arsenic	75-2	293	320	337	317	6.90	cps
Barium	135-1	13503	13163	12786	13151	2.73	cps
Barium	137-1	23023	23544	23063	23210	1.25	cps
Beryllium	9-1	872	763	711	782	10.51	cps
Bismuth	209-1	4661605	4614854	4601016	4625825	0.69	cps
Bismuth	209-2	2084691	2073513	2112313	2090172	0.96	cps
Bromine	81-1	30944	31432	32374	31583	2.30	cps
Cadmium	108-1	237	243	203	228	9.41	cps
Cadmium	106-1	5071	5214	4838	5041	3.77	cps
Cadmium	111-1	4421	4506	4201	4376	3.60	cps
Calcium	43-1	44301268	44490639	44846441	44546116	0.62	cps
Calcium	44-1	726693909	721827803	718661856	722394523	0.56	cps
Carbon	12-1	4433013	4347454	4259854	4346774	1.99	cps
Carbon	12-2	40061	40098	39797	39985	0.41	cps
Chlorine	35-1	146664	144600	143714	144993	1.04	cps
Chlorine	35-2	620	767	663	683	11.03	cps
Chromium	52-2	51726	52282	50743	51584	1.51	cps
Cobalt	59-2	23413	23693	22798	23301	1.96	cps
Copper	63-2	23336	23603	22615	23185	2.20	cps
Dysprosium	156-1	1013	970	1023	1002	2.83	cps
Dysprosium	156-2	297	313	343	318	7.44	cps
Erbium	164-1	1040	967	1027	1011	3.86	cps
Erbium	164-2	380	387	353	373	4.73	cps
Gadolinium	160-1	840	900	840	860	4.03	cps
Gadolinium	160-2	377	387	363	376	3.12	cps
Holmium	165-1	8927184	8743157	8657993	8776111	1.57	cps
Holmium	165-2	3385403	3407735	3413092	3402076	0.43	cps
Indium	115-1	7152615	7072893	6998334	7074614	1.09	cps
Indium	115-2	746820	749232	753873	749975	0.48	cps
Iron	54-2	58962771	59023739	58369651	58785387	0.61	cps
Iron	56-2	1095185184	1087605424	1075953531	1086248046	0.89	cps
Iron	57-2	27276001	27512804	27085466	27291424	0.78	cps
Krypton	83-1	393	433	510	446	13.31	cps
Lead	206-1	102639	101661	101258	101853	0.70	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:38:55	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	89624	87711	86899	88078	1.59	cps
Lead	208-1	407695	401510	397190	402131	1.31	cps
Lithium	6-1	2095079	2108559	2113839	2105826	0.46	cps
Magnesium	24-2	168454781	165711878	164263558	166143405	1.28	cps
Manganese	55-2	13864	13593	14324	13927	2.65	cps
Molybdenum	94-1	20812	20138	19484	20145	3.30	cps
Molybdenum	95-1	21099	20489	20118	20569	2.41	cps
Molybdenum	96-1	38336	35733	35419	36496	4.39	cps
Molybdenum	97-1	12883	11775	11525	12061	5.99	cps
Molybdenum	98-1	32017	29558	28620	30065	5.84	cps
Neodymium	150-1	527	527	463	506	7.23	cps
Neodymium	150-2	90	117	140	116	21.65	cps
Nickel	60-2	14534	14387	14674	14532	0.99	cps
Phosphorus	31-2	153	123	140	139	10.83	cps
Potassium	39-2	60108232	59813794	59527719	59816582	0.49	cps
Rhodium	103-1	6337360	6174779	6313429	6275190	1.40	cps
Rhodium	103-2	2544523	2612259	2597294	2584692	1.38	cps
Scandium	45-1	5054419	4908528	4935573	4966173	1.56	cps
Scandium	45-2	101384	101236	100763	101128	0.32	cps
Selenium	82-1	377	400	223	333	28.79	cps
Selenium	77-2	0	17	7	8	107.84	cps
Selenium	78-2	33	33	20	29	26.64	cps
Silicon	28-1	757306	718312	689118	721579	4.74	cps
Silver	107-1	4297	3797	3320	3805	12.84	cps
Silver	109-1	4037	3394	3107	3513	13.56	cps
Sodium	23-2	335772735	333913162	329970102	333218666	0.89	cps
Strontium	86-1	30303	29641	30286	30077	1.25	cps
Strontium	88-1	259649	262812	258142	260201	0.92	cps
Sulfur	34-1	536040	537366	538489	537298	0.23	cps
Terbium	159-1	9011419	9014066	8843349	8956278	1.09	cps
Terbium	159-2	3262405	3227660	3299413	3263159	1.10	cps
Thallium	203-1	2260	1940	1733	1978	13.42	cps
Thallium	205-1	5201	4611	4224	4679	10.52	cps
Tin	118-1	7489	7482	7212	7394	2.14	cps
Titanium	47-1	4944	4964	5008	4972	0.65	cps
Uranium	238-1	4097	3264	3174	3512	14.50	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:38:55	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1193	1257	1163	1205	3.96	cps
Ytterbium	172-1	1693	1793	1807	1765	3.51	cps
Ytterbium	172-2	743	740	810	764	5.17	cps
Ytterbium	176-1	2287	2400	2327	2338	2.46	cps
Ytterbium	176-2	737	657	680	691	5.95	cps
Yttrium	89-1	13869439	13855296	13682470	13802402	0.75	cps
Yttrium	89-2	1026796	1022548	1031929	1027091	0.46	cps
Zinc	66-2	57810	58202	56726	57579	1.33	cps
Zirconium	90-1	23790	23476	23961	23742	1.03	cps
Zirconium	91-1	5424	5118	5251	5264	2.92	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:46:35	DataFile Name :	013ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	53391	52682	47668	51247	6.09	cps
Antimony	121-1	6306194	6367234	6425876	6366435	0.94	cps
Arsenic	75-2	136513	136964	127373	133617	4.05	cps
Barium	135-1	734155	741933	742955	739681	0.65	cps
Barium	137-1	1279694	1274475	1285770	1279979	0.44	cps
Beryllium	9-1	699129	702791	708743	703554	0.69	cps
Bismuth	209-1	5869735	5804085	5914062	5862627	0.94	cps
Bismuth	209-2	2678998	2697503	2689185	2688562	0.34	cps
Bromine	81-1	32675	33450	32955	33027	1.19	cps
Cadmium	108-1	52520	52392	53637	52850	1.30	cps
Cadmium	106-1	77455	77120	79145	77907	1.39	cps
Cadmium	111-1	785206	782835	793099	787046	0.68	cps
Calcium	43-1	195861	198783	198024	197556	0.77	cps
Calcium	44-1	3284637	3301505	3215711	3267284	1.39	cps
Carbon	12-1	4355259	4365500	4439951	4386903	1.05	cps
Carbon	12-2	30582	30211	30922	30572	1.16	cps
Chlorine	35-1	150001	152699	152820	151840	1.05	cps
Chlorine	35-2	587	677	620	628	7.25	cps
Chromium	52-2	682155	683548	620723	662142	5.42	cps
Cobalt	59-2	1292760	1312206	1203423	1269463	4.57	cps
Copper	63-2	1029724	1028667	950834	1003075	4.51	cps
Dysprosium	156-1	23	33	33	30	19.25	cps
Dysprosium	156-2	0	3	3	2	86.60	cps
Erbium	164-1	87	77	43	69	32.94	cps
Erbium	164-2	37	20	30	29	29.04	cps
Gadolinium	160-1	107	83	90	93	12.88	cps
Gadolinium	160-2	20	10	13	14	35.26	cps
Holmium	165-1	9806130	9754632	9773457	9778073	0.27	cps
Holmium	165-2	3724948	3803230	3709912	3746030	1.34	cps
Indium	115-1	8445502	8351105	8630882	8475830	1.68	cps
Indium	115-2	882909	888563	877200	882891	0.64	cps
Iron	54-2	560892	566469	513312	546891	5.34	cps
Iron	56-2	10378702	10450939	9549207	10126283	4.95	cps
Iron	57-2	250458	252476	230294	244409	5.02	cps
Krypton	83-1	300	320	340	320	6.25	cps
Lead	206-1	4670999	4723584	4625181	4673255	1.05	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:46:35	DataFile Name :	013ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3830594	3830419	3878873	3846629	0.73	cps
Lead	208-1	17833377	17990156	17882416	17901983	0.45	cps
Lithium	6-1	2560777	2540515	2529716	2543669	0.62	cps
Magnesium	24-2	434479	438487	406728	426565	4.05	cps
Manganese	55-2	285914	291278	269395	282195	4.04	cps
Molybdenum	94-1	1493	1497	1470	1487	0.98	cps
Molybdenum	95-1	1203	1360	1093	1219	10.99	cps
Molybdenum	96-1	1600	1677	1453	1577	7.20	cps
Molybdenum	97-1	633	597	530	587	8.93	cps
Molybdenum	98-1	1653	1647	1470	1590	6.54	cps
Neodymium	150-1	93	83	47	74	33.00	cps
Neodymium	150-2	10	3	0	4	114.60	cps
Nickel	60-2	359753	357246	335117	350705	3.87	cps
Phosphorus	31-2	67	100	93	87	20.35	cps
Potassium	39-2	524388	525548	519797	523244	0.58	cps
Rhodium	103-1	8116367	8087414	8047129	8083637	0.43	cps
Rhodium	103-2	3330504	3350037	3299296	3326612	0.77	cps
Scandium	45-1	5623231	5643371	5529508	5598703	1.09	cps
Scandium	45-2	111088	111451	110655	111065	0.36	cps
Selenium	82-1	102155	101419	102960	102178	0.75	cps
Selenium	77-2	1910	1857	1750	1839	4.43	cps
Selenium	78-2	6528	6338	6248	6372	2.24	cps
Silicon	28-1	535597	536008	543344	538316	0.81	cps
Silver	107-1	2114620	2142085	2202458	2153054	2.09	cps
Silver	109-1	1996290	2016742	2021715	2011582	0.67	cps
Sodium	23-2	1584465	1612200	1562436	1586367	1.57	cps
Strontium	86-1	3087	3354	3160	3200	4.31	cps
Strontium	88-1	22595	22104	21994	22231	1.44	cps
Sulfur	34-1	621545	615594	613942	617027	0.65	cps
Terbium	159-1	10373385	9962158	10130863	10155469	2.04	cps
Terbium	159-2	3641081	3606336	3665297	3637571	0.81	cps
Thallium	203-1	5650924	5733935	5683390	5689416	0.74	cps
Thallium	205-1	13214885	13230312	13150882	13198693	0.32	cps
Tin	118-1	5465	4584	4811	4953	9.23	cps
Titanium	47-1	630	497	533	553	12.45	cps
Uranium	238-1	473	470	477	473	0.70	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:46:35	DataFile Name :	013ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	507427	509222	468701	495117	4.62	cps
Ytterbium	172-1	30	57	50	46	30.47	cps
Ytterbium	172-2	13	30	43	29	52.03	cps
Ytterbium	176-1	1397	1283	1363	1348	4.32	cps
Ytterbium	176-2	340	333	290	321	8.45	cps
Yttrium	89-1	15053214	15412861	15432581	15299552	1.40	cps
Yttrium	89-2	1120362	1138397	1128609	1129123	0.80	cps
Zinc	66-2	223271	225342	207981	218865	4.33	cps
Zirconium	90-1	2484	2230	2424	2379	5.57	cps
Zirconium	91-1	1320	1310	1297	1309	0.89	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:54:11	DataFile Name :	014LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2747	2500	2630	2626	4.70	cps
Antimony	121-1	63620	64721	64471	64271	0.90	cps
Arsenic	75-2	800	770	677	749	8.59	cps
Barium	135-1	75807	77979	77466	77084	1.47	cps
Barium	137-1	132551	134854	135460	134288	1.14	cps
Beryllium	9-1	7844	8070	7885	7933	1.52	cps
Bismuth	209-1	5823825	5772247	5804808	5800293	0.45	cps
Bismuth	209-2	2679192	2657883	2607422	2648166	1.39	cps
Bromine	81-1	34786	35117	34563	34822	0.80	cps
Cadmium	108-1	693	640	680	671	4.14	cps
Cadmium	106-1	6091	5898	6221	6070	2.68	cps
Cadmium	111-1	12018	12147	12202	12122	0.78	cps
Calcium	43-1	54579	55915	55744	55413	1.31	cps
Calcium	44-1	908718	930334	920139	919730	1.18	cps
Carbon	12-1	3932682	3844810	3794791	3857428	1.81	cps
Carbon	12-2	26243	26123	26086	26151	0.31	cps
Chlorine	35-1	131800	131756	131712	131756	0.03	cps
Chlorine	35-2	483	633	517	544	14.47	cps
Chromium	52-2	16843	16760	16139	16581	2.32	cps
Cobalt	59-2	14464	14554	14394	14471	0.55	cps
Copper	63-2	24989	24932	25319	25080	0.83	cps
Dysprosium	156-1	33	20	23	26	27.15	cps
Dysprosium	156-2	7	0	0	2	173.21	cps
Erbium	164-1	67	83	53	68	22.18	cps
Erbium	164-2	30	23	10	21	48.24	cps
Gadolinium	160-1	73	107	103	94	19.44	cps
Gadolinium	160-2	10	13	17	13	25.01	cps
Holmium	165-1	9759719	9588382	9763558	9703886	1.03	cps
Holmium	165-2	3756257	3710281	3737453	3734664	0.62	cps
Indium	115-1	8390817	8420609	8440583	8417336	0.30	cps
Indium	115-2	879281	886705	887957	884647	0.53	cps
Iron	54-2	16273	16543	16123	16313	1.31	cps
Iron	56-2	295381	295680	293122	294728	0.47	cps
Iron	57-2	7469	7142	7132	7247	2.64	cps
Krypton	83-1	337	400	337	358	10.22	cps
Lead	206-1	23344	23748	24062	23718	1.52	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:54:11	DataFile Name :	014LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	20566	20723	21221	20837	1.64	cps
Lead	208-1	94201	94260	96517	94993	1.39	cps
Lithium	6-1	2503215	2522298	2537708	2521074	0.69	cps
Magnesium	24-2	213517	214379	211215	213037	0.77	cps
Manganese	55-2	8359	8743	8726	8609	2.52	cps
Molybdenum	94-1	69647	69881	70088	69872	0.32	cps
Molybdenum	95-1	83163	83794	82325	83094	0.89	cps
Molybdenum	96-1	92522	92616	92777	92638	0.14	cps
Molybdenum	97-1	51187	51830	51629	51549	0.64	cps
Molybdenum	98-1	132543	135363	132553	133486	1.22	cps
Neodymium	150-1	10	20	20	17	34.64	cps
Neodymium	150-2	0	3	3	2	86.60	cps
Nickel	60-2	4587	4651	4581	4606	0.84	cps
Phosphorus	31-2	287	230	257	258	11.00	cps
Potassium	39-2	161222	163511	161458	162064	0.78	cps
Rhodium	103-1	8035312	8158373	8172189	8121958	0.93	cps
Rhodium	103-2	3373298	3312843	3321910	3336017	0.98	cps
Scandium	45-1	5615639	5586938	5690626	5631068	0.95	cps
Scandium	45-2	113063	113017	113537	113206	0.25	cps
Selenium	82-1	2647	2487	2530	2555	3.24	cps
Selenium	77-2	43	63	70	59	23.57	cps
Selenium	78-2	197	170	170	179	8.61	cps
Silicon	28-1	635167	625889	647896	636317	1.74	cps
Silver	107-1	41068	41389	40984	41147	0.52	cps
Silver	109-1	38347	39109	39597	39017	1.61	cps
Sodium	23-2	483543	485287	483875	484235	0.19	cps
Strontium	86-1	11401	11695	11365	11487	1.58	cps
Strontium	88-1	95605	96879	96399	96295	0.67	cps
Sulfur	34-1	632366	635229	630999	632865	0.34	cps
Terbium	159-1	10029648	10165895	10004915	10066819	0.86	cps
Terbium	159-2	3587357	3605496	3606883	3599912	0.30	cps
Thallium	203-1	27349	27396	27860	27535	1.03	cps
Thallium	205-1	63886	66444	65514	65281	1.98	cps
Tin	118-1	135654	137658	136890	136734	0.74	cps
Titanium	47-1	24351	24438	25229	24672	1.96	cps
Uranium	238-1	82428	82374	81754	82185	0.46	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 15:54:11	DataFile Name :	014LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	28812	28278	28458	28516	0.95	cps
Ytterbium	172-1	80	53	40	58	35.25	cps
Ytterbium	172-2	10	20	30	20	50.00	cps
Ytterbium	176-1	1327	1253	1330	1303	3.32	cps
Ytterbium	176-2	280	330	283	298	9.39	cps
Yttrium	89-1	15179313	15487514	15327649	15331492	1.01	cps
Yttrium	89-2	1141245	1134824	1133649	1136573	0.36	cps
Zinc	66-2	8029	7946	8256	8077	1.99	cps
Zirconium	90-1	60162	61528	60919	60870	1.12	cps
Zirconium	91-1	13360	13190	13243	13264	0.66	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:01:37	DataFile Name :	015CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	480	603	587	557	12.02	cps
Antimony	121-1	417	400	390	402	3.35	cps
Arsenic	75-2	10	0	10	7	86.60	cps
Barium	135-1	163	137	180	160	13.66	cps
Barium	137-1	267	287	307	287	6.98	cps
Beryllium	9-1	157	165	146	156	6.08	cps
Bismuth	209-1	5851324	5876224	5867722	5865090	0.22	cps
Bismuth	209-2	2676530	2648166	2653902	2659533	0.56	cps
Bromine	81-1	34633	35695	35338	35222	1.53	cps
Cadmium	108-1	20	17	13	17	20.01	cps
Cadmium	106-1	5548	5391	5158	5366	3.66	cps
Cadmium	111-1	3906	3792	3644	3781	3.47	cps
Calcium	43-1	1477	1510	1403	1463	3.73	cps
Calcium	44-1	38128	38261	38295	38228	0.23	cps
Carbon	12-1	4123632	4120708	4003837	4082725	1.67	cps
Carbon	12-2	28381	27102	27853	27778	2.31	cps
Chlorine	35-1	153224	153537	154804	153855	0.54	cps
Chlorine	35-2	593	690	547	610	11.98	cps
Chromium	52-2	1383	1433	1563	1460	6.36	cps
Cobalt	59-2	110	123	110	114	6.72	cps
Copper	63-2	2624	2590	2700	2638	2.14	cps
Dysprosium	156-1	3	17	7	9	78.08	cps
Dysprosium	156-2	3	0	0	1	173.21	cps
Erbium	164-1	60	70	70	67	8.66	cps
Erbium	164-2	17	37	23	26	39.85	cps
Gadolinium	160-1	77	70	97	81	17.11	cps
Gadolinium	160-2	3	23	27	18	71.00	cps
Holmium	165-1	9603773	9796433	9623204	9674470	1.10	cps
Holmium	165-2	3726943	3697720	3718907	3714523	0.41	cps
Indium	115-1	8713177	8601896	8564232	8626435	0.90	cps
Indium	115-2	894061	894276	888039	892125	0.40	cps
Iron	54-2	1047	1043	1007	1032	2.15	cps
Iron	56-2	13283	13240	12886	13136	1.66	cps
Iron	57-2	307	317	313	312	1.63	cps
Krypton	83-1	437	293	380	370	19.51	cps
Lead	206-1	2004	1907	1873	1928	3.50	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:01:37	DataFile Name :	015CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1547	1667	1490	1568	5.75	cps
Lead	208-1	7418	7604	7131	7384	3.23	cps
Lithium	6-1	2480064	2547620	2465592	2497759	1.75	cps
Magnesium	24-2	740	560	573	624	16.06	cps
Manganese	55-2	3030	3024	2830	2961	3.84	cps
Molybdenum	94-1	693	633	703	677	5.60	cps
Molybdenum	95-1	390	350	353	364	6.09	cps
Molybdenum	96-1	393	417	430	413	4.49	cps
Molybdenum	97-1	190	160	180	177	8.65	cps
Molybdenum	98-1	473	483	523	493	5.36	cps
Neodymium	150-1	23	7	13	14	58.06	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	870	867	947	894	5.06	cps
Phosphorus	31-2	97	107	103	102	4.98	cps
Potassium	39-2	22100	22327	22301	22243	0.56	cps
Rhodium	103-1	8171477	8180322	8171320	8174373	0.06	cps
Rhodium	103-2	3358666	3353152	3347394	3353071	0.17	cps
Scandium	45-1	5742962	5680984	5752744	5725563	0.68	cps
Scandium	45-2	115483	113970	115170	114874	0.69	cps
Selenium	82-1	-70	103	10	14	600.69	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	33	17	37	29	37.08	cps
Silicon	28-1	501052	500420	497018	499497	0.43	cps
Silver	107-1	267	307	367	313	16.06	cps
Silver	109-1	270	263	220	251	10.81	cps
Sodium	23-2	66919	67669	67455	67348	0.57	cps
Strontium	86-1	707	657	477	613	19.72	cps
Strontium	88-1	847	760	820	809	5.49	cps
Sulfur	34-1	662621	663500	661140	662421	0.18	cps
Terbium	159-1	9969393	9935975	9981651	9962340	0.24	cps
Terbium	159-2	3598270	3685845	3566061	3616725	1.71	cps
Thallium	203-1	503	437	443	461	7.96	cps
Thallium	205-1	1133	1037	1060	1077	4.69	cps
Tin	118-1	4938	5074	5138	5050	2.03	cps
Titanium	47-1	383	407	390	393	3.06	cps
Uranium	238-1	203	163	157	174	14.47	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:01:37	DataFile Name :	015CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	17	23	10	17	39.99	cps
Ytterbium	172-1	77	47	70	64	24.44	cps
Ytterbium	172-2	23	13	10	16	44.60	cps
Ytterbium	176-1	1243	1390	1207	1280	7.58	cps
Ytterbium	176-2	247	327	277	283	14.27	cps
Yttrium	89-1	15986829	15614978	15396364	15666057	1.91	cps
Yttrium	89-2	1151533	1143895	1139946	1145125	0.51	cps
Zinc	66-2	2377	2060	2010	2149	9.25	cps
Zirconium	90-1	1437	1370	1453	1420	3.11	cps
Zirconium	91-1	330	270	263	288	12.76	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:05:01	DataFile Name :	016ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	10280761	10229663	10212836	10241087	0.35	cps
Antimony	121-1	33604	34580	33675	33953	1.60	cps
Arsenic	75-2	207	160	187	184	12.69	cps
Barium	135-1	10828	10874	10968	10890	0.65	cps
Barium	137-1	18229	18459	17922	18203	1.48	cps
Beryllium	9-1	2098	1970	2071	2046	3.30	cps
Bismuth	209-1	5268680	5260041	5318499	5282407	0.60	cps
Bismuth	209-2	2360261	2344952	2373669	2359628	0.61	cps
Bromine	81-1	35732	36414	37336	36494	2.21	cps
Cadmium	108-1	8780	8653	8830	8754	1.04	cps
Cadmium	106-1	5121	4931	5261	5104	3.25	cps
Cadmium	111-1	7670	7442	7806	7639	2.41	cps
Calcium	43-1	10567442	10504515	10661380	10577779	0.75	cps
Calcium	44-1	169445374	169833951	172266557	170515294	0.90	cps
Carbon	12-1	58449554	60310082	59792594	59517410	1.61	cps
Carbon	12-2	407866	409854	403003	406908	0.87	cps
Chlorine	35-1	134168911	142170728	146843971	141061203	4.54	cps
Chlorine	35-2	644737	646856	647409	646334	0.22	cps
Chromium	52-2	137557	135313	135481	136117	0.92	cps
Cobalt	59-2	14708	14374	14080	14387	2.18	cps
Copper	63-2	75703	75794	75801	75766	0.07	cps
Dysprosium	156-1	133	120	127	127	5.27	cps
Dysprosium	156-2	37	47	53	46	18.41	cps
Erbium	164-1	157	133	183	158	15.86	cps
Erbium	164-2	60	57	77	64	16.63	cps
Gadolinium	160-1	177	150	153	160	9.08	cps
Gadolinium	160-2	43	70	73	62	26.43	cps
Holmium	165-1	9479379	9608346	9701774	9596500	1.16	cps
Holmium	165-2	3522794	3558592	3559073	3546820	0.59	cps
Indium	115-1	8038853	7905284	8119391	8021176	1.35	cps
Indium	115-2	804530	807854	805473	805952	0.21	cps
Iron	54-2	28141603	27735003	28064663	27980423	0.77	cps
Iron	56-2	518354006	517650859	523313379	519772748	0.59	cps
Iron	57-2	13148902	13192368	13154293	13165188	0.18	cps
Krypton	83-1	340	383	373	366	6.21	cps
Lead	206-1	99790	97144	97795	98243	1.40	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:05:01	DataFile Name :	016ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	77513	76256	76413	76728	0.89	cps
Lead	208-1	369491	363842	363323	365552	0.94	cps
Lithium	6-1	2240845	2371618	2352108	2321524	3.04	cps
Magnesium	24-2	37127302	37102345	36691224	36973624	0.66	cps
Manganese	55-2	24381	23837	23883	24034	1.26	cps
Molybdenum	94-1	18552696	18873842	18342091	18589543	1.44	cps
Molybdenum	95-1	32538117	32992411	32818832	32783120	0.70	cps
Molybdenum	96-1	34903433	35476944	35591861	35324079	1.04	cps
Molybdenum	97-1	19846066	20544056	20045933	20145351	1.78	cps
Molybdenum	98-1	51891929	53332934	52295278	52506714	1.42	cps
Neodymium	150-1	117	153	113	128	17.37	cps
Neodymium	150-2	27	37	43	36	23.58	cps
Nickel	60-2	18933	19110	18886	18976	0.62	cps
Phosphorus	31-2	572519	574472	571915	572968	0.23	cps
Potassium	39-2	27029843	27048315	26755096	26944418	0.61	cps
Rhodium	103-1	7192097	7390323	7237074	7273165	1.43	cps
Rhodium	103-2	2986766	2969526	2898832	2951708	1.58	cps
Scandium	45-1	5516189	5517705	5512905	5515599	0.04	cps
Scandium	45-2	108845	108526	108744	108705	0.15	cps
Selenium	82-1	147	33	117	99	59.38	cps
Selenium	77-2	3	0	7	3	100.05	cps
Selenium	78-2	67	30	37	44	43.95	cps
Silicon	28-1	1002730	973105	956540	977458	2.39	cps
Silver	107-1	2464	2300	2194	2319	5.86	cps
Silver	109-1	2277	2317	2154	2249	3.79	cps
Sodium	23-2	79648767	78732795	79515175	79298913	0.62	cps
Strontium	86-1	349493	352695	352281	351490	0.50	cps
Strontium	88-1	3226421	3279505	3255041	3253655	0.82	cps
Sulfur	34-1	13188384	13032780	13084834	13102000	0.60	cps
Terbium	159-1	9585964	9765820	9677497	9676427	0.93	cps
Terbium	159-2	3464471	3451551	3483742	3466588	0.47	cps
Thallium	203-1	2924	3984	4497	3802	21.11	cps
Thallium	205-1	6989	9610	10721	9107	21.05	cps
Tin	118-1	8679	8713	9050	8814	2.32	cps
Titanium	47-1	9764081	9671568	9528129	9654593	1.23	cps
Uranium	238-1	1357	1520	1560	1479	7.28	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:05:01	DataFile Name :	016ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	830	743	710	761	8.14	cps
Ytterbium	172-1	83	87	123	98	22.70	cps
Ytterbium	172-2	43	33	30	36	19.51	cps
Ytterbium	176-1	1283	1213	1130	1209	6.35	cps
Ytterbium	176-2	230	310	223	254	18.95	cps
Yttrium	89-1	14957789	15191813	15386167	15178589	1.41	cps
Yttrium	89-2	1092953	1076291	1079067	1082770	0.82	cps
Zinc	66-2	15592	16707	16226	16175	3.46	cps
Zirconium	90-1	2574	2704	2724	2667	3.05	cps
Zirconium	91-1	653	607	680	647	5.74	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:12:29	DataFile Name :	018ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	9971694	9938014	9887762	9932490	0.43	cps
Antimony	121-1	608475	613318	612643	611479	0.43	cps
Arsenic	75-2	13086	13210	13183	13160	0.49	cps
Barium	135-1	153336	151809	153135	152760	0.54	cps
Barium	137-1	259116	267430	267212	264586	1.79	cps
Beryllium	9-1	132954	133225	134448	133542	0.60	cps
Bismuth	209-1	5266413	5179849	5346076	5264113	1.58	cps
Bismuth	209-2	2345027	2291218	2336661	2324302	1.25	cps
Bromine	81-1	38516	37904	38824	38415	1.22	cps
Cadmium	108-1	18112	17732	18212	18019	1.41	cps
Cadmium	106-1	17595	18272	17721	17863	2.02	cps
Cadmium	111-1	150549	151396	151474	151140	0.34	cps
Calcium	43-1	10202477	10004574	10062012	10089688	1.01	cps
Calcium	44-1	164899584	163115308	163893744	163969545	0.55	cps
Carbon	12-1	57914104	60512637	59521261	59316001	2.21	cps
Carbon	12-2	411098	409576	410708	410461	0.19	cps
Chlorine	35-1	142084675	150351161	151389864	147941900	3.45	cps
Chlorine	35-2	659339	655712	661963	659005	0.48	cps
Chromium	52-2	264149	265985	264599	264911	0.36	cps
Cobalt	59-2	259640	256726	258352	258239	0.57	cps
Copper	63-2	265337	267776	264060	265724	0.71	cps
Dysprosium	156-1	113	157	107	126	21.62	cps
Dysprosium	156-2	27	43	60	43	38.46	cps
Erbium	164-1	167	157	130	151	12.54	cps
Erbium	164-2	50	43	33	42	19.87	cps
Gadolinium	160-1	207	160	163	177	14.74	cps
Gadolinium	160-2	53	70	40	54	27.61	cps
Holmium	165-1	9455926	9470508	9343691	9423375	0.74	cps
Holmium	165-2	3543520	3522129	3493997	3519882	0.71	cps
Indium	115-1	7900123	7899005	7844481	7881203	0.40	cps
Indium	115-2	802566	804828	804344	803913	0.15	cps
Iron	54-2	26893673	27180290	27248167	27107377	0.69	cps
Iron	56-2	502840233	502857993	506211126	503969784	0.39	cps
Iron	57-2	12562636	12650421	12838799	12683952	1.11	cps
Krypton	83-1	397	427	407	410	3.73	cps
Lead	206-1	484084	486373	490377	486945	0.65	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:12:29	DataFile Name :	018ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	398285	410654	409403	406114	1.68	cps
Lead	208-1	1857623	1881751	1903128	1880834	1.21	cps
Lithium	6-1	2272782	2386298	2359328	2339469	2.54	cps
Magnesium	24-2	36036979	36188724	36081201	36102301	0.22	cps
Manganese	55-2	80529	80324	80569	80474	0.16	cps
Molybdenum	94-1	18098667	17679287	17908946	17895633	1.17	cps
Molybdenum	95-1	31535023	31139949	31154181	31276384	0.72	cps
Molybdenum	96-1	34136510	33728495	33854548	33906518	0.62	cps
Molybdenum	97-1	19234471	19253210	19328098	19271926	0.26	cps
Molybdenum	98-1	50612413	50693568	50141109	50482363	0.59	cps
Neodymium	150-1	150	143	150	148	2.60	cps
Neodymium	150-2	43	27	33	34	24.35	cps
Nickel	60-2	85072	84100	83047	84073	1.20	cps
Phosphorus	31-2	556216	556042	559165	557141	0.31	cps
Potassium	39-2	26385681	26205599	26186795	26259358	0.42	cps
Rhodium	103-1	7161249	7324404	7204593	7230082	1.17	cps
Rhodium	103-2	3039135	2973359	2943464	2985319	1.64	cps
Scandium	45-1	5510631	5572945	5631161	5571579	1.08	cps
Scandium	45-2	110303	110477	110561	110447	0.12	cps
Selenium	82-1	9837	9881	9497	9738	2.16	cps
Selenium	77-2	157	183	203	181	12.93	cps
Selenium	78-2	630	570	657	619	7.17	cps
Silicon	28-1	874356	990563	974202	946374	6.65	cps
Silver	107-1	703302	707355	711535	707398	0.58	cps
Silver	109-1	662409	672767	681294	672157	1.41	cps
Sodium	23-2	78347116	76835879	77791617	77658204	0.98	cps
Strontium	86-1	338539	337808	342139	339495	0.68	cps
Strontium	88-1	3179429	3136241	3139195	3151622	0.77	cps
Sulfur	34-1	12839964	12775333	12803961	12806419	0.25	cps
Terbium	159-1	9646654	9921922	9736482	9768353	1.44	cps
Terbium	159-2	3506571	3451898	3422554	3460341	1.23	cps
Thallium	203-1	482845	499975	499941	494254	2.00	cps
Thallium	205-1	1167631	1188788	1184937	1180452	0.95	cps
Tin	118-1	8953	8953	8793	8900	1.04	cps
Titanium	47-1	9399348	9225226	9393220	9339265	1.06	cps
Uranium	238-1	2334	2420	2430	2395	2.22	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:12:29	DataFile Name :	018ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	102386	101244	102433	102021	0.66	cps
Ytterbium	172-1	87	77	90	84	8.22	cps
Ytterbium	172-2	30	43	43	39	19.79	cps
Ytterbium	176-1	1390	1160	1253	1268	9.12	cps
Ytterbium	176-2	230	267	297	264	12.63	cps
Yttrium	89-1	14757644	14803762	15196796	14919401	1.62	cps
Yttrium	89-2	1073927	1083768	1081112	1079602	0.47	cps
Zinc	66-2	34398	34378	34672	34483	0.48	cps
Zirconium	90-1	3397	3574	3717	3563	4.50	cps
Zirconium	91-1	867	897	927	897	3.35	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:15:41	DataFile Name :	019CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5499403	5565419	5603928	5556250	0.95	cps
Antimony	121-1	14246276	14848724	14873211	14656070	2.42	cps
Arsenic	75-2	321872	325142	327520	324845	0.87	cps
Barium	135-1	17730765	17960086	18177700	17956184	1.24	cps
Barium	137-1	30802960	30851398	30929217	30861191	0.21	cps
Beryllium	9-1	3069195	3142426	3211823	3141148	2.27	cps
Bismuth	209-1	4890159	5027304	5052946	4990136	1.75	cps
Bismuth	209-2	2203175	2215974	2268553	2229234	1.55	cps
Bromine	81-1	36417	38309	37400	37375	2.53	cps
Cadmium	108-1	277512	284711	279655	280626	1.32	cps
Cadmium	106-1	397935	404692	404028	402218	0.93	cps
Cadmium	111-1	3572037	3622917	3676121	3623692	1.44	cps
Calcium	43-1	24469601	24678417	25100135	24749385	1.30	cps
Calcium	44-1	394187247	401226021	407616527	401009932	1.68	cps
Carbon	12-1	5205954	5169572	5319637	5231721	1.50	cps
Carbon	12-2	41615	42745	42003	42121	1.36	cps
Chlorine	35-1	6214067	5896521	5594748	5901779	5.25	cps
Chlorine	35-2	21523	20391	19123	20346	5.90	cps
Chromium	52-2	3503062	3520172	3484072	3502435	0.52	cps
Cobalt	59-2	5997306	6206577	6006903	6070262	1.95	cps
Copper	63-2	45644466	46140638	45325534	45703546	0.90	cps
Dysprosium	156-1	800	900	643	781	16.56	cps
Dysprosium	156-2	150	220	177	182	19.39	cps
Erbium	164-1	663	680	703	682	2.95	cps
Erbium	164-2	220	250	223	231	7.11	cps
Gadolinium	160-1	583	590	470	548	12.31	cps
Gadolinium	160-2	200	243	210	218	10.42	cps
Holmium	165-1	8946763	9144584	9186385	9092577	1.41	cps
Holmium	165-2	3390759	3561086	3524937	3492261	2.57	cps
Indium	115-1	7393924	7515759	7432693	7447459	0.84	cps
Indium	115-2	751785	754272	758772	754943	0.47	cps
Iron	54-2	33649354	33353098	34356342	33786265	1.53	cps
Iron	56-2	625735684	631070311	627728511	628178168	0.43	cps
Iron	57-2	15606016	16099444	15642626	15782696	1.74	cps
Krypton	83-1	437	487	440	454	6.15	cps
Lead	206-1	48510463	49744373	50389446	49548094	1.93	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:15:41	DataFile Name :	019CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	41558123	42568830	42711154	42279369	1.49	cps
Lead	208-1	192166454	196224938	197364215	195251869	1.40	cps
Lithium	6-1	2195585	2255452	2264623	2238553	1.67	cps
Magnesium	24-2	92482835	95460429	94224015	94055760	1.59	cps
Manganese	55-2	14577720	14659163	14690429	14642437	0.40	cps
Molybdenum	94-1	53348251	54388654	55522083	54419663	2.00	cps
Molybdenum	95-1	78006776	77968701	78750487	78241988	0.56	cps
Molybdenum	96-1	84923030	85264352	86242025	85476469	0.80	cps
Molybdenum	97-1	47197496	47882549	48399916	47826654	1.26	cps
Molybdenum	98-1	124533511	125634688	128240308	126136169	1.51	cps
Neodymium	150-1	1333	1337	1430	1367	4.02	cps
Neodymium	150-2	133	110	147	130	14.28	cps
Nickel	60-2	1718399	1727365	1681767	1709177	1.41	cps
Phosphorus	31-2	55573	55626	55131	55443	0.49	cps
Potassium	39-2	34098775	33761505	34112070	33990783	0.58	cps
Rhodium	103-1	6814189	6854874	6897070	6855378	0.60	cps
Rhodium	103-2	2853342	2891236	2816709	2853762	1.31	cps
Scandium	45-1	5389189	5440878	5463797	5431288	0.70	cps
Scandium	45-2	114488	113988	114508	114328	0.26	cps
Selenium	82-1	214577	221715	218510	218268	1.64	cps
Selenium	77-2	4221	4324	4464	4336	2.82	cps
Selenium	78-2	14221	13960	14224	14135	1.07	cps
Silicon	28-1	27176532	27497805	27843931	27506089	1.21	cps
Silver	107-1	18077141	18282512	17951918	18103857	0.92	cps
Silver	109-1	16891096	17204343	17195948	17097129	1.04	cps
Sodium	23-2	186807044	187196164	187598284	187200497	0.21	cps
Strontium	86-1	4929483	5055835	5181389	5055569	2.49	cps
Strontium	88-1	44240964	44890931	44798066	44643320	0.79	cps
Sulfur	34-1	1818391	1862451	1867281	1849374	1.46	cps
Terbium	159-1	9479690	9408338	9588811	9492280	0.96	cps
Terbium	159-2	3452884	3388776	3400237	3413965	1.00	cps
Thallium	203-1	11952278	12139606	12376248	12156044	1.75	cps
Thallium	205-1	28008940	28634577	29452165	28698560	2.52	cps
Tin	118-1	11914778	12173974	12325321	12138024	1.71	cps
Titanium	47-1	22019974	22503046	22638026	22387015	1.45	cps
Uranium	238-1	38174889	38344895	38808388	38442724	0.85	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:15:41	DataFile Name :	019CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2664111	2674556	2706057	2681575	0.81	cps
Ytterbium	172-1	950	1017	910	959	5.62	cps
Ytterbium	172-2	437	483	510	477	7.79	cps
Ytterbium	176-1	58961	60199	60883	60014	1.62	cps
Ytterbium	176-2	22302	22556	22686	22515	0.87	cps
Yttrium	89-1	14247294	14786657	14617302	14550418	1.90	cps
Yttrium	89-2	1079454	1087341	1093294	1086697	0.64	cps
Zinc	66-2	5119655	5124484	5203069	5149069	0.91	cps
Zirconium	90-1	26957078	27552370	27789551	27433000	1.56	cps
Zirconium	91-1	5965308	6099737	6143152	6069399	1.53	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:18:24	DataFile Name :	020CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2504	2360	2457	2440	3.00	cps
Antimony	121-1	4004	3370	2887	3420	16.38	cps
Arsenic	75-2	3	13	20	12	68.66	cps
Barium	135-1	813	530	447	597	32.21	cps
Barium	137-1	1177	900	853	977	17.90	cps
Beryllium	9-1	448	415	387	417	7.41	cps
Bismuth	209-1	6023493	5948676	5930617	5967595	0.83	cps
Bismuth	209-2	2643336	2660860	2669829	2658008	0.51	cps
Bromine	81-1	35485	36003	35512	35666	0.82	cps
Cadmium	108-1	50	30	13	31	59.02	cps
Cadmium	106-1	5635	5358	5671	5555	3.09	cps
Cadmium	111-1	4169	3923	4121	4071	3.21	cps
Calcium	43-1	2104	1990	1830	1975	6.96	cps
Calcium	44-1	51747	47398	46301	48482	5.94	cps
Carbon	12-1	4603743	4578428	4629728	4603966	0.56	cps
Carbon	12-2	31323	31574	31611	31503	0.50	cps
Chlorine	35-1	2974335	2779961	2666753	2807016	5.54	cps
Chlorine	35-2	10324	10037	9710	10024	3.06	cps
Chromium	52-2	1553	1780	1677	1670	6.80	cps
Cobalt	59-2	183	160	210	184	13.56	cps
Copper	63-2	3934	4114	3847	3965	3.43	cps
Dysprosium	156-1	20	7	13	13	49.99	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	70	63	77	70	9.53	cps
Erbium	164-2	27	30	17	24	28.38	cps
Gadolinium	160-1	97	100	83	93	9.45	cps
Gadolinium	160-2	10	13	13	12	15.73	cps
Holmium	165-1	10010416	9909605	9988781	9969601	0.53	cps
Holmium	165-2	3753837	3754428	3711593	3739953	0.66	cps
Indium	115-1	8827238	8757888	8796222	8793783	0.40	cps
Indium	115-2	897550	891641	895496	894896	0.34	cps
Iron	54-2	1740	1737	1640	1706	3.33	cps
Iron	56-2	28191	26401	25947	26847	4.42	cps
Iron	57-2	623	653	647	641	2.46	cps
Krypton	83-1	297	310	430	346	21.25	cps
Lead	206-1	5618	4748	4641	5002	10.72	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:18:24	DataFile Name :	020CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4851	4124	3961	4312	10.99	cps
Lead	208-1	22084	18889	18028	19667	10.87	cps
Lithium	6-1	2508755	2481086	2615365	2535069	2.80	cps
Magnesium	24-2	2070	1913	2020	2001	4.00	cps
Manganese	55-2	2784	3017	2780	2860	4.74	cps
Molybdenum	94-1	3604	2940	2537	3027	17.80	cps
Molybdenum	95-1	3794	2884	2680	3119	19.01	cps
Molybdenum	96-1	4221	3214	2764	3399	21.95	cps
Molybdenum	97-1	2320	1603	1400	1775	27.24	cps
Molybdenum	98-1	6025	4421	3777	4741	24.41	cps
Neodymium	150-1	17	7	10	11	45.82	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	890	913	923	909	1.88	cps
Phosphorus	31-2	83	113	113	103	16.76	cps
Potassium	39-2	27012	27366	27322	27233	0.71	cps
Rhodium	103-1	8315584	8264524	8345215	8308441	0.49	cps
Rhodium	103-2	3349634	3389646	3386198	3375159	0.66	cps
Scandium	45-1	5751930	5968948	6080061	5933646	2.81	cps
Scandium	45-2	118547	116591	117179	117439	0.85	cps
Selenium	82-1	57	107	-47	39	201.08	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	27	40	50	39	30.10	cps
Silicon	28-1	549035	548061	549618	548905	0.14	cps
Silver	107-1	3041	2000	1927	2323	26.83	cps
Silver	109-1	2187	1780	1607	1858	16.03	cps
Sodium	23-2	93125	91444	90780	91783	1.32	cps
Strontium	86-1	707	773	720	733	4.81	cps
Strontium	88-1	2150	1520	1577	1749	19.93	cps
Sulfur	34-1	670614	672068	676080	672921	0.42	cps
Terbium	159-1	10393820	10370466	10259749	10341345	0.69	cps
Terbium	159-2	3654475	3597759	3637012	3629749	0.80	cps
Thallium	203-1	2330	2124	1957	2137	8.75	cps
Thallium	205-1	5711	5058	4624	5131	10.67	cps
Tin	118-1	5705	5401	13200	8102	54.53	cps
Titanium	47-1	1403	1053	1107	1188	15.88	cps
Uranium	238-1	1457	1030	857	1115	27.71	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:18:24	DataFile Name :	020CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	70	90	113	91	23.80	cps
Ytterbium	172-1	53	43	63	53	18.75	cps
Ytterbium	172-2	30	30	23	28	13.86	cps
Ytterbium	176-1	1437	1227	1293	1319	8.14	cps
Ytterbium	176-2	277	267	293	279	4.83	cps
Yttrium	89-1	16090444	15580160	16176594	15949066	2.02	cps
Yttrium	89-2	1149333	1152327	1140826	1147495	0.52	cps
Zinc	66-2	2084	2120	2260	2155	4.33	cps
Zirconium	90-1	3887	3350	3494	3577	7.77	cps
Zirconium	91-1	883	747	743	791	10.10	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:32:49	DataFile Name :	024LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2837	2687	2684	2736	3.20	cps
Antimony	121-1	62182	61802	62894	62293	0.89	cps
Arsenic	75-2	813	760	727	767	5.70	cps
Barium	135-1	74618	74621	75961	75066	1.03	cps
Barium	137-1	129089	129379	130307	129592	0.49	cps
Beryllium	9-1	7526	7465	7572	7521	0.71	cps
Bismuth	209-1	5801486	5711717	5843800	5785667	1.17	cps
Bismuth	209-2	2644721	2637029	2584042	2621931	1.26	cps
Bromine	81-1	36812	35846	36721	36460	1.46	cps
Cadmium	108-1	693	677	650	673	3.25	cps
Cadmium	106-1	6108	6575	6425	6369	3.74	cps
Cadmium	111-1	12193	12315	12088	12199	0.93	cps
Calcium	43-1	56601	56641	57049	56764	0.44	cps
Calcium	44-1	927584	938776	935280	933880	0.61	cps
Carbon	12-1	4456767	4370283	4348569	4391873	1.30	cps
Carbon	12-2	29724	28995	29019	29246	1.42	cps
Chlorine	35-1	575503	569243	560181	568309	1.36	cps
Chlorine	35-2	2334	2334	2227	2298	2.68	cps
Chromium	52-2	17057	16343	16219	16540	2.73	cps
Cobalt	59-2	14601	14054	14404	14353	1.93	cps
Copper	63-2	24859	24815	24318	24664	1.22	cps
Dysprosium	156-1	20	10	33	21	55.45	cps
Dysprosium	156-2	7	3	7	6	34.70	cps
Erbium	164-1	80	70	77	76	6.74	cps
Erbium	164-2	30	27	20	26	19.92	cps
Gadolinium	160-1	127	70	90	96	30.08	cps
Gadolinium	160-2	20	27	33	27	24.99	cps
Holmium	165-1	9863928	9857978	9917355	9879754	0.33	cps
Holmium	165-2	3663216	3640920	3617572	3640569	0.63	cps
Indium	115-1	8676335	8474038	8861169	8670514	2.23	cps
Indium	115-2	873855	874017	871593	873155	0.16	cps
Iron	54-2	16446	15785	16059	16097	2.06	cps
Iron	56-2	290610	285173	283256	286346	1.33	cps
Iron	57-2	6892	7215	7242	7116	2.74	cps
Krypton	83-1	340	340	307	329	5.85	cps
Lead	206-1	22025	22416	23007	22483	2.20	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:32:49	DataFile Name :	024LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	19011	19425	19622	19352	1.61	cps
Lead	208-1	88355	88571	89928	88952	0.96	cps
Lithium	6-1	2430807	2445904	2519043	2465251	1.91	cps
Magnesium	24-2	216475	216881	214275	215877	0.65	cps
Manganese	55-2	8790	8779	8826	8798	0.28	cps
Molybdenum	94-1	67312	67995	67720	67676	0.51	cps
Molybdenum	95-1	79958	80149	80434	80181	0.30	cps
Molybdenum	96-1	89801	90241	91720	90587	1.11	cps
Molybdenum	97-1	49127	49003	49578	49236	0.62	cps
Molybdenum	98-1	128250	130023	131220	129831	1.15	cps
Neodymium	150-1	30	17	20	22	31.22	cps
Neodymium	150-2	7	7	3	6	34.70	cps
Nickel	60-2	5670	4474	4657	4934	13.06	cps
Phosphorus	31-2	337	253	260	283	16.34	cps
Potassium	39-2	168265	162079	163399	164581	1.98	cps
Rhodium	103-1	8202967	8112249	8242713	8185976	0.82	cps
Rhodium	103-2	3386513	3335422	3271029	3330988	1.74	cps
Scandium	45-1	5822721	6016638	5916276	5918545	1.64	cps
Scandium	45-2	118507	117811	118050	118122	0.30	cps
Selenium	82-1	2434	2587	2544	2521	3.14	cps
Selenium	77-2	47	47	60	51	15.06	cps
Selenium	78-2	250	187	187	208	17.60	cps
Silicon	28-1	655494	670812	664924	663743	1.16	cps
Silver	107-1	39433	40900	41282	40538	2.41	cps
Silver	109-1	37471	37397	39179	38016	2.65	cps
Sodium	23-2	517133	513423	508759	513105	0.82	cps
Strontium	86-1	11371	11321	11408	11367	0.38	cps
Strontium	88-1	93823	95608	93521	94317	1.20	cps
Sulfur	34-1	720479	712828	710693	714667	0.72	cps
Terbium	159-1	10198515	10183357	9873545	10085139	1.82	cps
Terbium	159-2	3595441	3519655	3516845	3543980	1.26	cps
Thallium	203-1	25916	25615	25482	25671	0.87	cps
Thallium	205-1	61883	65110	62125	63039	2.85	cps
Tin	118-1	132370	135031	134524	133975	1.05	cps
Titanium	47-1	24982	24705	24955	24881	0.61	cps
Uranium	238-1	78108	78759	79154	78673	0.67	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:32:49	DataFile Name :	024LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	28091	27860	27730	27894	0.65	cps
Ytterbium	172-1	40	60	17	39	55.76	cps
Ytterbium	172-2	27	23	20	23	14.29	cps
Ytterbium	176-1	1367	1323	1360	1350	1.73	cps
Ytterbium	176-2	257	260	287	268	6.14	cps
Yttrium	89-1	15637511	15932176	15888015	15819234	1.00	cps
Yttrium	89-2	1134424	1141258	1143061	1139581	0.40	cps
Zinc	66-2	7816	7916	7809	7847	0.76	cps
Zirconium	90-1	59054	59737	58703	59165	0.89	cps
Zirconium	91-1	13050	13036	13343	13143	1.32	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1816-01	Instrumnet Name :	P8
Client Sample ID :	441	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:36:13	DataFile Name :	025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	189555	188275	189362	189064	0.37	cps
Antimony	121-1	164406	164797	165573	164925	0.36	cps
Arsenic	75-2	8816	8613	8813	8747	1.33	cps
Barium	135-1	574541	581708	579161	578470	0.63	cps
Barium	137-1	994111	995918	1011666	1000565	0.97	cps
Beryllium	9-1	1392	1432	1475	1433	2.90	cps
Bismuth	209-1	5290765	5296746	5343457	5310323	0.54	cps
Bismuth	209-2	2391216	2347081	2401463	2379920	1.21	cps
Bromine	81-1	110468	115356	116734	114186	2.88	cps
Cadmium	108-1	4361	4001	4001	4121	5.05	cps
Cadmium	106-1	11421	11285	11155	11287	1.18	cps
Cadmium	111-1	45516	46050	46647	46071	1.23	cps
Calcium	43-1	2549725	2516592	2530854	2532391	0.66	cps
Calcium	44-1	40964891	41337069	40940109	41080690	0.54	cps
Carbon	12-1	139578881	145117468	146327538	143674629	2.50	cps
Carbon	12-2	871427	895389	883774	883530	1.36	cps
Chlorine	35-1	15905273	17489953	18249896	17215041	6.95	cps
Chlorine	35-2	81407	82755	83157	82440	1.11	cps
Chromium	52-2	74278	75257	72563	74032	1.84	cps
Cobalt	59-2	98179	99004	97766	98316	0.64	cps
Copper	63-2	4960708	4875082	4815726	4883839	1.49	cps
Dysprosium	156-1	20015	20382	20366	20254	1.02	cps
Dysprosium	156-2	7175	7109	7255	7180	1.02	cps
Erbium	164-1	15816	16323	16310	16150	1.79	cps
Erbium	164-2	5548	5768	5688	5668	1.97	cps
Gadolinium	160-1	19461	19791	19054	19435	1.90	cps
Gadolinium	160-2	8043	8133	8243	8139	1.23	cps
Holmium	165-1	9703850	9371148	9556590	9543863	1.75	cps
Holmium	165-2	3639073	3611680	3584471	3611741	0.76	cps
Indium	115-1	8112929	8023771	8116606	8084435	0.65	cps
Indium	115-2	821061	811415	827817	820098	1.01	cps
Iron	54-2	1160677	1163481	1163825	1162661	0.15	cps
Iron	56-2	22637296	22784670	22453932	22625300	0.73	cps
Iron	57-2	539860	542902	534521	539094	0.79	cps
Krypton	83-1	443	407	343	398	12.72	cps
Lead	206-1	274119143	285291736	284517769	281309549	2.22	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1816-01	Instrumnet Name :	P8
Client Sample ID :	441	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:36:13	DataFile Name :	025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	227905197	233109237	236466610	232493681	1.86	cps
Lead	208-1	1058026451	1091044950	1103933650	1084335017	2.18	cps
Lithium	6-1	2275672	2327798	2354351	2319274	1.73	cps
Magnesium	24-2	2202147	2210406	2190231	2200928	0.46	cps
Manganese	55-2	1499703	1499491	1493796	1497663	0.22	cps
Molybdenum	94-1	168096	169629	169825	169183	0.56	cps
Molybdenum	95-1	66659	67205	66290	66718	0.69	cps
Molybdenum	96-1	88855	88308	90217	89127	1.10	cps
Molybdenum	97-1	39376	38697	39272	39115	0.93	cps
Molybdenum	98-1	101333	98413	100648	100131	1.53	cps
Neodymium	150-1	31624	32001	32600	32075	1.53	cps
Neodymium	150-2	8529	8596	8403	8509	1.15	cps
Nickel	60-2	87387	86930	87067	87128	0.27	cps
Phosphorus	31-2	385701	390247	385034	386994	0.73	cps
Potassium	39-2	72175396	71918749	70371916	71488687	1.36	cps
Rhodium	103-1	7702103	7433371	7584551	7573341	1.78	cps
Rhodium	103-2	3105453	3104980	3032029	3080820	1.37	cps
Scandium	45-1	5929048	5750358	5823268	5834225	1.54	cps
Scandium	45-2	111304	108204	110121	109876	1.42	cps
Selenium	82-1	447	523	487	486	7.90	cps
Selenium	77-2	40	53	37	43	20.34	cps
Selenium	78-2	93	63	77	78	19.33	cps
Silicon	28-1	316330475	316848822	320819915	317999737	0.77	cps
Silver	107-1	25671	25537	26108	25772	1.16	cps
Silver	109-1	23597	23119	24158	23625	2.20	cps
Sodium	23-2	137562998	136946155	136072945	136860699	0.55	cps
Strontium	86-1	992171	1010077	1017964	1006737	1.31	cps
Strontium	88-1	9143457	9312419	9241997	9232625	0.92	cps
Sulfur	34-1	9907293	9877848	9849592	9878244	0.29	cps
Terbium	159-1	9929702	9808268	9943319	9893763	0.75	cps
Terbium	159-2	3496680	3496169	3497994	3496948	0.03	cps
Thallium	203-1	1640	1190	1130	1320	21.12	cps
Thallium	205-1	3674	2947	2887	3169	13.82	cps
Tin	118-1	140283	141146	141344	140924	0.40	cps
Titanium	47-1	387437	390954	379943	386111	1.46	cps
Uranium	238-1	46428	46124	47321	46624	1.33	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1816-01	Instrumnet Name :	P8
Client Sample ID :	441	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:36:13	DataFile Name :	025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	78373	78544	77662	78193	0.60	cps
Ytterbium	172-1	6375	6442	6732	6516	2.91	cps
Ytterbium	172-2	2624	2754	2940	2773	5.74	cps
Ytterbium	176-1	6045	5831	5845	5907	2.02	cps
Ytterbium	176-2	2344	2244	2287	2291	2.19	cps
Yttrium	89-1	15489257	15341185	15522513	15450985	0.62	cps
Yttrium	89-2	1132632	1105491	1124189	1120770	1.24	cps
Zinc	66-2	7593817	7588504	7446893	7543071	1.10	cps
Zirconium	90-1	362364	362402	364678	363148	0.36	cps
Zirconium	91-1	80115	82061	80752	80976	1.23	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-05	Instrumnet Name :	P8
Client Sample ID :	3828	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:39:27	DataFile Name :	026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1067193	1090523	1081372	1079696	1.09	cps
Antimony	121-1	618943	626461	628611	624672	0.81	cps
Arsenic	75-2	54759	54619	54311	54563	0.42	cps
Barium	135-1	1791717	1801819	1804633	1799390	0.38	cps
Barium	137-1	2984056	3056883	3096707	3045882	1.88	cps
Beryllium	9-1	7909	8041	7874	7941	1.11	cps
Bismuth	209-1	5500459	5459201	5464673	5474778	0.41	cps
Bismuth	209-2	2629716	2529838	2535870	2565141	2.18	cps
Bromine	81-1	120381	125573	129535	125163	3.67	cps
Cadmium	108-1	8736	8836	8860	8811	0.74	cps
Cadmium	106-1	25504	25554	25570	25543	0.14	cps
Cadmium	111-1	47333	47796	47514	47548	0.49	cps
Calcium	43-1	4306845	4404204	4445998	4385682	1.63	cps
Calcium	44-1	70791519	72912444	73294059	72332674	1.86	cps
Carbon	12-1	720047483	788494975	831507588	780016682	7.21	cps
Carbon	12-2	5200341	5219198	5237269	5218936	0.35	cps
Chlorine	35-1	29408091	33024813	35081743	32504882	8.84	cps
Chlorine	35-2	155994	159455	161878	159109	1.86	cps
Chromium	52-2	326082	328502	328392	327659	0.42	cps
Cobalt	59-2	126738	127394	127861	127331	0.44	cps
Copper	63-2	18355797	18089447	18504376	18316540	1.15	cps
Dysprosium	156-1	111930	112868	113991	112930	0.91	cps
Dysprosium	156-2	37593	37175	37686	37485	0.73	cps
Erbium	164-1	91311	89951	91807	91023	1.06	cps
Erbium	164-2	33388	32566	33405	33120	1.45	cps
Gadolinium	160-1	97043	97839	99383	98088	1.21	cps
Gadolinium	160-2	42892	42641	42899	42811	0.34	cps
Holmium	165-1	10121990	9971994	10009002	10034329	0.78	cps
Holmium	165-2	4117950	3882252	3835038	3945080	3.84	cps
Indium	115-1	8365263	8394175	8461129	8406856	0.58	cps
Indium	115-2	912309	871178	872961	885483	2.63	cps
Iron	54-2	5093574	5129247	5109025	5110615	0.35	cps
Iron	56-2	95259495	93869909	95498315	94875906	0.93	cps
Iron	57-2	2433056	2419281	2434553	2428963	0.35	cps
Krypton	83-1	530	550	523	534	2.60	cps
Lead	206-1	60330081	62949866	63674239	62318062	2.82	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-05	Instrumnet Name :	P8
Client Sample ID :	3828	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:39:27	DataFile Name :	026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	49463036	51182349	51532403	50725929	2.18	cps
Lead	208-1	233852388	237689553	240572150	237371364	1.42	cps
Lithium	6-1	2564032	2499637	2563156	2542275	1.45	cps
Magnesium	24-2	3524955	3546519	3549182	3540219	0.38	cps
Manganese	55-2	749695	750043	746792	748843	0.24	cps
Molybdenum	94-1	1828748	1853964	1875486	1852733	1.26	cps
Molybdenum	95-1	99506	100074	100151	99910	0.35	cps
Molybdenum	96-1	379232	377815	383262	380103	0.74	cps
Molybdenum	97-1	61120	61546	62711	61792	1.33	cps
Molybdenum	98-1	159609	159866	160243	159906	0.20	cps
Neodymium	150-1	159083	159246	163752	160694	1.65	cps
Neodymium	150-2	43259	43551	43607	43472	0.43	cps
Nickel	60-2	87956	87711	87939	87869	0.16	cps
Phosphorus	31-2	16049	15455	15732	15745	1.89	cps
Potassium	39-2	8354474	8337299	8499197	8396990	1.06	cps
Rhodium	103-1	7686479	7738164	7799634	7741426	0.73	cps
Rhodium	103-2	3398992	3224734	3216525	3280084	3.14	cps
Scandium	45-1	7405486	7622434	7717435	7581785	2.11	cps
Scandium	45-2	132314	126370	126672	128452	2.61	cps
Selenium	82-1	947	1003	1090	1013	7.12	cps
Selenium	77-2	213	260	260	244	11.02	cps
Selenium	78-2	203	220	170	198	12.87	cps
Silicon	28-1	2927206996	3010289128	3024843155	2987446427	1.76	cps
Silver	107-1	40941	41950	42231	41707	1.63	cps
Silver	109-1	35122	35847	36188	35719	1.52	cps
Sodium	23-2	601773884	605082058	603759591	603538511	0.28	cps
Strontium	86-1	1806651	1881786	1901800	1863413	2.69	cps
Strontium	88-1	15623333	16010253	16505359	16046315	2.76	cps
Sulfur	34-1	6330125	6508887	6515371	6451461	1.63	cps
Terbium	159-1	10239821	10413856	10587547	10413742	1.67	cps
Terbium	159-2	3987895	3723218	3748182	3819765	3.83	cps
Thallium	203-1	3767	3641	3857	3755	2.90	cps
Thallium	205-1	8873	8940	9430	9081	3.35	cps
Tin	118-1	719234	727494	731475	726068	0.86	cps
Titanium	47-1	2110944	2145788	2212349	2156360	2.39	cps
Uranium	238-1	123584	123015	126434	124344	1.47	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-05	Instrumnet Name :	P8
Client Sample ID :	3828	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:39:27	DataFile Name :	026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	355857	356517	356689	356354	0.12	cps
Ytterbium	172-1	31477	30472	30652	30867	1.74	cps
Ytterbium	172-2	13507	13807	13917	13744	1.55	cps
Ytterbium	176-1	31254	30946	31327	31176	0.65	cps
Ytterbium	176-2	13624	13447	13620	13564	0.75	cps
Yttrium	89-1	17518391	18186189	18042031	17915537	1.96	cps
Yttrium	89-2	1496669	1301579	1304116	1367455	8.18	cps
Zinc	66-2	3685879	3726344	3742058	3718094	0.78	cps
Zirconium	90-1	4816126	4998212	4876687	4897008	1.89	cps
Zirconium	91-1	992294	1000634	998296	997075	0.43	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-06	Instrumnet Name :	P8
Client Sample ID :	3829	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:42:34	DataFile Name :	027AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1012743	1002306	1004876	1006642	0.54	cps
Antimony	121-1	360847	365482	367402	364577	0.92	cps
Arsenic	75-2	46875	46490	46838	46734	0.45	cps
Barium	135-1	1573391	1596648	1607072	1592370	1.08	cps
Barium	137-1	2761312	2744793	2796873	2767660	0.96	cps
Beryllium	9-1	6230	6227	6478	6312	2.29	cps
Bismuth	209-1	5770546	5844093	5736617	5783752	0.95	cps
Bismuth	209-2	2655341	2675131	2656866	2662446	0.41	cps
Bromine	81-1	107847	111116	113895	110953	2.73	cps
Cadmium	108-1	5518	5498	5404	5473	1.11	cps
Cadmium	106-1	16747	16767	16443	16652	1.09	cps
Cadmium	111-1	39804	40129	39851	39928	0.44	cps
Calcium	43-1	4046433	4147899	4066715	4087016	1.31	cps
Calcium	44-1	64453474	67612642	66679636	66248584	2.45	cps
Carbon	12-1	404333967	432986554	456122780	431147767	6.02	cps
Carbon	12-2	2845254	2825524	2803060	2824613	0.75	cps
Chlorine	35-1	23413447	25704555	26341639	25153214	6.12	cps
Chlorine	35-2	113951	114371	117152	115158	1.51	cps
Chromium	52-2	323874	323763	326564	324734	0.49	cps
Cobalt	59-2	83898	83503	83808	83736	0.25	cps
Copper	63-2	7727299	7764778	7685059	7725712	0.52	cps
Dysprosium	156-1	104666	107656	108650	106991	1.94	cps
Dysprosium	156-2	35815	35440	35149	35468	0.94	cps
Erbium	164-1	81806	82319	83624	82583	1.13	cps
Erbium	164-2	30284	30161	30144	30196	0.25	cps
Gadolinium	160-1	90645	91860	90558	91021	0.80	cps
Gadolinium	160-2	40461	39375	40140	39992	1.40	cps
Holmium	165-1	10449935	10446170	10465969	10454025	0.10	cps
Holmium	165-2	4079067	3996776	3979117	4018320	1.33	cps
Indium	115-1	8833837	8953799	8945062	8910899	0.75	cps
Indium	115-2	910374	913751	902234	908787	0.65	cps
Iron	54-2	4640318	4608798	4591698	4613605	0.53	cps
Iron	56-2	85593527	84933132	85609669	85378776	0.45	cps
Iron	57-2	2194791	2187566	2190607	2190988	0.17	cps
Krypton	83-1	483	527	560	523	7.35	cps
Lead	206-1	55737991	56412807	56156019	56102272	0.61	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-06	Instrumnet Name :	P8
Client Sample ID :	3829	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:42:34	DataFile Name :	027AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	45572301	45473116	44895576	45313664	0.81	cps
Lead	208-1	215561443	214366102	214021310	214649618	0.38	cps
Lithium	6-1	2727316	2638621	2679593	2681843	1.66	cps
Magnesium	24-2	2815740	2781369	2783561	2793557	0.69	cps
Manganese	55-2	521293	518038	521499	520277	0.37	cps
Molybdenum	94-1	794096	804615	806103	801605	0.82	cps
Molybdenum	95-1	88684	88305	89825	88938	0.89	cps
Molybdenum	96-1	219532	223516	220121	221057	0.97	cps
Molybdenum	97-1	53928	55159	55109	54732	1.27	cps
Molybdenum	98-1	141780	142261	142176	142073	0.18	cps
Neodymium	150-1	152043	155593	155323	154320	1.28	cps
Neodymium	150-2	40999	41370	41561	41310	0.69	cps
Nickel	60-2	74360	75345	74859	74855	0.66	cps
Phosphorus	31-2	13977	14250	14110	14113	0.97	cps
Potassium	39-2	4666065	4578156	4586874	4610365	1.05	cps
Rhodium	103-1	8358475	8121842	8132443	8204253	1.63	cps
Rhodium	103-2	3412434	3421833	3419541	3417936	0.14	cps
Scandium	45-1	7301614	7419941	7383535	7368364	0.82	cps
Scandium	45-2	129988	130869	130809	130555	0.38	cps
Selenium	82-1	777	897	880	851	7.64	cps
Selenium	77-2	233	250	240	241	3.48	cps
Selenium	78-2	227	163	190	193	16.45	cps
Silicon	28-1	1584623336	1613985736	1617364403	1605324492	1.12	cps
Silver	107-1	56261	58021	57794	57358	1.67	cps
Silver	109-1	52162	54306	54059	53509	2.19	cps
Sodium	23-2	322630469	317047589	313723609	317800555	1.42	cps
Strontium	86-1	1942134	1990268	1947530	1959977	1.35	cps
Strontium	88-1	16994339	16833321	17128992	16985551	0.87	cps
Sulfur	34-1	3961478	3896082	4003955	3953838	1.37	cps
Terbium	159-1	10642108	10917268	10621764	10727047	1.54	cps
Terbium	159-2	3971544	3947420	3895046	3938003	0.99	cps
Thallium	203-1	3344	3327	3334	3335	0.25	cps
Thallium	205-1	8046	7869	8039	7985	1.25	cps
Tin	118-1	363904	362811	364849	363855	0.28	cps
Titanium	47-1	1521112	1565163	1531960	1539412	1.49	cps
Uranium	238-1	126580	129556	127842	127992	1.17	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-06	Instrumnet Name :	P8
Client Sample ID :	3829	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:42:34	DataFile Name :	027AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	226371	223772	222919	224354	0.80	cps
Ytterbium	172-1	26303	26707	26386	26465	0.81	cps
Ytterbium	172-2	11578	11622	11966	11722	1.81	cps
Ytterbium	176-1	22299	23027	23067	22798	1.90	cps
Ytterbium	176-2	9453	9567	9920	9647	2.52	cps
Yttrium	89-1	18433816	18696326	18471956	18534033	0.77	cps
Yttrium	89-2	1328229	1329558	1325320	1327702	0.16	cps
Zinc	66-2	2827190	2778531	2771339	2792353	1.09	cps
Zirconium	90-1	2233671	2366903	2337121	2312565	3.02	cps
Zirconium	91-1	459767	464460	462229	462152	0.51	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-07	Instrumnet Name :	P8
Client Sample ID :	3651	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:45:39	DataFile Name :	028AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	9216	9637	8939	9264	3.79	cps
Antimony	121-1	49225	48693	49155	49024	0.59	cps
Arsenic	75-2	5665	5598	5474	5579	1.73	cps
Barium	135-1	172432	170485	171403	171440	0.57	cps
Barium	137-1	296849	299328	300546	298908	0.63	cps
Beryllium	9-1	205	204	209	206	1.25	cps
Bismuth	209-1	5714629	5646477	5639812	5666973	0.73	cps
Bismuth	209-2	2636477	2608952	2618936	2621455	0.53	cps
Bromine	81-1	167720	181410	187928	179020	5.76	cps
Cadmium	108-1	220	277	203	233	16.47	cps
Cadmium	106-1	5678	6095	5705	5826	4.01	cps
Cadmium	111-1	4514	4763	4518	4598	3.10	cps
Calcium	43-1	2902482	2866318	2842055	2870285	1.06	cps
Calcium	44-1	46481576	45488036	46119303	46029638	1.09	cps
Carbon	12-1	51790471	48725109	46959773	49158451	4.97	cps
Carbon	12-2	292331	281683	275034	283016	3.08	cps
Chlorine	35-1	33873129	37037121	38734317	36548189	6.75	cps
Chlorine	35-2	166502	166000	166449	166317	0.17	cps
Chromium	52-2	12512	12459	12219	12397	1.26	cps
Cobalt	59-2	9413	9450	9543	9469	0.71	cps
Copper	63-2	161874	159929	159046	160283	0.90	cps
Dysprosium	156-1	290	347	297	311	9.96	cps
Dysprosium	156-2	93	70	103	89	19.24	cps
Erbium	164-1	367	317	300	328	10.59	cps
Erbium	164-2	110	73	80	88	22.25	cps
Gadolinium	160-1	300	323	317	313	3.83	cps
Gadolinium	160-2	107	147	160	138	20.14	cps
Holmium	165-1	10187557	10296266	10202434	10228752	0.58	cps
Holmium	165-2	3905729	3883249	3904510	3897830	0.32	cps
Indium	115-1	9008905	9025273	8817721	8950633	1.29	cps
Indium	115-2	900354	904633	897137	900708	0.42	cps
Iron	54-2	117720	117310	118554	117862	0.54	cps
Iron	56-2	2371497	2377902	2356345	2368581	0.47	cps
Iron	57-2	54249	56163	53965	54793	2.18	cps
Krypton	83-1	343	390	423	386	10.42	cps
Lead	206-1	65883	65166	66077	65709	0.73	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-07	Instrumnet Name :	P8
Client Sample ID :	3651	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:45:39	DataFile Name :	028AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	54688	54889	55672	55083	0.94	cps
Lead	208-1	253209	253949	254448	253869	0.25	cps
Lithium	6-1	2595645	2592839	2627749	2605411	0.74	cps
Magnesium	24-2	433010	433023	428974	431669	0.54	cps
Manganese	55-2	215699	217120	217254	216691	0.40	cps
Molybdenum	94-1	66029	66743	66863	66545	0.68	cps
Molybdenum	95-1	107458	110256	109748	109154	1.37	cps
Molybdenum	96-1	117175	118319	118433	117976	0.59	cps
Molybdenum	97-1	65594	68163	67972	67243	2.13	cps
Molybdenum	98-1	171948	174856	175012	173939	0.99	cps
Neodymium	150-1	427	353	490	423	16.16	cps
Neodymium	150-2	113	103	123	113	8.83	cps
Nickel	60-2	12042	11748	11852	11881	1.25	cps
Phosphorus	31-2	2807	2640	2670	2706	3.28	cps
Potassium	39-2	13648809	13689514	13657511	13665278	0.16	cps
Rhodium	103-1	8277541	8386316	8243669	8302509	0.90	cps
Rhodium	103-2	3469108	3358246	3439056	3422137	1.68	cps
Scandium	45-1	6445132	6260323	6353008	6352821	1.45	cps
Scandium	45-2	121606	122725	121949	122093	0.47	cps
Selenium	82-1	303	203	150	219	35.56	cps
Selenium	77-2	0	3	7	3	100.05	cps
Selenium	78-2	43	50	20	38	41.70	cps
Silicon	28-1	43970586	44343186	43790174	44034649	0.64	cps
Silver	107-1	1880	1883	1713	1826	5.32	cps
Silver	109-1	1867	1583	1630	1693	8.97	cps
Sodium	23-2	129792401	127419118	126406218	127872579	1.36	cps
Strontium	86-1	1041967	1045767	1047403	1045046	0.27	cps
Strontium	88-1	9754942	9984047	9895602	9878197	1.17	cps
Sulfur	34-1	1448023	1475566	1483447	1469012	1.27	cps
Terbium	159-1	10813133	10518807	10645589	10659177	1.39	cps
Terbium	159-2	3829990	3863458	3791029	3828159	0.95	cps
Thallium	203-1	517	500	457	491	6.31	cps
Thallium	205-1	1060	1047	1090	1066	2.08	cps
Tin	118-1	32629	34056	33845	33510	2.30	cps
Titanium	47-1	13283	13803	14498	13861	4.40	cps
Uranium	238-1	19685	19528	19739	19651	0.56	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-07	Instrumnet Name :	P8
Client Sample ID :	3651	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:45:39	DataFile Name :	028AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	9033	9240	9360	9211	1.80	cps
Ytterbium	172-1	137	170	227	178	25.59	cps
Ytterbium	172-2	87	70	63	73	16.39	cps
Ytterbium	176-1	1313	1373	1390	1359	2.97	cps
Ytterbium	176-2	237	300	293	277	12.58	cps
Yttrium	89-1	16462312	16989751	16716829	16722964	1.58	cps
Yttrium	89-2	1178102	1188703	1184535	1183780	0.45	cps
Zinc	66-2	325499	325905	326323	325909	0.13	cps
Zirconium	90-1	11501	11101	11248	11284	1.79	cps
Zirconium	91-1	2727	2540	2474	2580	5.09	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04	Instrumnet Name :	P8
Client Sample ID :	285	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:48:57	DataFile Name :	029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	74811	75418	74402	74877	0.68	cps
Antimony	121-1	18132	18623	18493	18416	1.38	cps
Arsenic	75-2	1900	1830	1817	1849	2.42	cps
Barium	135-1	281147	283619	280524	281763	0.58	cps
Barium	137-1	483407	489226	488327	486987	0.64	cps
Beryllium	9-1	200	236	228	221	8.64	cps
Bismuth	209-1	5893013	5962728	5896316	5917352	0.66	cps
Bismuth	209-2	2625281	2651863	2620038	2632394	0.65	cps
Bromine	81-1	102810	108496	110101	107136	3.58	cps
Cadmium	108-1	333	303	293	310	6.71	cps
Cadmium	106-1	6322	6505	6558	6462	1.92	cps
Cadmium	111-1	5388	5718	5656	5587	3.13	cps
Calcium	43-1	1551659	1585447	1586027	1574378	1.25	cps
Calcium	44-1	25021891	25390389	25237487	25216589	0.73	cps
Carbon	12-1	37002006	38953450	40323963	38759806	4.31	cps
Carbon	12-2	274144	274900	273291	274112	0.29	cps
Chlorine	35-1	44340414	49841593	50982483	48388163	7.34	cps
Chlorine	35-2	222088	225216	220463	222589	1.09	cps
Chromium	52-2	57133	56856	57244	57078	0.35	cps
Cobalt	59-2	27867	28084	27250	27734	1.56	cps
Copper	63-2	641833	640228	639176	640413	0.21	cps
Dysprosium	156-1	2284	2230	2304	2272	1.67	cps
Dysprosium	156-2	843	810	693	782	10.07	cps
Erbium	164-1	2014	1923	1977	1971	2.30	cps
Erbium	164-2	740	763	737	747	1.95	cps
Gadolinium	160-1	2014	2187	2154	2118	4.34	cps
Gadolinium	160-2	877	987	940	934	5.91	cps
Holmium	165-1	10305761	10497871	10328499	10377377	1.01	cps
Holmium	165-2	3935783	3972246	3925586	3944538	0.62	cps
Indium	115-1	8835402	8977269	9031378	8948016	1.13	cps
Indium	115-2	907601	906305	902066	905324	0.32	cps
Iron	54-2	3779306	3721779	3685124	3728736	1.27	cps
Iron	56-2	69508099	68861532	67929611	68766414	1.15	cps
Iron	57-2	1786118	1730300	1736689	1751036	1.74	cps
Krypton	83-1	400	420	477	432	9.20	cps
Lead	206-1	8922634	9165612	9091603	9059950	1.37	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04	Instrumnet Name :	P8
Client Sample ID :	285	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:48:57	DataFile Name :	029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	7701531	7740668	7841719	7761306	0.93	cps
Lead	208-1	35756059	35935785	35987567	35893137	0.34	cps
Lithium	6-1	2695953	2705708	2604201	2668620	2.10	cps
Magnesium	24-2	493507	490349	483972	489276	0.99	cps
Manganese	55-2	1726380	1697592	1707330	1710434	0.86	cps
Molybdenum	94-1	26215	28059	27290	27188	3.41	cps
Molybdenum	95-1	38597	39603	39148	39116	1.29	cps
Molybdenum	96-1	43551	43899	44417	43956	0.99	cps
Molybdenum	97-1	23854	24422	24305	24193	1.24	cps
Molybdenum	98-1	62805	63856	61650	62770	1.76	cps
Neodymium	150-1	3187	3074	3064	3108	2.20	cps
Neodymium	150-2	910	837	893	880	4.37	cps
Nickel	60-2	40715	41012	40989	40905	0.40	cps
Phosphorus	31-2	467	473	407	449	8.18	cps
Potassium	39-2	1955628	1963510	2001910	1973683	1.25	cps
Rhodium	103-1	8383067	8490226	8488297	8453863	0.73	cps
Rhodium	103-2	3490917	3471419	3384255	3448864	1.65	cps
Scandium	45-1	6433174	6490296	6476963	6466811	0.46	cps
Scandium	45-2	124308	124352	123781	124147	0.26	cps
Selenium	82-1	147	123	90	120	23.73	cps
Selenium	77-2	10	3	0	4	114.60	cps
Selenium	78-2	40	40	53	44	17.32	cps
Silicon	28-1	38098128	38158194	37692063	37982795	0.67	cps
Silver	107-1	2714	2904	2804	2807	3.39	cps
Silver	109-1	2647	2690	2790	2709	2.71	cps
Sodium	23-2	203408030	202475357	202629657	202837681	0.25	cps
Strontium	86-1	729277	740442	748446	739388	1.30	cps
Strontium	88-1	6823525	7090410	7043117	6985684	2.04	cps
Sulfur	34-1	1800778	1821763	1837173	1819905	1.00	cps
Terbium	159-1	10557067	10882490	10719479	10719678	1.52	cps
Terbium	159-2	3839443	3874042	3847235	3853573	0.47	cps
Thallium	203-1	1113	983	1083	1060	6.42	cps
Thallium	205-1	2370	2644	2547	2520	5.50	cps
Tin	118-1	284471	289450	292833	288918	1.46	cps
Titanium	47-1	81804	78161	78105	79357	2.67	cps
Uranium	238-1	5211	5034	5044	5097	1.95	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04	Instrumnet Name :	P8
Client Sample ID :	285	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:48:57	DataFile Name :	029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	23940	23813	23823	23859	0.30	cps
Ytterbium	172-1	730	597	817	714	15.51	cps
Ytterbium	172-2	310	263	247	273	12.01	cps
Ytterbium	176-1	1620	1697	1667	1661	2.33	cps
Ytterbium	176-2	453	507	423	461	9.15	cps
Yttrium	89-1	16877040	17130472	16999471	17002328	0.75	cps
Yttrium	89-2	1210935	1202724	1192102	1201920	0.79	cps
Zinc	66-2	1389154	1383498	1389629	1387427	0.25	cps
Zirconium	90-1	13300	13460	13597	13452	1.10	cps
Zirconium	91-1	3000	3017	2974	2997	0.73	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04DUP	Instrumnet Name :	P8
Client Sample ID :	285DUP	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:52:08	DataFile Name :	030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	71679	71715	71799	71731	0.09	cps
Antimony	121-1	18616	18506	18115	18412	1.43	cps
Arsenic	75-2	1653	1520	1600	1591	4.22	cps
Barium	135-1	274078	272028	273291	273132	0.38	cps
Barium	137-1	477057	470674	476532	474755	0.75	cps
Beryllium	9-1	228	199	185	204	10.78	cps
Bismuth	209-1	5811199	5832092	5757491	5800261	0.66	cps
Bismuth	209-2	2528439	2580891	2525620	2544983	1.22	cps
Bromine	81-1	101125	106225	109201	105517	3.87	cps
Cadmium	108-1	330	330	330	330	0.00	cps
Cadmium	106-1	6098	6038	6005	6047	0.78	cps
Cadmium	111-1	5198	5302	5306	5269	1.17	cps
Calcium	43-1	1522792	1490950	1538907	1517550	1.61	cps
Calcium	44-1	24581295	24475120	24197396	24417937	0.81	cps
Carbon	12-1	32863145	35040668	35157300	34353704	3.76	cps
Carbon	12-2	241221	239104	241533	240619	0.55	cps
Chlorine	35-1	45455084	49818488	50688768	48654113	5.76	cps
Chlorine	35-2	216631	218450	217815	217632	0.42	cps
Chromium	52-2	48385	47278	48392	48018	1.34	cps
Cobalt	59-2	25813	25984	25396	25731	1.18	cps
Copper	63-2	567180	571354	567468	568667	0.41	cps
Dysprosium	156-1	2180	2007	2204	2130	5.04	cps
Dysprosium	156-2	653	690	690	678	3.12	cps
Erbium	164-1	1777	1787	1690	1751	3.04	cps
Erbium	164-2	607	607	693	636	7.87	cps
Gadolinium	160-1	1743	1947	1773	1821	6.03	cps
Gadolinium	160-2	707	757	727	730	3.45	cps
Holmium	165-1	10226971	10043861	10091760	10120864	0.94	cps
Holmium	165-2	3829238	3877209	3854674	3853707	0.62	cps
Indium	115-1	8797881	8621024	8839061	8752655	1.32	cps
Indium	115-2	879617	876290	877406	877771	0.19	cps
Iron	54-2	3130016	3147876	3166497	3148130	0.58	cps
Iron	56-2	57361276	57285139	57081301	57242572	0.25	cps
Iron	57-2	1462465	1479821	1454127	1465471	0.89	cps
Krypton	83-1	447	453	540	480	10.85	cps
Lead	206-1	8761455	8743986	8707041	8737494	0.32	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04DUP	Instrumnet Name :	P8
Client Sample ID :	285DUP	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:52:08	DataFile Name :	030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	7446345	7325356	7568307	7446669	1.63	cps
Lead	208-1	34625227	34337528	34534515	34499090	0.43	cps
Lithium	6-1	2626789	2693553	2526221	2615521	3.22	cps
Magnesium	24-2	461622	459982	458713	460106	0.32	cps
Manganese	55-2	1646421	1630504	1626916	1634614	0.64	cps
Molybdenum	94-1	24345	23603	24755	24235	2.41	cps
Molybdenum	95-1	33256	33794	34045	33699	1.20	cps
Molybdenum	96-1	38169	37534	36979	37561	1.58	cps
Molybdenum	97-1	21016	21083	21083	21060	0.18	cps
Molybdenum	98-1	53583	54001	54594	54059	0.94	cps
Neodymium	150-1	3087	3150	2990	3076	2.62	cps
Neodymium	150-2	823	737	730	763	6.82	cps
Nickel	60-2	37583	36607	36396	36862	1.72	cps
Phosphorus	31-2	450	387	443	427	8.16	cps
Potassium	39-2	1924260	1941407	1908906	1924858	0.84	cps
Rhodium	103-1	8313811	8107800	8172450	8198020	1.29	cps
Rhodium	103-2	3370043	3321332	3351875	3347750	0.74	cps
Scandium	45-1	6416782	6415828	6297838	6376816	1.07	cps
Scandium	45-2	120321	120614	119660	120198	0.41	cps
Selenium	82-1	103	80	27	70	56.15	cps
Selenium	77-2	7	10	0	6	91.64	cps
Selenium	78-2	27	43	53	41	32.76	cps
Silicon	28-1	35752755	35390761	34896911	35346809	1.22	cps
Silver	107-1	2500	2610	2497	2536	2.54	cps
Silver	109-1	8266	2444	2374	4361	77.55	cps
Sodium	23-2	196288924	194422904	193708570	194806799	0.68	cps
Strontium	86-1	719255	714955	716469	716893	0.30	cps
Strontium	88-1	6844902	6749348	6811093	6801781	0.71	cps
Sulfur	34-1	1803891	1792793	1812858	1803181	0.56	cps
Terbium	159-1	10760694	10568001	10476214	10601636	1.37	cps
Terbium	159-2	3679348	3713345	3680972	3691222	0.52	cps
Thallium	203-1	1010	1083	1003	1032	4.30	cps
Thallium	205-1	2330	2507	2404	2414	3.68	cps
Tin	118-1	251136	249715	252651	251167	0.58	cps
Titanium	47-1	69651	70124	68797	69524	0.97	cps
Uranium	238-1	4621	4634	4474	4576	1.94	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04DUP	Instrumnet Name :	P8
Client Sample ID :	285DUP	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:52:08	DataFile Name :	030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	21520	21646	21476	21547	0.41	cps
Ytterbium	172-1	627	653	633	638	2.18	cps
Ytterbium	172-2	293	250	307	283	10.46	cps
Ytterbium	176-1	1687	1667	1640	1665	1.41	cps
Ytterbium	176-2	380	407	410	399	4.12	cps
Yttrium	89-1	16881415	16575138	16656469	16704341	0.95	cps
Yttrium	89-2	1167878	1169868	1176592	1171446	0.39	cps
Zinc	66-2	1323852	1319595	1322358	1321935	0.16	cps
Zirconium	90-1	12880	13080	13313	13091	1.66	cps
Zirconium	91-1	2697	2714	2900	2770	4.08	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04LX5	Instrumnet Name :	P8
Client Sample ID :	285L	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 16:55:21	DataFile Name :	031AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	14798	15151	14601	14850	1.88	cps
Antimony	121-1	3904	3774	4027	3902	3.25	cps
Arsenic	75-2	427	430	367	408	8.74	cps
Barium	135-1	56470	56266	55995	56244	0.42	cps
Barium	137-1	96601	99153	98348	98034	1.33	cps
Beryllium	9-1	114	134	115	121	9.36	cps
Bismuth	209-1	5918460	5809538	5954246	5894081	1.28	cps
Bismuth	209-2	2650145	2624492	2712405	2662348	1.70	cps
Bromine	81-1	52581	53846	53489	53306	1.22	cps
Cadmium	108-1	97	80	117	98	18.78	cps
Cadmium	106-1	5328	5358	5648	5444	3.25	cps
Cadmium	111-1	3985	3964	4172	4040	2.83	cps
Calcium	43-1	296962	296539	297604	297035	0.18	cps
Calcium	44-1	4988139	5003484	5043991	5011872	0.58	cps
Carbon	12-1	13192080	13353543	13400464	13315362	0.82	cps
Carbon	12-2	89715	87743	88712	88723	1.11	cps
Chlorine	35-1	11069685	11550139	11655818	11425214	2.73	cps
Chlorine	35-2	49428	49260	49591	49426	0.33	cps
Chromium	52-2	12532	12719	12028	12427	2.87	cps
Cobalt	59-2	5751	5758	5464	5658	2.96	cps
Copper	63-2	134523	132640	129965	132376	1.73	cps
Dysprosium	156-1	477	463	440	460	4.03	cps
Dysprosium	156-2	150	227	187	188	20.42	cps
Erbium	164-1	467	453	460	460	1.45	cps
Erbium	164-2	147	187	180	171	12.52	cps
Gadolinium	160-1	593	443	503	513	14.71	cps
Gadolinium	160-2	197	183	233	204	12.66	cps
Holmium	165-1	10350813	10201479	10301225	10284506	0.74	cps
Holmium	165-2	3875103	3797005	3849890	3840666	1.04	cps
Indium	115-1	8892986	8987439	8861733	8914053	0.73	cps
Indium	115-2	891485	897432	898687	895868	0.43	cps
Iron	54-2	718856	719818	688075	708916	2.55	cps
Iron	56-2	14170796	14137610	13597730	13968712	2.30	cps
Iron	57-2	333579	332378	321567	329175	2.01	cps
Krypton	83-1	400	347	410	386	8.83	cps
Lead	206-1	1864576	1881214	1905445	1883745	1.09	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04LX5	Instrumnet Name :	P8
Client Sample ID :	285L	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 16:55:21	DataFile Name :	031AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1460344	1470007	1472958	1467770	0.45	cps
Lead	208-1	7228022	7254696	7306755	7263158	0.55	cps
Lithium	6-1	2616272	2614144	2517301	2582572	2.19	cps
Magnesium	24-2	98487	99070	95779	97778	1.80	cps
Manganese	55-2	318621	324977	308742	317447	2.58	cps
Molybdenum	94-1	6311	6205	6378	6298	1.39	cps
Molybdenum	95-1	8062	8142	8503	8236	2.85	cps
Molybdenum	96-1	9050	8976	9193	9073	1.22	cps
Molybdenum	97-1	5321	5141	4814	5092	5.05	cps
Molybdenum	98-1	12743	12619	12559	12640	0.74	cps
Neodymium	150-1	643	710	720	691	6.03	cps
Neodymium	150-2	170	193	177	180	6.68	cps
Nickel	60-2	9316	8956	8806	9026	2.91	cps
Phosphorus	31-2	147	120	193	153	24.21	cps
Potassium	39-2	390530	387144	384334	387336	0.80	cps
Rhodium	103-1	8520848	8733341	8364193	8539461	2.17	cps
Rhodium	103-2	3460777	3408094	3489289	3452720	1.19	cps
Scandium	45-1	6205026	6253952	6189336	6216104	0.54	cps
Scandium	45-2	120560	119471	120120	120050	0.46	cps
Selenium	82-1	13	77	-3	29	146.10	cps
Selenium	77-2	7	3	3	4	43.40	cps
Selenium	78-2	33	37	37	36	5.42	cps
Silicon	28-1	8001097	8111659	7952731	8021829	1.02	cps
Silver	107-1	653	767	717	712	7.97	cps
Silver	109-1	623	660	590	624	5.61	cps
Sodium	23-2	40249071	40242943	39683121	40058378	0.81	cps
Strontium	86-1	148941	148735	148628	148768	0.11	cps
Strontium	88-1	1288394	1282032	1288158	1286195	0.28	cps
Sulfur	34-1	918834	942840	931713	931129	1.29	cps
Terbium	159-1	10624320	10407982	10456976	10496426	1.08	cps
Terbium	159-2	3737744	3692068	3687907	3705906	0.75	cps
Thallium	203-1	540	493	503	512	4.80	cps
Thallium	205-1	1423	1203	1280	1302	8.58	cps
Tin	118-1	66363	62967	63349	64226	2.90	cps
Titanium	47-1	16263	16246	16002	16170	0.90	cps
Uranium	238-1	1313	1093	1270	1226	9.51	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04LX5	Instrumnet Name :	P8
Client Sample ID :	285L	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 16:55:21	DataFile Name :	031AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	4601	4661	4384	4549	3.20	cps
Ytterbium	172-1	230	187	173	197	15.07	cps
Ytterbium	172-2	100	63	87	83	22.27	cps
Ytterbium	176-1	1427	1467	1367	1420	3.54	cps
Ytterbium	176-2	277	233	263	258	8.61	cps
Yttrium	89-1	16835676	16232020	16296329	16454675	2.01	cps
Yttrium	89-2	1161657	1165990	1169923	1165857	0.35	cps
Zinc	66-2	287943	286716	276518	283725	2.21	cps
Zirconium	90-1	4414	4504	4411	4443	1.19	cps
Zirconium	91-1	790	867	960	872	9.76	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04MS	Instrumnet Name :	P8
Client Sample ID :	285MS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:58:37	DataFile Name :	032AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1171593	1111133	1111558	1131428	3.07	cps
Antimony	121-1	15897331	16038640	16089676	16008549	0.62	cps
Arsenic	75-2	1790	1770	1900	1820	3.85	cps
Barium	135-1	17649126	17742346	17532314	17641262	0.60	cps
Barium	137-1	30236155	30517533	30212405	30322031	0.56	cps
Beryllium	9-1	3434353	3508963	3450713	3464676	1.13	cps
Bismuth	209-1	5623864	5572950	5582625	5593146	0.48	cps
Bismuth	209-2	2482472	2523003	2437191	2480889	1.73	cps
Bromine	81-1	96710	102404	107588	102234	5.32	cps
Cadmium	108-1	281950	280567	282893	281803	0.42	cps
Cadmium	106-1	423509	428139	421837	424495	0.77	cps
Cadmium	111-1	3979249	3857712	3927917	3921626	1.56	cps
Calcium	43-1	6710014	6890262	6921816	6840698	1.67	cps
Calcium	44-1	109948848	111883235	110381612	110737898	0.92	cps
Carbon	12-1	25363196	26591602	26900880	26285226	3.09	cps
Carbon	12-2	191507	190015	194212	191911	1.11	cps
Chlorine	35-1	164715351	172617357	175008837	170780515	3.15	cps
Chlorine	35-2	761707	754125	765163	760332	0.74	cps
Chromium	52-2	3643534	3567370	3628724	3613209	1.12	cps
Cobalt	59-2	6690598	6652292	6816319	6719736	1.28	cps
Copper	63-2	52055756	51226073	52778004	52019944	1.49	cps
Dysprosium	156-1	2207	2314	2247	2256	2.39	cps
Dysprosium	156-2	753	687	680	707	5.74	cps
Erbium	164-1	1733	1633	1797	1721	4.79	cps
Erbium	164-2	623	567	653	614	7.16	cps
Gadolinium	160-1	1924	1947	1977	1949	1.37	cps
Gadolinium	160-2	740	707	843	763	9.34	cps
Holmium	165-1	9739425	10011188	9988671	9913095	1.52	cps
Holmium	165-2	3819744	3780935	3808827	3803169	0.53	cps
Indium	115-1	8308595	8225791	8310329	8281572	0.58	cps
Indium	115-2	816805	817497	813687	815996	0.25	cps
Iron	54-2	8998868	8862832	8907617	8923106	0.78	cps
Iron	56-2	166819378	165137331	163008728	164988479	1.16	cps
Iron	57-2	4165574	4151493	4210939	4176002	0.74	cps
Krypton	83-1	700	720	660	693	4.41	cps
Lead	206-1	60250467	59768364	59756844	59925225	0.47	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04MS	Instrumnet Name :	P8
Client Sample ID :	285MS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:58:37	DataFile Name :	032AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	52226963	51798753	51018374	51681363	1.19	cps
Lead	208-1	238928355	238928168	234400123	237418882	1.10	cps
Lithium	6-1	2352316	2340099	2375166	2355860	0.76	cps
Magnesium	24-2	21450180	21614556	21184077	21416271	1.01	cps
Manganese	55-2	16801949	16637752	16684280	16707993	0.51	cps
Molybdenum	94-1	27811410	27934053	28054317	27933260	0.43	cps
Molybdenum	95-1	30900185	29972872	30103293	30325450	1.66	cps
Molybdenum	96-1	35121041	34170807	34154474	34482107	1.60	cps
Molybdenum	97-1	18900346	18821183	18843156	18854895	0.22	cps
Molybdenum	98-1	49129038	48488329	49213399	48943589	0.81	cps
Neodymium	150-1	3397	3661	3647	3568	4.16	cps
Neodymium	150-2	693	677	640	670	4.07	cps
Nickel	60-2	1952421	1876579	1907192	1912064	2.00	cps
Phosphorus	31-2	413	343	390	382	9.32	cps
Potassium	39-2	8383983	8277301	8340584	8333956	0.64	cps
Rhodium	103-1	7830499	7914179	8009173	7917951	1.13	cps
Rhodium	103-2	3227342	3231280	3251216	3236613	0.40	cps
Scandium	45-1	6155512	6226949	6170585	6184349	0.61	cps
Scandium	45-2	124551	122446	123216	123404	0.86	cps
Selenium	82-1	243768	241451	246002	243741	0.93	cps
Selenium	77-2	4671	4607	4491	4590	1.99	cps
Selenium	78-2	15258	15365	15025	15216	1.14	cps
Silicon	28-1	31006551	31207988	30461608	30892049	1.25	cps
Silver	107-1	3451756	3361975	3356948	3390227	1.57	cps
Silver	109-1	3161788	3118105	3193909	3157934	1.20	cps
Sodium	23-2	219467517	220247697	220046857	219920690	0.18	cps
Strontium	86-1	7208592	7296215	7143141	7215983	1.06	cps
Strontium	88-1	63066499	63245576	61607016	62639697	1.43	cps
Sulfur	34-1	1632359	1665838	1687082	1661760	1.66	cps
Terbium	159-1	10401109	10172967	10286984	10287020	1.11	cps
Terbium	159-2	3682834	3690188	3626154	3666392	0.96	cps
Thallium	203-1	12876702	12656029	12650439	12727723	1.01	cps
Thallium	205-1	30257849	30456999	29976370	30230406	0.80	cps
Tin	118-1	11890624	11868386	11852876	11870629	0.16	cps
Titanium	47-1	67139	68141	68348	67876	0.95	cps
Uranium	238-1	39509469	40101542	39787918	39799643	0.74	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04MS	Instrumnet Name :	P8
Client Sample ID :	285MS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 16:58:37	DataFile Name :	032AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2919171	2886558	2878723	2894817	0.74	cps
Ytterbium	172-1	1130	1043	1130	1101	4.54	cps
Ytterbium	172-2	477	447	507	477	6.29	cps
Ytterbium	176-1	60658	60903	60501	60687	0.33	cps
Ytterbium	176-2	22349	22432	22112	22298	0.75	cps
Yttrium	89-1	16343828	16428957	16250063	16340949	0.55	cps
Yttrium	89-2	1147754	1155910	1154708	1152791	0.38	cps
Zinc	66-2	7016505	7046207	7060920	7041210	0.32	cps
Zirconium	90-1	29312115	29054123	28920038	29095425	0.68	cps
Zirconium	91-1	6573356	6372488	6402703	6449516	1.68	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:01:26	DataFile Name :	033CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5606295	5771778	5718245	5698772	1.48	cps
Antimony	121-1	14950566	15135163	15292874	15126201	1.13	cps
Arsenic	75-2	329381	327893	329273	328849	0.25	cps
Barium	135-1	17967221	18413456	18513740	18298139	1.59	cps
Barium	137-1	31299535	31211128	31134287	31214983	0.26	cps
Beryllium	9-1	3167800	3197909	3158097	3174602	0.65	cps
Bismuth	209-1	5082478	5097039	5048080	5075866	0.50	cps
Bismuth	209-2	2252107	2279333	2300349	2277263	1.06	cps
Bromine	81-1	42147	43521	42785	42818	1.61	cps
Cadmium	108-1	280184	280979	280617	280593	0.14	cps
Cadmium	106-1	401393	412213	407606	407071	1.33	cps
Cadmium	111-1	3719079	3717241	3661805	3699375	0.88	cps
Calcium	43-1	25595830	25874595	25566746	25679057	0.66	cps
Calcium	44-1	416391234	416586900	410545394	414507843	0.83	cps
Carbon	12-1	7476122	7525200	7348267	7449863	1.23	cps
Carbon	12-2	54578	53543	54106	54076	0.96	cps
Chlorine	35-1	5275405	4932644	4609720	4939256	6.74	cps
Chlorine	35-2	16897	16570	15465	16310	4.60	cps
Chromium	52-2	3567618	3575870	3550368	3564619	0.37	cps
Cobalt	59-2	6277127	6300682	6279753	6285854	0.21	cps
Copper	63-2	46972843	46880283	47210736	47021287	0.36	cps
Dysprosium	156-1	743	743	793	760	3.80	cps
Dysprosium	156-2	167	150	180	166	9.08	cps
Erbium	164-1	663	683	630	659	4.09	cps
Erbium	164-2	197	287	267	250	18.90	cps
Gadolinium	160-1	620	540	587	582	6.90	cps
Gadolinium	160-2	163	260	170	198	27.30	cps
Holmium	165-1	9175604	9338438	9329898	9281313	0.99	cps
Holmium	165-2	3601520	3593504	3582993	3592672	0.26	cps
Indium	115-1	7611116	7589083	7640778	7613659	0.34	cps
Indium	115-2	752386	759929	757435	756583	0.51	cps
Iron	54-2	34414203	34226663	34060374	34233746	0.52	cps
Iron	56-2	641943510	634922017	639322764	638729430	0.56	cps
Iron	57-2	16103291	15986008	15930972	16006757	0.55	cps
Krypton	83-1	437	467	517	473	8.54	cps
Lead	206-1	49200601	50826628	50521296	50182841	1.72	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:01:26	DataFile Name :	033CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	42145114	42657549	43250046	42684237	1.30	cps
Lead	208-1	194333084	198381165	198871880	197195377	1.26	cps
Lithium	6-1	2212727	2213301	2219791	2215273	0.18	cps
Magnesium	24-2	97469872	98254539	96940329	97554913	0.68	cps
Manganese	55-2	14927284	14712468	14906966	14848906	0.80	cps
Molybdenum	94-1	55890004	55594614	55835983	55773534	0.28	cps
Molybdenum	95-1	80084330	79406537	80989947	80160272	0.99	cps
Molybdenum	96-1	87730512	87819839	87639312	87729888	0.10	cps
Molybdenum	97-1	49431606	49411144	49305439	49382730	0.14	cps
Molybdenum	98-1	128372581	128371711	129589525	128777939	0.55	cps
Neodymium	150-1	1350	1340	1460	1383	4.81	cps
Neodymium	150-2	103	113	133	117	13.10	cps
Nickel	60-2	1778298	1741788	1762394	1760826	1.04	cps
Phosphorus	31-2	55914	57185	56038	56379	1.24	cps
Potassium	39-2	35272922	34998503	35313914	35195113	0.49	cps
Rhodium	103-1	7147103	7158538	7094462	7133367	0.48	cps
Rhodium	103-2	2972991	2931895	2946667	2950518	0.71	cps
Scandium	45-1	5735664	5652845	5585899	5658136	1.33	cps
Scandium	45-2	115352	116091	116527	115990	0.51	cps
Selenium	82-1	220888	219509	221900	220766	0.54	cps
Selenium	77-2	4127	4214	4131	4157	1.18	cps
Selenium	78-2	14484	14414	14284	14394	0.71	cps
Silicon	28-1	31545252	31635900	31363905	31515019	0.44	cps
Silver	107-1	18412980	18747302	18652897	18604393	0.93	cps
Silver	109-1	17633635	17710021	17388417	17577358	0.96	cps
Sodium	23-2	197860170	194607490	197993404	196820355	0.97	cps
Strontium	86-1	5158088	5204225	5215916	5192743	0.59	cps
Strontium	88-1	44140653	45461829	45632591	45078358	1.81	cps
Sulfur	34-1	1929119	1943061	1932356	1934845	0.38	cps
Terbium	159-1	9490062	9581884	9743173	9605040	1.33	cps
Terbium	159-2	3443595	3425930	3425511	3431679	0.30	cps
Thallium	203-1	12153112	12374587	12419699	12315799	1.16	cps
Thallium	205-1	29291204	29559688	29134366	29328419	0.73	cps
Tin	118-1	12339554	12722555	12610890	12557667	1.57	cps
Titanium	47-1	23133954	23323528	23156554	23204679	0.45	cps
Uranium	238-1	38105310	38622541	38464524	38397459	0.69	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:01:26	DataFile Name :	033CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2760022	2740911	2735435	2745456	0.47	cps
Ytterbium	172-1	970	967	983	973	0.91	cps
Ytterbium	172-2	390	363	443	399	10.21	cps
Ytterbium	176-1	59008	59420	60333	59587	1.14	cps
Ytterbium	176-2	22015	22129	22059	22067	0.26	cps
Yttrium	89-1	14883036	15225841	15067753	15058877	1.14	cps
Yttrium	89-2	1094862	1095871	1097003	1095912	0.10	cps
Zinc	66-2	5289433	5287432	5300938	5292601	0.14	cps
Zirconium	90-1	27746100	28032070	28136390	27971520	0.72	cps
Zirconium	91-1	6179053	6188424	6218978	6195485	0.34	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:04:23	DataFile Name :	034CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2550	2410	2384	2448	3.66	cps
Antimony	121-1	3901	3484	3120	3502	11.15	cps
Arsenic	75-2	13	7	30	17	72.11	cps
Barium	135-1	680	657	623	653	4.36	cps
Barium	137-1	1197	1127	1117	1147	3.80	cps
Beryllium	9-1	605	463	423	497	19.25	cps
Bismuth	209-1	6152546	6048666	6015030	6072080	1.18	cps
Bismuth	209-2	2751570	2758550	2711636	2740585	0.92	cps
Bromine	81-1	38242	37597	38389	38076	1.11	cps
Cadmium	108-1	30	57	30	39	39.59	cps
Cadmium	106-1	5818	5838	5484	5713	3.48	cps
Cadmium	111-1	4295	4250	3995	4180	3.87	cps
Calcium	43-1	2314	1967	1890	2057	10.97	cps
Calcium	44-1	50421	48632	47067	48707	3.45	cps
Carbon	12-1	5803689	5928043	5753868	5828533	1.54	cps
Carbon	12-2	38607	38487	38621	38572	0.19	cps
Chlorine	35-1	2447372	2307439	2147552	2300788	6.52	cps
Chlorine	35-2	8399	7839	7362	7867	6.60	cps
Chromium	52-2	1710	1720	1737	1722	0.78	cps
Cobalt	59-2	193	210	217	207	5.81	cps
Copper	63-2	4421	3881	3951	4084	7.19	cps
Dysprosium	156-1	10	17	23	17	39.99	cps
Dysprosium	156-2	3	0	0	1	173.21	cps
Erbium	164-1	60	60	80	67	17.32	cps
Erbium	164-2	7	20	20	16	49.47	cps
Gadolinium	160-1	90	67	80	79	14.84	cps
Gadolinium	160-2	20	23	13	19	26.96	cps
Holmium	165-1	10225171	10336268	10183039	10248159	0.77	cps
Holmium	165-2	3861047	3867530	3753339	3827305	1.68	cps
Indium	115-1	9063522	9222473	9005775	9097257	1.23	cps
Indium	115-2	905101	928888	885538	906509	2.39	cps
Iron	54-2	1587	1677	1677	1647	3.16	cps
Iron	56-2	27330	26959	25252	26514	4.18	cps
Iron	57-2	727	707	643	692	6.28	cps
Krypton	83-1	423	353	337	371	12.39	cps
Lead	206-1	6145	5515	5294	5651	7.81	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:04:23	DataFile Name :	034CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5271	4911	4578	4920	7.05	cps
Lead	208-1	24656	22435	21310	22800	7.47	cps
Lithium	6-1	2537531	2472176	2487596	2499101	1.37	cps
Magnesium	24-2	2290	2237	2107	2211	4.27	cps
Manganese	55-2	3024	2937	3090	3017	2.55	cps
Molybdenum	94-1	3254	3110	2787	3050	7.84	cps
Molybdenum	95-1	3380	2840	2624	2948	13.22	cps
Molybdenum	96-1	3891	3454	2947	3430	13.77	cps
Molybdenum	97-1	2220	1803	1503	1842	19.54	cps
Molybdenum	98-1	5184	4374	4027	4529	13.11	cps
Neodymium	150-1	13	10	3	9	57.30	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	970	1030	933	978	4.99	cps
Phosphorus	31-2	67	53	93	71	28.64	cps
Potassium	39-2	28314	28087	27573	27992	1.36	cps
Rhodium	103-1	8592119	8596168	8736157	8641481	0.95	cps
Rhodium	103-2	3543548	3514231	3484231	3514003	0.84	cps
Scandium	45-1	6239776	6176438	6109225	6175146	1.06	cps
Scandium	45-2	120023	121664	117932	119873	1.56	cps
Selenium	82-1	-3	-10	90	26	218.76	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	53	37	37	42	22.78	cps
Silicon	28-1	980989	942834	910673	944832	3.73	cps
Silver	107-1	2097	2120	1743	1987	10.62	cps
Silver	109-1	2150	1927	1587	1888	15.03	cps
Sodium	23-2	142864	141232	138769	140955	1.46	cps
Strontium	86-1	860	833	827	840	2.10	cps
Strontium	88-1	2247	1873	2127	2082	9.15	cps
Sulfur	34-1	695617	699760	699943	698440	0.35	cps
Terbium	159-1	10575907	10523159	10506133	10535066	0.35	cps
Terbium	159-2	3719112	3759861	3661136	3713370	1.34	cps
Thallium	203-1	1793	1500	1500	1598	10.60	cps
Thallium	205-1	4447	3824	3761	4011	9.46	cps
Tin	118-1	6211	6422	5965	6199	3.69	cps
Titanium	47-1	1487	1310	1357	1385	6.61	cps
Uranium	238-1	1517	1160	1080	1252	18.57	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:04:23	DataFile Name :	034CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	103	97	113	104	8.03	cps
Ytterbium	172-1	70	47	57	58	20.26	cps
Ytterbium	172-2	13	37	13	21	63.83	cps
Ytterbium	176-1	1350	1243	1293	1296	4.12	cps
Ytterbium	176-2	210	293	270	258	16.68	cps
Yttrium	89-1	16850412	16394517	16473660	16572863	1.47	cps
Yttrium	89-2	1157335	1198291	1136829	1164151	2.69	cps
Zinc	66-2	2304	2470	2077	2284	8.65	cps
Zirconium	90-1	4254	3941	3737	3977	6.55	cps
Zirconium	91-1	943	803	867	871	8.05	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04MSD	Instrumnet Name :	P8
Client Sample ID :	285MSD	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:07:47	DataFile Name :	035AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1101204	1116030	1113559	1110264	0.72	cps
Antimony	121-1	15958655	16148851	16237418	16114975	0.88	cps
Arsenic	75-2	1703	1787	1597	1696	5.62	cps
Barium	135-1	17806112	17754518	18059221	17873283	0.91	cps
Barium	137-1	30445400	30675815	30816425	30645880	0.61	cps
Beryllium	9-1	3438592	3467164	3397676	3434477	1.02	cps
Bismuth	209-1	5581530	5761614	5589172	5644106	1.80	cps
Bismuth	209-2	2530075	2530645	2502584	2521101	0.64	cps
Bromine	81-1	94945	102239	106091	101092	5.60	cps
Cadmium	108-1	284703	287401	287069	286391	0.51	cps
Cadmium	106-1	436137	434839	437070	436015	0.26	cps
Cadmium	111-1	3966170	4034571	4046082	4015608	1.08	cps
Calcium	43-1	6778473	6817082	6805740	6800432	0.29	cps
Calcium	44-1	110227382	110634222	110233672	110365092	0.21	cps
Carbon	12-1	23171493	25008717	25388040	24522750	4.83	cps
Carbon	12-2	179228	183801	183899	182309	1.46	cps
Chlorine	35-1	152272871	162987278	166958338	160739495	4.73	cps
Chlorine	35-2	729679	730171	733527	731126	0.29	cps
Chromium	52-2	3659836	3669363	3611552	3646917	0.85	cps
Cobalt	59-2	6823075	6671519	6638185	6710926	1.47	cps
Copper	63-2	52100013	51845009	51004303	51649775	1.11	cps
Dysprosium	156-1	2347	2377	2257	2327	2.68	cps
Dysprosium	156-2	730	603	600	644	11.50	cps
Erbium	164-1	1793	1760	1853	1802	2.62	cps
Erbium	164-2	573	533	733	613	17.26	cps
Gadolinium	160-1	1843	1823	1877	1848	1.46	cps
Gadolinium	160-2	773	797	783	784	1.49	cps
Holmium	165-1	10093248	9943931	10060794	10032658	0.78	cps
Holmium	165-2	3854988	3766269	3787123	3802793	1.22	cps
Indium	115-1	8342771	8388931	8329138	8353613	0.38	cps
Indium	115-2	813338	812494	816349	814060	0.25	cps
Iron	54-2	8873830	8935588	8814228	8874549	0.68	cps
Iron	56-2	163571938	165506794	162844498	163974410	0.84	cps
Iron	57-2	4168519	4125648	4124087	4139418	0.61	cps
Krypton	83-1	577	683	680	647	9.38	cps
Lead	206-1	59881739	60870362	61171972	60641358	1.11	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04MSD	Instrumnet Name :	P8
Client Sample ID :	285MSD	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:07:47	DataFile Name :	035AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	51873818	52785344	52508721	52389294	0.89	cps
Lead	208-1	238016175	243308011	240837781	240720656	1.10	cps
Lithium	6-1	2352702	2323155	2282454	2319437	1.52	cps
Magnesium	24-2	21584441	21757666	21882915	21741674	0.69	cps
Manganese	55-2	16743461	16968499	16663314	16791758	0.94	cps
Molybdenum	94-1	28135291	27938615	28113049	28062318	0.38	cps
Molybdenum	95-1	30453643	30720270	30614675	30596196	0.44	cps
Molybdenum	96-1	34623594	35010255	35375698	35003183	1.07	cps
Molybdenum	97-1	18729083	19000589	18877593	18869088	0.72	cps
Molybdenum	98-1	48623563	49289094	49093491	49002049	0.70	cps
Neodymium	150-1	3294	3527	3541	3454	4.02	cps
Neodymium	150-2	657	690	640	662	3.85	cps
Nickel	60-2	1913476	1867376	1898722	1893192	1.24	cps
Phosphorus	31-2	380	453	413	416	8.84	cps
Potassium	39-2	8205155	8211351	8269332	8228613	0.43	cps
Rhodium	103-1	7919950	7989031	7894854	7934612	0.61	cps
Rhodium	103-2	3237476	3212185	3250673	3233445	0.60	cps
Scandium	45-1	6300729	6281866	6151764	6244787	1.30	cps
Scandium	45-2	123781	122634	123828	123415	0.55	cps
Selenium	82-1	244950	249962	248849	247920	1.06	cps
Selenium	77-2	4427	4604	4728	4586	3.29	cps
Selenium	78-2	15495	15589	15235	15440	1.19	cps
Silicon	28-1	30687885	30431120	30686770	30601925	0.48	cps
Silver	107-1	3395223	3472813	3397562	3421866	1.29	cps
Silver	109-1	3227158	3250538	3261773	3246490	0.54	cps
Sodium	23-2	219959117	222611450	221629770	221400112	0.61	cps
Strontium	86-1	7201650	7217411	7298822	7239294	0.72	cps
Strontium	88-1	63600911	63612287	64098764	63770654	0.45	cps
Sulfur	34-1	1744256	1710601	1701644	1718834	1.31	cps
Terbium	159-1	10246730	10362940	10355543	10321738	0.63	cps
Terbium	159-2	3599237	3583598	3661957	3614931	1.15	cps
Thallium	203-1	12622976	12922811	12957779	12834522	1.43	cps
Thallium	205-1	30060838	31048590	30369065	30492831	1.66	cps
Tin	118-1	11770032	11863045	11800539	11811205	0.40	cps
Titanium	47-1	64873	67219	65626	65906	1.82	cps
Uranium	238-1	40248235	40400080	40298724	40315680	0.19	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04MSD	Instrumnet Name :	P8
Client Sample ID :	285MSD	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:07:47	DataFile Name :	035AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2900787	2882759	2926708	2903418	0.76	cps
Ytterbium	172-1	1067	1143	1050	1087	4.58	cps
Ytterbium	172-2	403	373	423	400	6.29	cps
Ytterbium	176-1	60538	62283	62219	61680	1.60	cps
Ytterbium	176-2	22556	22499	22366	22474	0.43	cps
Yttrium	89-1	16699609	16385916	16439467	16508331	1.02	cps
Yttrium	89-2	1136828	1153090	1147290	1145736	0.72	cps
Zinc	66-2	7018057	7070182	7027992	7038744	0.39	cps
Zirconium	90-1	29508691	29365165	29438204	29437353	0.24	cps
Zirconium	91-1	6555647	6471646	6610017	6545770	1.06	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04A	Instrumnet Name :	P8
Client Sample ID :	285A	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:10:34	DataFile Name :	036AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1106964	1097224	1094785	1099658	0.59	cps
Antimony	121-1	16192601	15872683	15896584	15987289	1.11	cps
Arsenic	75-2	1673	1623	1637	1645	1.57	cps
Barium	135-1	17692760	17513240	17792774	17666258	0.80	cps
Barium	137-1	30236048	30389055	30040373	30221825	0.58	cps
Beryllium	9-1	3351928	3336942	3372011	3353627	0.52	cps
Bismuth	209-1	5443702	5450757	5597616	5497358	1.58	cps
Bismuth	209-2	2466519	2453829	2446617	2455655	0.41	cps
Bromine	81-1	102082	106692	108416	105730	3.10	cps
Cadmium	108-1	284694	285493	280509	283565	0.94	cps
Cadmium	106-1	431998	431040	432628	431889	0.19	cps
Cadmium	111-1	4014091	3987123	3899331	3966849	1.51	cps
Calcium	43-1	6596354	6843496	6785178	6741676	1.92	cps
Calcium	44-1	107215158	111104262	108625015	108981478	1.81	cps
Carbon	12-1	24886263	25916410	27099336	25967337	4.26	cps
Carbon	12-2	189428	190186	190781	190132	0.36	cps
Chlorine	35-1	161349478	168511914	170510497	166790630	2.89	cps
Chlorine	35-2	744137	742921	739523	742194	0.32	cps
Chromium	52-2	3611722	3560516	3549311	3573850	0.93	cps
Cobalt	59-2	6710536	6666448	6605826	6660936	0.79	cps
Copper	63-2	51336284	50957548	50913328	51069053	0.46	cps
Dysprosium	156-1	2144	2320	2194	2219	4.10	cps
Dysprosium	156-2	697	607	813	706	14.69	cps
Erbium	164-1	1680	1623	1723	1676	2.99	cps
Erbium	164-2	660	577	613	617	6.77	cps
Gadolinium	160-1	1793	1907	1907	1869	3.50	cps
Gadolinium	160-2	817	893	823	844	5.03	cps
Holmium	165-1	10085056	9707707	9889751	9894171	1.91	cps
Holmium	165-2	3706846	3675314	3691385	3691182	0.43	cps
Indium	115-1	8157314	8239664	8130553	8175844	0.70	cps
Indium	115-2	798541	797143	800790	798825	0.23	cps
Iron	54-2	8732169	8783515	8915937	8810541	1.08	cps
Iron	56-2	161491791	163156554	160618408	161755584	0.80	cps
Iron	57-2	4083035	4066830	4096151	4082006	0.36	cps
Krypton	83-1	653	887	887	809	16.65	cps
Lead	206-1	60738369	59638962	59504734	59960689	1.13	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04A	Instrumnet Name :	P8
Client Sample ID :	285A	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:10:34	DataFile Name :	036AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	51962636	52131746	51406454	51833612	0.73	cps
Lead	208-1	236610670	237751553	236288386	236883536	0.32	cps
Lithium	6-1	2323948	2273210	2233187	2276782	2.00	cps
Magnesium	24-2	21109509	21541887	21031639	21227678	1.29	cps
Manganese	55-2	16558948	16497238	16457520	16504569	0.31	cps
Molybdenum	94-1	27554724	28143914	27413479	27704039	1.40	cps
Molybdenum	95-1	30480390	30986060	29908776	30458409	1.77	cps
Molybdenum	96-1	34476880	34816646	34139404	34477644	0.98	cps
Molybdenum	97-1	18518831	18832949	18460941	18604241	1.08	cps
Molybdenum	98-1	48129833	49273343	48056948	48486708	1.41	cps
Neodymium	150-1	3350	3594	3367	3437	3.96	cps
Neodymium	150-2	623	613	647	628	2.72	cps
Nickel	60-2	1874638	1896112	1870744	1880498	0.73	cps
Phosphorus	31-2	337	443	383	388	13.79	cps
Potassium	39-2	8117881	8183311	8285773	8195655	1.03	cps
Rhodium	103-1	7795793	7914093	7822140	7844009	0.79	cps
Rhodium	103-2	3155581	3111894	3139023	3135499	0.70	cps
Scandium	45-1	6060707	6141154	6094896	6098919	0.66	cps
Scandium	45-2	120752	122029	122224	121668	0.66	cps
Selenium	82-1	245911	246658	245103	245890	0.32	cps
Selenium	77-2	4494	4754	4654	4634	2.83	cps
Selenium	78-2	15485	15475	15102	15354	1.42	cps
Silicon	28-1	30812219	30962823	31073555	30949532	0.42	cps
Silver	107-1	3390324	3387180	3404654	3394053	0.27	cps
Silver	109-1	3190977	3222551	3169800	3194443	0.83	cps
Sodium	23-2	221734570	222200417	217415110	220450032	1.20	cps
Strontium	86-1	7156594	7106538	7307740	7190291	1.46	cps
Strontium	88-1	63694192	62409109	64030597	63377966	1.35	cps
Sulfur	34-1	1697900	1716672	1711004	1708526	0.56	cps
Terbium	159-1	10264010	10321598	10037046	10207551	1.47	cps
Terbium	159-2	3630862	3565550	3611318	3602577	0.93	cps
Thallium	203-1	13099115	12749928	12934226	12927756	1.35	cps
Thallium	205-1	30099142	30038175	30283819	30140378	0.42	cps
Tin	118-1	11762898	11855751	11635704	11751451	0.94	cps
Titanium	47-1	65994	66835	67605	66811	1.21	cps
Uranium	238-1	38995415	39537260	39602888	39378521	0.85	cps

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-04A	Instrumnet Name :	P8
Client Sample ID :	285A	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:10:34	DataFile Name :	036AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2881335	2884584	2859034	2874984	0.48	cps
Ytterbium	172-1	1223	1147	1203	1191	3.34	cps
Ytterbium	172-2	510	377	430	439	15.29	cps
Ytterbium	176-1	60802	61536	62423	61587	1.32	cps
Ytterbium	176-2	22082	22135	21778	21998	0.88	cps
Yttrium	89-1	16265375	16021449	16350555	16212460	1.05	cps
Yttrium	89-2	1128206	1121955	1137777	1129313	0.71	cps
Zinc	66-2	7003861	6968640	7044154	7005552	0.54	cps
Zirconium	90-1	28965434	29060027	29327146	29117536	0.64	cps
Zirconium	91-1	6516918	6449381	6372602	6446300	1.12	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1816-01DLX5	Instrumnet Name :	P8
Client Sample ID :	441DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:13:24	DataFile Name :	037AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	41583	41382	39567	40844	2.72	cps
Antimony	121-1	36235	35590	36225	36016	1.03	cps
Arsenic	75-2	1720	1817	1717	1751	3.24	cps
Barium	135-1	123059	119003	122417	121493	1.79	cps
Barium	137-1	208838	210354	212405	210532	0.85	cps
Beryllium	9-1	920	923	805	883	7.63	cps
Bismuth	209-1	5834477	5774787	5832307	5813857	0.58	cps
Bismuth	209-2	2581758	2637482	2536619	2585286	1.95	cps
Bromine	81-1	58150	58512	59084	58582	0.80	cps
Cadmium	108-1	873	960	953	929	5.19	cps
Cadmium	106-1	6852	6989	7149	6996	2.12	cps
Cadmium	111-1	13622	13283	13276	13394	1.47	cps
Calcium	43-1	542337	539840	544845	542341	0.46	cps
Calcium	44-1	9153250	9270455	8977020	9133575	1.62	cps
Carbon	12-1	35157671	35319054	36125864	35534196	1.46	cps
Carbon	12-2	238891	234943	230793	234875	1.72	cps
Chlorine	35-1	9974289	9443952	9249682	9555974	3.92	cps
Chlorine	35-2	35036	34518	33278	34277	2.63	cps
Chromium	52-2	17694	17050	16760	17168	2.79	cps
Cobalt	59-2	21002	21096	20241	20780	2.26	cps
Copper	63-2	1055978	1042791	1012577	1037115	2.15	cps
Dysprosium	156-1	4297	4204	4094	4198	2.42	cps
Dysprosium	156-2	1507	1417	1360	1428	5.18	cps
Erbium	164-1	3444	3317	3347	3369	1.96	cps
Erbium	164-2	1147	1133	1160	1147	1.16	cps
Gadolinium	160-1	4044	4131	4097	4091	1.07	cps
Gadolinium	160-2	1740	1670	1683	1698	2.19	cps
Holmium	165-1	10056644	10005990	10023842	10028825	0.26	cps
Holmium	165-2	3696464	3748684	3782579	3742576	1.16	cps
Indium	115-1	8904247	8671101	8982168	8852505	1.83	cps
Indium	115-2	844882	864471	866292	858548	1.38	cps
Iron	54-2	249480	251725	237816	246340	3.03	cps
Iron	56-2	4968276	4898110	4743711	4870032	2.36	cps
Iron	57-2	115984	116095	111069	114382	2.51	cps
Krypton	83-1	387	400	363	383	4.84	cps
Lead	206-1	59682927	60070244	59772601	59841924	0.34	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1816-01DLX5	Instrumnet Name :	P8
Client Sample ID :	441DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:13:24	DataFile Name :	037AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	50323889	50140699	50402339	50288976	0.27	cps
Lead	208-1	232735452	230208688	234097642	232347260	0.85	cps
Lithium	6-1	2465467	2412309	2481775	2453183	1.48	cps
Magnesium	24-2	478114	476757	456971	470614	2.51	cps
Manganese	55-2	304994	303484	293483	300654	2.08	cps
Molybdenum	94-1	40913	40576	41441	40977	1.06	cps
Molybdenum	95-1	14915	14578	15032	14841	1.59	cps
Molybdenum	96-1	21483	20976	20382	20947	2.63	cps
Molybdenum	97-1	9170	8853	8963	8995	1.79	cps
Molybdenum	98-1	23280	23113	22942	23112	0.73	cps
Neodymium	150-1	6695	6702	6838	6745	1.20	cps
Neodymium	150-2	1717	1720	1627	1688	3.14	cps
Nickel	60-2	24124	23807	22999	23643	2.45	cps
Phosphorus	31-2	81366	82147	80297	81270	1.14	cps
Potassium	39-2	15770716	15476803	15646871	15631463	0.94	cps
Rhodium	103-1	8243947	8186196	8260197	8230113	0.47	cps
Rhodium	103-2	3332674	3375188	3383870	3363911	0.81	cps
Scandium	45-1	6283452	6082911	6290863	6219075	1.90	cps
Scandium	45-2	116381	116658	118830	117290	1.14	cps
Selenium	82-1	130	133	117	127	6.96	cps
Selenium	77-2	13	10	20	14	35.26	cps
Selenium	78-2	57	37	47	47	21.43	cps
Silicon	28-1	69070426	67675726	69647012	68797721	1.47	cps
Silver	107-1	6388	6332	6101	6274	2.42	cps
Silver	109-1	5941	5868	5801	5870	1.19	cps
Sodium	23-2	30921440	30654157	30081004	30552200	1.41	cps
Strontium	86-1	213879	212627	215534	214013	0.68	cps
Strontium	88-1	2066430	2058736	2027805	2050990	1.00	cps
Sulfur	34-1	2687944	2695370	2670227	2684514	0.48	cps
Terbium	159-1	10227455	10480892	10483050	10397132	1.41	cps
Terbium	159-2	3582321	3627322	3627577	3612406	0.72	cps
Thallium	203-1	3474	3000	2740	3072	12.11	cps
Thallium	205-1	7953	6745	6068	6922	13.79	cps
Tin	118-1	37284	38263	38846	38131	2.07	cps
Titanium	47-1	83280	84540	83324	83715	0.85	cps
Uranium	238-1	11322	10645	10768	10911	3.31	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1816-01DLX5	Instrumnet Name :	P8
Client Sample ID :	441DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:13:24	DataFile Name :	037AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	16349	16173	15352	15958	3.34	cps
Ytterbium	172-1	1320	1450	1517	1429	7.00	cps
Ytterbium	172-2	607	553	617	592	5.75	cps
Ytterbium	176-1	2244	2277	2277	2266	0.85	cps
Ytterbium	176-2	603	700	693	666	8.11	cps
Yttrium	89-1	16526768	15998588	16440059	16321805	1.74	cps
Yttrium	89-2	1127277	1141948	1147810	1139012	0.93	cps
Zinc	66-2	1666367	1643593	1613121	1641027	1.63	cps
Zirconium	90-1	90032	90679	89766	90159	0.52	cps
Zirconium	91-1	19814	20058	19928	19933	0.61	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-05DLX5	Instrumnet Name :	P8
Client Sample ID :	3828DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:16:35	DataFile Name :	038AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	204856	203290	192794	200313	3.27	cps
Antimony	121-1	129455	128880	129571	129302	0.29	cps
Arsenic	75-2	9130	9493	9236	9286	2.01	cps
Barium	135-1	331115	331823	330124	331021	0.26	cps
Barium	137-1	566233	574700	569294	570075	0.75	cps
Beryllium	9-1	1996	2045	1888	1977	4.07	cps
Bismuth	209-1	5854217	5893267	5865533	5871005	0.34	cps
Bismuth	209-2	2636596	2586075	2613001	2611891	0.97	cps
Bromine	81-1	53625	53234	54308	53722	1.01	cps
Cadmium	108-1	1873	1853	2020	1916	4.75	cps
Cadmium	106-1	9460	9547	9910	9639	2.48	cps
Cadmium	111-1	12803	13124	13132	13020	1.44	cps
Calcium	43-1	853819	869640	858918	860792	0.94	cps
Calcium	44-1	14379761	14954911	14985616	14773429	2.31	cps
Carbon	12-1	141617965	149639464	155228478	148828636	4.60	cps
Carbon	12-2	953159	956024	914826	941336	2.44	cps
Chlorine	35-1	8371505	8707988	8830520	8636671	2.75	cps
Chlorine	35-2	36062	36028	36335	36142	0.47	cps
Chromium	52-2	66222	64849	63624	64899	2.00	cps
Cobalt	59-2	25763	25803	24862	25476	2.09	cps
Copper	63-2	3752932	3709285	3547866	3670028	2.94	cps
Dysprosium	156-1	23154	23227	23447	23276	0.66	cps
Dysprosium	156-2	7102	7302	6778	7061	3.74	cps
Erbium	164-1	18156	18353	18797	18435	1.78	cps
Erbium	164-2	6382	6358	6185	6308	1.70	cps
Gadolinium	160-1	19721	20119	19398	19746	1.83	cps
Gadolinium	160-2	8466	8346	8086	8299	2.34	cps
Holmium	165-1	10060060	10408722	10271178	10246653	1.71	cps
Holmium	165-2	3927156	3834318	3772678	3844718	2.02	cps
Indium	115-1	8847778	8973793	8904335	8908636	0.71	cps
Indium	115-2	873510	872719	878296	874842	0.34	cps
Iron	54-2	946475	941588	901681	929915	2.64	cps
Iron	56-2	18964121	18630101	17433224	18342482	4.39	cps
Iron	57-2	444071	440848	416802	433907	3.43	cps
Krypton	83-1	393	423	407	408	3.69	cps
Lead	206-1	13174761	12734288	13116982	13008677	1.84	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-05DLX5	Instrumnet Name :	P8
Client Sample ID :	3828DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:16:35	DataFile Name :	038AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	10641784	10606051	10593039	10613625	0.24	cps
Lead	208-1	50167874	49993071	49674299	49945081	0.50	cps
Lithium	6-1	2457673	2524072	2443932	2475226	1.73	cps
Magnesium	24-2	689512	680763	649630	673302	3.11	cps
Manganese	55-2	154010	154519	147817	152115	2.45	cps
Molybdenum	94-1	346636	351780	353980	350799	1.07	cps
Molybdenum	95-1	21146	20525	20392	20688	1.95	cps
Molybdenum	96-1	78748	77930	78406	78362	0.52	cps
Molybdenum	97-1	12869	12833	12716	12806	0.63	cps
Molybdenum	98-1	33574	32919	33464	33319	1.05	cps
Neodymium	150-1	32483	32793	33091	32789	0.93	cps
Neodymium	150-2	8593	8396	7982	8324	3.74	cps
Nickel	60-2	18652	17721	17117	17830	4.34	cps
Phosphorus	31-2	2950	3137	2680	2923	7.86	cps
Potassium	39-2	1659685	1667917	1666975	1664859	0.27	cps
Rhodium	103-1	8203836	8352983	8369389	8308736	1.10	cps
Rhodium	103-2	3358298	3410964	3409949	3393071	0.89	cps
Scandium	45-1	6388446	6582925	6578027	6516466	1.70	cps
Scandium	45-2	120701	120067	119165	119978	0.64	cps
Selenium	82-1	200	177	247	208	17.15	cps
Selenium	77-2	37	33	57	42	29.89	cps
Selenium	78-2	57	70	47	58	20.26	cps
Silicon	28-1	584634618	604062658	593427151	594041476	1.64	cps
Silver	107-1	9026	9507	9403	9312	2.71	cps
Silver	109-1	7832	7756	8116	7901	2.40	cps
Sodium	23-2	120235288	120247278	116183975	118888847	1.97	cps
Strontium	86-1	349113	349064	348351	348843	0.12	cps
Strontium	88-1	3310994	3345070	3389476	3348513	1.18	cps
Sulfur	34-1	1819395	1817233	1856845	1831158	1.22	cps
Terbium	159-1	10504990	10732281	10727258	10654843	1.22	cps
Terbium	159-2	3695699	3659676	3706466	3687280	0.66	cps
Thallium	203-1	1523	1510	1423	1486	3.66	cps
Thallium	205-1	3847	3721	3504	3691	4.71	cps
Tin	118-1	152601	145244	143850	147231	3.19	cps
Titanium	47-1	407425	412921	413732	411359	0.83	cps
Uranium	238-1	26227	25369	25395	25664	1.90	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-05DLX5	Instrumnet Name :	P8
Client Sample ID :	3828DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:16:35	DataFile Name :	038AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	70033	68643	65291	67989	3.59	cps
Ytterbium	172-1	6262	6348	6148	6253	1.60	cps
Ytterbium	172-2	2630	2557	2607	2598	1.44	cps
Ytterbium	176-1	7425	7442	7596	7488	1.25	cps
Ytterbium	176-2	2567	2830	2550	2649	5.93	cps
Yttrium	89-1	16835396	16894029	17053681	16927702	0.67	cps
Yttrium	89-2	1171637	1177628	1184412	1177892	0.54	cps
Zinc	66-2	670925	673319	642860	662368	2.56	cps
Zirconium	90-1	919060	934367	945022	932816	1.40	cps
Zirconium	91-1	201523	205425	209833	205594	2.02	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-06DLX5	Instrumnet Name :	P8
Client Sample ID :	3829DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:19:51	DataFile Name :	039AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	189906	187549	171948	183135	5.33	cps
Antimony	121-1	73044	74146	74304	73831	0.93	cps
Arsenic	75-2	8119	8256	7972	8116	1.75	cps
Barium	135-1	281652	281556	282919	282042	0.27	cps
Barium	137-1	486827	491855	497398	492027	1.07	cps
Beryllium	9-1	1385	1387	1334	1369	2.20	cps
Bismuth	209-1	5877182	5990423	6098720	5988775	1.85	cps
Bismuth	209-2	2661033	2662553	2578210	2633932	1.83	cps
Bromine	81-1	48688	49393	51585	49889	3.03	cps
Cadmium	108-1	977	1030	1030	1012	3.04	cps
Cadmium	106-1	7449	7079	7232	7253	2.56	cps
Cadmium	111-1	11082	10782	10713	10859	1.81	cps
Calcium	43-1	736097	735439	732954	734830	0.23	cps
Calcium	44-1	12688446	12507857	12580211	12592171	0.72	cps
Carbon	12-1	74659931	78473271	82774810	78636004	5.16	cps
Carbon	12-2	553687	557817	533006	548170	2.43	cps
Chlorine	35-1	5791871	6050859	6147343	5996691	3.07	cps
Chlorine	35-2	25649	25763	25907	25773	0.50	cps
Chromium	52-2	64073	63731	59132	62312	4.43	cps
Cobalt	59-2	16513	16350	15422	16095	3.66	cps
Copper	63-2	1393959	1530771	1313550	1412760	7.77	cps
Dysprosium	156-1	20556	21357	20853	20922	1.94	cps
Dysprosium	156-2	6655	6405	6081	6380	4.51	cps
Erbium	164-1	16317	16303	16387	16336	0.27	cps
Erbium	164-2	5945	5755	5201	5633	6.86	cps
Gadolinium	160-1	17602	18062	17672	17779	1.40	cps
Gadolinium	160-2	7826	7405	6862	7364	6.56	cps
Holmium	165-1	10189651	10255769	10128308	10191243	0.63	cps
Holmium	165-2	3748111	3869857	3857094	3825021	1.75	cps
Indium	115-1	9139747	9039502	8997085	9058778	0.81	cps
Indium	115-2	884726	891678	888326	888243	0.39	cps
Iron	54-2	823765	820152	757937	800618	4.62	cps
Iron	56-2	16279109	15878987	14912315	15690137	4.48	cps
Iron	57-2	380964	378310	351299	370191	4.43	cps
Krypton	83-1	350	463	450	421	14.71	cps
Lead	206-1	11250569	11289895	11234005	11258157	0.25	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-06DLX5	Instrumnet Name :	P8
Client Sample ID :	3829DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:19:51	DataFile Name :	039AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	9132667	9191450	9200456	9174858	0.40	cps
Lead	208-1	43155841	43342517	43434739	43311032	0.33	cps
Lithium	6-1	2516059	2460188	2473470	2483239	1.18	cps
Magnesium	24-2	510912	510382	479637	500310	3.58	cps
Manganese	55-2	108901	107615	102847	106454	3.00	cps
Molybdenum	94-1	139299	141411	141771	140827	0.95	cps
Molybdenum	95-1	17298	17254	17741	17431	1.55	cps
Molybdenum	96-1	40061	41107	40241	40470	1.38	cps
Molybdenum	97-1	10781	10487	10914	10728	2.04	cps
Molybdenum	98-1	27808	27724	28239	27924	0.99	cps
Neodymium	150-1	30468	30114	29927	30169	0.91	cps
Neodymium	150-2	7979	7529	7212	7573	5.09	cps
Nickel	60-2	15619	15575	14484	15226	4.22	cps
Phosphorus	31-2	2657	2664	2324	2548	7.63	cps
Potassium	39-2	820783	821119	802848	814917	1.28	cps
Rhodium	103-1	8524167	8524463	8472169	8506933	0.35	cps
Rhodium	103-2	3378339	3425912	3424389	3409546	0.79	cps
Scandium	45-1	6435350	6406873	6516737	6452987	0.88	cps
Scandium	45-2	119112	120483	120934	120176	0.79	cps
Selenium	82-1	210	123	100	144	40.13	cps
Selenium	77-2	37	50	43	43	15.38	cps
Selenium	78-2	40	63	73	59	29.04	cps
Silicon	28-1	289459809	287957676	291660329	289692605	0.64	cps
Silver	107-1	11605	12232	11685	11841	2.88	cps
Silver	109-1	10778	10934	11078	10930	1.37	cps
Sodium	23-2	59722294	59657147	58231292	59203578	1.42	cps
Strontium	86-1	341329	345256	345653	344079	0.69	cps
Strontium	88-1	3279722	3312329	3304135	3298729	0.51	cps
Sulfur	34-1	1247729	1262068	1241130	1250309	0.86	cps
Terbium	159-1	10632969	10474310	10731864	10613048	1.22	cps
Terbium	159-2	3686155	3722214	3712123	3706831	0.50	cps
Thallium	203-1	1160	1187	1140	1162	2.01	cps
Thallium	205-1	2597	2660	2570	2609	1.77	cps
Tin	118-1	62957	63945	65443	64115	1.95	cps
Titanium	47-1	268224	272904	273528	271552	1.07	cps
Uranium	238-1	24280	24417	25058	24585	1.69	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-06DLX5	Instrumnet Name :	P8
Client Sample ID :	3829DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 17:19:51	DataFile Name :	039AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	41767	42443	39635	41282	3.55	cps
Ytterbium	172-1	5124	5398	5394	5306	2.96	cps
Ytterbium	172-2	2397	2197	2080	2225	7.20	cps
Ytterbium	176-1	5181	5191	5281	5218	1.06	cps
Ytterbium	176-2	1890	2087	1897	1958	5.70	cps
Yttrium	89-1	17186145	16950048	16714543	16950245	1.39	cps
Yttrium	89-2	1180015	1192927	1181892	1184945	0.59	cps
Zinc	66-2	487556	490499	457452	478503	3.82	cps
Zirconium	90-1	353614	361524	362744	359294	1.38	cps
Zirconium	91-1	77940	80139	80571	79550	1.77	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	PB167626BS	Instrumnet Name :	P8
Client Sample ID :	PB167626BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:26:29	DataFile Name :	041LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1120005	1130825	1166167	1138999	2.12	cps
Antimony	121-1	16807631	16713395	16567448	16696158	0.72	cps
Arsenic	75-2	348563	353218	347382	349721	0.88	cps
Barium	135-1	20129777	19918436	19994123	20014112	0.54	cps
Barium	137-1	34226659	34195294	34396509	34272821	0.32	cps
Beryllium	9-1	3364922	3397322	3451827	3404690	1.29	cps
Bismuth	209-1	5552428	5483573	5590267	5542089	0.98	cps
Bismuth	209-2	2501702	2416411	2494949	2471021	1.92	cps
Bromine	81-1	35705	36919	37697	36774	2.73	cps
Cadmium	108-1	311440	320130	316626	316066	1.38	cps
Cadmium	106-1	449124	452786	461951	454621	1.45	cps
Cadmium	111-1	4218240	4249636	4262277	4243384	0.53	cps
Calcium	43-1	5570435	5513570	5654986	5579664	1.28	cps
Calcium	44-1	91079122	91661465	91482705	91407764	0.33	cps
Carbon	12-1	6667228	6812998	6900243	6793490	1.73	cps
Carbon	12-2	48413	48546	48366	48442	0.19	cps
Chlorine	35-1	1253481	1244746	1204101	1234109	2.14	cps
Chlorine	35-2	4674	4914	4607	4732	3.41	cps
Chromium	52-2	3722154	3801598	3790222	3771325	1.14	cps
Cobalt	59-2	6865924	6947723	7024153	6945933	1.14	cps
Copper	63-2	53511109	53146866	54073438	53577138	0.87	cps
Dysprosium	156-1	297	353	330	327	8.72	cps
Dysprosium	156-2	40	57	47	48	17.56	cps
Erbium	164-1	207	200	247	218	11.59	cps
Erbium	164-2	90	77	83	83	8.00	cps
Gadolinium	160-1	190	210	173	191	9.60	cps
Gadolinium	160-2	47	67	73	62	22.30	cps
Holmium	165-1	9555893	9586949	9894251	9679031	1.93	cps
Holmium	165-2	3666411	3644762	3662754	3657976	0.32	cps
Indium	115-1	8122938	8248409	8224577	8198642	0.81	cps
Indium	115-2	778557	774378	778140	777025	0.30	cps
Iron	54-2	7530656	7481101	7616392	7542716	0.91	cps
Iron	56-2	137910298	138649028	137255495	137938273	0.51	cps
Iron	57-2	3557294	3523371	3472470	3517712	1.21	cps
Krypton	83-1	460	483	410	451	8.31	cps
Lead	206-1	55955438	55978606	55824321	55919455	0.15	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	PB167626BS	Instrumnet Name :	P8
Client Sample ID :	PB167626BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:26:29	DataFile Name :	041LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	47778079	47652748	47929241	47786689	0.29	cps
Lead	208-1	219021015	219202638	221837347	220020333	0.72	cps
Lithium	6-1	2226833	2257873	2317542	2267416	2.03	cps
Magnesium	24-2	21375205	21412775	21158180	21315387	0.64	cps
Manganese	55-2	15503370	15795931	15817244	15705515	1.12	cps
Molybdenum	94-1	58644909	59750632	60666334	59687292	1.70	cps
Molybdenum	95-1	84881524	85589472	86768862	85746619	1.11	cps
Molybdenum	96-1	94533845	95213175	95090742	94945921	0.38	cps
Molybdenum	97-1	53236226	54124906	54048761	53803298	0.92	cps
Molybdenum	98-1	138049445	138855171	139421101	138775239	0.50	cps
Neodymium	150-1	1377	1307	1240	1308	5.23	cps
Neodymium	150-2	57	43	47	49	14.20	cps
Nickel	60-2	1995776	1938490	1986237	1973501	1.56	cps
Phosphorus	31-2	58206	58989	57922	58372	0.95	cps
Potassium	39-2	7462263	7446413	7352525	7420401	0.80	cps
Rhodium	103-1	7854413	7749756	7848087	7817419	0.75	cps
Rhodium	103-2	3181275	3143521	3222721	3182506	1.24	cps
Scandium	45-1	5955026	5941539	5971713	5956093	0.25	cps
Scandium	45-2	116810	118074	117966	117617	0.60	cps
Selenium	82-1	242768	249870	250682	247773	1.76	cps
Selenium	77-2	4431	4394	4614	4480	2.63	cps
Selenium	78-2	15789	15612	15569	15657	0.75	cps
Silicon	28-1	19602444	19984375	20180088	19922302	1.47	cps
Silver	107-1	21126691	21521440	21640192	21429441	1.25	cps
Silver	109-1	19962295	20606252	20487293	20351947	1.68	cps
Sodium	23-2	42934069	43313213	43586789	43278024	0.76	cps
Strontium	86-1	5617856	5732998	5659392	5670082	1.03	cps
Strontium	88-1	48370799	49336683	49665279	49124254	1.37	cps
Sulfur	34-1	2084961	2052827	2084144	2073977	0.88	cps
Terbium	159-1	10157645	9955776	10070210	10061210	1.01	cps
Terbium	159-2	3481570	3484198	3528323	3498031	0.75	cps
Thallium	203-1	13505319	13892641	13643215	13680392	1.44	cps
Thallium	205-1	32128863	32256966	32563580	32316470	0.69	cps
Tin	118-1	13641040	13551079	13674848	13622322	0.47	cps
Titanium	47-1	24814106	25113533	25069824	24999154	0.65	cps
Uranium	238-1	40046231	41230484	42233984	41170233	2.66	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	PB167626BS	Instrumnet Name :	P8
Client Sample ID :	PB167626BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:26:29	DataFile Name :	041LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2872996	2883338	2855042	2870459	0.50	cps
Ytterbium	172-1	227	257	310	264	15.96	cps
Ytterbium	172-2	110	133	127	123	9.75	cps
Ytterbium	176-1	62721	62889	62825	62812	0.13	cps
Ytterbium	176-2	22376	22756	22770	22634	0.99	cps
Yttrium	89-1	15720173	15930876	16095872	15915640	1.18	cps
Yttrium	89-2	1085627	1087205	1090748	1087860	0.24	cps
Zinc	66-2	5896533	5966908	5968702	5944047	0.69	cps
Zirconium	90-1	29123610	30233885	30540841	29966112	2.49	cps
Zirconium	91-1	6464649	6540411	6657132	6554064	1.48	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	PB167626BL	Instrumnet Name :	P8
Client Sample ID :	PB167626BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:33:49	DataFile Name :	043CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	320	273	353	316	12.73	cps
Antimony	121-1	690	747	623	687	8.99	cps
Arsenic	75-2	10	3	3	6	69.34	cps
Barium	135-1	180	207	240	209	14.39	cps
Barium	137-1	307	373	343	341	9.79	cps
Beryllium	9-1	226	219	222	222	1.73	cps
Bismuth	209-1	5970957	6097215	5958937	6009036	1.27	cps
Bismuth	209-2	2631411	2579748	2629992	2613717	1.13	cps
Bromine	81-1	35639	36086	34777	35501	1.88	cps
Cadmium	108-1	20	20	27	22	17.33	cps
Cadmium	106-1	5518	5575	5381	5491	1.81	cps
Cadmium	111-1	3922	3918	3808	3883	1.66	cps
Calcium	43-1	1270	1137	1193	1200	5.58	cps
Calcium	44-1	34799	34699	34619	34706	0.26	cps
Carbon	12-1	5057623	4956437	4890345	4968135	1.70	cps
Carbon	12-2	32653	31223	31454	31777	2.42	cps
Chlorine	35-1	689286	679858	669823	679656	1.43	cps
Chlorine	35-2	2700	2644	2550	2631	2.88	cps
Chromium	52-2	1763	1757	1643	1721	3.92	cps
Cobalt	59-2	113	67	50	77	42.82	cps
Copper	63-2	2410	2540	2540	2497	3.01	cps
Dysprosium	156-1	0	20	17	12	87.67	cps
Dysprosium	156-2	3	0	3	2	86.60	cps
Erbium	164-1	70	97	57	74	27.36	cps
Erbium	164-2	13	30	17	20	44.10	cps
Gadolinium	160-1	80	77	87	81	6.28	cps
Gadolinium	160-2	20	20	13	18	21.66	cps
Holmium	165-1	10068857	10218174	10189320	10158784	0.78	cps
Holmium	165-2	3677365	3680837	3651301	3669834	0.44	cps
Indium	115-1	8719427	8973852	8928492	8873924	1.53	cps
Indium	115-2	865894	853145	849707	856249	1.00	cps
Iron	54-2	993	1063	1027	1028	3.41	cps
Iron	56-2	13283	12923	13006	13071	1.44	cps
Iron	57-2	303	303	337	314	6.12	cps
Krypton	83-1	350	287	357	331	11.67	cps
Lead	206-1	3330	3390	3334	3352	1.01	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	PB167626BL	Instrumnet Name :	P8
Client Sample ID :	PB167626BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:33:49	DataFile Name :	043CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2920	3007	2907	2945	1.84	cps
Lead	208-1	13346	13229	12946	13174	1.56	cps
Lithium	6-1	2411297	2376689	2403764	2397250	0.76	cps
Magnesium	24-2	573	547	587	569	3.58	cps
Manganese	55-2	6011	6288	5841	6047	3.73	cps
Molybdenum	94-1	1193	1083	1140	1139	4.83	cps
Molybdenum	95-1	593	627	607	609	2.76	cps
Molybdenum	96-1	773	727	690	730	5.72	cps
Molybdenum	97-1	363	333	337	344	4.77	cps
Molybdenum	98-1	910	987	857	918	7.12	cps
Neodymium	150-1	13	17	0	10	88.20	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	660	773	870	768	13.69	cps
Phosphorus	31-2	83	70	70	74	10.34	cps
Potassium	39-2	22184	21987	22404	22192	0.94	cps
Rhodium	103-1	8366278	8462611	8468380	8432423	0.68	cps
Rhodium	103-2	3379302	3392884	3434558	3402248	0.85	cps
Scandium	45-1	6030336	6105759	6108552	6081549	0.73	cps
Scandium	45-2	114404	114985	114551	114647	0.26	cps
Selenium	82-1	37	133	-23	49	161.69	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	37	33	27	32	15.80	cps
Silicon	28-1	700955	696301	632257	676504	5.67	cps
Silver	107-1	513	543	550	536	3.65	cps
Silver	109-1	493	420	447	453	8.19	cps
Sodium	23-2	127293	126724	126388	126802	0.36	cps
Strontium	86-1	613	637	580	610	4.67	cps
Strontium	88-1	670	760	803	744	9.14	cps
Sulfur	34-1	686638	678311	673757	679569	0.96	cps
Terbium	159-1	10253729	10367365	10213493	10278195	0.78	cps
Terbium	159-2	3600350	3549127	3483614	3544364	1.65	cps
Thallium	203-1	693	710	553	652	13.19	cps
Thallium	205-1	1433	1503	1500	1479	2.67	cps
Tin	118-1	5021	5702	5258	5327	6.49	cps
Titanium	47-1	867	867	787	840	5.50	cps
Uranium	238-1	270	230	227	242	9.96	cps

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	PB167626BL	Instrumnet Name :	P8
Client Sample ID :	PB167626BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:33:49	DataFile Name :	043CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	33	30	10	24	51.62	cps
Ytterbium	172-1	47	47	43	46	4.23	cps
Ytterbium	172-2	10	13	27	17	52.93	cps
Ytterbium	176-1	1233	1227	1243	1235	0.68	cps
Ytterbium	176-2	197	247	260	234	14.24	cps
Yttrium	89-1	16068455	16476243	16468776	16337824	1.43	cps
Yttrium	89-2	1118675	1107604	1110305	1112194	0.52	cps
Zinc	66-2	1927	1853	2024	1935	4.41	cps
Zirconium	90-1	2154	2217	2174	2181	1.48	cps
Zirconium	91-1	473	497	417	462	8.90	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-01	Instrumnet Name :	P8
Client Sample ID :	3822	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:37:39	DataFile Name :	044AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	238816	238661	239708	239062	0.24	cps
Antimony	121-1	360325	365718	364140	363394	0.76	cps
Arsenic	75-2	5041	4821	4924	4929	2.23	cps
Barium	135-1	21800365	22125721	21666111	21864065	1.08	cps
Barium	137-1	37730415	37935134	36946941	37537497	1.39	cps
Beryllium	9-1	839	788	794	807	3.41	cps
Bismuth	209-1	6061722	6177054	6084999	6107925	1.00	cps
Bismuth	209-2	2664369	2693739	2646333	2668147	0.90	cps
Bromine	81-1	52077	52494	53050	52540	0.93	cps
Cadmium	108-1	9824	9683	9714	9740	0.76	cps
Cadmium	106-1	18946	18756	18823	18842	0.51	cps
Cadmium	111-1	129209	129324	130467	129667	0.54	cps
Calcium	43-1	1254081	1264570	1308004	1275552	2.24	cps
Calcium	44-1	20410092	20314495	20363943	20362843	0.23	cps
Carbon	12-1	48514298	52972758	53946883	51811313	5.59	cps
Carbon	12-2	371222	378361	376014	375199	0.97	cps
Chlorine	35-1	2104311	2334360	2489518	2309397	8.39	cps
Chlorine	35-2	10404	10437	10954	10598	2.91	cps
Chromium	52-2	943022	943680	938897	941866	0.28	cps
Cobalt	59-2	80023	79742	80422	80062	0.43	cps
Copper	63-2	3297988	3260856	3267025	3275290	0.61	cps
Dysprosium	156-1	20886	20432	21360	20893	2.22	cps
Dysprosium	156-2	6195	6558	6405	6386	2.86	cps
Erbium	164-1	16143	16654	16657	16485	1.79	cps
Erbium	164-2	5895	5745	5705	5781	1.73	cps
Gadolinium	160-1	17208	17845	17255	17436	2.04	cps
Gadolinium	160-2	7442	7339	7005	7262	3.14	cps
Holmium	165-1	9955392	9686953	9849511	9830618	1.38	cps
Holmium	165-2	3658062	3643987	3694636	3665562	0.71	cps
Indium	115-1	8761020	8743963	9050425	8851803	1.95	cps
Indium	115-2	850662	842297	845662	846207	0.50	cps
Iron	54-2	14944136	14755360	14667121	14788872	0.96	cps
Iron	56-2	274111163	275313223	276398796	275274394	0.42	cps
Iron	57-2	6969433	6844684	6915475	6909864	0.91	cps
Krypton	83-1	407	343	403	384	9.27	cps
Lead	206-1	1519971	1524530	1560216	1534906	1.44	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-01	Instrumnet Name :	P8
Client Sample ID :	3822	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:37:39	DataFile Name :	044AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1283957	1289903	1293869	1289243	0.39	cps
Lead	208-1	6283890	6310236	6356415	6316847	0.58	cps
Lithium	6-1	2404776	2323509	2298928	2342404	2.36	cps
Magnesium	24-2	685080	686019	686126	685741	0.08	cps
Manganese	55-2	1037518	1032710	1029169	1033132	0.41	cps
Molybdenum	94-1	682038	695358	688101	688499	0.97	cps
Molybdenum	95-1	911444	921029	924253	918909	0.73	cps
Molybdenum	96-1	1015958	1010517	1019822	1015432	0.46	cps
Molybdenum	97-1	561647	579239	578569	573152	1.74	cps
Molybdenum	98-1	1577515	1618506	1668321	1621447	2.80	cps
Neodymium	150-1	29823	31420	31023	30755	2.70	cps
Neodymium	150-2	7355	7362	7142	7286	1.72	cps
Nickel	60-2	190498	191738	190515	190917	0.37	cps
Phosphorus	31-2	9987	9650	9927	9855	1.82	cps
Potassium	39-2	442060	441454	440026	441180	0.24	cps
Rhodium	103-1	8099162	8223127	8297301	8206530	1.22	cps
Rhodium	103-2	3384920	3328473	3332184	3348526	0.94	cps
Scandium	45-1	6047823	6037634	6066700	6050719	0.24	cps
Scandium	45-2	116656	115785	115913	116118	0.41	cps
Selenium	82-1	297	350	270	306	13.33	cps
Selenium	77-2	43	33	47	41	16.89	cps
Selenium	78-2	33	73	63	57	36.74	cps
Silicon	28-1	24656640	25219922	25391884	25089482	1.53	cps
Silver	107-1	24515	25337	25644	25165	2.32	cps
Silver	109-1	23213	23974	23737	23641	1.65	cps
Sodium	23-2	21168675	21120261	21117883	21135606	0.14	cps
Strontium	86-1	769136	775871	774600	773202	0.46	cps
Strontium	88-1	7108800	7192672	7315894	7205789	1.45	cps
Sulfur	34-1	5429007	5586318	5780231	5598519	3.14	cps
Terbium	159-1	10298244	10206584	10329830	10278219	0.62	cps
Terbium	159-2	3579985	3540769	3547940	3556231	0.59	cps
Thallium	203-1	2387	2137	2374	2299	6.12	cps
Thallium	205-1	5465	5588	5468	5507	1.28	cps
Tin	118-1	753867	773233	770368	765823	1.36	cps
Titanium	47-1	733313	746753	751212	743759	1.25	cps
Uranium	238-1	15523	15696	16371	15863	2.82	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-01	Instrumnet Name :	P8
Client Sample ID :	3822	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:37:39	DataFile Name :	044AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	62221	62208	61307	61912	0.85	cps
Ytterbium	172-1	5351	5445	5368	5388	0.92	cps
Ytterbium	172-2	2190	2310	2234	2245	2.71	cps
Ytterbium	176-1	5498	5561	5321	5460	2.28	cps
Ytterbium	176-2	1970	1967	2057	1998	2.55	cps
Yttrium	89-1	16387642	16379912	16459927	16409160	0.27	cps
Yttrium	89-2	1142254	1133289	1150063	1141869	0.74	cps
Zinc	66-2	2465020	2474024	2470126	2469723	0.18	cps
Zirconium	90-1	446740	440255	423464	436820	2.75	cps
Zirconium	91-1	101355	96518	92746	96873	4.45	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P8
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:44:42	DataFile Name :	046CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5417019	5546333	5458796	5474049	1.21	cps
Antimony	121-1	14317072	14302909	14645662	14421881	1.34	cps
Arsenic	75-2	310419	310219	310678	310439	0.07	cps
Barium	135-1	17518296	17544164	17605116	17555858	0.25	cps
Barium	137-1	29928059	30178125	29836174	29980786	0.59	cps
Beryllium	9-1	3030339	3070397	3080074	3060270	0.86	cps
Bismuth	209-1	5030294	5055214	5039519	5041676	0.25	cps
Bismuth	209-2	2220386	2237005	2354102	2270498	3.21	cps
Bromine	81-1	36137	37410	37406	36984	1.98	cps
Cadmium	108-1	269782	267241	268262	268428	0.48	cps
Cadmium	106-1	383946	385993	389254	386398	0.69	cps
Cadmium	111-1	3480526	3570329	3582242	3544366	1.57	cps
Calcium	43-1	24178837	24709650	24438677	24442388	1.09	cps
Calcium	44-1	389715954	402820554	394776314	395770941	1.67	cps
Carbon	12-1	5997223	6002080	6094899	6031401	0.91	cps
Carbon	12-2	46637	46356	45721	46238	1.02	cps
Chlorine	35-1	511942	515992	512683	513539	0.42	cps
Chlorine	35-2	2037	2260	2230	2176	5.57	cps
Chromium	52-2	3352132	3442252	3368542	3387642	1.42	cps
Cobalt	59-2	5916564	5999222	6000461	5972082	0.81	cps
Copper	63-2	44845463	44847289	44341034	44677929	0.65	cps
Dysprosium	156-1	673	760	700	711	6.24	cps
Dysprosium	156-2	170	160	177	169	4.97	cps
Erbium	164-1	707	667	627	667	6.00	cps
Erbium	164-2	220	273	247	247	10.81	cps
Gadolinium	160-1	530	510	523	521	1.95	cps
Gadolinium	160-2	183	197	217	199	8.43	cps
Holmium	165-1	9253329	9140819	9263927	9219358	0.74	cps
Holmium	165-2	3453397	3497230	3590401	3513676	1.99	cps
Indium	115-1	7426239	7623745	7549721	7533235	1.32	cps
Indium	115-2	744958	746692	771323	754325	1.95	cps
Iron	54-2	32850493	32897042	33031299	32926278	0.29	cps
Iron	56-2	611087991	606576631	600744351	606136324	0.86	cps
Iron	57-2	15154815	15199633	15196865	15183771	0.17	cps
Krypton	83-1	490	553	423	489	13.30	cps
Lead	206-1	47243536	47293901	47665363	47400933	0.49	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P8
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:44:42	DataFile Name :	046CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	40561208	40727634	41079335	40789392	0.65	cps
Lead	208-1	187138129	189932580	189143123	188737944	0.76	cps
Lithium	6-1	2168531	2079565	2198360	2148819	2.88	cps
Magnesium	24-2	92583369	93837582	94091795	93504249	0.86	cps
Manganese	55-2	14194648	14349918	14170586	14238384	0.68	cps
Molybdenum	94-1	52949963	53451629	53549681	53317091	0.60	cps
Molybdenum	95-1	76767816	76084621	76376676	76409704	0.45	cps
Molybdenum	96-1	84480597	85071072	82726819	84092829	1.45	cps
Molybdenum	97-1	46790513	48008748	46120996	46973419	2.04	cps
Molybdenum	98-1	120782158	124119085	123131762	122677668	1.40	cps
Neodymium	150-1	1363	1400	1333	1366	2.45	cps
Neodymium	150-2	107	70	100	92	21.18	cps
Nickel	60-2	1632696	1657550	1630504	1640250	0.92	cps
Phosphorus	31-2	53615	53642	53341	53533	0.31	cps
Potassium	39-2	33116491	33325955	33162760	33201736	0.33	cps
Rhodium	103-1	7005168	7119679	7063683	7062843	0.81	cps
Rhodium	103-2	2882572	2914252	3031136	2942653	2.66	cps
Scandium	45-1	5636424	5633758	5673462	5647881	0.39	cps
Scandium	45-2	111633	114938	117407	114659	2.53	cps
Selenium	82-1	210949	211907	211464	211440	0.23	cps
Selenium	77-2	3837	3931	3957	3908	1.61	cps
Selenium	78-2	13303	13567	13533	13468	1.07	cps
Silicon	28-1	30407983	30163281	30515369	30362211	0.59	cps
Silver	107-1	17945503	17630775	17605917	17727398	1.07	cps
Silver	109-1	16741401	16720971	16601739	16688037	0.45	cps
Sodium	23-2	190854744	190500064	187864991	189739933	0.86	cps
Strontium	86-1	5007672	5061648	5040589	5036636	0.54	cps
Strontium	88-1	43712166	43419411	42895736	43342438	0.95	cps
Sulfur	34-1	1862554	1888286	1896540	1882460	0.94	cps
Terbium	159-1	9354721	9653091	9686074	9564628	1.91	cps
Terbium	159-2	3451241	3383813	3457500	3430851	1.19	cps
Thallium	203-1	11796360	11678537	11853042	11775980	0.76	cps
Thallium	205-1	27938789	27826307	27790200	27851765	0.28	cps
Tin	118-1	11694163	11844623	12080891	11873226	1.64	cps
Titanium	47-1	21938645	22360571	22377978	22225731	1.12	cps
Uranium	238-1	36214658	37018329	37057609	36763532	1.29	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P8
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:44:42	DataFile Name :	046CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2593424	2637240	2585411	2605358	1.07	cps
Ytterbium	172-1	877	937	1043	952	8.87	cps
Ytterbium	172-2	393	463	400	419	9.22	cps
Ytterbium	176-1	57090	56547	57066	56901	0.54	cps
Ytterbium	176-2	20910	21157	20566	20878	1.42	cps
Yttrium	89-1	14988511	14930108	14941539	14953386	0.21	cps
Yttrium	89-2	1078531	1065629	1104211	1082790	1.81	cps
Zinc	66-2	5060509	5065649	5118689	5081616	0.63	cps
Zirconium	90-1	26630309	26677233	27355233	26887592	1.51	cps
Zirconium	91-1	5924818	5921086	6004732	5950212	0.79	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P8
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:48:37	DataFile Name :	047CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1017	1030	1080	1042	3.20	cps
Antimony	121-1	2867	2504	2260	2544	12.01	cps
Arsenic	75-2	7	17	13	12	41.65	cps
Barium	135-1	387	387	380	384	1.00	cps
Barium	137-1	857	707	663	742	13.67	cps
Beryllium	9-1	427	392	455	425	7.52	cps
Bismuth	209-1	5802815	5954481	5932923	5896739	1.39	cps
Bismuth	209-2	2655420	2638783	2656504	2650235	0.37	cps
Bromine	81-1	36681	36578	36959	36739	0.54	cps
Cadmium	108-1	13	27	23	21	32.88	cps
Cadmium	106-1	5351	5608	5524	5494	2.38	cps
Cadmium	111-1	3916	4084	3944	3981	2.25	cps
Calcium	43-1	1593	1530	1660	1595	4.08	cps
Calcium	44-1	41139	40788	39936	40621	1.52	cps
Carbon	12-1	4962095	4934583	4865344	4920674	1.01	cps
Carbon	12-2	32102	31731	31711	31848	0.69	cps
Chlorine	35-1	446068	439469	436737	440758	1.09	cps
Chlorine	35-2	1753	1833	1753	1780	2.59	cps
Chromium	52-2	1700	1920	1693	1771	7.28	cps
Cobalt	59-2	143	150	120	138	11.43	cps
Copper	63-2	2957	3247	3097	3100	4.68	cps
Dysprosium	156-1	7	13	17	12	41.65	cps
Dysprosium	156-2	7	3	10	7	50.03	cps
Erbium	164-1	73	70	60	68	10.24	cps
Erbium	164-2	20	37	23	27	33.08	cps
Gadolinium	160-1	87	77	90	84	8.22	cps
Gadolinium	160-2	20	20	10	17	34.64	cps
Holmium	165-1	9651598	10048526	10002464	9900863	2.19	cps
Holmium	165-2	3811746	3604679	3734257	3716894	2.81	cps
Indium	115-1	8738202	8900644	8789207	8809351	0.94	cps
Indium	115-2	877806	870353	863863	870674	0.80	cps
Iron	54-2	1473	1290	1337	1367	6.97	cps
Iron	56-2	20652	21241	19610	20501	4.03	cps
Iron	57-2	520	490	453	488	6.84	cps
Krypton	83-1	410	373	307	363	14.42	cps
Lead	206-1	4404	4227	4021	4217	4.55	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P8
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:48:37	DataFile Name :	047CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3857	3614	3584	3685	4.07	cps
Lead	208-1	17788	16488	16181	16819	5.07	cps
Lithium	6-1	2456014	2535663	2515370	2502349	1.65	cps
Magnesium	24-2	1567	1373	1463	1468	6.59	cps
Manganese	55-2	5912	5574	5421	5636	4.46	cps
Molybdenum	94-1	2520	2377	2260	2386	5.46	cps
Molybdenum	95-1	1937	1623	1527	1696	12.64	cps
Molybdenum	96-1	2354	2124	1907	2128	10.50	cps
Molybdenum	97-1	1217	1040	1057	1105	8.83	cps
Molybdenum	98-1	2960	2380	2230	2524	15.28	cps
Neodymium	150-1	33	20	10	21	55.45	cps
Neodymium	150-2	10	0	0	3	173.21	cps
Nickel	60-2	787	923	743	818	11.49	cps
Phosphorus	31-2	110	127	90	109	16.86	cps
Potassium	39-2	27169	27139	25933	26747	2.64	cps
Rhodium	103-1	8553868	8438610	8453678	8482052	0.74	cps
Rhodium	103-2	3468023	3435276	3432720	3445340	0.57	cps
Scandium	45-1	6121955	5977791	6071234	6056993	1.21	cps
Scandium	45-2	116921	115271	115097	115763	0.87	cps
Selenium	82-1	-70	20	120	23	407.29	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	50	27	23	33	43.59	cps
Silicon	28-1	710657	686594	695649	697634	1.74	cps
Silver	107-1	1323	1440	1203	1322	8.95	cps
Silver	109-1	1250	1050	1090	1130	9.37	cps
Sodium	23-2	125810	124481	124845	125046	0.55	cps
Strontium	86-1	680	657	703	680	3.43	cps
Strontium	88-1	1443	1107	1100	1217	16.14	cps
Sulfur	34-1	713860	717891	715776	715842	0.28	cps
Terbium	159-1	10497900	10302215	10354128	10384748	0.98	cps
Terbium	159-2	3584620	3566426	3615369	3588805	0.69	cps
Thallium	203-1	980	1077	983	1013	5.42	cps
Thallium	205-1	2490	2267	2327	2361	4.90	cps
Tin	118-1	5628	5428	5414	5490	2.18	cps
Titanium	47-1	970	907	847	908	6.79	cps
Uranium	238-1	720	587	593	633	11.86	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P8
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:48:37	DataFile Name :	047CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	67	70	47	61	20.65	cps
Ytterbium	172-1	70	40	63	58	27.26	cps
Ytterbium	172-2	23	10	33	22	52.68	cps
Ytterbium	176-1	1193	1283	1237	1238	3.64	cps
Ytterbium	176-2	240	283	207	243	15.80	cps
Yttrium	89-1	16353284	16119754	16437641	16303560	1.01	cps
Yttrium	89-2	1134354	1130184	1130089	1131542	0.22	cps
Zinc	66-2	2187	2184	2140	2170	1.20	cps
Zirconium	90-1	3871	3947	3804	3874	1.85	cps
Zirconium	91-1	703	840	777	773	8.84	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-02	Instrumnet Name :	P8
Client Sample ID :	3833	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:52:00	DataFile Name :	048AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	48748	48882	48745	48792	0.16	cps
Antimony	121-1	174119	176268	177119	175835	0.88	cps
Arsenic	75-2	740	930	837	836	11.37	cps
Barium	135-1	5188632	5288449	5270415	5249165	1.01	cps
Barium	137-1	8819624	8947888	9020129	8929213	1.14	cps
Beryllium	9-1	430	424	411	421	2.29	cps
Bismuth	209-1	5802502	5864185	5949457	5872048	1.26	cps
Bismuth	209-2	2598907	2556784	2608664	2588118	1.07	cps
Bromine	81-1	38978	39679	40064	39574	1.39	cps
Cadmium	108-1	3614	3577	3477	3556	1.99	cps
Cadmium	106-1	10668	10627	10467	10587	1.00	cps
Cadmium	111-1	50429	51276	50110	50605	1.19	cps
Calcium	43-1	228916	228457	234206	230527	1.39	cps
Calcium	44-1	3874850	3900237	3954862	3909983	1.05	cps
Carbon	12-1	21393296	22833459	24012697	22746484	5.77	cps
Carbon	12-2	165321	165665	169070	166685	1.24	cps
Chlorine	35-1	516441	522664	529426	522844	1.24	cps
Chlorine	35-2	2054	2217	2217	2162	4.36	cps
Chromium	52-2	246361	248178	249380	247973	0.61	cps
Cobalt	59-2	17921	17744	17451	17706	1.34	cps
Copper	63-2	816110	819974	827366	821150	0.70	cps
Dysprosium	156-1	3437	3287	3427	3384	2.48	cps
Dysprosium	156-2	1013	960	1067	1013	5.26	cps
Erbium	164-1	2810	2820	2920	2850	2.13	cps
Erbium	164-2	840	1057	857	918	13.14	cps
Gadolinium	160-1	2820	2860	2800	2827	1.08	cps
Gadolinium	160-2	1240	1210	1260	1237	2.03	cps
Holmium	165-1	9699221	9949019	10075947	9908062	1.93	cps
Holmium	165-2	3659484	3593965	3637799	3630416	0.92	cps
Indium	115-1	8666546	8766146	8692734	8708475	0.59	cps
Indium	115-2	851387	838383	858317	849363	1.19	cps
Iron	54-2	4138379	4098554	4025592	4087509	1.40	cps
Iron	56-2	76041637	75685751	74864137	75530508	0.80	cps
Iron	57-2	1946813	1940670	1968499	1951994	0.75	cps
Krypton	83-1	363	367	353	361	1.92	cps
Lead	206-1	350634	355778	357158	354523	0.97	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-02	Instrumnet Name :	P8
Client Sample ID :	3833	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:52:00	DataFile Name :	048AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	290493	291333	295145	292324	0.85	cps
Lead	208-1	1357743	1361906	1371177	1363609	0.50	cps
Lithium	6-1	2571148	2472499	2510164	2517937	1.98	cps
Magnesium	24-2	128783	130767	130508	130019	0.83	cps
Manganese	55-2	296426	298100	294268	296265	0.65	cps
Molybdenum	94-1	237522	225877	219988	227795	3.92	cps
Molybdenum	95-1	262276	260923	264700	262633	0.73	cps
Molybdenum	96-1	292591	295960	293354	293968	0.60	cps
Molybdenum	97-1	160456	162660	163737	162284	1.03	cps
Molybdenum	98-1	414194	416186	420105	416828	0.72	cps
Neodymium	150-1	5021	5028	4994	5014	0.35	cps
Neodymium	150-2	1097	1330	1097	1175	11.47	cps
Nickel	60-2	53627	53112	52403	53047	1.16	cps
Phosphorus	31-2	4474	4811	4721	4669	3.73	cps
Potassium	39-2	95580	96402	96550	96177	0.54	cps
Rhodium	103-1	8268191	8325976	8340436	8311534	0.46	cps
Rhodium	103-2	3435276	3348129	3347324	3376910	1.50	cps
Scandium	45-1	5894326	6014575	6034350	5981084	1.27	cps
Scandium	45-2	116998	114062	116541	115867	1.36	cps
Selenium	82-1	40	100	33	58	63.54	cps
Selenium	77-2	13	7	3	8	65.47	cps
Selenium	78-2	37	17	33	29	37.08	cps
Silicon	28-1	9062230	9124305	9285981	9157505	1.26	cps
Silver	107-1	4991	5161	5094	5082	1.69	cps
Silver	109-1	4854	4714	4848	4805	1.64	cps
Sodium	23-2	1517076	1559491	1533697	1536755	1.39	cps
Strontium	86-1	259339	263323	263607	262090	0.91	cps
Strontium	88-1	2549554	2528878	2539374	2539269	0.41	cps
Sulfur	34-1	1944881	1970417	1938355	1951218	0.87	cps
Terbium	159-1	9974035	10320891	10385316	10226747	2.16	cps
Terbium	159-2	3606810	3535714	3527082	3556535	1.23	cps
Thallium	203-1	1677	1553	1673	1635	4.30	cps
Thallium	205-1	3721	3551	3754	3675	2.97	cps
Tin	118-1	237454	236859	236258	236857	0.25	cps
Titanium	47-1	130139	131132	126533	129268	1.87	cps
Uranium	238-1	3190	3474	3411	3358	4.43	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-02	Instrumnet Name :	P8
Client Sample ID :	3833	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:52:00	DataFile Name :	048AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	14471	14140	14564	14392	1.55	cps
Ytterbium	172-1	1487	1563	1433	1495	4.37	cps
Ytterbium	172-2	587	673	597	619	7.66	cps
Ytterbium	176-1	2607	2437	2604	2549	3.81	cps
Ytterbium	176-2	730	793	730	751	4.87	cps
Yttrium	89-1	15615866	16249323	16261741	16042310	2.30	cps
Yttrium	89-2	1121704	1097830	1120128	1113221	1.20	cps
Zinc	66-2	462213	465151	456470	461278	0.96	cps
Zirconium	90-1	242389	208206	180845	210480	14.65	cps
Zirconium	91-1	54112	45203	39566	46294	15.84	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03	Instrumnet Name :	P8
Client Sample ID :	RT-3873	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:55:15	DataFile Name :	049AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	16271811	16064766	16094774	16143784	0.69	cps
Antimony	121-1	16694	16517	17505	16905	3.12	cps
Arsenic	75-2	64718	64480	64691	64629	0.20	cps
Barium	135-1	8081745	8213489	8285018	8193417	1.26	cps
Barium	137-1	14012218	14030478	14208869	14083855	0.77	cps
Beryllium	9-1	59133	61073	61337	60514	1.99	cps
Bismuth	209-1	5557217	5619818	5518870	5565302	0.92	cps
Bismuth	209-2	2497315	2496585	2511053	2501651	0.33	cps
Bromine	81-1	74865	80057	82337	79086	4.84	cps
Cadmium	108-1	11652	11852	11925	11810	1.20	cps
Cadmium	106-1	35155	34998	35452	35202	0.66	cps
Cadmium	111-1	94046	95043	95802	94964	0.93	cps
Calcium	43-1	3692350	3694836	3690897	3692694	0.05	cps
Calcium	44-1	59506517	59485016	59269646	59420393	0.22	cps
Carbon	12-1	30822325	32556230	33131297	32169951	3.74	cps
Carbon	12-2	226293	220953	222813	223353	1.21	cps
Chlorine	35-1	592427	606321	609693	602814	1.52	cps
Chlorine	35-2	2550	2887	2677	2705	6.29	cps
Chromium	52-2	1593897	1591241	1596971	1594036	0.18	cps
Cobalt	59-2	2138418	2142316	2083114	2121283	1.56	cps
Copper	63-2	6901542	6977717	6962183	6947147	0.58	cps
Dysprosium	156-1	1351554	1356111	1357844	1355170	0.24	cps
Dysprosium	156-2	443713	444179	446735	444876	0.37	cps
Erbium	164-1	1077339	1089120	1092432	1086297	0.73	cps
Erbium	164-2	387073	387408	386181	386887	0.16	cps
Gadolinium	160-1	1167572	1189444	1205348	1187455	1.60	cps
Gadolinium	160-2	508228	506687	505862	506926	0.24	cps
Holmium	165-1	10290940	10339188	10340859	10323662	0.27	cps
Holmium	165-2	3897472	3902109	3912342	3903974	0.19	cps
Indium	115-1	8303026	8433719	8446637	8394461	0.95	cps
Indium	115-2	832399	835360	831998	833252	0.22	cps
Iron	54-2	58643757	58922101	58868084	58811314	0.25	cps
Iron	56-2	1089351664	1076551984	1081425077	1082442908	0.60	cps
Iron	57-2	27438408	27308509	27137059	27294658	0.55	cps
Krypton	83-1	1990	2084	2277	2117	6.91	cps
Lead	206-1	29208130	28951125	29719327	29292861	1.33	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03	Instrumnet Name :	P8
Client Sample ID :	RT-3873	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:55:15	DataFile Name :	049AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	24067606	23989624	24857421	24304884	1.98	cps
Lead	208-1	112460981	112508821	115040349	113336717	1.30	cps
Lithium	6-1	2428418	2517081	2611056	2518852	3.63	cps
Magnesium	24-2	22612370	22341906	22400215	22451497	0.63	cps
Manganese	55-2	27345598	27225796	27145255	27238883	0.37	cps
Molybdenum	94-1	1850598	1905514	1843604	1866572	1.82	cps
Molybdenum	95-1	100063	103055	100839	101319	1.53	cps
Molybdenum	96-1	390547	398819	399688	396351	1.27	cps
Molybdenum	97-1	62135	61853	61345	61778	0.65	cps
Molybdenum	98-1	157685	159194	159195	158691	0.55	cps
Neodymium	150-1	1944110	1965821	1936907	1948946	0.77	cps
Neodymium	150-2	459485	458965	462514	460321	0.42	cps
Nickel	60-2	846218	837809	840058	841362	0.52	cps
Phosphorus	31-2	63522	62330	63321	63057	1.01	cps
Potassium	39-2	4895382	4834937	4871045	4867121	0.62	cps
Rhodium	103-1	7764980	7856012	7752311	7791101	0.73	cps
Rhodium	103-2	3137605	3161952	3177792	3159116	0.64	cps
Scandium	45-1	9622198	9796804	9828957	9749320	1.14	cps
Scandium	45-2	188081	187455	184845	186794	0.92	cps
Selenium	82-1	2681	2574	2687	2647	2.40	cps
Selenium	77-2	2524	2424	2727	2558	6.04	cps
Selenium	78-2	1463	1407	1530	1467	4.21	cps
Silicon	28-1	82185139	83181587	83507255	82957994	0.83	cps
Silver	107-1	51733	54152	54219	53368	2.65	cps
Silver	109-1	46170	47361	47405	46979	1.49	cps
Sodium	23-2	5982763	5888000	5970452	5947071	0.87	cps
Strontium	86-1	2156750	2189510	2170375	2172212	0.76	cps
Strontium	88-1	18332204	18885132	18901419	18706252	1.73	cps
Sulfur	34-1	900223	889015	879399	889546	1.17	cps
Terbium	159-1	10773097	10865373	10720676	10786382	0.68	cps
Terbium	159-2	3843950	3777343	3850301	3823865	1.06	cps
Thallium	203-1	56492	56576	58173	57080	1.66	cps
Thallium	205-1	133102	134937	137544	135194	1.65	cps
Tin	118-1	270661	275170	276303	274045	1.09	cps
Titanium	47-1	11054890	11210250	11144136	11136425	0.70	cps
Uranium	238-1	915146	937331	937543	930006	1.38	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03	Instrumnet Name :	P8
Client Sample ID :	RT-3873	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:55:15	DataFile Name :	049AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2139078	2116362	2118691	2124710	0.59	cps
Ytterbium	172-1	334246	337562	340181	337330	0.88	cps
Ytterbium	172-2	144077	144064	145971	144704	0.76	cps
Ytterbium	176-1	213794	215482	219277	216184	1.30	cps
Ytterbium	176-2	95378	94411	94552	94780	0.55	cps
Yttrium	89-1	33630627	35008412	34194545	34277861	2.02	cps
Yttrium	89-2	2571647	2623750	2591972	2595790	1.01	cps
Zinc	66-2	3420457	3425321	3446054	3430610	0.40	cps
Zirconium	90-1	4977001	4977596	4903768	4952789	0.86	cps
Zirconium	91-1	998564	1030777	1011014	1013451	1.60	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUP	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUP	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:58:15	DataFile Name :	050AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	17433873	17720908	17474642	17543141	0.89	cps
Antimony	121-1	18489	19207	19441	19046	2.60	cps
Arsenic	75-2	54846	54301	54495	54547	0.51	cps
Barium	135-1	8201693	8172454	8262286	8212145	0.56	cps
Barium	137-1	14359745	14180768	14300453	14280322	0.64	cps
Beryllium	9-1	67419	67634	68578	67877	0.91	cps
Bismuth	209-1	5621695	5570312	5694322	5628776	1.11	cps
Bismuth	209-2	2526884	2495008	2526606	2516166	0.73	cps
Bromine	81-1	76672	81488	84983	81047	5.15	cps
Cadmium	108-1	8793	8720	8606	8706	1.08	cps
Cadmium	106-1	30413	30567	31639	30873	2.16	cps
Cadmium	111-1	56276	56395	57522	56731	1.21	cps
Calcium	43-1	3459777	3497226	3476385	3477796	0.54	cps
Calcium	44-1	56573212	56282402	56616214	56490610	0.32	cps
Carbon	12-1	29940163	32141411	32604083	31561886	4.51	cps
Carbon	12-2	218422	216318	216653	217131	0.52	cps
Chlorine	35-1	574898	587622	595873	586131	1.80	cps
Chlorine	35-2	2610	2574	2684	2622	2.14	cps
Chromium	52-2	1795788	1815864	1820104	1810585	0.72	cps
Cobalt	59-2	1323141	1322734	1310803	1318893	0.53	cps
Copper	63-2	5790861	5703584	5859825	5784756	1.35	cps
Dysprosium	156-1	1635829	1626215	1660923	1640989	1.09	cps
Dysprosium	156-2	491751	487338	488169	489086	0.48	cps
Erbium	164-1	1228338	1235221	1234974	1232844	0.32	cps
Erbium	164-2	429751	431727	429183	430220	0.31	cps
Gadolinium	160-1	1293213	1326924	1328646	1316261	1.52	cps
Gadolinium	160-2	554727	560606	561308	558880	0.65	cps
Holmium	165-1	10500626	10546504	10530654	10525928	0.22	cps
Holmium	165-2	3927581	3920543	3953682	3933935	0.44	cps
Indium	115-1	8262576	8280990	8386174	8309913	0.80	cps
Indium	115-2	830577	827485	829048	829037	0.19	cps
Iron	54-2	57835396	58071746	57185709	57697617	0.80	cps
Iron	56-2	1064512571	1060687824	1069480064	1064893486	0.41	cps
Iron	57-2	27003764	27096940	27305451	27135385	0.57	cps
Krypton	83-1	2217	2207	2277	2234	1.70	cps
Lead	206-1	20930388	20660478	20844320	20811729	0.66	cps

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LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUP	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUP	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:58:15	DataFile Name :	050AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	17480712	17213855	17630043	17441537	1.21	cps
Lead	208-1	81194950	80688983	82333677	81405870	1.03	cps
Lithium	6-1	2678821	2817920	2667229	2721323	3.08	cps
Magnesium	24-2	19926520	20142883	19843554	19970986	0.77	cps
Manganese	55-2	20275906	20473596	20309510	20353004	0.52	cps
Molybdenum	94-1	1701238	1715893	1741048	1719393	1.17	cps
Molybdenum	95-1	76472	77685	78825	77661	1.52	cps
Molybdenum	96-1	347699	356232	354658	352863	1.29	cps
Molybdenum	97-1	47310	48203	47752	47755	0.94	cps
Molybdenum	98-1	120582	122421	122855	121952	0.99	cps
Neodymium	150-1	2229278	2212775	2217400	2219818	0.38	cps
Neodymium	150-2	518104	517902	515825	517277	0.24	cps
Nickel	60-2	670762	664292	665412	666822	0.52	cps
Phosphorus	31-2	57513	56289	57426	57076	1.20	cps
Potassium	39-2	5646545	5724771	5656530	5675949	0.75	cps
Rhodium	103-1	7703302	7696212	7843377	7747630	1.07	cps
Rhodium	103-2	3184495	3153200	3148562	3162086	0.62	cps
Scandium	45-1	10065905	10056769	10355385	10159353	1.67	cps
Scandium	45-2	194355	192538	193613	193502	0.47	cps
Selenium	82-1	3371	3164	3171	3235	3.63	cps
Selenium	77-2	2964	2967	3057	2996	1.77	cps
Selenium	78-2	1493	1693	1493	1560	7.40	cps
Silicon	28-1	117866168	121267518	118781062	119304916	1.48	cps
Silver	107-1	51716	53219	53336	52757	1.71	cps
Silver	109-1	46699	48100	48301	47700	1.83	cps
Sodium	23-2	5594149	5610673	5556647	5587156	0.50	cps
Strontium	86-1	1952204	1964275	1942770	1953083	0.55	cps
Strontium	88-1	17037577	17149418	17071053	17086016	0.34	cps
Sulfur	34-1	826910	828817	826157	827295	0.17	cps
Terbium	159-1	10828383	10983524	11047205	10953037	1.03	cps
Terbium	159-2	3849461	3803311	3783511	3812094	0.89	cps
Thallium	203-1	58963	59305	60631	59633	1.48	cps
Thallium	205-1	138585	142062	142241	140963	1.46	cps
Tin	118-1	220690	226063	227147	224633	1.54	cps
Titanium	47-1	11919934	11955783	11894973	11923563	0.26	cps
Uranium	238-1	1237083	1249685	1261304	1249357	0.97	cps

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Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUP	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUP	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 17:58:15	DataFile Name :	050AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1996488	1974899	2009248	1993545	0.87	cps
Ytterbium	172-1	386853	392628	393120	390867	0.89	cps
Ytterbium	172-2	167944	168540	167570	168018	0.29	cps
Ytterbium	176-1	244014	251009	250208	248411	1.54	cps
Ytterbium	176-2	108178	108094	108649	108307	0.28	cps
Yttrium	89-1	34400777	34108677	34611247	34373567	0.73	cps
Yttrium	89-2	2731136	2626846	2617874	2658619	2.37	cps
Zinc	66-2	3232585	3233585	3257647	3241272	0.44	cps
Zirconium	90-1	4594543	4553215	4578961	4575573	0.46	cps
Zirconium	91-1	916630	942809	939641	933027	1.53	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873L	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:01:18	DataFile Name :	051AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3203955	3269392	3255766	3243038	1.06	cps
Antimony	121-1	3534	3791	3841	3722	4.42	cps
Arsenic	75-2	13623	13059	12726	13136	3.45	cps
Barium	135-1	1712239	1744722	1758968	1738643	1.38	cps
Barium	137-1	3002440	3049245	3005052	3018912	0.87	cps
Beryllium	9-1	13161	12789	13195	13048	1.73	cps
Bismuth	209-1	5800899	5885977	5897880	5861585	0.90	cps
Bismuth	209-2	2637049	2583039	2635964	2618684	1.18	cps
Bromine	81-1	48447	48781	48721	48650	0.37	cps
Cadmium	108-1	2534	2500	2507	2514	0.70	cps
Cadmium	106-1	10908	11211	11378	11166	2.14	cps
Cadmium	111-1	22305	22681	22937	22641	1.40	cps
Calcium	43-1	710713	723262	720079	718018	0.91	cps
Calcium	44-1	11969139	12179713	12057205	12068686	0.88	cps
Carbon	12-1	9573511	9807162	9917442	9766039	1.80	cps
Carbon	12-2	65327	64765	64835	64976	0.47	cps
Chlorine	35-1	406569	408652	412008	409076	0.67	cps
Chlorine	35-2	1513	1680	1793	1662	8.47	cps
Chromium	52-2	302002	303211	300394	301869	0.47	cps
Cobalt	59-2	405608	404127	405223	404986	0.19	cps
Copper	63-2	1368785	1363331	1352637	1361584	0.60	cps
Dysprosium	156-1	278033	280061	281661	279918	0.65	cps
Dysprosium	156-2	89842	89617	91735	90398	1.29	cps
Erbium	164-1	223831	227646	224237	225238	0.93	cps
Erbium	164-2	79972	78721	79033	79242	0.82	cps
Gadolinium	160-1	244731	248263	246099	246364	0.72	cps
Gadolinium	160-2	103907	104532	105224	104554	0.63	cps
Holmium	165-1	10147097	10130273	10098720	10125364	0.24	cps
Holmium	165-2	3771441	3780880	3846676	3799665	1.08	cps
Indium	115-1	8724211	8966421	8764153	8818262	1.47	cps
Indium	115-2	866931	865437	883052	871807	1.12	cps
Iron	54-2	12044115	11907763	11870078	11940652	0.77	cps
Iron	56-2	225949257	223398857	222300370	223882828	0.84	cps
Iron	57-2	5629749	5646051	5577336	5617712	0.64	cps
Krypton	83-1	717	683	800	733	8.19	cps
Lead	206-1	6304958	6421500	6455868	6394109	1.24	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873L	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:01:18	DataFile Name :	051AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5299155	5328799	5335666	5321207	0.36	cps
Lead	208-1	24485060	24714521	24737407	24645663	0.57	cps
Lithium	6-1	2570699	2642252	2541120	2584690	2.01	cps
Magnesium	24-2	4491403	4530541	4429924	4483956	1.13	cps
Manganese	55-2	5576220	5627866	5484176	5562754	1.31	cps
Molybdenum	94-1	346613	356286	353004	351968	1.40	cps
Molybdenum	95-1	20415	21220	21670	21102	3.01	cps
Molybdenum	96-1	80250	81601	83204	81685	1.81	cps
Molybdenum	97-1	12939	13066	13013	13006	0.49	cps
Molybdenum	98-1	33373	32856	33738	33322	1.33	cps
Neodymium	150-1	371612	376058	376026	374565	0.68	cps
Neodymium	150-2	95443	94775	94456	94891	0.53	cps
Nickel	60-2	179099	178375	177789	178421	0.37	cps
Phosphorus	31-2	12505	12289	13079	12624	3.24	cps
Potassium	39-2	935708	938556	925722	933329	0.72	cps
Rhodium	103-1	8375576	8230774	8240350	8282233	0.98	cps
Rhodium	103-2	3417580	3329313	3427644	3391513	1.60	cps
Scandium	45-1	6704171	6733419	6730331	6722640	0.24	cps
Scandium	45-2	128932	129197	131143	129757	0.93	cps
Selenium	82-1	577	613	440	543	16.81	cps
Selenium	77-2	523	600	543	556	7.16	cps
Selenium	78-2	387	297	383	356	14.35	cps
Silicon	28-1	17059422	17084670	17327596	17157229	0.86	cps
Silver	107-1	12122	11895	11889	11969	1.11	cps
Silver	109-1	10327	10491	10734	10517	1.95	cps
Sodium	23-2	1257396	1276462	1233556	1255804	1.71	cps
Strontium	86-1	402940	412456	411821	409072	1.30	cps
Strontium	88-1	3800693	3828211	3785908	3804937	0.56	cps
Sulfur	34-1	615237	616568	619185	616997	0.33	cps
Terbium	159-1	10520512	10905700	10689325	10705179	1.80	cps
Terbium	159-2	3657778	3757635	3850648	3755354	2.57	cps
Thallium	203-1	12316	12543	12586	12482	1.16	cps
Thallium	205-1	29023	29550	28725	29099	1.44	cps
Tin	118-1	60422	61554	60158	60711	1.22	cps
Titanium	47-1	2252107	2282372	2275490	2269990	0.70	cps
Uranium	238-1	192769	195338	197737	195282	1.27	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873L	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:01:18	DataFile Name :	051AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	402054	402137	402334	402175	0.04	cps
Ytterbium	172-1	69240	71542	70124	70302	1.65	cps
Ytterbium	172-2	30535	30017	29483	30012	1.75	cps
Ytterbium	176-1	45016	45371	45535	45307	0.59	cps
Ytterbium	176-2	19177	19872	20005	19685	2.26	cps
Yttrium	89-1	19881827	19712834	20407885	20000849	1.81	cps
Yttrium	89-2	1531182	1496610	1525952	1517914	1.23	cps
Zinc	66-2	670708	664000	662351	665686	0.66	cps
Zirconium	90-1	926043	935442	946896	936127	1.12	cps
Zirconium	91-1	206369	207004	206766	206713	0.16	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MS	Instrumnet Name :	P8
Client Sample ID :	RT-3873MS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:04:26	DataFile Name :	052AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	16220994	16193986	16310091	16241690	0.37	cps
Antimony	121-1	15136531	14861874	14831167	14943191	1.13	cps
Arsenic	75-2	54880	54381	54304	54522	0.57	cps
Barium	135-1	24405285	23877984	23591476	23958249	1.72	cps
Barium	137-1	41123976	40607470	40429560	40720336	0.89	cps
Beryllium	9-1	3364621	3332731	3254875	3317409	1.70	cps
Bismuth	209-1	3486445	5606489	5446086	4846340	24.36	cps
Bismuth	209-2	2305989	2361330	2394959	2354093	1.91	cps
Bromine	81-1	77392	84526	86991	82970	6.01	cps
Cadmium	108-1	274428	275033	273849	274437	0.22	cps
Cadmium	106-1	427753	425779	429016	427516	0.38	cps
Cadmium	111-1	3811250	3754483	3802661	3789464	0.81	cps
Calcium	43-1	8687401	8602446	8686787	8658878	0.56	cps
Calcium	44-1	142230751	138395641	140537298	140387897	1.37	cps
Carbon	12-1	28185530	29937084	30154320	29425644	3.67	cps
Carbon	12-2	204407	204826	208483	205906	1.09	cps
Chlorine	35-1	105935958	110984685	114575362	110498668	3.93	cps
Chlorine	35-2	480611	491450	497542	489868	1.75	cps
Chromium	52-2	4877912	4877616	4857305	4870944	0.24	cps
Cobalt	59-2	7424790	7468993	7355495	7416426	0.77	cps
Copper	63-2	52741738	52408844	51922691	52357758	0.79	cps
Dysprosium	156-1	1269241	1257396	1255622	1260753	0.59	cps
Dysprosium	156-2	404861	402734	405860	404485	0.39	cps
Erbium	164-1	1005696	1003148	1002803	1003882	0.16	cps
Erbium	164-2	347364	347700	350068	348377	0.42	cps
Gadolinium	160-1	1117960	1103388	1096699	1106016	0.98	cps
Gadolinium	160-2	461350	463765	464339	463152	0.34	cps
Holmium	165-1	6447100	10378509	10346571	9057393	24.96	cps
Holmium	165-2	3673079	3809566	3897472	3793373	2.98	cps
Indium	115-1	4553806	8006954	7969009	6843256	28.97	cps
Indium	115-2	716766	744248	763459	741491	3.16	cps
Iron	54-2	56982336	56915094	56505262	56800897	0.45	cps
Iron	56-2	1066544811	1067265637	1053674038	1062494829	0.72	cps
Iron	57-2	26644017	26712910	26656586	26671171	0.14	cps
Krypton	83-1	2147	1993	1870	2003	6.92	cps
Lead	206-1	74791322	73624511	73162186	73859339	1.14	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MS	Instrumnet Name :	P8
Client Sample ID :	RT-3873MS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:04:26	DataFile Name :	052AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	63841097	62369891	63430804	63213931	1.20	cps
Lead	208-1	295367774	289142652	290304927	291605118	1.14	cps
Lithium	6-1	1733817	2664704	2520796	2306439	21.73	cps
Magnesium	24-2	38115553	38429104	38114164	38219607	0.47	cps
Manganese	55-2	33142335	33238377	32952879	33111197	0.44	cps
Molybdenum	94-1	28011485	27500488	27723286	27745087	0.92	cps
Molybdenum	95-1	29066592	28316085	28454147	28612275	1.40	cps
Molybdenum	96-1	32892896	32666996	31946345	32502079	1.52	cps
Molybdenum	97-1	17599521	17449206	17209522	17419416	1.13	cps
Molybdenum	98-1	46069881	45454158	45815491	45779843	0.68	cps
Neodymium	150-1	1863723	1829747	1866759	1853409	1.11	cps
Neodymium	150-2	430434	430285	429838	430186	0.07	cps
Nickel	60-2	2429567	2446211	2349599	2408459	2.14	cps
Phosphorus	31-2	59481	58142	58353	58659	1.23	cps
Potassium	39-2	10712859	10457577	10653725	10608054	1.26	cps
Rhodium	103-1	4469183	7593119	7528156	6530153	27.34	cps
Rhodium	103-2	2900495	2999456	3023627	2974526	2.19	cps
Scandium	45-1	7094911	9604500	9494342	8731251	16.24	cps
Scandium	45-2	177617	181949	182756	180774	1.53	cps
Selenium	82-1	228502	227011	227307	227607	0.35	cps
Selenium	77-2	6278	6335	6648	6420	3.11	cps
Selenium	78-2	15452	14931	14511	14965	3.15	cps
Silicon	28-1	130781335	129287741	126779751	128949609	1.57	cps
Silver	107-1	3298971	3320539	3251174	3290228	1.08	cps
Silver	109-1	3076808	3126682	3043376	3082289	1.36	cps
Sodium	23-2	44101298	44290501	45023649	44471816	1.10	cps
Strontium	86-1	8115290	8112683	8018833	8082269	0.68	cps
Strontium	88-1	70656109	70261846	69008021	69975325	1.23	cps
Sulfur	34-1	924268	928383	931633	928094	0.40	cps
Terbium	159-1	6845752	10803161	10542144	9397019	23.55	cps
Terbium	159-2	3519546	3623234	3715152	3619311	2.70	cps
Thallium	203-1	12514360	12125630	12128230	12256073	1.83	cps
Thallium	205-1	29236265	29054391	28779663	29023440	0.79	cps
Tin	118-1	11489290	11381228	11398017	11422845	0.51	cps
Titanium	47-1	11306072	13686806	11258831	12083903	11.49	cps
Uranium	238-1	38983623	38161214	38537679	38560839	1.07	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MS	Instrumnet Name :	P8
Client Sample ID :	RT-3873MS	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:04:26	DataFile Name :	052AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	4363399	4395508	4453345	4404084	1.03	cps
Ytterbium	172-1	311958	308472	311141	310524	0.59	cps
Ytterbium	172-2	130469	132643	130771	131294	0.90	cps
Ytterbium	176-1	257802	252534	254143	254826	1.06	cps
Ytterbium	176-2	105759	105433	105809	105667	0.19	cps
Yttrium	89-1	25976334	32578807	31823758	30126300	12.00	cps
Yttrium	89-2	2371657	2408912	2469438	2416669	2.04	cps
Zinc	66-2	8476291	8449832	8562190	8496104	0.69	cps
Zirconium	90-1	32202394	31765741	32077379	32015171	0.70	cps
Zirconium	91-1	7069886	7069239	7095689	7078271	0.21	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSD	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSD	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:07:13	DataFile Name :	053AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	17659493	17773756	17507354	17646868	0.76	cps
Antimony	121-1	14557451	14677987	15116735	14784058	1.99	cps
Arsenic	75-2	59816	60138	58919	59624	1.06	cps
Barium	135-1	23942288	23834582	24303191	24026687	1.02	cps
Barium	137-1	40503166	41606181	41164222	41091190	1.35	cps
Beryllium	9-1	3194979	3220502	3299435	3238305	1.68	cps
Bismuth	209-1	5471905	5409381	5432229	5437838	0.58	cps
Bismuth	209-2	2379587	2368293	2345955	2364612	0.72	cps
Bromine	81-1	77992	81904	83822	81239	3.66	cps
Cadmium	108-1	270379	273876	278043	274100	1.40	cps
Cadmium	106-1	416055	425806	426210	422690	1.36	cps
Cadmium	111-1	3719519	3796694	3801694	3772636	1.22	cps
Calcium	43-1	8973627	9188529	8987455	9049870	1.33	cps
Calcium	44-1	147311234	146726951	147854748	147297644	0.38	cps
Carbon	12-1	29953461	32573200	32862310	31796324	5.04	cps
Carbon	12-2	220875	224380	222169	222475	0.80	cps
Chlorine	35-1	109236685	116291372	116303498	113943852	3.58	cps
Chlorine	35-2	495991	497500	495157	496216	0.24	cps
Chromium	52-2	5089326	5086980	5071424	5082577	0.19	cps
Cobalt	59-2	7469142	7627305	7511875	7536107	1.09	cps
Copper	63-2	51426063	52208221	51913173	51849152	0.76	cps
Dysprosium	156-1	1257697	1299619	1285377	1280898	1.66	cps
Dysprosium	156-2	405895	413644	409654	409731	0.95	cps
Erbium	164-1	994293	1015815	1000722	1003610	1.10	cps
Erbium	164-2	348603	351524	349215	349781	0.44	cps
Gadolinium	160-1	1090677	1112177	1109858	1104237	1.07	cps
Gadolinium	160-2	464752	462625	464608	463995	0.26	cps
Holmium	165-1	10269745	10338967	10008047	10205587	1.71	cps
Holmium	165-2	3763904	3753135	3753006	3756682	0.17	cps
Indium	115-1	7744913	7898911	7938958	7860927	1.30	cps
Indium	115-2	747446	751375	749825	749549	0.26	cps
Iron	54-2	62389132	62632957	62840556	62620882	0.36	cps
Iron	56-2	1155892649	1168906623	1165626516	1163475263	0.58	cps
Iron	57-2	29277975	29377696	28900555	29185409	0.86	cps
Krypton	83-1	1893	1850	2117	1953	7.33	cps
Lead	206-1	74013619	75708647	74657966	74793411	1.14	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSD	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSD	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:07:13	DataFile Name :	053AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	62978572	63997001	63970859	63648811	0.91	cps
Lead	208-1	293163266	294040422	294209506	293804398	0.19	cps
Lithium	6-1	2518020	2690287	2685978	2631429	3.73	cps
Magnesium	24-2	42628904	43051828	42940121	42873617	0.51	cps
Manganese	55-2	34568838	34135951	34332347	34345712	0.63	cps
Molybdenum	94-1	27358920	27740515	27494339	27531258	0.70	cps
Molybdenum	95-1	28149735	28645036	28467694	28420822	0.88	cps
Molybdenum	96-1	32263948	32949415	32611313	32608225	1.05	cps
Molybdenum	97-1	17258294	17622940	17482816	17454683	1.05	cps
Molybdenum	98-1	45374146	45827104	45935416	45712222	0.65	cps
Neodymium	150-1	1898165	1921615	1907420	1909066	0.62	cps
Neodymium	150-2	435394	443054	438935	439128	0.87	cps
Nickel	60-2	2423373	2514708	2468876	2468986	1.85	cps
Phosphorus	31-2	64593	64817	64168	64526	0.51	cps
Potassium	39-2	11480304	11597217	11401646	11493056	0.86	cps
Rhodium	103-1	7403148	7382641	7342791	7376193	0.42	cps
Rhodium	103-2	3010990	2942012	2961352	2971451	1.20	cps
Scandium	45-1	9402260	9434512	9443704	9426825	0.23	cps
Scandium	45-2	183273	182277	181635	182395	0.45	cps
Selenium	82-1	220903	225447	226723	224358	1.36	cps
Selenium	77-2	6311	6558	6438	6436	1.92	cps
Selenium	78-2	15292	15068	14878	15079	1.37	cps
Silicon	28-1	210548530	212068784	252665050	225094121	10.61	cps
Silver	107-1	3205497	3168923	3314507	3229642	2.35	cps
Silver	109-1	3033398	3074204	3122166	3076589	1.44	cps
Sodium	23-2	44830523	45834406	45063858	45242929	1.16	cps
Strontium	86-1	7901997	8107950	8300599	8103515	2.46	cps
Strontium	88-1	68951174	71174117	70354981	70160091	1.60	cps
Sulfur	34-1	881997	886738	886567	885101	0.30	cps
Terbium	159-1	10503576	10631609	10608943	10581376	0.65	cps
Terbium	159-2	3702141	3660315	3655607	3672688	0.70	cps
Thallium	203-1	12104579	12417783	12137925	12220096	1.41	cps
Thallium	205-1	29106548	29221773	28771863	29033395	0.80	cps
Tin	118-1	11051735	11242144	11316699	11203526	1.22	cps
Titanium	47-1	14131738	14395623	14284530	14270630	0.93	cps
Uranium	238-1	38410122	38211894	39322790	38648269	1.53	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSD	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSD	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:07:13	DataFile Name :	053AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	4659575	4693123	4695408	4682702	0.43	cps
Ytterbium	172-1	299639	304662	305637	303313	1.06	cps
Ytterbium	172-2	129560	128507	127544	128537	0.78	cps
Ytterbium	176-1	246512	250538	253376	250142	1.38	cps
Ytterbium	176-2	102198	105000	104932	104043	1.54	cps
Yttrium	89-1	31341695	32076255	31599930	31672626	1.18	cps
Yttrium	89-2	2461448	2388870	2470137	2440152	1.83	cps
Zinc	66-2	8704612	8685656	8649675	8679981	0.32	cps
Zirconium	90-1	31152040	31883265	31600427	31545244	1.17	cps
Zirconium	91-1	6932662	7040124	7004077	6992288	0.78	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03A	Instrumnet Name :	P8
Client Sample ID :	RT-3873A	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:09:57	DataFile Name :	054AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	16748647	16963628	17037767	16916681	0.89	cps
Antimony	121-1	14860257	15050541	14538703	14816500	1.75	cps
Arsenic	75-2	57292	57286	57219	57266	0.07	cps
Barium	135-1	23773631	24257747	23981152	24004177	1.01	cps
Barium	137-1	39832647	40221311	40948957	40334305	1.40	cps
Beryllium	9-1	3221662	3294796	3237197	3251218	1.19	cps
Bismuth	209-1	5459279	5531398	5571523	5520734	1.03	cps
Bismuth	209-2	2440250	2364601	2365021	2389958	1.82	cps
Bromine	81-1	79963	83164	88262	83797	4.99	cps
Cadmium	108-1	271821	271396	275597	272938	0.85	cps
Cadmium	106-1	416651	420533	429450	422212	1.55	cps
Cadmium	111-1	3678012	3708992	3801382	3729462	1.72	cps
Calcium	43-1	8672748	8787708	8908925	8789794	1.34	cps
Calcium	44-1	139362411	142430931	145516051	142436465	2.16	cps
Carbon	12-1	29097311	31440943	31736289	30758181	4.70	cps
Carbon	12-2	215230	213131	215668	214676	0.63	cps
Chlorine	35-1	108343972	113818685	115705005	112622554	3.39	cps
Chlorine	35-2	485721	490174	491673	489189	0.63	cps
Chromium	52-2	4981288	4958505	4930796	4956863	0.51	cps
Cobalt	59-2	7422477	7402738	7349862	7391692	0.51	cps
Copper	63-2	51324883	51324379	51420068	51356443	0.11	cps
Dysprosium	156-1	1266593	1288979	1283847	1279806	0.92	cps
Dysprosium	156-2	409039	408267	413653	410320	0.71	cps
Erbium	164-1	999298	1015435	1013240	1009325	0.87	cps
Erbium	164-2	348652	347984	348419	348352	0.10	cps
Gadolinium	160-1	1098791	1101514	1112600	1104302	0.66	cps
Gadolinium	160-2	467081	458702	465396	463726	0.96	cps
Holmium	165-1	10192039	10262821	10286697	10247186	0.48	cps
Holmium	165-2	3823401	3863614	3815551	3834189	0.67	cps
Indium	115-1	7791119	7863881	7985589	7880196	1.25	cps
Indium	115-2	757186	750286	751634	753035	0.49	cps
Iron	54-2	59817542	59415096	59281024	59504554	0.47	cps
Iron	56-2	1108624943	1107879477	1100420170	1105641530	0.41	cps
Iron	57-2	27674020	28214823	28038174	27975672	0.99	cps
Krypton	83-1	1957	2100	1907	1988	5.05	cps
Lead	206-1	72811754	74253449	74173524	73746242	1.10	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03A	Instrumnet Name :	P8
Client Sample ID :	RT-3873A	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:09:57	DataFile Name :	054AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	61915407	63445276	63828664	63063116	1.61	cps
Lead	208-1	288106976	292916212	292718429	291247206	0.93	cps
Lithium	6-1	2605401	2570052	2646759	2607404	1.47	cps
Magnesium	24-2	40358408	40275405	40776972	40470262	0.66	cps
Manganese	55-2	33612521	33267525	33288791	33389613	0.58	cps
Molybdenum	94-1	27204737	26739046	27583304	27175696	1.56	cps
Molybdenum	95-1	27729420	27675061	28930083	28111522	2.52	cps
Molybdenum	96-1	31983550	32797174	32569728	32450151	1.29	cps
Molybdenum	97-1	17079734	17718144	17411989	17403289	1.83	cps
Molybdenum	98-1	44983414	45163051	45615236	45253900	0.72	cps
Neodymium	150-1	1839024	1844866	1902452	1862114	1.88	cps
Neodymium	150-2	437262	433420	437250	435977	0.51	cps
Nickel	60-2	2416020	2483288	2451817	2450375	1.37	cps
Phosphorus	31-2	61677	61767	62718	62054	0.93	cps
Potassium	39-2	11127099	10998327	11119304	11081577	0.65	cps
Rhodium	103-1	7355651	7537732	7496144	7463176	1.28	cps
Rhodium	103-2	2981533	3053189	3012285	3015669	1.19	cps
Scandium	45-1	9347173	9434048	9451704	9410975	0.59	cps
Scandium	45-2	182075	186073	184920	184356	1.12	cps
Selenium	82-1	223230	225502	225288	224673	0.56	cps
Selenium	77-2	6432	6445	6105	6327	3.05	cps
Selenium	78-2	14968	14831	14825	14875	0.54	cps
Silicon	28-1	173919671	182001971	180894457	178938700	2.45	cps
Silver	107-1	3169727	3250351	3324140	3248073	2.38	cps
Silver	109-1	3025950	3098185	3069670	3064602	1.19	cps
Sodium	23-2	44198743	44279698	44138064	44205502	0.16	cps
Strontium	86-1	7971069	8241309	7857838	8023405	2.46	cps
Strontium	88-1	68439724	71021612	69307281	69589539	1.89	cps
Sulfur	34-1	898881	907785	901386	902684	0.51	cps
Terbium	159-1	10398226	10444518	10700440	10514395	1.55	cps
Terbium	159-2	3705261	3670279	3649640	3675060	0.77	cps
Thallium	203-1	12106749	12099927	12373453	12193376	1.28	cps
Thallium	205-1	28632087	29387735	29220470	29080097	1.36	cps
Tin	118-1	11070227	11120204	11088436	11092956	0.23	cps
Titanium	47-1	12885908	13054266	12988849	12976341	0.65	cps
Uranium	238-1	37745511	38448208	38292718	38162146	0.97	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03A	Instrumnet Name :	P8
Client Sample ID :	RT-3873A	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:09:57	DataFile Name :	054AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	4579763	4571973	4483169	4544968	1.18	cps
Ytterbium	172-1	304885	304577	307060	305507	0.44	cps
Ytterbium	172-2	128876	129290	128456	128874	0.32	cps
Ytterbium	176-1	251437	250934	246055	249475	1.19	cps
Ytterbium	176-2	104943	105295	104912	105050	0.20	cps
Yttrium	89-1	31411975	32224770	31622693	31753146	1.33	cps
Yttrium	89-2	2441372	2421497	2427756	2430208	0.42	cps
Zinc	66-2	8494316	8398517	8492022	8461619	0.65	cps
Zirconium	90-1	30631010	31194237	31307140	31044129	1.17	cps
Zirconium	91-1	6711549	6817816	6937606	6822324	1.66	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-01	Instrumnet Name :	P8
Client Sample ID :	284	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:12:44	DataFile Name :	055AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	199114	195905	199275	198098	0.96	cps
Antimony	121-1	1870463	1849194	1870720	1863459	0.66	cps
Arsenic	75-2	1957	2087	2197	2080	5.78	cps
Barium	135-1	1782348	1763121	1780742	1775404	0.60	cps
Barium	137-1	3063491	3015798	3029280	3036190	0.81	cps
Beryllium	9-1	1163	1061	999	1075	7.70	cps
Bismuth	209-1	6997107	6953425	6924558	6958364	0.52	cps
Bismuth	209-2	3022426	2997570	3005750	3008582	0.42	cps
Bromine	81-1	89084	97479	99950	95504	5.96	cps
Cadmium	108-1	22505	22101	23039	22549	2.09	cps
Cadmium	106-1	17922	17371	17695	17662	1.57	cps
Cadmium	111-1	68055	68756	67820	68211	0.71	cps
Calcium	43-1	7592744	7853337	7819841	7755307	1.83	cps
Calcium	44-1	125448741	127000751	126505571	126318355	0.63	cps
Carbon	12-1	411109674	422631834	441655647	425132385	3.63	cps
Carbon	12-2	2641350	2641288	2591448	2624695	1.10	cps
Chlorine	35-1	6399090	6395978	5997720	6264263	3.68	cps
Chlorine	35-2	20661	19443	17734	19280	7.63	cps
Chromium	52-2	362042	365238	364785	364022	0.47	cps
Cobalt	59-2	52945	52811	53095	52950	0.27	cps
Copper	63-2	6334838	6269454	6330268	6311520	0.58	cps
Dysprosium	156-1	4307	4527	4281	4372	3.10	cps
Dysprosium	156-2	1277	1357	1403	1346	4.76	cps
Erbium	164-1	4357	4661	4771	4596	4.66	cps
Erbium	164-2	1497	1583	1567	1549	2.97	cps
Gadolinium	160-1	3754	3551	3834	3713	3.94	cps
Gadolinium	160-2	1603	1543	1507	1551	3.15	cps
Holmium	165-1	10777513	10696647	10541600	10671920	1.12	cps
Holmium	165-2	3851922	3847341	3945000	3881421	1.42	cps
Indium	115-1	9433667	9540181	9540517	9504788	0.65	cps
Indium	115-2	881862	889520	913178	894853	1.82	cps
Iron	54-2	8745576	8863894	8954352	8854607	1.18	cps
Iron	56-2	164130468	161857384	162980221	162989358	0.70	cps
Iron	57-2	4189713	4122639	4185046	4165799	0.90	cps
Krypton	83-1	360	537	477	458	19.62	cps
Lead	206-1	8644540	8797181	8744557	8728759	0.89	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-01	Instrumnet Name :	P8
Client Sample ID :	284	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:12:44	DataFile Name :	055AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	7270249	7165366	7246479	7227365	0.76	cps
Lead	208-1	33843267	33622046	33742906	33736073	0.33	cps
Lithium	6-1	2735193	2709839	2675920	2706984	1.10	cps
Magnesium	24-2	4631898	4640220	4588834	4620317	0.60	cps
Manganese	55-2	484814	487412	492337	488188	0.78	cps
Molybdenum	94-1	29090013	28894730	28840768	28941837	0.45	cps
Molybdenum	95-1	50562243	50293981	49789034	50215086	0.78	cps
Molybdenum	96-1	54351643	54028588	53343303	53907844	0.96	cps
Molybdenum	97-1	31451657	30809249	30696867	30985924	1.31	cps
Molybdenum	98-1	81680442	80111002	80416150	80735865	1.03	cps
Neodymium	150-1	5541	5838	5685	5688	2.61	cps
Neodymium	150-2	1360	1393	1413	1389	1.94	cps
Nickel	60-2	184828	184264	184193	184428	0.19	cps
Phosphorus	31-2	100361	101965	102522	101616	1.10	cps
Potassium	39-2	908827	908369	914549	910582	0.38	cps
Rhodium	103-1	8714485	8654718	8577347	8648850	0.79	cps
Rhodium	103-2	3464313	3491005	3580601	3511973	1.73	cps
Scandium	45-1	6306708	6373822	6257558	6312696	0.92	cps
Scandium	45-2	115832	116870	121468	118057	2.54	cps
Selenium	82-1	573	530	453	519	11.71	cps
Selenium	77-2	7	13	27	16	65.47	cps
Selenium	78-2	50	47	63	53	16.53	cps
Silicon	28-1	43727586	46768168	48485271	46327008	5.20	cps
Silver	107-1	41539	41763	41643	41648	0.27	cps
Silver	109-1	37855	39236	38357	38482	1.82	cps
Sodium	23-2	3142097	3137872	3146285	3142085	0.13	cps
Strontium	86-1	277139	282514	280708	280120	0.98	cps
Strontium	88-1	2632525	2688495	2658207	2659742	1.05	cps
Sulfur	34-1	7725567	7890407	7898619	7838198	1.25	cps
Terbium	159-1	10956144	11132646	11067133	11051974	0.81	cps
Terbium	159-2	3706283	3760445	3824260	3763663	1.57	cps
Thallium	203-1	8016	6662	6362	7013	12.57	cps
Thallium	205-1	18520	16534	16060	17038	7.66	cps
Tin	118-1	1746057	1739838	1725187	1737028	0.62	cps
Titanium	47-1	588270	588662	595628	590853	0.70	cps
Uranium	238-1	36188	34794	34905	35296	2.20	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-01	Instrumnet Name :	P8
Client Sample ID :	284	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:12:44	DataFile Name :	055AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	49599	50412	49405	49805	1.07	cps
Ytterbium	172-1	1327	1377	1500	1401	6.37	cps
Ytterbium	172-2	593	693	563	617	11.04	cps
Ytterbium	176-1	3544	3524	3304	3457	3.85	cps
Ytterbium	176-2	900	1020	1033	984	7.46	cps
Yttrium	89-1	17120620	17165931	16981906	17089486	0.56	cps
Yttrium	89-2	1150931	1155516	1185117	1163855	1.59	cps
Zinc	66-2	25680187	25640343	25803549	25708026	0.33	cps
Zirconium	90-1	478775	471418	468353	472849	1.13	cps
Zirconium	91-1	105952	104871	104011	104945	0.93	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-03	Instrumnet Name :	P8
Client Sample ID :	288	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:15:45	DataFile Name :	056AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	98789	98923	99978	99230	0.66	cps
Antimony	121-1	98139	97753	97894	97929	0.20	cps
Arsenic	75-2	1987	1740	1960	1896	7.14	cps
Barium	135-1	750289	760874	755789	755651	0.70	cps
Barium	137-1	1284028	1301074	1316186	1300429	1.24	cps
Beryllium	9-1	813	752	770	778	3.97	cps
Bismuth	209-1	5846067	5826639	5764546	5812417	0.73	cps
Bismuth	209-2	2610714	2499345	2564668	2558242	2.19	cps
Bromine	81-1	45310	44775	44587	44891	0.83	cps
Cadmium	108-1	2624	2604	2510	2579	2.35	cps
Cadmium	106-1	9470	9133	9520	9374	2.24	cps
Cadmium	111-1	34648	35148	35417	35071	1.11	cps
Calcium	43-1	22897493	23188775	22895984	22994084	0.73	cps
Calcium	44-1	370318568	378633128	370682621	373211439	1.26	cps
Carbon	12-1	65425026	69146509	70605786	68392440	3.91	cps
Carbon	12-2	479523	474532	472428	475495	0.77	cps
Chlorine	35-1	2769385	2631757	2420268	2607137	6.75	cps
Chlorine	35-2	9173	8649	8893	8905	2.94	cps
Chromium	52-2	625956	623565	630544	626688	0.57	cps
Cobalt	59-2	14711	14838	15215	14921	1.76	cps
Copper	63-2	949786	940127	939948	943287	0.60	cps
Dysprosium	156-1	7419	7375	7676	7490	2.17	cps
Dysprosium	156-2	2330	2317	2634	2427	7.38	cps
Erbium	164-1	6668	6365	6405	6479	2.54	cps
Erbium	164-2	2190	2400	2320	2304	4.60	cps
Gadolinium	160-1	6825	6762	6762	6783	0.54	cps
Gadolinium	160-2	2817	2820	2687	2775	2.74	cps
Holmium	165-1	9851660	9990067	9933058	9924928	0.70	cps
Holmium	165-2	3717005	3713883	3698607	3709832	0.27	cps
Indium	115-1	8763135	8699354	8767421	8743304	0.44	cps
Indium	115-2	853351	847493	848838	849894	0.36	cps
Iron	54-2	1590558	1559765	1586736	1579020	1.06	cps
Iron	56-2	28797651	28446571	28343854	28529359	0.83	cps
Iron	57-2	663159	671677	672968	669268	0.80	cps
Krypton	83-1	467	420	443	443	5.26	cps
Lead	206-1	13342373	13420592	13603273	13455413	1.00	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-03	Instrumnet Name :	P8
Client Sample ID :	288	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:15:45	DataFile Name :	056AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	11237452	11290867	11330159	11286159	0.41	cps
Lead	208-1	52749040	52713651	52848702	52770464	0.13	cps
Lithium	6-1	2423222	2493836	2430181	2449080	1.59	cps
Magnesium	24-2	559299	562356	561484	561046	0.28	cps
Manganese	55-2	527935	528182	530326	528814	0.25	cps
Molybdenum	94-1	157936	157093	155774	156934	0.69	cps
Molybdenum	95-1	130947	131293	130917	131052	0.16	cps
Molybdenum	96-1	154798	154411	156507	155239	0.72	cps
Molybdenum	97-1	81746	81320	80579	81215	0.73	cps
Molybdenum	98-1	209117	209705	209544	209455	0.15	cps
Neodymium	150-1	10117	10224	10187	10176	0.53	cps
Neodymium	150-2	2587	2600	2694	2627	2.21	cps
Nickel	60-2	57158	56552	56441	56717	0.68	cps
Phosphorus	31-2	1597	1617	1520	1578	3.23	cps
Potassium	39-2	123547	122387	123295	123076	0.50	cps
Rhodium	103-1	7986668	8226516	8039761	8084315	1.56	cps
Rhodium	103-2	3303164	3254507	3296793	3284821	0.81	cps
Scandium	45-1	6046238	5996822	6162277	6068445	1.40	cps
Scandium	45-2	115351	115714	117055	116040	0.77	cps
Selenium	82-1	213	127	163	168	25.93	cps
Selenium	77-2	10	3	23	12	83.33	cps
Selenium	78-2	50	40	27	39	30.10	cps
Silicon	28-1	21458981	25627559	26690283	24592274	11.24	cps
Silver	107-1	4422	3727	3795	3981	9.62	cps
Silver	109-1	2901	3531	3818	3416	13.73	cps
Sodium	23-2	7008157	6972224	6983812	6988064	0.26	cps
Strontium	86-1	5340524	5425755	5279225	5348501	1.38	cps
Strontium	88-1	46453731	47530226	46262286	46748748	1.46	cps
Sulfur	34-1	2032617	2048917	2054450	2045328	0.55	cps
Terbium	159-1	10363122	10365878	10388127	10372375	0.13	cps
Terbium	159-2	3591919	3607686	3568890	3589498	0.54	cps
Thallium	203-1	2504	2307	2320	2377	4.62	cps
Thallium	205-1	5745	5841	5685	5757	1.37	cps
Tin	118-1	258113	261495	261382	260330	0.74	cps
Titanium	47-1	1242177	1339522	1299903	1293867	3.78	cps
Uranium	238-1	31526	31465	31603	31531	0.22	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-03	Instrumnet Name :	P8
Client Sample ID :	288	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:15:45	DataFile Name :	056AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	18439	18616	19313	18789	2.46	cps
Ytterbium	172-1	2217	2297	2364	2292	3.20	cps
Ytterbium	172-2	1013	1017	1020	1017	0.33	cps
Ytterbium	176-1	3094	3334	3117	3182	4.16	cps
Ytterbium	176-2	1097	1040	963	1033	6.48	cps
Yttrium	89-1	16287825	16360143	16294536	16314168	0.24	cps
Yttrium	89-2	1135098	1136111	1128974	1133394	0.34	cps
Zinc	66-2	992066	989215	990399	990560	0.14	cps
Zirconium	90-1	225010	222798	224153	223987	0.50	cps
Zirconium	91-1	48691	49564	49625	49294	1.06	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P8
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:18:57	DataFile Name :	057CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5264960	5287974	5265081	5272672	0.25	cps
Antimony	121-1	14486476	14600526	14608416	14565140	0.47	cps
Arsenic	75-2	304840	306002	306086	305643	0.23	cps
Barium	135-1	17621232	17713483	17711691	17682135	0.30	cps
Barium	137-1	30198283	30592085	30446430	30412266	0.65	cps
Beryllium	9-1	3012760	3021454	3076137	3036784	1.13	cps
Bismuth	209-1	5144356	5079918	5102961	5109078	0.64	cps
Bismuth	209-2	2278794	2214094	2250578	2247822	1.44	cps
Bromine	81-1	36364	37263	37390	37006	1.51	cps
Cadmium	108-1	269792	273432	274531	272585	0.91	cps
Cadmium	106-1	385671	390340	393773	389928	1.04	cps
Cadmium	111-1	3572682	3542545	3616778	3577335	1.04	cps
Calcium	43-1	24216958	24727276	24369925	24438053	1.07	cps
Calcium	44-1	393570794	396569581	394873807	395004727	0.38	cps
Carbon	12-1	11834214	11416643	11129380	11460079	3.09	cps
Carbon	12-2	72785	70920	69359	71022	2.42	cps
Chlorine	35-1	1168091	1074663	1051194	1097983	5.63	cps
Chlorine	35-2	4357	4254	4217	4276	1.70	cps
Chromium	52-2	3311912	3354882	3338611	3335135	0.65	cps
Cobalt	59-2	5953053	5961329	5874822	5929735	0.81	cps
Copper	63-2	44017938	44448539	43964888	44143788	0.60	cps
Dysprosium	156-1	807	750	767	774	3.76	cps
Dysprosium	156-2	177	183	173	178	2.86	cps
Erbium	164-1	670	660	680	670	1.49	cps
Erbium	164-2	247	220	273	247	10.81	cps
Gadolinium	160-1	483	533	473	497	6.47	cps
Gadolinium	160-2	260	137	183	193	32.21	cps
Holmium	165-1	9336252	9381892	9421728	9379957	0.46	cps
Holmium	165-2	3531808	3499908	3426059	3485925	1.56	cps
Indium	115-1	7700281	7663550	7634898	7666243	0.43	cps
Indium	115-2	731277	734100	733249	732875	0.20	cps
Iron	54-2	31997944	32153361	32568790	32240032	0.92	cps
Iron	56-2	591554165	592701898	590440578	591565547	0.19	cps
Iron	57-2	14942571	15166079	14966066	15024906	0.82	cps
Krypton	83-1	467	460	413	447	6.51	cps
Lead	206-1	48050886	48560948	48067728	48226520	0.60	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P8
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:18:57	DataFile Name :	057CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	40586725	41099107	41158839	40948224	0.77	cps
Lead	208-1	189024620	190116873	189996035	189712509	0.32	cps
Lithium	6-1	2152370	2132264	2204923	2163186	1.73	cps
Magnesium	24-2	90554292	90811419	90751819	90705843	0.15	cps
Manganese	55-2	13737131	13839318	13879889	13818780	0.53	cps
Molybdenum	94-1	52548929	52789903	54068141	53135658	1.54	cps
Molybdenum	95-1	76134211	78181374	77912431	77409338	1.44	cps
Molybdenum	96-1	84817575	84834655	84705535	84785922	0.08	cps
Molybdenum	97-1	47032633	46979751	47674261	47228882	0.82	cps
Molybdenum	98-1	122225612	123044485	125134931	123468343	1.22	cps
Neodymium	150-1	1397	1497	1517	1470	4.37	cps
Neodymium	150-2	123	153	107	128	18.51	cps
Nickel	60-2	1665101	1653909	1606261	1641757	1.90	cps
Phosphorus	31-2	51183	51642	51250	51358	0.48	cps
Potassium	39-2	32577745	32580814	32166385	32441648	0.73	cps
Rhodium	103-1	7093610	7055359	7037493	7062154	0.41	cps
Rhodium	103-2	2901142	2911784	2886475	2899801	0.44	cps
Scandium	45-1	5613604	5615316	5570658	5599859	0.45	cps
Scandium	45-2	111535	111505	111082	111374	0.23	cps
Selenium	82-1	211756	213944	212548	212749	0.52	cps
Selenium	77-2	3974	4301	3921	4065	5.06	cps
Selenium	78-2	12926	13056	13697	13226	3.12	cps
Silicon	28-1	32469179	32971525	32966963	32802555	0.88	cps
Silver	107-1	17784894	18136946	17985842	17969228	0.98	cps
Silver	109-1	16803966	16989661	17103903	16965843	0.89	cps
Sodium	23-2	184759364	184988791	183048717	184265624	0.58	cps
Strontium	86-1	4967532	5033464	5063707	5021568	0.98	cps
Strontium	88-1	43091951	44188348	43885948	43722082	1.30	cps
Sulfur	34-1	1857693	1913057	1882805	1884518	1.47	cps
Terbium	159-1	9540669	9526037	9716319	9594342	1.10	cps
Terbium	159-2	3376897	3385400	3342206	3368168	0.68	cps
Thallium	203-1	11909784	12009117	11966585	11961829	0.42	cps
Thallium	205-1	28508924	28409185	28214140	28377416	0.53	cps
Tin	118-1	11841872	11997834	11906667	11915458	0.66	cps
Titanium	47-1	21990101	22006490	22096796	22031129	0.26	cps
Uranium	238-1	36500145	36865021	37342496	36902554	1.14	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P8
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:18:57	DataFile Name :	057CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2589418	2543925	2589061	2574135	1.02	cps
Ytterbium	172-1	910	1027	950	962	6.16	cps
Ytterbium	172-2	390	423	487	433	11.33	cps
Ytterbium	176-1	56062	57046	58231	57113	1.90	cps
Ytterbium	176-2	20740	20877	20306	20641	1.44	cps
Yttrium	89-1	14835603	14918825	15001652	14918694	0.56	cps
Yttrium	89-2	1056383	1061751	1058535	1058890	0.26	cps
Zinc	66-2	4987254	5013179	5027633	5009355	0.41	cps
Zirconium	90-1	26399562	26848112	27071672	26773115	1.28	cps
Zirconium	91-1	5862758	6024864	6001904	5963176	1.47	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P8
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:21:41	DataFile Name :	058CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1210	1237	1077	1175	7.30	cps
Antimony	121-1	4344	3567	3254	3722	15.08	cps
Arsenic	75-2	17	10	20	16	32.73	cps
Barium	135-1	597	533	510	547	8.20	cps
Barium	137-1	1200	970	953	1041	13.24	cps
Beryllium	9-1	654	608	516	593	11.84	cps
Bismuth	209-1	5986436	6019486	5886016	5963979	1.17	cps
Bismuth	209-2	2630327	2586666	2610517	2609170	0.84	cps
Bromine	81-1	37814	37831	37400	37682	0.65	cps
Cadmium	108-1	50	47	53	50	6.66	cps
Cadmium	106-1	5198	5361	5508	5356	2.90	cps
Cadmium	111-1	3787	3890	4055	3911	3.46	cps
Calcium	43-1	2204	2020	1713	1979	12.51	cps
Calcium	44-1	50876	46345	44679	47300	6.78	cps
Carbon	12-1	7234171	7241844	6968399	7148138	2.18	cps
Carbon	12-2	44898	43702	42481	43694	2.77	cps
Chlorine	35-1	808222	796899	782736	795952	1.60	cps
Chlorine	35-2	3184	3114	2957	3085	3.76	cps
Chromium	52-2	1857	1747	1737	1780	3.74	cps
Cobalt	59-2	227	160	200	196	17.16	cps
Copper	63-2	3714	3490	3514	3573	3.44	cps
Dysprosium	156-1	7	3	13	8	65.47	cps
Dysprosium	156-2	0	7	0	2	173.21	cps
Erbium	164-1	70	73	73	72	2.66	cps
Erbium	164-2	20	7	27	18	57.27	cps
Gadolinium	160-1	67	73	67	69	5.58	cps
Gadolinium	160-2	3	7	13	8	65.47	cps
Holmium	165-1	9941066	9937227	9810299	9896198	0.75	cps
Holmium	165-2	3683202	3658893	3658856	3666984	0.38	cps
Indium	115-1	8767093	8872370	8924394	8854619	0.91	cps
Indium	115-2	860737	865809	859144	861897	0.40	cps
Iron	54-2	1860	1507	1710	1692	10.48	cps
Iron	56-2	26385	25052	24080	25172	4.60	cps
Iron	57-2	527	603	563	564	6.79	cps
Krypton	83-1	427	350	400	392	9.92	cps
Lead	206-1	6368	5828	5421	5872	8.09	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P8
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:21:41	DataFile Name :	058CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5375	4971	4644	4997	7.32	cps
Lead	208-1	25080	22594	21527	23067	7.90	cps
Lithium	6-1	2479949	2529894	2400362	2470068	2.64	cps
Magnesium	24-2	2200	2097	1843	2047	8.97	cps
Manganese	55-2	5344	5461	5221	5342	2.25	cps
Molybdenum	94-1	3544	2890	2710	3048	14.39	cps
Molybdenum	95-1	3360	2957	2417	2911	16.26	cps
Molybdenum	96-1	3687	3170	2617	3158	16.95	cps
Molybdenum	97-1	2140	1737	1390	1756	21.38	cps
Molybdenum	98-1	5241	4344	3647	4411	18.12	cps
Neodymium	150-1	20	7	3	10	88.20	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	743	837	757	779	6.48	cps
Phosphorus	31-2	90	73	83	82	10.20	cps
Potassium	39-2	25830	26024	25376	25743	1.29	cps
Rhodium	103-1	8587931	8513253	8414175	8505120	1.02	cps
Rhodium	103-2	3473747	3435888	3331694	3413776	2.15	cps
Scandium	45-1	5909792	6032877	6054869	5999179	1.30	cps
Scandium	45-2	113279	114421	114965	114222	0.75	cps
Selenium	82-1	-37	50	-20	-2	-2068.44	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	33	33	37	34	5.60	cps
Silicon	28-1	1627057	1470977	1348906	1482314	9.41	cps
Silver	107-1	2057	1670	1520	1749	15.83	cps
Silver	109-1	1797	1587	1497	1627	9.46	cps
Sodium	23-2	119184	116984	117206	117792	1.03	cps
Strontium	86-1	890	723	763	792	10.98	cps
Strontium	88-1	2127	1937	1730	1931	10.27	cps
Sulfur	34-1	702487	705503	703718	703902	0.22	cps
Terbium	159-1	10366494	10418281	10365950	10383575	0.29	cps
Terbium	159-2	3629566	3546407	3597102	3591025	1.17	cps
Thallium	203-1	1723	1610	1610	1648	3.97	cps
Thallium	205-1	3981	3974	3657	3871	4.78	cps
Tin	118-1	6025	5978	5995	5999	0.39	cps
Titanium	47-1	1623	1347	1240	1403	14.10	cps
Uranium	238-1	1270	1063	963	1099	14.23	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P8
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:21:41	DataFile Name :	058CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	90	57	107	84	30.15	cps
Ytterbium	172-1	50	83	57	63	27.85	cps
Ytterbium	172-2	20	17	13	17	20.01	cps
Ytterbium	176-1	1193	1170	1277	1213	4.62	cps
Ytterbium	176-2	203	210	160	191	14.21	cps
Yttrium	89-1	16139029	16465618	16270244	16291630	1.01	cps
Yttrium	89-2	1112753	1119795	1107335	1113294	0.56	cps
Zinc	66-2	2434	2430	2457	2440	0.60	cps
Zirconium	90-1	4211	4017	3651	3959	7.19	cps
Zirconium	91-1	907	890	917	904	1.49	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:25:22	DataFile Name :	059AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3297557	3356309	3342805	3332224	0.92	cps
Antimony	121-1	4404	4297	4407	4370	1.43	cps
Arsenic	75-2	13380	12949	13413	13247	1.95	cps
Barium	135-1	1711989	1688380	1696335	1698901	0.71	cps
Barium	137-1	2921212	2888884	2905421	2905172	0.56	cps
Beryllium	9-1	12424	12487	12535	12482	0.44	cps
Bismuth	209-1	5737692	5822281	5776410	5778794	0.73	cps
Bismuth	209-2	2542664	2527960	2537400	2536008	0.29	cps
Bromine	81-1	44360	47276	48530	46722	4.58	cps
Cadmium	108-1	2594	2337	2487	2472	5.22	cps
Cadmium	106-1	11331	11502	11345	11393	0.83	cps
Cadmium	111-1	22133	22708	23031	22624	2.01	cps
Calcium	43-1	714370	721525	723898	719931	0.69	cps
Calcium	44-1	11934880	12061972	12422613	12139822	2.08	cps
Carbon	12-1	10703433	11077775	11056771	10945993	1.92	cps
Carbon	12-2	75275	73931	73345	74184	1.33	cps
Chlorine	35-1	724756	732218	732415	729796	0.60	cps
Chlorine	35-2	3197	3234	2994	3141	4.12	cps
Chromium	52-2	305852	305637	307527	306339	0.34	cps
Cobalt	59-2	408490	410474	407654	408873	0.35	cps
Copper	63-2	1378422	1374626	1370218	1374422	0.30	cps
Dysprosium	156-1	273412	270534	275153	273033	0.85	cps
Dysprosium	156-2	88994	89610	88681	89095	0.53	cps
Erbium	164-1	219571	218772	218205	218849	0.31	cps
Erbium	164-2	76860	78010	77655	77508	0.76	cps
Gadolinium	160-1	237813	239161	238931	238635	0.30	cps
Gadolinium	160-2	103215	102194	103380	102930	0.62	cps
Holmium	165-1	10012749	10015651	9878309	9968903	0.79	cps
Holmium	165-2	3714881	3674797	3741554	3710410	0.91	cps
Indium	115-1	8701491	8888354	8611989	8733944	1.61	cps
Indium	115-2	871034	863985	877870	870963	0.80	cps
Iron	54-2	12297201	12092102	12175222	12188175	0.85	cps
Iron	56-2	229654477	224547997	225802083	226668186	1.17	cps
Iron	57-2	5791849	5662578	5673151	5709192	1.26	cps
Krypton	83-1	690	800	800	763	8.32	cps
Lead	206-1	6126822	6164082	6122337	6137747	0.37	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:25:22	DataFile Name :	059AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	5059491	5109735	5141927	5103718	0.81	cps
Lead	208-1	23555551	23767184	23821302	23714679	0.59	cps
Lithium	6-1	2458706	2359129	2392495	2403444	2.11	cps
Magnesium	24-2	4627564	4660878	4648720	4645721	0.36	cps
Manganese	55-2	5742170	5637598	5710856	5696874	0.94	cps
Molybdenum	94-1	343936	348134	351110	347727	1.04	cps
Molybdenum	95-1	20489	20532	21427	20816	2.54	cps
Molybdenum	96-1	81138	81182	81585	81302	0.30	cps
Molybdenum	97-1	13240	12846	12753	12946	2.00	cps
Molybdenum	98-1	32284	32822	33006	32704	1.15	cps
Neodymium	150-1	360178	363778	361037	361664	0.52	cps
Neodymium	150-2	93110	94241	93811	93721	0.61	cps
Nickel	60-2	179386	178653	179450	179163	0.25	cps
Phosphorus	31-2	13076	12946	12522	12848	2.25	cps
Potassium	39-2	971471	967646	968414	969177	0.21	cps
Rhodium	103-1	8064787	8275195	8195755	8178579	1.30	cps
Rhodium	103-2	3361554	3378129	3357773	3365819	0.32	cps
Scandium	45-1	6659386	6861009	7051123	6857172	2.86	cps
Scandium	45-2	131915	133706	134761	133461	1.08	cps
Selenium	82-1	513	413	547	491	14.13	cps
Selenium	77-2	567	523	527	539	4.47	cps
Selenium	78-2	333	263	333	310	13.04	cps
Silicon	28-1	17254276	17945312	17140521	17446703	2.50	cps
Silver	107-1	11051	11522	11325	11299	2.09	cps
Silver	109-1	10157	10798	10334	10430	3.17	cps
Sodium	23-2	1320160	1320169	1339390	1326573	0.84	cps
Strontium	86-1	390948	401060	404856	398954	1.80	cps
Strontium	88-1	3727334	3866425	3843897	3812552	1.96	cps
Sulfur	34-1	722398	718409	700495	713767	1.63	cps
Terbium	159-1	10427800	10329142	10488598	10415180	0.77	cps
Terbium	159-2	3637285	3656136	3692560	3661994	0.77	cps
Thallium	203-1	12716	12803	12429	12650	1.55	cps
Thallium	205-1	29868	29781	29848	29832	0.15	cps
Tin	118-1	59247	59515	60168	59644	0.79	cps
Titanium	47-1	2261027	2255206	2325215	2280483	1.70	cps
Uranium	238-1	187763	186621	189342	187909	0.73	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:25:22	DataFile Name :	059AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	406671	410065	409928	408888	0.47	cps
Ytterbium	172-1	67434	67953	68268	67885	0.62	cps
Ytterbium	172-2	29476	29332	29152	29320	0.55	cps
Ytterbium	176-1	44271	43475	44531	44092	1.25	cps
Ytterbium	176-2	19177	19030	19498	19235	1.24	cps
Yttrium	89-1	19662128	19844114	20174683	19893642	1.31	cps
Yttrium	89-2	1533471	1550843	1541339	1541884	0.56	cps
Zinc	66-2	664124	660280	657648	660684	0.49	cps
Zirconium	90-1	923627	934265	934892	930928	0.68	cps
Zirconium	91-1	201955	206942	204321	204406	1.22	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUPDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUPDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:28:31	DataFile Name :	060AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3826327	3738292	3739126	3767915	1.34	cps
Antimony	121-1	4184	4537	4587	4436	4.96	cps
Arsenic	75-2	11838	11365	11421	11541	2.24	cps
Barium	135-1	1730659	1736921	1715486	1727689	0.64	cps
Barium	137-1	2935742	2994092	3001677	2977170	1.21	cps
Beryllium	9-1	13952	13841	13968	13920	0.49	cps
Bismuth	209-1	5776019	5702648	5721509	5733392	0.66	cps
Bismuth	209-2	2545745	2518569	2525815	2530043	0.56	cps
Bromine	81-1	46805	48310	47209	47441	1.64	cps
Cadmium	108-1	1743	1703	1920	1789	6.45	cps
Cadmium	106-1	10047	10050	10671	10256	3.50	cps
Cadmium	111-1	14619	14386	14882	14629	1.70	cps
Calcium	43-1	704243	711641	703687	706524	0.63	cps
Calcium	44-1	11571644	12024272	11851116	11815677	1.93	cps
Carbon	12-1	10389559	10755468	10756847	10633958	1.99	cps
Carbon	12-2	71704	71188	70628	71173	0.76	cps
Chlorine	35-1	650791	664555	656903	657416	1.05	cps
Chlorine	35-2	2790	2637	2637	2688	3.29	cps
Chromium	52-2	350870	347045	347717	348544	0.59	cps
Cobalt	59-2	283685	283855	281726	283089	0.42	cps
Copper	63-2	1153109	1158436	1159139	1156895	0.29	cps
Dysprosium	156-1	298465	302719	301208	300797	0.72	cps
Dysprosium	156-2	99910	99174	98694	99259	0.62	cps
Erbium	164-1	244930	246965	249213	247036	0.87	cps
Erbium	164-2	87253	86146	88190	87196	1.17	cps
Gadolinium	160-1	265838	265533	264990	265454	0.16	cps
Gadolinium	160-2	112382	113774	113992	113383	0.77	cps
Holmium	165-1	9977155	9813660	10008213	9933010	1.05	cps
Holmium	165-2	3785848	3677568	3682241	3715219	1.65	cps
Indium	115-1	8555674	8574262	8495772	8541903	0.48	cps
Indium	115-2	868650	857831	857473	861318	0.74	cps
Iron	54-2	12369972	12005653	12183764	12186463	1.49	cps
Iron	56-2	225345363	225134730	224490930	224990341	0.20	cps
Iron	57-2	5699526	5669305	5708329	5692387	0.36	cps
Krypton	83-1	767	753	757	759	0.91	cps
Lead	206-1	4283918	4373213	4352556	4336562	1.08	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUPDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUPDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:28:31	DataFile Name :	060AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3541212	3669593	3635066	3615290	1.84	cps
Lead	208-1	16626249	16951606	16858471	16812108	1.00	cps
Lithium	6-1	2431673	2443839	2377993	2417835	1.45	cps
Magnesium	24-2	4380272	4301435	4298325	4326677	1.07	cps
Manganese	55-2	4294687	4295983	4315636	4302102	0.27	cps
Molybdenum	94-1	319829	326891	325998	324239	1.19	cps
Molybdenum	95-1	16196	16693	16947	16612	2.30	cps
Molybdenum	96-1	71804	72723	73711	72746	1.31	cps
Molybdenum	97-1	9520	10197	10297	10005	4.23	cps
Molybdenum	98-1	25644	25837	26372	25951	1.45	cps
Neodymium	150-1	405073	405995	410156	407074	0.67	cps
Neodymium	150-2	105927	106152	106723	106267	0.39	cps
Nickel	60-2	146021	143502	145967	145163	0.99	cps
Phosphorus	31-2	12165	11675	11835	11892	2.10	cps
Potassium	39-2	1163648	1154199	1161643	1159830	0.43	cps
Rhodium	103-1	8169565	8251785	8273161	8231504	0.66	cps
Rhodium	103-2	3281461	3342738	3373351	3332517	1.40	cps
Scandium	45-1	6887633	7167934	6886383	6980650	2.32	cps
Scandium	45-2	134234	133665	132541	133480	0.65	cps
Selenium	82-1	687	807	637	710	12.31	cps
Selenium	77-2	607	640	540	596	8.55	cps
Selenium	78-2	430	363	333	376	13.18	cps
Silicon	28-1	25183189	24989056	25513778	25228674	1.05	cps
Silver	107-1	11175	11588	11615	11459	2.15	cps
Silver	109-1	10324	10287	10244	10285	0.39	cps
Sodium	23-2	1282774	1289705	1282237	1284906	0.32	cps
Strontium	86-1	371432	375325	378703	375154	0.97	cps
Strontium	88-1	3591981	3571238	3571121	3578113	0.34	cps
Sulfur	34-1	671451	666543	659684	665893	0.89	cps
Terbium	159-1	10230755	10473367	10329976	10344699	1.18	cps
Terbium	159-2	3658910	3603708	3678618	3647079	1.06	cps
Thallium	203-1	12429	12820	12576	12608	1.56	cps
Thallium	205-1	29811	30429	30319	30186	1.09	cps
Tin	118-1	49589	50924	50727	50413	1.43	cps
Titanium	47-1	2466071	2575336	2559519	2533642	2.33	cps
Uranium	238-1	249084	249032	255028	251048	1.37	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUPDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUPDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:28:31	DataFile Name :	060AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	387081	389729	384874	387228	0.63	cps
Ytterbium	172-1	80530	78588	78943	79354	1.30	cps
Ytterbium	172-2	33502	34391	34538	34144	1.64	cps
Ytterbium	176-1	49737	50674	50797	50402	1.15	cps
Ytterbium	176-2	21995	22666	22409	22357	1.51	cps
Yttrium	89-1	20110211	20067432	19945346	20040996	0.43	cps
Yttrium	89-2	1533396	1538877	1540676	1537650	0.25	cps
Zinc	66-2	633397	642424	621661	632494	1.65	cps
Zirconium	90-1	854724	872626	879463	868938	1.47	cps
Zirconium	91-1	188358	192187	194231	191592	1.56	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LDLX25	Instrumnet Name :	P8
Client Sample ID :	RT-3873LDL	Dilution Factor :	25
Date & Time Acquired :	2025-04-21 18:31:42	DataFile Name :	061AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	639162	632201	632550	634638	0.62	cps
Antimony	121-1	1197	1170	1030	1132	7.91	cps
Arsenic	75-2	2470	2747	2927	2715	8.48	cps
Barium	135-1	311300	313200	314418	312973	0.50	cps
Barium	137-1	534426	541379	540103	538636	0.69	cps
Beryllium	9-1	2752	2644	2681	2692	2.04	cps
Bismuth	209-1	5632092	5885019	5824431	5780514	2.28	cps
Bismuth	209-2	2656326	2595935	2630859	2627707	1.15	cps
Bromine	81-1	41227	41197	40251	40892	1.36	cps
Cadmium	108-1	460	507	497	488	5.04	cps
Cadmium	106-1	6088	6215	5988	6097	1.86	cps
Cadmium	111-1	7417	7610	7328	7451	1.93	cps
Calcium	43-1	144915	146754	145716	145795	0.63	cps
Calcium	44-1	2536826	2515585	2474966	2509126	1.25	cps
Carbon	12-1	6225803	6221500	6118686	6188663	0.98	cps
Carbon	12-2	40840	41351	40880	41024	0.69	cps
Chlorine	35-1	540247	530583	531368	534066	1.01	cps
Chlorine	35-2	2250	2260	2207	2239	1.27	cps
Chromium	52-2	63527	63092	62057	62892	1.20	cps
Cobalt	59-2	83034	82236	83231	82834	0.64	cps
Copper	63-2	284231	281526	281782	282513	0.53	cps
Dysprosium	156-1	53604	54501	54638	54247	1.04	cps
Dysprosium	156-2	17872	18082	17785	17913	0.85	cps
Erbium	164-1	43113	44421	45187	44240	2.37	cps
Erbium	164-2	15613	15339	15352	15435	1.00	cps
Gadolinium	160-1	46919	48137	47708	47588	1.30	cps
Gadolinium	160-2	20376	21147	20596	20706	1.92	cps
Holmium	165-1	9967311	9932012	9979451	9959591	0.25	cps
Holmium	165-2	3706901	3687838	3752083	3715607	0.89	cps
Indium	115-1	8682491	8830216	8880023	8797577	1.17	cps
Indium	115-2	874635	871846	869302	871928	0.31	cps
Iron	54-2	2513515	2473785	2430442	2472581	1.68	cps
Iron	56-2	45085463	45060591	45143599	45096551	0.09	cps
Iron	57-2	1071163	1068023	1063044	1067410	0.38	cps
Krypton	83-1	373	447	430	417	9.23	cps
Lead	206-1	1119098	1126514	1138997	1128203	0.89	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LDLX25	Instrumnet Name :	P8
Client Sample ID :	RT-3873LDL	Dilution Factor :	25
Date & Time Acquired :	2025-04-21 18:31:42	DataFile Name :	061AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	947146	963130	957933	956070	0.85	cps
Lead	208-1	4603339	4731657	4656888	4663961	1.38	cps
Lithium	6-1	2294317	2403649	2410504	2369490	2.75	cps
Magnesium	24-2	892847	897368	894333	894849	0.26	cps
Manganese	55-2	1056929	1049496	1053984	1053470	0.36	cps
Molybdenum	94-1	70132	70876	69697	70235	0.85	cps
Molybdenum	95-1	4467	4611	4531	4536	1.58	cps
Molybdenum	96-1	16093	16500	17014	16536	2.79	cps
Molybdenum	97-1	2584	2760	2720	2688	3.45	cps
Molybdenum	98-1	6875	7115	6968	6986	1.73	cps
Neodymium	150-1	73630	73010	73614	73418	0.48	cps
Neodymium	150-2	18650	18930	19137	18906	1.29	cps
Nickel	60-2	37172	36704	36958	36945	0.63	cps
Phosphorus	31-2	2764	2500	2590	2618	5.11	cps
Potassium	39-2	209938	211920	211649	211169	0.51	cps
Rhodium	103-1	8441686	8234754	8312056	8329498	1.26	cps
Rhodium	103-2	3404190	3365194	3417265	3395550	0.80	cps
Scandium	45-1	6254863	6291438	6298834	6281712	0.37	cps
Scandium	45-2	118688	119142	118940	118923	0.19	cps
Selenium	82-1	163	197	93	151	34.90	cps
Selenium	77-2	150	77	83	103	39.24	cps
Selenium	78-2	93	120	73	96	24.50	cps
Silicon	28-1	3993202	3974454	4016797	3994818	0.53	cps
Silver	107-1	2464	2790	2557	2604	6.46	cps
Silver	109-1	2320	2114	2204	2212	4.68	cps
Sodium	23-2	315030	314662	315071	314921	0.07	cps
Strontium	86-1	80909	80769	82029	81235	0.85	cps
Strontium	88-1	692890	705377	715041	704436	1.58	cps
Sulfur	34-1	609796	604366	611912	608691	0.64	cps
Terbium	159-1	10001669	10116103	10254218	10123997	1.25	cps
Terbium	159-2	3639822	3637851	3604383	3627352	0.55	cps
Thallium	203-1	2837	2960	3130	2976	4.95	cps
Thallium	205-1	6912	7029	7019	6986	0.93	cps
Tin	118-1	15983	16173	16216	16124	0.77	cps
Titanium	47-1	435249	436609	437440	436432	0.25	cps
Uranium	238-1	37164	37830	38194	37729	1.38	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LDLX25	Instrumnet Name :	P8
Client Sample ID :	RT-3873LDL	Dilution Factor :	25
Date & Time Acquired :	2025-04-21 18:31:42	DataFile Name :	061AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	81396	80572	80920	80963	0.51	cps
Ytterbium	172-1	13480	13297	13670	13483	1.39	cps
Ytterbium	172-2	5655	5898	6028	5860	3.24	cps
Ytterbium	176-1	9764	10237	9957	9986	2.38	cps
Ytterbium	176-2	4051	4007	4034	4031	0.54	cps
Yttrium	89-1	16716879	16950443	17109929	16925750	1.17	cps
Yttrium	89-2	1199683	1186039	1192506	1192742	0.57	cps
Zinc	66-2	144017	146020	145451	145163	0.71	cps
Zirconium	90-1	186092	187258	186807	186719	0.31	cps
Zirconium	91-1	41027	41251	40682	40987	0.70	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:35:01	DataFile Name :	062AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3396715	3447182	3419729	3421208	0.74	cps
Antimony	121-1	3086201	3090181	3138179	3104853	0.93	cps
Arsenic	75-2	11158	11128	11375	11220	1.20	cps
Barium	135-1	4823121	4968167	4957340	4916209	1.64	cps
Barium	137-1	8246209	8512507	8394918	8384545	1.59	cps
Beryllium	9-1	660432	670863	673479	668258	1.03	cps
Bismuth	209-1	5642451	5632972	5761771	5679064	1.26	cps
Bismuth	209-2	2533702	2527118	2489186	2516669	0.95	cps
Bromine	81-1	46293	48915	48567	47925	2.97	cps
Cadmium	108-1	57647	59096	58420	58387	1.24	cps
Cadmium	106-1	92718	94044	94528	93763	1.00	cps
Cadmium	111-1	733432	747495	739110	740012	0.96	cps
Calcium	43-1	1834873	1786090	1808841	1809935	1.35	cps
Calcium	44-1	28684281	28981129	29323615	28996342	1.10	cps
Carbon	12-1	9465247	9645129	9714244	9608207	1.34	cps
Carbon	12-2	65448	66141	66081	65890	0.58	cps
Chlorine	35-1	17641373	19546088	21143012	19443491	9.02	cps
Chlorine	35-2	93868	94798	95190	94619	0.72	cps
Chromium	52-2	950695	959127	959085	956303	0.51	cps
Cobalt	59-2	1612751	1611494	1606559	1610268	0.20	cps
Copper	63-2	11424039	11362077	11648496	11478204	1.31	cps
Dysprosium	156-1	252054	259710	256868	256211	1.51	cps
Dysprosium	156-2	81882	81744	81650	81759	0.14	cps
Erbium	164-1	195476	197438	199740	197551	1.08	cps
Erbium	164-2	69875	70040	69805	69907	0.17	cps
Gadolinium	160-1	219176	221782	222520	221159	0.79	cps
Gadolinium	160-2	94975	94065	93334	94124	0.87	cps
Holmium	165-1	9744953	9961764	9964097	9890272	1.27	cps
Holmium	165-2	3683350	3649159	3723858	3685455	1.01	cps
Indium	115-1	8334311	8518593	8596456	8483120	1.59	cps
Indium	115-2	839590	839879	839183	839551	0.04	cps
Iron	54-2	11998728	12159913	12170975	12109872	0.80	cps
Iron	56-2	218506037	222445797	223143923	221365252	1.13	cps
Iron	57-2	5612900	5588890	5543719	5581837	0.63	cps
Krypton	83-1	707	683	597	662	8.75	cps
Lead	206-1	15183840	15285962	15234596	15234799	0.34	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:35:01	DataFile Name :	062AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	12946883	12978103	13101834	13008940	0.63	cps
Lead	208-1	59698488	59995556	60657338	60117127	0.82	cps
Lithium	6-1	2362781	2318700	2367612	2349697	1.15	cps
Magnesium	24-2	8056414	8095577	8110922	8087637	0.35	cps
Manganese	55-2	6832695	6967063	6975989	6925249	1.16	cps
Molybdenum	94-1	5587364	5681278	5708728	5659123	1.12	cps
Molybdenum	95-1	5834392	5940607	5970968	5915322	1.21	cps
Molybdenum	96-1	6676894	6618334	6706537	6667255	0.67	cps
Molybdenum	97-1	3607762	3594403	3665213	3622460	1.04	cps
Molybdenum	98-1	9278375	9321259	9412752	9337462	0.74	cps
Neodymium	150-1	333461	343978	343726	340389	1.76	cps
Neodymium	150-2	87325	88442	89043	88270	0.99	cps
Nickel	60-2	465024	468271	467164	466820	0.35	cps
Phosphorus	31-2	11888	12309	12132	12110	1.74	cps
Potassium	39-2	2192582	2260750	2226356	2226563	1.53	cps
Rhodium	103-1	8180757	8003247	8045252	8076419	1.15	cps
Rhodium	103-2	3303427	3268071	3313614	3295037	0.73	cps
Scandium	45-1	6729672	6644299	6733616	6702529	0.75	cps
Scandium	45-2	128418	129984	131280	129894	1.10	cps
Selenium	82-1	47001	47626	47957	47528	1.02	cps
Selenium	77-2	1297	1433	1237	1322	7.62	cps
Selenium	78-2	3227	3254	3107	3196	2.44	cps
Silicon	28-1	26920970	27300455	27141162	27120863	0.70	cps
Silver	107-1	629740	637811	634313	633955	0.64	cps
Silver	109-1	592840	595229	605847	597972	1.16	cps
Sodium	23-2	9404963	9463950	9555009	9474641	0.80	cps
Strontium	86-1	1661211	1676736	1648332	1662093	0.86	cps
Strontium	88-1	14055947	14334931	14405536	14265471	1.30	cps
Sulfur	34-1	692868	702367	699384	698206	0.70	cps
Terbium	159-1	10174472	10244354	10450683	10289836	1.40	cps
Terbium	159-2	3628873	3600113	3575240	3601409	0.75	cps
Thallium	203-1	2584715	2569068	2559709	2571164	0.49	cps
Thallium	205-1	5923901	5964074	6069378	5985784	1.26	cps
Tin	118-1	2347200	2377795	2433014	2386003	1.82	cps
Titanium	47-1	2318654	2313307	2352228	2328063	0.91	cps
Uranium	238-1	7644054	7658832	7830754	7711213	1.35	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:35:01	DataFile Name :	062AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	866668	866219	860870	864586	0.37	cps
Ytterbium	172-1	60142	61549	61974	61222	1.57	cps
Ytterbium	172-2	27114	26179	26984	26759	1.89	cps
Ytterbium	176-1	50978	51446	52628	51684	1.65	cps
Ytterbium	176-2	21107	21661	21892	21553	1.87	cps
Yttrium	89-1	19274702	19213486	19318040	19268743	0.27	cps
Yttrium	89-2	1349453	1342208	1341105	1344255	0.34	cps
Zinc	66-2	1883952	1894097	1877138	1885062	0.45	cps
Zirconium	90-1	6391000	6428743	6502411	6440718	0.88	cps
Zirconium	91-1	1310043	1327041	1434328	1357138	4.97	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:37:57	DataFile Name :	063AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3755402	3745986	3742005	3747797	0.18	cps
Antimony	121-1	3179459	3225200	3203964	3202874	0.71	cps
Arsenic	75-2	13013	12709	12826	12849	1.19	cps
Barium	135-1	4984857	5193239	5099446	5092514	2.05	cps
Barium	137-1	8394119	8779373	8690240	8621244	2.34	cps
Beryllium	9-1	681531	685141	684702	683791	0.29	cps
Bismuth	209-1	5781960	5775843	5720082	5759295	0.59	cps
Bismuth	209-2	2557493	2534333	2477485	2523104	1.63	cps
Bromine	81-1	44955	48219	48373	47183	4.09	cps
Cadmium	108-1	58778	59745	59166	59230	0.82	cps
Cadmium	106-1	93161	95396	95742	94767	1.48	cps
Cadmium	111-1	748346	757374	762527	756082	0.95	cps
Calcium	43-1	1946810	1942382	2006161	1965118	1.81	cps
Calcium	44-1	30645167	31184308	31201218	31010231	1.02	cps
Carbon	12-1	10052839	10271036	10299151	10207675	1.32	cps
Carbon	12-2	69543	68686	69084	69105	0.62	cps
Chlorine	35-1	20156876	22031672	23309788	21832779	7.26	cps
Chlorine	35-2	99882	100154	103134	101056	1.79	cps
Chromium	52-2	996796	996204	996036	996346	0.04	cps
Cobalt	59-2	1705281	1674726	1628434	1669480	2.32	cps
Copper	63-2	11567770	11418965	11416185	11467640	0.76	cps
Dysprosium	156-1	271494	262709	266043	266749	1.66	cps
Dysprosium	156-2	83156	84461	83965	83861	0.79	cps
Erbium	164-1	203812	205341	206115	205089	0.57	cps
Erbium	164-2	71320	72355	72258	71978	0.79	cps
Gadolinium	160-1	227072	222565	228150	225929	1.31	cps
Gadolinium	160-2	96277	97547	97053	96959	0.66	cps
Holmium	165-1	9840365	10010729	9953335	9934809	0.87	cps
Holmium	165-2	3736086	3763849	3727312	3742416	0.51	cps
Indium	115-1	8548570	8545988	8470960	8521839	0.52	cps
Indium	115-2	831425	836705	825300	831143	0.69	cps
Iron	54-2	13377955	13641611	13385309	13468291	1.11	cps
Iron	56-2	246076023	249667483	248421376	248054961	0.74	cps
Iron	57-2	6232445	6255168	6192729	6226781	0.51	cps
Krypton	83-1	673	727	653	684	5.54	cps
Lead	206-1	16129667	15953419	16150126	16077737	0.67	cps

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:37:57	DataFile Name :	063AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	13650313	13498279	13699720	13616104	0.77	cps
Lead	208-1	63263117	62687065	63003507	62984563	0.46	cps
Lithium	6-1	2363011	2428512	2483214	2424912	2.48	cps
Magnesium	24-2	9112277	9161432	9084328	9119345	0.43	cps
Manganese	55-2	7262231	7373597	7225594	7287141	1.06	cps
Molybdenum	94-1	5796075	5861473	5915612	5857720	1.02	cps
Molybdenum	95-1	5968466	6020355	6113058	6033959	1.21	cps
Molybdenum	96-1	6771726	6846489	6779408	6799207	0.60	cps
Molybdenum	97-1	3715237	3717480	3740915	3724544	0.38	cps
Molybdenum	98-1	9541108	9774976	9718501	9678195	1.26	cps
Neodymium	150-1	348718	352751	357425	352965	1.23	cps
Neodymium	150-2	90650	92271	91784	91568	0.91	cps
Nickel	60-2	489119	493442	492858	491806	0.48	cps
Phosphorus	31-2	14064	14527	13606	14066	3.27	cps
Potassium	39-2	2482993	2486249	2466120	2478454	0.44	cps
Rhodium	103-1	7895706	8136214	8015917	8015945	1.50	cps
Rhodium	103-2	3286099	3235253	3188923	3236759	1.50	cps
Scandium	45-1	6650951	6895211	6709869	6752010	1.89	cps
Scandium	45-2	128404	130388	132087	130293	1.41	cps
Selenium	82-1	48061	49105	49295	48820	1.36	cps
Selenium	77-2	1277	1353	1377	1336	3.92	cps
Selenium	78-2	3407	3170	3254	3277	3.66	cps
Silicon	28-1	49444358	67267084	50694314	55801919	17.83	cps
Silver	107-1	631738	642985	648061	640928	1.30	cps
Silver	109-1	592947	605547	610680	603058	1.51	cps
Sodium	23-2	9622313	9551267	9805914	9659831	1.36	cps
Strontium	86-1	1719013	1713616	1726497	1719708	0.38	cps
Strontium	88-1	14810328	14889878	14933349	14877852	0.42	cps
Sulfur	34-1	687572	683070	682694	684445	0.40	cps
Terbium	159-1	10315542	10013383	10345678	10224868	1.80	cps
Terbium	159-2	3536425	3587978	3610058	3578154	1.06	cps
Thallium	203-1	2637384	2637625	2699801	2658270	1.35	cps
Thallium	205-1	6173300	6205924	6228763	6202663	0.45	cps
Tin	118-1	2444293	2446048	2423529	2437957	0.51	cps
Titanium	47-1	3009324	3157118	3059496	3075313	2.44	cps
Uranium	238-1	7969037	7976179	7960413	7968543	0.10	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDDLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDDL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:37:57	DataFile Name :	063AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	933734	948497	933909	938713	0.90	cps
Ytterbium	172-1	61720	62828	62523	62357	0.92	cps
Ytterbium	172-2	27368	26861	26871	27033	1.07	cps
Ytterbium	176-1	50944	52012	52273	51743	1.36	cps
Ytterbium	176-2	21882	21257	21367	21502	1.55	cps
Yttrium	89-1	19333056	19169853	19550124	19351011	0.99	cps
Yttrium	89-2	1343830	1338610	1340902	1341114	0.20	cps
Zinc	66-2	1927002	1925152	1949006	1933720	0.69	cps
Zirconium	90-1	6540571	6701752	6591178	6611167	1.25	cps
Zirconium	91-1	1442194	1500143	1490815	1477717	2.11	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03ADLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873ADL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:40:51	DataFile Name :	064AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3547415	3557194	3628052	3577553	1.23	cps
Antimony	121-1	3173435	3163075	3163910	3166807	0.18	cps
Arsenic	75-2	11965	12245	12412	12208	1.85	cps
Barium	135-1	5145625	5024924	5004720	5058423	1.51	cps
Barium	137-1	8592937	8643613	8528351	8588300	0.67	cps
Beryllium	9-1	674570	679716	679309	677865	0.42	cps
Bismuth	209-1	5700948	5663774	5577543	5647422	1.12	cps
Bismuth	209-2	2524871	2464515	2485438	2491608	1.23	cps
Bromine	81-1	47099	47196	48443	47580	1.58	cps
Cadmium	108-1	58045	57821	58828	58231	0.91	cps
Cadmium	106-1	93906	94377	95834	94706	1.06	cps
Cadmium	111-1	748312	760056	759157	755842	0.86	cps
Calcium	43-1	1880058	1851364	1922686	1884703	1.90	cps
Calcium	44-1	29835833	29877255	30117320	29943470	0.51	cps
Carbon	12-1	9698691	10056209	10116238	9957046	2.27	cps
Carbon	12-2	67708	65843	67333	66962	1.47	cps
Chlorine	35-1	20860176	22671701	23796025	22442634	6.60	cps
Chlorine	35-2	100949	100116	102882	101316	1.40	cps
Chromium	52-2	979126	979523	984995	981215	0.33	cps
Cobalt	59-2	1675237	1615329	1614667	1635078	2.13	cps
Copper	63-2	11437314	11630843	11483707	11517288	0.88	cps
Dysprosium	156-1	261954	263011	262659	262541	0.20	cps
Dysprosium	156-2	84115	85390	84434	84647	0.78	cps
Erbium	164-1	204225	206557	205537	205440	0.57	cps
Erbium	164-2	71849	71128	72010	71662	0.66	cps
Gadolinium	160-1	225082	226811	230193	227362	1.14	cps
Gadolinium	160-2	95468	96650	96301	96140	0.63	cps
Holmium	165-1	10124360	9932158	9937007	9997842	1.10	cps
Holmium	165-2	3684052	3673079	3669293	3675475	0.21	cps
Indium	115-1	8511122	8587353	8538598	8545691	0.45	cps
Indium	115-2	835456	829852	829594	831634	0.40	cps
Iron	54-2	12852451	12768665	12834194	12818437	0.34	cps
Iron	56-2	236686656	239909290	239433716	238676554	0.73	cps
Iron	57-2	6033896	5945548	6010594	5996679	0.76	cps
Krypton	83-1	643	693	643	660	4.37	cps
Lead	206-1	15582706	15786043	15789269	15719339	0.75	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03ADLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873ADL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:40:51	DataFile Name :	064AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	13245505	13377192	13623626	13415441	1.43	cps
Lead	208-1	61363227	62049761	62441449	61951479	0.88	cps
Lithium	6-1	2454105	2388771	2410848	2417908	1.37	cps
Magnesium	24-2	8611370	8561233	8555536	8576046	0.36	cps
Manganese	55-2	7234726	7146616	7029500	7136947	1.44	cps
Molybdenum	94-1	5634078	5702533	5608165	5648259	0.86	cps
Molybdenum	95-1	5844730	5900038	5880997	5875255	0.48	cps
Molybdenum	96-1	6692159	6804723	6679691	6725525	1.02	cps
Molybdenum	97-1	3584961	3727588	3677418	3663323	1.98	cps
Molybdenum	98-1	9188202	9610003	9609409	9469205	2.57	cps
Neodymium	150-1	350786	351274	356094	352718	0.83	cps
Neodymium	150-2	91006	90714	91700	91140	0.56	cps
Nickel	60-2	480031	482980	482500	481837	0.33	cps
Phosphorus	31-2	13313	13460	13470	13414	0.65	cps
Potassium	39-2	2379624	2366699	2392880	2379734	0.55	cps
Rhodium	103-1	7979681	8194504	8143601	8105928	1.38	cps
Rhodium	103-2	3269471	3239822	3303252	3270848	0.97	cps
Scandium	45-1	6765222	6666923	6722051	6718065	0.73	cps
Scandium	45-2	129426	129982	129504	129637	0.23	cps
Selenium	82-1	48680	49075	48803	48853	0.41	cps
Selenium	77-2	1283	1300	1207	1263	3.94	cps
Selenium	78-2	3277	3170	3084	3177	3.05	cps
Silicon	28-1	38303584	39005522	37974216	38427774	1.37	cps
Silver	107-1	635981	641584	647177	641581	0.87	cps
Silver	109-1	600716	608856	614972	608181	1.18	cps
Sodium	23-2	9421125	9410745	9448597	9426823	0.21	cps
Strontium	86-1	1687258	1733560	1691472	1704097	1.50	cps
Strontium	88-1	14426913	14747900	14559463	14578092	1.11	cps
Sulfur	34-1	677335	678145	678652	678044	0.10	cps
Terbium	159-1	10149122	10178279	10356087	10227829	1.10	cps
Terbium	159-2	3589219	3590642	3609310	3596390	0.31	cps
Thallium	203-1	2566381	2617029	2627325	2603578	1.25	cps
Thallium	205-1	6130404	6092819	6162464	6128563	0.57	cps
Tin	118-1	2430053	2398630	2413236	2413973	0.65	cps
Titanium	47-1	2780757	2731841	2764270	2758956	0.90	cps
Uranium	238-1	7940469	7881490	7951828	7924596	0.48	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03ADLX5	Instrumnet Name :	P8
Client Sample ID :	RT-3873ADL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:40:51	DataFile Name :	064AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	908594	900294	914180	907689	0.77	cps
Ytterbium	172-1	63381	63733	63763	63625	0.33	cps
Ytterbium	172-2	26684	27004	27094	26927	0.80	cps
Ytterbium	176-1	51697	52775	52357	52276	1.04	cps
Ytterbium	176-2	21478	21918	21805	21734	1.05	cps
Yttrium	89-1	19004379	19269242	19542921	19272181	1.40	cps
Yttrium	89-2	1352958	1345958	1454118	1384345	4.37	cps
Zinc	66-2	1923130	1899054	1932157	1918114	0.89	cps
Zirconium	90-1	6400231	6395712	6532659	6442867	1.21	cps
Zirconium	91-1	1315653	1427811	1412581	1385348	4.39	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-01DLX5	Instrumnet Name :	P8
Client Sample ID :	284DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:43:46	DataFile Name :	065AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	39828	39590	39738	39719	0.30	cps
Antimony	121-1	350962	357514	353104	353860	0.94	cps
Arsenic	75-2	353	353	397	368	6.80	cps
Barium	135-1	309279	309918	310555	309917	0.21	cps
Barium	137-1	538201	542705	545295	542067	0.66	cps
Beryllium	9-1	337	355	349	347	2.64	cps
Bismuth	209-1	6141737	6143027	6148656	6144474	0.06	cps
Bismuth	209-2	2755258	2728805	2710690	2731584	0.82	cps
Bromine	81-1	48801	50287	52244	50444	3.42	cps
Cadmium	108-1	4354	4301	4304	4320	0.69	cps
Cadmium	106-1	7599	7656	7622	7625	0.37	cps
Cadmium	111-1	16235	16062	16283	16193	0.72	cps
Calcium	43-1	1592824	1578912	1564494	1578743	0.90	cps
Calcium	44-1	25191649	25332690	25228092	25250810	0.29	cps
Carbon	12-1	84147510	86984015	87979589	86370371	2.30	cps
Carbon	12-2	587651	591532	595201	591461	0.64	cps
Chlorine	35-1	2443907	2373641	2277860	2365136	3.52	cps
Chlorine	35-2	7752	7662	6965	7460	5.77	cps
Chromium	52-2	74118	74194	74710	74341	0.43	cps
Cobalt	59-2	10824	10904	10507	10745	1.95	cps
Copper	63-2	1170977	1167201	1172819	1170332	0.24	cps
Dysprosium	156-1	793	860	913	856	7.03	cps
Dysprosium	156-2	317	277	240	278	13.80	cps
Erbium	164-1	897	913	847	886	3.92	cps
Erbium	164-2	347	343	347	346	0.56	cps
Gadolinium	160-1	743	813	807	788	4.90	cps
Gadolinium	160-2	313	277	290	293	6.33	cps
Holmium	165-1	9987863	10107426	10127684	10074324	0.75	cps
Holmium	165-2	3719425	3751879	3719572	3730292	0.50	cps
Indium	115-1	9139268	9075323	9321174	9178588	1.39	cps
Indium	115-2	868577	875777	867546	870633	0.52	cps
Iron	54-2	1794137	1763059	1784725	1780640	0.90	cps
Iron	56-2	32689691	32814843	32673345	32725960	0.24	cps
Iron	57-2	766886	760900	773724	767170	0.84	cps
Krypton	83-1	270	360	333	321	14.40	cps
Lead	206-1	1498373	1520141	1527944	1515486	1.01	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-01DLX5	Instrumnet Name :	P8
Client Sample ID :	284DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:43:46	DataFile Name :	065AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1249281	1272959	1251138	1257793	1.05	cps
Lead	208-1	6151770	6217291	6184885	6184649	0.53	cps
Lithium	6-1	2480742	2647781	2547672	2558732	3.29	cps
Magnesium	24-2	904922	891353	900170	898815	0.77	cps
Manganese	55-2	102786	102602	102327	102572	0.23	cps
Molybdenum	94-1	5737181	5660541	5803500	5733741	1.25	cps
Molybdenum	95-1	9836783	9832121	10020456	9896453	1.09	cps
Molybdenum	96-1	10661667	10696309	10759442	10705806	0.46	cps
Molybdenum	97-1	5987005	6157602	6155164	6099923	1.60	cps
Molybdenum	98-1	15918318	15939084	16348531	16068645	1.51	cps
Neodymium	150-1	1197	1173	1040	1137	7.44	cps
Neodymium	150-2	247	227	310	261	16.66	cps
Nickel	60-2	36945	37088	37767	37266	1.18	cps
Phosphorus	31-2	19703	19186	19857	19582	1.79	cps
Potassium	39-2	200672	197066	199597	199112	0.93	cps
Rhodium	103-1	8655240	8762816	8615320	8677792	0.88	cps
Rhodium	103-2	3470596	3461285	3428432	3453438	0.64	cps
Scandium	45-1	6266035	6213209	6298554	6259266	0.69	cps
Scandium	45-2	114891	114925	116612	115476	0.85	cps
Selenium	82-1	273	140	70	161	64.12	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	13	33	37	28	45.44	cps
Silicon	28-1	8903129	9010386	9263887	9059134	2.04	cps
Silver	107-1	8763	8569	8459	8597	1.79	cps
Silver	109-1	8199	8499	7992	8230	3.10	cps
Sodium	23-2	663390	653679	663538	660202	0.86	cps
Strontium	86-1	56078	55115	54850	55348	1.17	cps
Strontium	88-1	472332	480475	480487	477765	0.98	cps
Sulfur	34-1	2079407	2105615	2141421	2108814	1.48	cps
Terbium	159-1	10563739	10635907	10740440	10646695	0.83	cps
Terbium	159-2	3625004	3706265	3624110	3651793	1.29	cps
Thallium	203-1	1910	1833	1903	1882	2.26	cps
Thallium	205-1	4711	4141	3954	4269	9.24	cps
Tin	118-1	307062	311044	311074	309727	0.75	cps
Titanium	47-1	117489	118044	116215	117250	0.80	cps
Uranium	238-1	6869	6949	6842	6886	0.81	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1824-01DLX5	Instrumnet Name :	P8
Client Sample ID :	284DL	Dilution Factor :	5
Date & Time Acquired :	2025-04-21 18:43:46	DataFile Name :	065AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	9890	9793	10107	9930	1.62	cps
Ytterbium	172-1	313	343	303	320	6.51	cps
Ytterbium	172-2	110	130	203	148	33.26	cps
Ytterbium	176-1	1677	1593	1557	1609	3.82	cps
Ytterbium	176-2	377	390	397	388	2.63	cps
Yttrium	89-1	16584464	16930838	16490650	16668651	1.39	cps
Yttrium	89-2	1143618	1135561	1121565	1133581	0.98	cps
Zinc	66-2	5011057	4973127	4990945	4991710	0.38	cps
Zirconium	90-1	122200	112153	103904	112752	8.13	cps
Zirconium	91-1	27407	24468	23740	25205	7.70	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P8
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:46:56	DataFile Name :	066CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5310450	5341709	5234373	5295511	1.04	cps
Antimony	121-1	14307494	14400433	14433574	14380500	0.45	cps
Arsenic	75-2	307344	306106	309558	307669	0.57	cps
Barium	135-1	17198838	17401986	17789654	17463493	1.72	cps
Barium	137-1	29714215	30276813	30771218	30254082	1.75	cps
Beryllium	9-1	3035846	2989296	3004947	3010030	0.79	cps
Bismuth	209-1	4939724	4988430	5033890	4987348	0.94	cps
Bismuth	209-2	2235291	2196176	2186281	2205916	1.17	cps
Bromine	81-1	35916	36752	37871	36846	2.66	cps
Cadmium	108-1	263393	266838	271207	267146	1.47	cps
Cadmium	106-1	381424	382698	391540	385221	1.43	cps
Cadmium	111-1	3480090	3606507	3607986	3564861	2.06	cps
Calcium	43-1	24199203	23883015	24440578	24174265	1.16	cps
Calcium	44-1	391960007	389025541	390870781	390618776	0.38	cps
Carbon	12-1	7772900	7740936	7601641	7705159	1.18	cps
Carbon	12-2	52654	52530	51945	52376	0.72	cps
Chlorine	35-1	970507	961858	946020	959462	1.29	cps
Chlorine	35-2	3941	3854	3954	3916	1.39	cps
Chromium	52-2	3365248	3374184	3359762	3366398	0.22	cps
Cobalt	59-2	6039824	6027287	5948692	6005268	0.82	cps
Copper	63-2	44767391	44318969	44200291	44428884	0.67	cps
Dysprosium	156-1	717	723	727	722	0.71	cps
Dysprosium	156-2	203	183	150	179	15.06	cps
Erbium	164-1	573	607	660	613	7.13	cps
Erbium	164-2	180	257	203	213	18.42	cps
Gadolinium	160-1	533	507	460	500	7.42	cps
Gadolinium	160-2	157	243	187	196	22.51	cps
Holmium	165-1	8914255	9147357	9213292	9091635	1.73	cps
Holmium	165-2	3448114	3475267	3490765	3471382	0.62	cps
Indium	115-1	7516366	7521577	7685870	7574605	1.27	cps
Indium	115-2	727470	727191	737287	730650	0.79	cps
Iron	54-2	32156038	32141442	32068685	32122055	0.15	cps
Iron	56-2	592770578	590102431	596462031	593111680	0.54	cps
Iron	57-2	15183605	15014279	15167544	15121809	0.62	cps
Krypton	83-1	437	477	347	420	15.85	cps
Lead	206-1	46241113	47476248	48368501	47361954	2.26	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P8
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:46:56	DataFile Name :	066CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	40294034	40899524	41475785	40889781	1.45	cps
Lead	208-1	185473005	188513324	190384065	188123464	1.32	cps
Lithium	6-1	2090322	2067264	2138848	2098811	1.74	cps
Magnesium	24-2	91293325	90354279	90576092	90741232	0.54	cps
Manganese	55-2	13914014	13911171	13832240	13885808	0.33	cps
Molybdenum	94-1	52531116	53012099	53006416	52849877	0.52	cps
Molybdenum	95-1	74800397	76930481	77659151	76463343	1.94	cps
Molybdenum	96-1	81708575	85184789	85120019	84004461	2.37	cps
Molybdenum	97-1	45389428	47524874	46853328	46589210	2.34	cps
Molybdenum	98-1	121621068	122270675	122627315	122173019	0.42	cps
Neodymium	150-1	1347	1340	1340	1342	0.29	cps
Neodymium	150-2	97	127	127	117	14.85	cps
Nickel	60-2	1638489	1629871	1640524	1636294	0.35	cps
Phosphorus	31-2	52558	51989	52116	52221	0.57	cps
Potassium	39-2	32474464	32356437	32569272	32466724	0.33	cps
Rhodium	103-1	6999885	6978787	6961581	6980084	0.27	cps
Rhodium	103-2	2843506	2798121	2904345	2848657	1.87	cps
Scandium	45-1	5568454	5575472	5575949	5573291	0.08	cps
Scandium	45-2	112123	110900	112318	111780	0.69	cps
Selenium	82-1	208626	212890	212708	211408	1.14	cps
Selenium	77-2	3947	3764	3974	3895	2.94	cps
Selenium	78-2	13420	13236	13393	13350	0.74	cps
Silicon	28-1	30407008	31299873	31076487	30927789	1.50	cps
Silver	107-1	17269749	17748686	18001086	17673174	2.10	cps
Silver	109-1	16306500	16920540	16596731	16607924	1.85	cps
Sodium	23-2	183913937	185398644	186648864	185320482	0.74	cps
Strontium	86-1	4938701	5034079	4989553	4987444	0.96	cps
Strontium	88-1	42106663	43322276	43858451	43095797	2.08	cps
Sulfur	34-1	1890924	1891875	1861903	1881567	0.91	cps
Terbium	159-1	9626073	9633127	9655738	9638313	0.16	cps
Terbium	159-2	3371422	3368447	3355600	3365157	0.25	cps
Thallium	203-1	11479383	11726619	11941781	11715928	1.97	cps
Thallium	205-1	27448862	27978553	28045980	27824465	1.18	cps
Tin	118-1	11612331	11812572	11905833	11776912	1.27	cps
Titanium	47-1	21412813	22284083	22256709	21984535	2.25	cps
Uranium	238-1	36900602	36673779	36620027	36731469	0.41	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV05	Instrumnet Name :	P8
Client Sample ID :	CCV05	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:46:56	DataFile Name :	066CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2570841	2577874	2590664	2579793	0.39	cps
Ytterbium	172-1	980	997	943	973	2.80	cps
Ytterbium	172-2	387	427	450	421	7.61	cps
Ytterbium	176-1	55375	56490	57976	56614	2.30	cps
Ytterbium	176-2	20783	20676	20810	20756	0.34	cps
Yttrium	89-1	14646183	14814765	14813005	14757984	0.66	cps
Yttrium	89-2	1058743	1047106	1052802	1052884	0.55	cps
Zinc	66-2	4947375	5030238	5013817	4997143	0.88	cps
Zirconium	90-1	26227332	26644736	26862858	26578309	1.22	cps
Zirconium	91-1	5842707	5893796	6004377	5913626	1.40	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P8
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:49:42	DataFile Name :	067CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	723	670	617	670	7.96	cps
Antimony	121-1	4227	3641	2994	3621	17.04	cps
Arsenic	75-2	17	13	10	13	25.01	cps
Barium	135-1	607	487	467	520	14.56	cps
Barium	137-1	1127	877	797	933	18.44	cps
Beryllium	9-1	598	535	434	522	15.89	cps
Bismuth	209-1	5816261	6006059	5975979	5932766	1.72	cps
Bismuth	209-2	2612630	2606319	2559800	2592916	1.11	cps
Bromine	81-1	38827	37921	38175	38308	1.22	cps
Cadmium	108-1	53	33	20	36	47.19	cps
Cadmium	106-1	5258	5501	5451	5403	2.38	cps
Cadmium	111-1	3796	4021	3915	3911	2.87	cps
Calcium	43-1	2297	2047	1860	2068	10.60	cps
Calcium	44-1	49154	46332	45037	46841	4.49	cps
Carbon	12-1	5600234	5519466	5329185	5482962	2.54	cps
Carbon	12-2	34651	34300	34390	34447	0.53	cps
Chlorine	35-1	743045	726120	707346	725503	2.46	cps
Chlorine	35-2	2947	2734	2657	2779	5.41	cps
Chromium	52-2	1757	1777	1707	1747	2.06	cps
Cobalt	59-2	173	143	187	168	13.23	cps
Copper	63-2	3230	2980	3267	3159	4.94	cps
Dysprosium	156-1	17	17	17	17	0.00	cps
Dysprosium	156-2	3	0	0	1	173.21	cps
Erbium	164-1	83	70	57	70	19.04	cps
Erbium	164-2	20	27	17	21	24.12	cps
Gadolinium	160-1	63	50	73	62	18.81	cps
Gadolinium	160-2	10	7	10	9	21.63	cps
Holmium	165-1	10138446	10386793	9715182	10080140	3.37	cps
Holmium	165-2	3641770	3734202	3670844	3682272	1.28	cps
Indium	115-1	8960354	9024601	8721375	8902110	1.79	cps
Indium	115-2	854523	863229	860026	859260	0.51	cps
Iron	54-2	1433	1527	1547	1502	4.03	cps
Iron	56-2	23139	22555	21767	22487	3.06	cps
Iron	57-2	627	580	580	596	4.52	cps
Krypton	83-1	410	350	363	374	8.41	cps
Lead	206-1	4961	4654	4071	4562	9.91	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P8
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:49:42	DataFile Name :	067CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4224	3997	3464	3895	10.02	cps
Lead	208-1	19699	17401	16334	17812	9.65	cps
Lithium	6-1	2410191	2515986	2460939	2462372	2.15	cps
Magnesium	24-2	1903	1933	1760	1866	4.97	cps
Manganese	55-2	6552	6198	6278	6343	2.92	cps
Molybdenum	94-1	3671	2997	2660	3109	16.54	cps
Molybdenum	95-1	3484	2794	2280	2853	21.17	cps
Molybdenum	96-1	3941	3207	2787	3312	17.63	cps
Molybdenum	97-1	2024	1657	1497	1726	15.65	cps
Molybdenum	98-1	5358	4504	3524	4462	20.57	cps
Neodymium	150-1	13	13	7	11	34.61	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	900	823	800	841	6.22	cps
Phosphorus	31-2	100	80	93	91	11.18	cps
Potassium	39-2	26321	26494	26748	26521	0.81	cps
Rhodium	103-1	8347752	8369059	8480754	8399188	0.85	cps
Rhodium	103-2	3339815	3397872	3374506	3370731	0.87	cps
Scandium	45-1	6033143	6146922	5948921	6042996	1.64	cps
Scandium	45-2	112291	115499	113981	113924	1.41	cps
Selenium	82-1	-47	23	-17	-13	-263.33	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	47	43	23	38	33.41	cps
Silicon	28-1	896537	973658	894056	921417	4.91	cps
Silver	107-1	2134	1737	1427	1766	20.06	cps
Silver	109-1	2104	1683	1447	1745	19.07	cps
Sodium	23-2	120004	118704	119185	119298	0.55	cps
Strontium	86-1	817	743	657	739	10.84	cps
Strontium	88-1	2130	1833	1450	1805	18.89	cps
Sulfur	34-1	710935	706775	709324	709011	0.30	cps
Terbium	159-1	10264535	10154417	10372079	10263677	1.06	cps
Terbium	159-2	3564820	3540075	3584693	3563196	0.63	cps
Thallium	203-1	1643	1527	1363	1511	9.31	cps
Thallium	205-1	3854	3607	3364	3608	6.79	cps
Tin	118-1	7838	5578	5521	6312	20.94	cps
Titanium	47-1	1450	1350	1013	1271	18.00	cps
Uranium	238-1	1413	1073	750	1079	30.75	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB05	Instrumnet Name :	P8
Client Sample ID :	CCB05	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 18:49:42	DataFile Name :	067CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	70	73	53	66	16.35	cps
Ytterbium	172-1	47	50	37	44	15.61	cps
Ytterbium	172-2	17	40	20	26	49.38	cps
Ytterbium	176-1	1217	1273	1220	1237	2.57	cps
Ytterbium	176-2	197	177	223	199	11.77	cps
Yttrium	89-1	16267727	16597441	16503561	16456243	1.03	cps
Yttrium	89-2	1121637	1117976	1112164	1117259	0.43	cps
Zinc	66-2	2247	2277	2390	2305	3.28	cps
Zirconium	90-1	4704	4147	3914	4255	9.54	cps
Zirconium	91-1	920	933	843	899	5.40	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873DL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 18:53:04	DataFile Name :	068AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1674866	1680421	1635890	1663726	1.46	cps
Antimony	121-1	2700	2540	2870	2704	6.11	cps
Arsenic	75-2	6762	6838	6548	6716	2.24	cps
Barium	135-1	766708	786817	769714	774413	1.40	cps
Barium	137-1	1330717	1342016	1347341	1340025	0.63	cps
Beryllium	9-1	6305	6505	6288	6366	1.89	cps
Bismuth	209-1	5780964	5862132	5808443	5817180	0.71	cps
Bismuth	209-2	2645150	2608605	2558139	2603965	1.68	cps
Bromine	81-1	42070	42632	43929	42877	2.22	cps
Cadmium	108-1	1217	1280	1273	1257	2.77	cps
Cadmium	106-1	8276	8453	8256	8328	1.30	cps
Cadmium	111-1	13131	13087	13350	13189	1.07	cps
Calcium	43-1	355527	361302	360126	358985	0.85	cps
Calcium	44-1	6028144	6170059	6062177	6086793	1.22	cps
Carbon	12-1	6899491	7066686	7013958	6993379	1.22	cps
Carbon	12-2	46747	46908	46316	46657	0.66	cps
Chlorine	35-1	614781	619480	610261	614841	0.75	cps
Chlorine	35-2	2437	2444	2460	2447	0.49	cps
Chromium	52-2	153254	154494	153847	153865	0.40	cps
Cobalt	59-2	203333	203676	203595	203535	0.09	cps
Copper	63-2	690593	693241	696352	693396	0.42	cps
Dysprosium	156-1	137593	139328	137021	137981	0.87	cps
Dysprosium	156-2	44517	44216	43688	44140	0.95	cps
Erbium	164-1	109140	109408	107836	108795	0.77	cps
Erbium	164-2	38686	39268	38285	38746	1.28	cps
Gadolinium	160-1	120196	119873	119510	119859	0.29	cps
Gadolinium	160-2	50592	51091	50656	50780	0.53	cps
Holmium	165-1	10025311	9973280	10028856	10009149	0.31	cps
Holmium	165-2	3781360	3764957	3693398	3746572	1.25	cps
Indium	115-1	8838699	8630450	8865969	8778373	1.47	cps
Indium	115-2	867455	873508	866803	869255	0.43	cps
Iron	54-2	5980276	6094869	6034601	6036582	0.95	cps
Iron	56-2	112922858	112256372	110438342	111872524	1.15	cps
Iron	57-2	2827387	2873669	2836929	2845995	0.86	cps
Krypton	83-1	590	540	510	547	7.39	cps
Lead	206-1	3192671	3169221	3074064	3145318	2.00	cps

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873DL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 18:53:04	DataFile Name :	068AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2653127	2608972	2583066	2615055	1.35	cps
Lead	208-1	12167043	12151014	11962260	12093439	0.94	cps
Lithium	6-1	2425705	2497300	2434574	2452526	1.59	cps
Magnesium	24-2	2279761	2308780	2310411	2299651	0.75	cps
Manganese	55-2	2817867	2803427	2801246	2807513	0.32	cps
Molybdenum	94-1	172059	174268	174679	173669	0.81	cps
Molybdenum	95-1	10821	11101	11415	11112	2.67	cps
Molybdenum	96-1	40486	42033	41392	41304	1.88	cps
Molybdenum	97-1	6648	6765	6492	6635	2.07	cps
Molybdenum	98-1	17324	17792	17354	17490	1.50	cps
Neodymium	150-1	178487	179801	180854	179714	0.66	cps
Neodymium	150-2	46687	46781	46420	46629	0.40	cps
Nickel	60-2	90070	91106	90321	90499	0.60	cps
Phosphorus	31-2	6318	6365	6361	6348	0.41	cps
Potassium	39-2	493453	493463	490082	492332	0.40	cps
Rhodium	103-1	8324204	8399316	8311465	8344995	0.57	cps
Rhodium	103-2	3412399	3441612	3339658	3397889	1.55	cps
Scandium	45-1	6380250	6658319	6514927	6517832	2.13	cps
Scandium	45-2	125590	126689	126360	126213	0.45	cps
Selenium	82-1	190	320	227	246	27.30	cps
Selenium	77-2	257	293	227	259	12.90	cps
Selenium	78-2	133	177	187	166	17.12	cps
Silicon	28-1	8759065	9293708	8978162	9010312	2.98	cps
Silver	107-1	5828	6141	6135	6035	2.97	cps
Silver	109-1	5191	5161	5341	5231	1.84	cps
Sodium	23-2	683278	681062	676367	680236	0.52	cps
Strontium	86-1	200518	202140	200185	200948	0.52	cps
Strontium	88-1	1898797	1906380	1899830	1901669	0.22	cps
Sulfur	34-1	729833	721544	715637	722338	0.99	cps
Terbium	159-1	10363611	10592824	10302741	10419725	1.47	cps
Terbium	159-2	3626975	3619037	3617705	3621239	0.14	cps
Thallium	203-1	6608	6662	6742	6671	1.01	cps
Thallium	205-1	15790	16677	16270	16246	2.74	cps
Tin	118-1	34323	34490	34179	34331	0.45	cps
Titanium	47-1	1072246	1090874	1079375	1080832	0.87	cps
Uranium	238-1	94008	94357	94837	94401	0.44	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873DL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 18:53:04	DataFile Name :	068AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	199622	203593	200992	201402	1.00	cps
Ytterbium	172-1	33546	34217	34254	34006	1.17	cps
Ytterbium	172-2	14798	14655	14091	14515	2.58	cps
Ytterbium	176-1	22833	23124	23124	23027	0.73	cps
Ytterbium	176-2	9810	9834	9423	9689	2.38	cps
Yttrium	89-1	18401316	18216485	17916228	18178010	1.35	cps
Yttrium	89-2	1278934	1284777	1274127	1279279	0.42	cps
Zinc	66-2	334837	334316	335882	335012	0.24	cps
Zirconium	90-1	456860	466844	467590	463764	1.29	cps
Zirconium	91-1	101564	103323	103816	102901	1.15	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUPDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUPDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 18:56:17	DataFile Name :	069AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1929674	1896922	1824746	1883780	2.85	cps
Antimony	121-1	2387	2667	2434	2496	6.01	cps
Arsenic	75-2	5915	5718	5835	5822	1.70	cps
Barium	135-1	783793	790854	801012	791886	1.09	cps
Barium	137-1	1353471	1372859	1377114	1367814	0.92	cps
Beryllium	9-1	7197	7140	7128	7155	0.51	cps
Bismuth	209-1	5753699	5810065	5740819	5768194	0.64	cps
Bismuth	209-2	2628550	2583118	2557395	2589688	1.39	cps
Bromine	81-1	44082	43230	43805	43706	1.00	cps
Cadmium	108-1	910	973	977	953	3.94	cps
Cadmium	106-1	7789	7719	7659	7722	0.84	cps
Cadmium	111-1	9089	9236	9498	9275	2.23	cps
Calcium	43-1	352122	354061	357872	354685	0.82	cps
Calcium	44-1	6028073	5942419	6119440	6029977	1.47	cps
Carbon	12-1	6796042	7012604	6947288	6918644	1.61	cps
Carbon	12-2	46256	46022	45664	45980	0.65	cps
Chlorine	35-1	528109	529109	520203	525807	0.93	cps
Chlorine	35-2	2214	2174	2170	2186	1.10	cps
Chromium	52-2	178631	178951	178276	178619	0.19	cps
Cobalt	59-2	142552	146519	143819	144296	1.40	cps
Copper	63-2	588947	596162	588298	591136	0.74	cps
Dysprosium	156-1	149323	151413	150533	150423	0.70	cps
Dysprosium	156-2	50358	49618	48568	49515	1.82	cps
Erbium	164-1	123157	124675	124927	124253	0.77	cps
Erbium	164-2	44026	44150	43414	43863	0.90	cps
Gadolinium	160-1	130932	134739	134864	133512	1.67	cps
Gadolinium	160-2	56770	56793	56158	56574	0.64	cps
Holmium	165-1	9886904	9989663	9896179	9924249	0.57	cps
Holmium	165-2	3729418	3689113	3673948	3697493	0.78	cps
Indium	115-1	8566088	8688713	8669031	8641277	0.76	cps
Indium	115-2	866986	871942	862098	867009	0.57	cps
Iron	54-2	6146802	6225992	6118767	6163853	0.90	cps
Iron	56-2	113356175	114257282	112762182	113458546	0.66	cps
Iron	57-2	2927932	2968566	2886591	2927696	1.40	cps
Krypton	83-1	583	540	580	568	4.25	cps
Lead	206-1	2202639	2198008	2223695	2208114	0.62	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUPDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUPDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 18:56:17	DataFile Name :	069AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1829691	1844088	1852974	1842251	0.64	cps
Lead	208-1	8463001	8548691	8610199	8540630	0.87	cps
Lithium	6-1	2294066	2370690	2381259	2348672	2.03	cps
Magnesium	24-2	2186166	2210227	2158001	2184798	1.20	cps
Manganese	55-2	2182994	2201999	2185016	2190003	0.48	cps
Molybdenum	94-1	161068	164770	165174	163671	1.38	cps
Molybdenum	95-1	8826	8636	8836	8766	1.29	cps
Molybdenum	96-1	36678	37156	37273	37036	0.85	cps
Molybdenum	97-1	5501	5471	5468	5480	0.34	cps
Molybdenum	98-1	13754	13427	13330	13503	1.64	cps
Neodymium	150-1	204315	206390	205831	205512	0.52	cps
Neodymium	150-2	53392	53543	52592	53176	0.96	cps
Nickel	60-2	73298	72771	73555	73208	0.55	cps
Phosphorus	31-2	5908	6328	5705	5980	5.32	cps
Potassium	39-2	595161	600130	585235	593509	1.28	cps
Rhodium	103-1	8315028	8185814	8347092	8282645	1.03	cps
Rhodium	103-2	3430655	3375048	3349599	3385101	1.22	cps
Scandium	45-1	6513944	6525130	6593914	6544329	0.66	cps
Scandium	45-2	127036	127210	125263	126503	0.85	cps
Selenium	82-1	287	393	313	331	16.76	cps
Selenium	77-2	343	293	260	299	14.03	cps
Selenium	78-2	233	187	223	214	11.46	cps
Silicon	28-1	12881182	13033723	13005545	12973483	0.63	cps
Silver	107-1	5851	5758	6008	5872	2.15	cps
Silver	109-1	5381	5361	5288	5343	0.92	cps
Sodium	23-2	666763	666472	663702	665646	0.25	cps
Strontium	86-1	187064	189754	190844	189221	1.03	cps
Strontium	88-1	1785992	1754635	1772548	1771058	0.89	cps
Sulfur	34-1	685604	679877	667404	677629	1.37	cps
Terbium	159-1	10313947	10189177	10289468	10264197	0.64	cps
Terbium	159-2	3604547	3617997	3537101	3586548	1.21	cps
Thallium	203-1	6735	7119	6685	6846	3.46	cps
Thallium	205-1	15793	16364	16404	16187	2.11	cps
Tin	118-1	28440	28550	29736	28908	2.49	cps
Titanium	47-1	1278693	1251082	1272620	1267465	1.14	cps
Uranium	238-1	125226	127333	126512	126357	0.84	cps

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03DUPDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873DUPDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 18:56:17	DataFile Name :	069AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	197004	197945	195577	196842	0.61	cps
Ytterbium	172-1	39666	39830	39576	39690	0.32	cps
Ytterbium	172-2	16534	17612	16944	17030	3.19	cps
Ytterbium	176-1	25759	26851	26296	26302	2.08	cps
Ytterbium	176-2	11135	10875	11188	11066	1.52	cps
Yttrium	89-1	17898991	18121635	18110352	18043659	0.70	cps
Yttrium	89-2	1282517	1278302	1274823	1278547	0.30	cps
Zinc	66-2	323351	322883	321921	322718	0.23	cps
Zirconium	90-1	431625	442398	446772	440265	1.77	cps
Zirconium	91-1	96394	97286	96894	96858	0.46	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LDL2X50	Instrumnet Name :	P8
Client Sample ID :	RT-3873LDL2	Dilution Factor :	50
Date & Time Acquired :	2025-04-21 18:59:27	DataFile Name :	070AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	321259	318986	320223	320156	0.36	cps
Antimony	121-1	830	657	747	744	11.64	cps
Arsenic	75-2	1233	1250	1310	1265	3.19	cps
Barium	135-1	153913	156047	156458	155473	0.88	cps
Barium	137-1	264979	268335	269968	267761	0.95	cps
Beryllium	9-1	1422	1380	1407	1403	1.52	cps
Bismuth	209-1	5865905	5693658	5824333	5794632	1.55	cps
Bismuth	209-2	2629361	2557350	2660209	2615640	2.02	cps
Bromine	81-1	40224	39328	38850	39468	1.77	cps
Cadmium	108-1	213	267	250	243	11.21	cps
Cadmium	106-1	5788	5701	5444	5645	3.16	cps
Cadmium	111-1	5546	5611	5306	5488	2.92	cps
Calcium	43-1	72475	73145	72511	72710	0.52	cps
Calcium	44-1	1275540	1269199	1262875	1269205	0.50	cps
Carbon	12-1	5169811	5143885	5088951	5134216	0.80	cps
Carbon	12-2	33642	33765	32646	33351	1.84	cps
Chlorine	35-1	440268	434365	428898	434510	1.31	cps
Chlorine	35-2	1720	1923	1827	1823	5.58	cps
Chromium	52-2	32547	32230	32453	32410	0.50	cps
Cobalt	59-2	40715	42162	41086	41321	1.82	cps
Copper	63-2	142635	142089	141753	142159	0.31	cps
Dysprosium	156-1	26894	27492	27211	27199	1.10	cps
Dysprosium	156-2	8723	8726	8950	8800	1.48	cps
Erbium	164-1	21671	21217	21604	21497	1.14	cps
Erbium	164-2	7702	7719	7629	7683	0.62	cps
Gadolinium	160-1	23394	24058	24012	23821	1.56	cps
Gadolinium	160-2	9984	10387	10134	10168	2.01	cps
Holmium	165-1	9644233	9749967	9892249	9762150	1.27	cps
Holmium	165-2	3721678	3735033	3820113	3758942	1.42	cps
Indium	115-1	8859352	8952239	8659010	8823534	1.70	cps
Indium	115-2	873007	878912	869734	873884	0.53	cps
Iron	54-2	1144617	1146490	1152122	1147743	0.34	cps
Iron	56-2	23199290	22703145	22298402	22733612	1.98	cps
Iron	57-2	534288	533595	526195	531359	0.84	cps
Krypton	83-1	403	430	410	414	3.35	cps
Lead	206-1	554468	567337	564458	562088	1.20	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LDL2X50	Instrumnet Name :	P8
Client Sample ID :	RT-3873LDL2	Dilution Factor :	50
Date & Time Acquired :	2025-04-21 18:59:27	DataFile Name :	070AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	473942	476583	476118	475548	0.30	cps
Lead	208-1	2179761	2199362	2206729	2195284	0.63	cps
Lithium	6-1	2331731	2367017	2313639	2337463	1.16	cps
Magnesium	24-2	449177	453989	446466	449877	0.85	cps
Manganese	55-2	540392	538523	530103	536339	1.02	cps
Molybdenum	94-1	35001	35288	35435	35241	0.63	cps
Molybdenum	95-1	2710	2544	2687	2647	3.41	cps
Molybdenum	96-1	8786	8653	8669	8703	0.84	cps
Molybdenum	97-1	1507	1633	1633	1591	4.60	cps
Molybdenum	98-1	4071	4181	3887	4046	3.66	cps
Neodymium	150-1	35761	35985	36824	36190	1.55	cps
Neodymium	150-2	9350	9563	9230	9381	1.80	cps
Nickel	60-2	18899	18959	18736	18865	0.61	cps
Phosphorus	31-2	1293	1450	1333	1359	5.99	cps
Potassium	39-2	116149	116241	116610	116333	0.21	cps
Rhodium	103-1	8410491	8338142	8469632	8406088	0.78	cps
Rhodium	103-2	3416233	3444097	3416267	3425532	0.47	cps
Scandium	45-1	6159582	6194079	6155624	6169762	0.34	cps
Scandium	45-2	118964	119139	118676	118926	0.20	cps
Selenium	82-1	50	30	13	31	59.03	cps
Selenium	77-2	47	53	37	46	18.41	cps
Selenium	78-2	50	73	83	69	24.83	cps
Silicon	28-1	2260734	2315751	2232231	2269572	1.87	cps
Silver	107-1	1357	1370	1433	1387	2.95	cps
Silver	109-1	1250	1183	1253	1229	3.21	cps
Sodium	23-2	200950	202342	200514	201269	0.47	cps
Strontium	86-1	40579	40773	40682	40678	0.24	cps
Strontium	88-1	344935	351341	353670	349982	1.29	cps
Sulfur	34-1	620210	615855	615973	617346	0.40	cps
Terbium	159-1	10336685	10266567	10292097	10298449	0.34	cps
Terbium	159-2	3573050	3646994	3547794	3589279	1.44	cps
Thallium	203-1	1770	1737	1917	1808	5.30	cps
Thallium	205-1	4057	4274	4477	4270	4.92	cps
Tin	118-1	12025	12242	12286	12184	1.14	cps
Titanium	47-1	215433	214974	217470	215959	0.62	cps
Uranium	238-1	18697	19315	18761	18924	1.80	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03LDL2X50	Instrumnet Name :	P8
Client Sample ID :	RT-3873LDL2	Dilution Factor :	50
Date & Time Acquired :	2025-04-21 18:59:27	DataFile Name :	070AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	40835	41005	40664	40835	0.42	cps
Ytterbium	172-1	6642	6909	6849	6800	2.06	cps
Ytterbium	172-2	2980	2867	2900	2916	2.00	cps
Ytterbium	176-1	5418	5098	5244	5253	3.05	cps
Ytterbium	176-2	2267	2074	2297	2212	5.48	cps
Yttrium	89-1	16504499	16613821	16362873	16493731	0.76	cps
Yttrium	89-2	1166027	1172237	1171268	1169844	0.29	cps
Zinc	66-2	69040	68200	68477	68572	0.62	cps
Zirconium	90-1	91749	93041	93602	92797	1.02	cps
Zirconium	91-1	19781	20402	20458	20214	1.86	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:02:49	DataFile Name :	071AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1718137	1777302	1753471	1749636	1.70	cps
Antimony	121-1	1413308	1434800	1438010	1428706	0.94	cps
Arsenic	75-2	5795	5838	5725	5786	0.99	cps
Barium	135-1	2410924	2506250	2521076	2479417	2.41	cps
Barium	137-1	4214174	4239681	4304497	4252784	1.09	cps
Beryllium	9-1	331618	334368	335700	333895	0.62	cps
Bismuth	209-1	5738473	5888967	5744572	5790671	1.47	cps
Bismuth	209-2	2567211	2566303	2572671	2568728	0.13	cps
Bromine	81-1	42157	43751	43260	43056	1.90	cps
Cadmium	108-1	29127	29665	29622	29472	1.01	cps
Cadmium	106-1	49796	49063	49953	49604	0.96	cps
Cadmium	111-1	372888	375297	381357	376514	1.16	cps
Calcium	43-1	870112	867137	874283	870511	0.41	cps
Calcium	44-1	14644551	14520986	14767341	14644293	0.84	cps
Carbon	12-1	6564126	6710111	6561144	6611793	1.29	cps
Carbon	12-2	44133	44838	44531	44500	0.79	cps
Chlorine	35-1	9507615	10434073	10798064	10246584	6.49	cps
Chlorine	35-2	48618	49812	50173	49534	1.64	cps
Chromium	52-2	489268	489350	485703	488107	0.43	cps
Cobalt	59-2	751985	756565	758630	755727	0.45	cps
Copper	63-2	5866271	5966580	5817376	5883409	1.29	cps
Dysprosium	156-1	126959	127656	128346	127653	0.54	cps
Dysprosium	156-2	41193	41223	41341	41252	0.19	cps
Erbium	164-1	100000	101466	100136	100534	0.81	cps
Erbium	164-2	35096	35384	36223	35567	1.65	cps
Gadolinium	160-1	108789	108836	109606	109077	0.42	cps
Gadolinium	160-2	47280	46905	46364	46850	0.98	cps
Holmium	165-1	9842422	9917521	9844883	9868275	0.43	cps
Holmium	165-2	3692585	3645298	3725188	3687690	1.09	cps
Indium	115-1	8548352	8666644	8593900	8602965	0.69	cps
Indium	115-2	853894	854727	862649	857090	0.56	cps
Iron	54-2	6145946	6075060	6086533	6102513	0.62	cps
Iron	56-2	114309418	111152622	114356972	113273004	1.62	cps
Iron	57-2	2899256	2826276	2866877	2864136	1.28	cps
Krypton	83-1	480	503	517	500	3.71	cps
Lead	206-1	7803078	7706898	7750886	7753620	0.62	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:02:49	DataFile Name :	071AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	6667987	6647816	6549468	6621757	0.96	cps
Lead	208-1	30468153	30600961	30156200	30408438	0.75	cps
Lithium	6-1	2341591	2340714	2328069	2336791	0.32	cps
Magnesium	24-2	4049465	4093458	4085455	4076126	0.57	cps
Manganese	55-2	3565290	3499757	3525145	3530064	0.94	cps
Molybdenum	94-1	2768473	2865865	2806986	2813775	1.74	cps
Molybdenum	95-1	2942592	2932565	2953340	2942832	0.35	cps
Molybdenum	96-1	3375401	3365367	3387508	3376092	0.33	cps
Molybdenum	97-1	1822152	1853326	1858941	1844806	1.07	cps
Molybdenum	98-1	4609399	4761276	4745953	4705543	1.78	cps
Neodymium	150-1	169499	174026	173375	172300	1.42	cps
Neodymium	150-2	44400	43089	44621	44036	1.88	cps
Nickel	60-2	239202	242466	240309	240659	0.69	cps
Phosphorus	31-2	6488	6428	6515	6477	0.69	cps
Potassium	39-2	1094896	1088308	1088647	1090617	0.34	cps
Rhodium	103-1	8082166	8234024	8447786	8254658	2.23	cps
Rhodium	103-2	3306892	3396052	3338257	3347067	1.35	cps
Scandium	45-1	6563277	6477075	6491180	6510511	0.71	cps
Scandium	45-2	124372	125351	124339	124687	0.46	cps
Selenium	82-1	24168	24683	24679	24510	1.21	cps
Selenium	77-2	717	680	723	707	3.30	cps
Selenium	78-2	1623	1587	1600	1603	1.16	cps
Silicon	28-1	14319196	13985531	13763300	14022676	2.00	cps
Silver	107-1	311749	321118	322441	318436	1.83	cps
Silver	109-1	296700	299959	305294	300651	1.44	cps
Sodium	23-2	4747600	4831971	4760866	4780146	0.95	cps
Strontium	86-1	764349	772786	777480	771538	0.86	cps
Strontium	88-1	7179973	7179789	7261642	7207135	0.65	cps
Sulfur	34-1	656915	658028	656511	657151	0.12	cps
Terbium	159-1	10140763	10165405	10152314	10152827	0.12	cps
Terbium	159-2	3520549	3609164	3604456	3578057	1.39	cps
Thallium	203-1	1159696	1176959	1192624	1176427	1.40	cps
Thallium	205-1	3055602	3085930	3062274	3067935	0.52	cps
Tin	118-1	1083297	1106954	1106838	1099030	1.24	cps
Titanium	47-1	1118628	1121972	1132042	1124214	0.62	cps
Uranium	238-1	3888917	3953405	3802434	3881585	1.95	cps

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On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:02:49	DataFile Name :	071AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	439525	439158	440475	439719	0.15	cps
Ytterbium	172-1	30652	30525	30552	30576	0.22	cps
Ytterbium	172-2	13093	13407	13207	13236	1.20	cps
Ytterbium	176-1	25548	26670	26430	26216	2.25	cps
Ytterbium	176-2	10734	11095	10871	10900	1.67	cps
Yttrium	89-1	17614261	17650510	17765311	17676694	0.45	cps
Yttrium	89-2	1233238	1243089	1251316	1242547	0.73	cps
Zinc	66-2	879355	868501	865957	871271	0.82	cps
Zirconium	90-1	3262768	3181156	3252958	3232294	1.38	cps
Zirconium	91-1	651207	663136	660899	658414	0.96	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:05:49	DataFile Name :	072AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1980934	1966905	2001500	1983113	0.88	cps
Antimony	121-1	1612045	1564716	1655262	1610674	2.81	cps
Arsenic	75-2	6271	6658	6715	6548	3.69	cps
Barium	135-1	2578980	2590327	2633675	2600994	1.11	cps
Barium	137-1	4401694	4491360	4493811	4462289	1.18	cps
Beryllium	9-1	344364	347108	353327	348266	1.32	cps
Bismuth	209-1	5735737	5811023	5774299	5773686	0.65	cps
Bismuth	209-2	2562939	2583039	2529884	2558621	1.05	cps
Bromine	81-1	42668	43444	42317	42810	1.35	cps
Cadmium	108-1	29933	30627	30758	30439	1.46	cps
Cadmium	106-1	51318	52121	50642	51361	1.44	cps
Cadmium	111-1	389276	391597	391757	390877	0.36	cps
Calcium	43-1	944463	956937	953729	951710	0.68	cps
Calcium	44-1	16020754	16216857	16163121	16133578	0.63	cps
Carbon	12-1	6904760	6931827	6982696	6939761	0.57	cps
Carbon	12-2	46838	45945	46430	46404	0.96	cps
Chlorine	35-1	10643387	11505479	12173808	11440891	6.71	cps
Chlorine	35-2	52006	52130	53395	52510	1.46	cps
Chromium	52-2	521249	518456	517838	519181	0.35	cps
Cobalt	59-2	787307	790771	787210	788429	0.26	cps
Copper	63-2	6011409	6035318	6066264	6037664	0.46	cps
Dysprosium	156-1	132758	135091	133576	133808	0.88	cps
Dysprosium	156-2	42745	42879	43340	42988	0.73	cps
Erbium	164-1	103522	104910	104483	104305	0.68	cps
Erbium	164-2	36864	36978	36560	36801	0.59	cps
Gadolinium	160-1	114473	116560	115263	115432	0.91	cps
Gadolinium	160-2	49712	48387	49207	49102	1.36	cps
Holmium	165-1	9736817	9754430	9824772	9772006	0.48	cps
Holmium	165-2	3735513	3725834	3677088	3712812	0.84	cps
Indium	115-1	8731784	8535765	8578353	8615301	1.20	cps
Indium	115-2	856014	855441	852874	854776	0.20	cps
Iron	54-2	6912697	6929987	6908387	6917024	0.17	cps
Iron	56-2	129542891	128841851	128631898	129005547	0.37	cps
Iron	57-2	3280905	3261980	3321088	3287991	0.92	cps
Krypton	83-1	587	590	537	571	5.23	cps
Lead	206-1	8164387	8145619	8106137	8138714	0.37	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:05:49	DataFile Name :	072AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	6856785	7017358	6949316	6941153	1.16	cps
Lead	208-1	31853799	32336057	32008013	32065956	0.77	cps
Lithium	6-1	2445810	2344116	2409888	2399938	2.15	cps
Magnesium	24-2	4683296	4671902	4635517	4663572	0.54	cps
Manganese	55-2	3840125	3776567	3766503	3794398	1.05	cps
Molybdenum	94-1	2944397	2980290	2999522	2974736	0.94	cps
Molybdenum	95-1	3085712	3085320	3089819	3086950	0.08	cps
Molybdenum	96-1	3540208	3554223	3495120	3529851	0.87	cps
Molybdenum	97-1	1886369	1913524	1906323	1902072	0.74	cps
Molybdenum	98-1	4801488	4954041	4847836	4867789	1.61	cps
Neodymium	150-1	179767	183540	183706	182338	1.22	cps
Neodymium	150-2	46831	46380	46102	46438	0.79	cps
Nickel	60-2	258144	256087	257288	257173	0.40	cps
Phosphorus	31-2	7299	7062	7319	7226	1.98	cps
Potassium	39-2	1368353	1307372	1274441	1316722	3.62	cps
Rhodium	103-1	8157956	8324273	8248692	8243640	1.01	cps
Rhodium	103-2	3316151	3362061	3264868	3314360	1.47	cps
Scandium	45-1	6396797	6606194	6400783	6467925	1.85	cps
Scandium	45-2	125593	123082	124090	124255	1.02	cps
Selenium	82-1	24613	24426	25187	24742	1.60	cps
Selenium	77-2	683	663	797	714	10.06	cps
Selenium	78-2	1633	1793	1733	1720	4.70	cps
Silicon	28-1	47001846	25650178	29262412	33971479	33.64	cps
Silver	107-1	326574	326469	331648	328230	0.90	cps
Silver	109-1	305764	312001	320048	312604	2.29	cps
Sodium	23-2	5010805	5023708	4932819	4989110	0.99	cps
Strontium	86-1	803580	821089	815951	813540	1.11	cps
Strontium	88-1	7453550	7616438	7596279	7555422	1.18	cps
Sulfur	34-1	645790	645795	643090	644892	0.24	cps
Terbium	159-1	10370048	10306730	10385552	10354110	0.40	cps
Terbium	159-2	3580514	3537137	3578105	3565252	0.68	cps
Thallium	203-1	1217889	1231977	1226724	1225530	0.58	cps
Thallium	205-1	3255821	3208217	3169329	3211122	1.35	cps
Tin	118-1	1140450	1148198	1171361	1153336	1.39	cps
Titanium	47-1	1572254	1586003	1572549	1576936	0.50	cps
Uranium	238-1	4044201	4090567	4104794	4079854	0.78	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03MSDDL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873MSDDL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:05:49	DataFile Name :	072AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	488266	485071	482862	485399	0.56	cps
Ytterbium	172-1	31344	31484	31969	31599	1.04	cps
Ytterbium	172-2	14034	13564	13690	13763	1.77	cps
Ytterbium	176-1	27445	27596	27282	27441	0.57	cps
Ytterbium	176-2	11191	11639	11425	11418	1.96	cps
Yttrium	89-1	17695871	17872594	17865160	17811208	0.56	cps
Yttrium	89-2	1246157	1246024	1235959	1242713	0.47	cps
Zinc	66-2	920769	919000	914783	918184	0.33	cps
Zirconium	90-1	3361924	3381543	3380015	3374494	0.32	cps
Zirconium	91-1	684113	683054	688121	685096	0.39	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03ADL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873ADL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:08:50	DataFile Name :	073AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1895751	1857928	1852696	1868792	1.26	cps
Antimony	121-1	1571238	1600801	1588764	1586934	0.94	cps
Arsenic	75-2	6365	6195	6081	6214	2.30	cps
Barium	135-1	2562505	2513744	2618903	2565050	2.05	cps
Barium	137-1	4343859	4315865	4347394	4335706	0.40	cps
Beryllium	9-1	339636	341714	346523	342624	1.03	cps
Bismuth	209-1	5723971	5649565	5743360	5705632	0.87	cps
Bismuth	209-2	2504758	2549826	2490416	2515000	1.23	cps
Bromine	81-1	43022	44276	43277	43525	1.52	cps
Cadmium	108-1	29111	29465	29739	29438	1.07	cps
Cadmium	106-1	48950	51332	50509	50263	2.41	cps
Cadmium	111-1	380294	383798	386951	383681	0.87	cps
Calcium	43-1	900297	913660	925941	913299	1.40	cps
Calcium	44-1	15383815	15240998	15558128	15394314	1.03	cps
Carbon	12-1	6560318	6751862	6743157	6685112	1.62	cps
Carbon	12-2	45276	44945	44968	45063	0.41	cps
Chlorine	35-1	10362192	11239809	11834173	11145391	6.64	cps
Chlorine	35-2	51113	51592	52107	51604	0.96	cps
Chromium	52-2	502717	499774	497247	499913	0.55	cps
Cobalt	59-2	781311	772206	768357	773958	0.86	cps
Copper	63-2	5899302	5950351	5958396	5936017	0.54	cps
Dysprosium	156-1	132088	132523	132647	132419	0.22	cps
Dysprosium	156-2	42658	42621	43230	42836	0.80	cps
Erbium	164-1	102800	103092	102625	102839	0.23	cps
Erbium	164-2	35922	35758	36383	36021	0.90	cps
Gadolinium	160-1	113209	115559	114489	114419	1.03	cps
Gadolinium	160-2	47946	48076	48073	48032	0.15	cps
Holmium	165-1	9703042	9686255	9717477	9702258	0.16	cps
Holmium	165-2	3672839	3621359	3620934	3638377	0.82	cps
Indium	115-1	8548106	8550393	8504766	8534421	0.30	cps
Indium	115-2	840729	842192	838941	840621	0.19	cps
Iron	54-2	6602482	6606602	6497080	6568721	0.95	cps
Iron	56-2	121314608	123068788	121326742	121903379	0.83	cps
Iron	57-2	3131567	3142349	3090579	3121498	0.88	cps
Krypton	83-1	500	567	460	509	10.59	cps
Lead	206-1	7949955	7961148	7919855	7943653	0.27	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03ADL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873ADL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:08:50	DataFile Name :	073AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	6748750	6736515	6828386	6771217	0.74	cps
Lead	208-1	31134519	31160903	31520900	31272107	0.69	cps
Lithium	6-1	2371128	2375030	2347757	2364638	0.62	cps
Magnesium	24-2	4468374	4436385	4461836	4455532	0.38	cps
Manganese	55-2	3638059	3717543	3684350	3679984	1.08	cps
Molybdenum	94-1	2913356	2902421	2893800	2903192	0.34	cps
Molybdenum	95-1	3060488	3022323	3004296	3029036	0.95	cps
Molybdenum	96-1	3466613	3482898	3374644	3441385	1.70	cps
Molybdenum	97-1	1892960	1856793	1834019	1861257	1.60	cps
Molybdenum	98-1	4853576	4734127	4757285	4781663	1.32	cps
Neodymium	150-1	176955	181011	181196	179720	1.33	cps
Neodymium	150-2	45921	45059	45426	45469	0.95	cps
Nickel	60-2	250532	248044	251907	250161	0.78	cps
Phosphorus	31-2	6895	6805	6865	6855	0.67	cps
Potassium	39-2	1163390	1144588	1144913	1150964	0.94	cps
Rhodium	103-1	8027387	8133104	7951649	8037380	1.13	cps
Rhodium	103-2	3244793	3343106	3302114	3296671	1.50	cps
Scandium	45-1	6348826	6295789	6332532	6325716	0.43	cps
Scandium	45-2	121657	122997	123976	122876	0.95	cps
Selenium	82-1	24279	24212	24526	24339	0.68	cps
Selenium	77-2	673	633	807	704	12.88	cps
Selenium	78-2	1787	1627	1567	1660	6.85	cps
Silicon	28-1	19278371	21161556	18952829	19797585	6.02	cps
Silver	107-1	321470	325618	333378	326822	1.85	cps
Silver	109-1	303726	312046	312057	309277	1.55	cps
Sodium	23-2	4905769	4871610	4844790	4874056	0.63	cps
Strontium	86-1	788357	794178	793674	792070	0.41	cps
Strontium	88-1	7365656	7385631	7491965	7414417	0.92	cps
Sulfur	34-1	642476	644841	643972	643763	0.19	cps
Terbium	159-1	9954888	10331463	9998423	10094925	2.04	cps
Terbium	159-2	3507246	3565277	3528287	3533603	0.83	cps
Thallium	203-1	1195049	1212918	1205153	1204373	0.74	cps
Thallium	205-1	3083324	3119080	3127542	3109982	0.75	cps
Tin	118-1	1108560	1143048	1128176	1126595	1.54	cps
Titanium	47-1	1411926	1404639	1416374	1410979	0.42	cps
Uranium	238-1	3938646	4024294	3986000	3982980	1.08	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	Q1818-03ADL2X10	Instrumnet Name :	P8
Client Sample ID :	RT-3873ADL2	Dilution Factor :	10
Date & Time Acquired :	2025-04-21 19:08:50	DataFile Name :	073AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	462225	468362	462641	464409	0.74	cps
Ytterbium	172-1	30732	31491	32102	31442	2.18	cps
Ytterbium	172-2	13457	13520	13353	13444	0.63	cps
Ytterbium	176-1	27275	26757	27689	27240	1.71	cps
Ytterbium	176-2	11322	10694	10975	10997	2.86	cps
Yttrium	89-1	17317886	17279218	17604804	17400636	1.02	cps
Yttrium	89-2	1230506	1236376	1238217	1235033	0.33	cps
Zinc	66-2	903305	899437	901490	901410	0.21	cps
Zirconium	90-1	3216132	3364786	3284767	3288562	2.26	cps
Zirconium	91-1	665431	677163	673664	672086	0.90	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV06	Instrumnet Name :	P8
Client Sample ID :	CCV06	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 19:11:48	DataFile Name :	074CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	5266372	5233687	5391826	5297295	1.58	cps
Antimony	121-1	14421046	14389273	14442282	14417534	0.19	cps
Arsenic	75-2	305835	308946	308237	307673	0.53	cps
Barium	135-1	17460266	17574998	17750179	17595148	0.83	cps
Barium	137-1	29932198	30551746	30098351	30194098	1.06	cps
Beryllium	9-1	2960220	3105371	3051364	3038985	2.41	cps
Bismuth	209-1	5007935	5082478	4965602	5018672	1.18	cps
Bismuth	209-2	2165727	2237459	2220617	2207934	1.70	cps
Bromine	81-1	35702	37490	37544	36912	2.84	cps
Cadmium	108-1	267497	274757	273232	271828	1.41	cps
Cadmium	106-1	390365	394088	392539	392331	0.48	cps
Cadmium	111-1	3527176	3575081	3616249	3572835	1.25	cps
Calcium	43-1	24090460	24710848	24712386	24504565	1.46	cps
Calcium	44-1	390458568	397742221	400567367	396256052	1.32	cps
Carbon	12-1	5477821	5423656	5488782	5463420	0.64	cps
Carbon	12-2	41903	42458	42133	42165	0.66	cps
Chlorine	35-1	1374683	1275165	1267106	1305651	4.59	cps
Chlorine	35-2	4484	4384	4514	4461	1.53	cps
Chromium	52-2	3293248	3331323	3394464	3339678	1.53	cps
Cobalt	59-2	5917918	5874492	5953334	5915248	0.67	cps
Copper	63-2	43874221	44398253	44412513	44228329	0.69	cps
Dysprosium	156-1	730	873	657	753	14.63	cps
Dysprosium	156-2	167	193	210	190	11.50	cps
Erbium	164-1	697	617	753	689	9.97	cps
Erbium	164-2	260	197	247	234	14.24	cps
Gadolinium	160-1	530	433	480	481	10.05	cps
Gadolinium	160-2	240	203	147	197	23.91	cps
Holmium	165-1	9172096	9177129	9298951	9216059	0.78	cps
Holmium	165-2	3446636	3434519	3474288	3451814	0.59	cps
Indium	115-1	7487919	7481881	7617008	7528936	1.01	cps
Indium	115-2	731515	735219	732436	733057	0.26	cps
Iron	54-2	31993697	32063821	32172520	32076680	0.28	cps
Iron	56-2	589782525	593509404	599271631	594187853	0.80	cps
Iron	57-2	14892234	14947914	15094967	14978372	0.70	cps
Krypton	83-1	417	470	417	434	7.09	cps
Lead	206-1	48765911	47597626	48119403	48160980	1.22	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV06	Instrumnet Name :	P8
Client Sample ID :	CCV06	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 19:11:48	DataFile Name :	074CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	41250239	40593069	41227189	41023499	0.91	cps
Lead	208-1	189647676	189867367	188669900	189394981	0.34	cps
Lithium	6-1	2133433	2123260	2212070	2156254	2.25	cps
Magnesium	24-2	89722272	90928322	91561055	90737216	1.03	cps
Manganese	55-2	13735283	14013405	14028935	13925874	1.19	cps
Molybdenum	94-1	53183178	52948233	53327249	53152886	0.36	cps
Molybdenum	95-1	76072871	76488179	76598357	76386469	0.36	cps
Molybdenum	96-1	83573497	84262424	83856932	83897618	0.41	cps
Molybdenum	97-1	46664123	46964696	47256633	46961817	0.63	cps
Molybdenum	98-1	123540498	122209632	124009165	123253098	0.76	cps
Neodymium	150-1	1470	1350	1357	1392	4.84	cps
Neodymium	150-2	93	87	90	90	3.70	cps
Nickel	60-2	1643020	1613691	1629302	1628671	0.90	cps
Phosphorus	31-2	51745	52187	52906	52279	1.12	cps
Potassium	39-2	32580859	32447718	32397447	32475341	0.29	cps
Rhodium	103-1	7132469	7068236	7065021	7088576	0.54	cps
Rhodium	103-2	2817864	2846709	2889153	2851242	1.26	cps
Scandium	45-1	5622755	5629014	5684605	5645458	0.60	cps
Scandium	45-2	110800	112463	112731	111998	0.93	cps
Selenium	82-1	212917	214736	214059	213904	0.43	cps
Selenium	77-2	3861	3971	3917	3916	1.41	cps
Selenium	78-2	13116	13457	13236	13270	1.30	cps
Silicon	28-1	30250623	30262763	30717808	30410398	0.88	cps
Silver	107-1	17725509	17942578	17940842	17869643	0.70	cps
Silver	109-1	16716091	16891114	16879479	16828894	0.58	cps
Sodium	23-2	184216137	186856377	184582564	185218359	0.77	cps
Strontium	86-1	4977712	4934665	5023898	4978758	0.90	cps
Strontium	88-1	43344989	43443709	43939584	43576094	0.73	cps
Sulfur	34-1	1936080	1924610	1916625	1925771	0.51	cps
Terbium	159-1	9472092	9232744	9607052	9437296	2.01	cps
Terbium	159-2	3372791	3335436	3303464	3337230	1.04	cps
Thallium	203-1	11934901	11740459	11839478	11838279	0.82	cps
Thallium	205-1	28044696	28200677	28057146	28100840	0.31	cps
Tin	118-1	11779083	11700659	11966421	11815388	1.16	cps
Titanium	47-1	21869347	22580273	22445419	22298346	1.69	cps
Uranium	238-1	36486229	37471091	36604430	36853917	1.46	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCV06	Instrumnet Name :	P8
Client Sample ID :	CCV06	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 19:11:48	DataFile Name :	074CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2551196	2555588	2563912	2556898	0.25	cps
Ytterbium	172-1	963	1050	937	983	6.03	cps
Ytterbium	172-2	467	417	363	416	12.44	cps
Ytterbium	176-1	58107	57762	58315	58061	0.48	cps
Ytterbium	176-2	20463	20372	20703	20513	0.83	cps
Yttrium	89-1	14841968	14796032	15106880	14914960	1.12	cps
Yttrium	89-2	1048859	1045517	1051284	1048554	0.28	cps
Zinc	66-2	4968436	4928919	4914430	4937262	0.57	cps
Zirconium	90-1	26884375	26666185	26969027	26839862	0.58	cps
Zirconium	91-1	5949781	5907724	5961317	5939607	0.47	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB06	Instrumnet Name :	P8
Client Sample ID :	CCB06	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 19:14:34	DataFile Name :	075CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	733	797	663	731	9.12	cps
Antimony	121-1	4151	3457	3137	3582	14.47	cps
Arsenic	75-2	27	23	7	19	56.72	cps
Barium	135-1	717	580	520	606	16.64	cps
Barium	137-1	1123	933	990	1016	9.61	cps
Beryllium	9-1	531	490	444	488	8.86	cps
Bismuth	209-1	5952487	6012860	5918479	5961276	0.80	cps
Bismuth	209-2	2672628	2627666	2595517	2631937	1.47	cps
Bromine	81-1	38165	38466	38469	38367	0.46	cps
Cadmium	108-1	23	37	40	33	26.47	cps
Cadmium	106-1	5441	5474	5228	5381	2.49	cps
Cadmium	111-1	4019	4000	3821	3947	2.76	cps
Calcium	43-1	2080	1957	1973	2003	3.34	cps
Calcium	44-1	49666	46040	45312	47006	4.96	cps
Carbon	12-1	4882821	4741106	4756221	4793383	1.62	cps
Carbon	12-2	30452	30725	30492	30556	0.48	cps
Chlorine	35-1	726700	694260	672463	697808	3.91	cps
Chlorine	35-2	2557	2454	2510	2507	2.06	cps
Chromium	52-2	1730	1823	1760	1771	2.69	cps
Cobalt	59-2	203	173	197	191	8.24	cps
Copper	63-2	3474	3090	3087	3217	6.91	cps
Dysprosium	156-1	7	13	3	8	65.47	cps
Dysprosium	156-2	0	7	0	2	173.21	cps
Erbium	164-1	63	80	50	64	23.32	cps
Erbium	164-2	13	23	20	19	26.96	cps
Gadolinium	160-1	77	100	87	88	13.33	cps
Gadolinium	160-2	20	3	40	21	86.97	cps
Holmium	165-1	10010618	9817536	9932563	9920239	0.98	cps
Holmium	165-2	3695412	3704278	3709579	3703090	0.19	cps
Indium	115-1	8843076	8786067	8863558	8830900	0.45	cps
Indium	115-2	856788	860647	859472	858969	0.23	cps
Iron	54-2	1660	1683	1600	1648	2.61	cps
Iron	56-2	24765	24709	23062	24179	4.00	cps
Iron	57-2	610	603	580	598	2.64	cps
Krypton	83-1	313	383	363	353	10.20	cps
Lead	206-1	4841	4081	3907	4276	11.61	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB06	Instrumnet Name :	P8
Client Sample ID :	CCB06	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 19:14:34	DataFile Name :	075CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4044	3867	3494	3802	7.39	cps
Lead	208-1	18959	16874	15661	17165	9.72	cps
Lithium	6-1	2428606	2499313	2511333	2479750	1.80	cps
Magnesium	24-2	2074	2074	2053	2067	0.56	cps
Manganese	55-2	6118	6225	6295	6213	1.43	cps
Molybdenum	94-1	3354	2834	2624	2937	12.80	cps
Molybdenum	95-1	3414	2797	2257	2823	20.51	cps
Molybdenum	96-1	3931	3264	2644	3279	19.63	cps
Molybdenum	97-1	2227	1717	1337	1760	25.38	cps
Molybdenum	98-1	5458	4654	3754	4622	18.44	cps
Neodymium	150-1	27	7	7	13	86.58	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	773	813	827	804	3.45	cps
Phosphorus	31-2	113	73	57	81	35.91	cps
Potassium	39-2	26374	25873	26033	26094	0.98	cps
Rhodium	103-1	8492120	8337881	8497716	8442572	1.07	cps
Rhodium	103-2	3436081	3480993	3458117	3458397	0.65	cps
Scandium	45-1	5954268	6069858	6126979	6050369	1.45	cps
Scandium	45-2	114199	115348	114346	114631	0.55	cps
Selenium	82-1	37	43	-13	22	139.35	cps
Selenium	77-2	3	3	0	2	86.60	cps
Selenium	78-2	37	30	20	29	29.04	cps
Silicon	28-1	685691	667475	656612	669926	2.19	cps
Silver	107-1	2237	1720	1623	1860	17.73	cps
Silver	109-1	2017	1660	1383	1687	18.83	cps
Sodium	23-2	116426	115227	114991	115548	0.67	cps
Strontium	86-1	790	767	720	759	4.70	cps
Strontium	88-1	2157	1830	1617	1868	14.56	cps
Sulfur	34-1	722546	725154	726751	724817	0.29	cps
Terbium	159-1	10463612	10190664	10424808	10359695	1.43	cps
Terbium	159-2	3627358	3584255	3612540	3608051	0.61	cps
Thallium	203-1	1857	1607	1373	1612	14.99	cps
Thallium	205-1	4277	3927	3951	4052	4.83	cps
Tin	118-1	5771	5545	5444	5587	3.00	cps
Titanium	47-1	1447	1127	1027	1200	18.28	cps
Uranium	238-1	1410	1090	867	1122	24.34	cps

Reviewed By:mohan
On:4/29/2025 5:43:52 PM
Inst Id :P8
LB :LB135513

LB Number :	LB135513	Operator :	Jaswal
Lab Sample ID :	CCB06	Instrumnet Name :	P8
Client Sample ID :	CCB06	Dilution Factor :	1
Date & Time Acquired :	2025-04-21 19:14:34	DataFile Name :	075CCBE.d

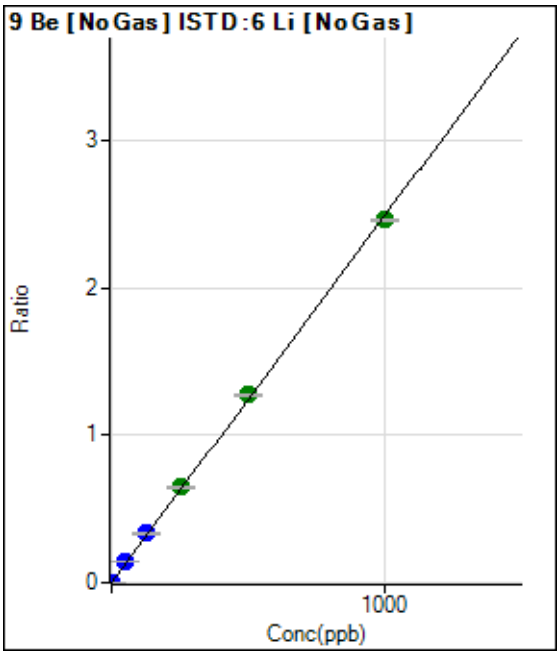
Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	63	60	87	70	20.76	cps
Ytterbium	172-1	83	80	43	69	32.22	cps
Ytterbium	172-2	30	13	27	23	37.81	cps
Ytterbium	176-1	1190	1170	1137	1166	2.31	cps
Ytterbium	176-2	153	180	250	194	25.68	cps
Yttrium	89-1	16554021	16450815	16514301	16506379	0.32	cps
Yttrium	89-2	1108169	1125513	1122263	1118648	0.82	cps
Zinc	66-2	2250	2174	2284	2236	2.52	cps
Zirconium	90-1	4014	3641	3480	3712	7.38	cps
Zirconium	91-1	793	863	737	798	7.95	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8042925MS.b\
Analysis File: P8042925MS.batch.bin
DA Date-Time: 2025-04-29 13:11:38
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2025-04-29 11:31:50
2	006CALS.d	S02	2025-04-29 11:38:36
3	007CALB.d	S03	2025-04-29 11:41:58
4	008CALS.d	S04	2025-04-29 11:45:01
5	009CALS.d	S05	2025-04-29 11:47:58
6	010CALS.d	S06	2025-04-29 11:50:47
7	011CALS.d	S07	2025-04-29 11:53:32
8	012CALS.d	S08	2025-04-29 11:56:21

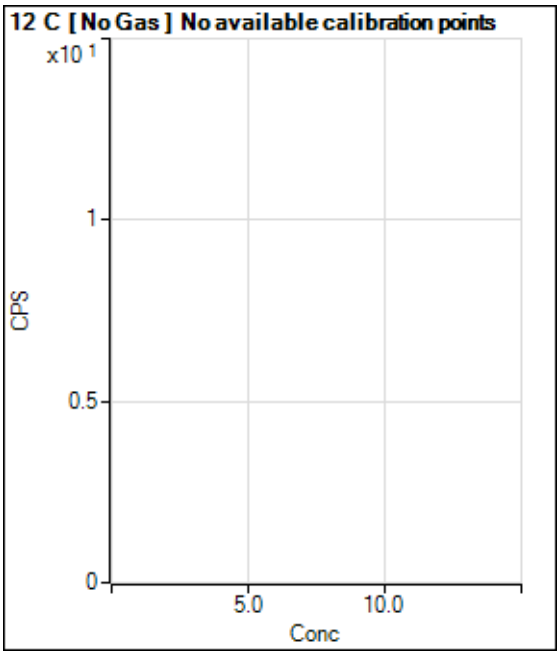
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	134.62	0.0001	P	6.1
2	☐	1.000	1.213	7442.99	0.0031	P	2.0
3	☐	50.000	57.105	345873.92	0.1421	P	0.7
4	☐	125.000	134.557	826176.43	0.3348	P	1.7
5	☐	250.000	261.155	1545687.17	0.6497	A	2.2
6	☐	500.000	511.935	2947057.39	1.2736	A	1.7
7	☐	1000.000	989.694	5525741.32	2.4621	A	0.2
8	☐			773.52	0.0004	P	9.4

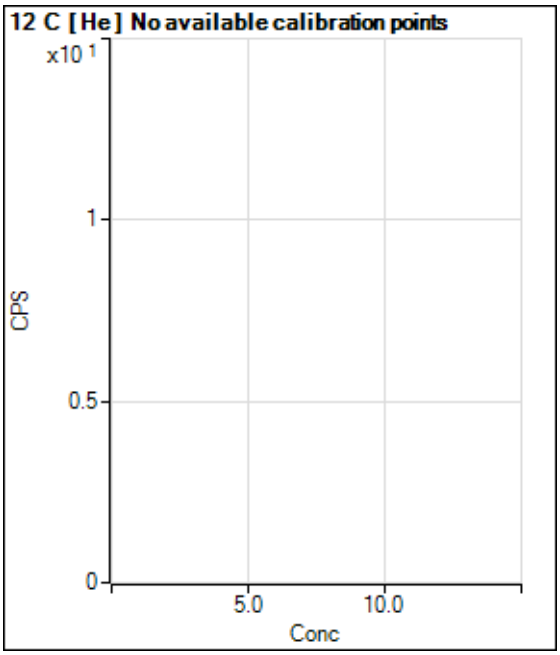
y = 0.0025 * x + 5.4774E-005
R = 0.9998
DL = 0.004049
BEC = 0.02202

Weight: <None>
Min Conc: 0

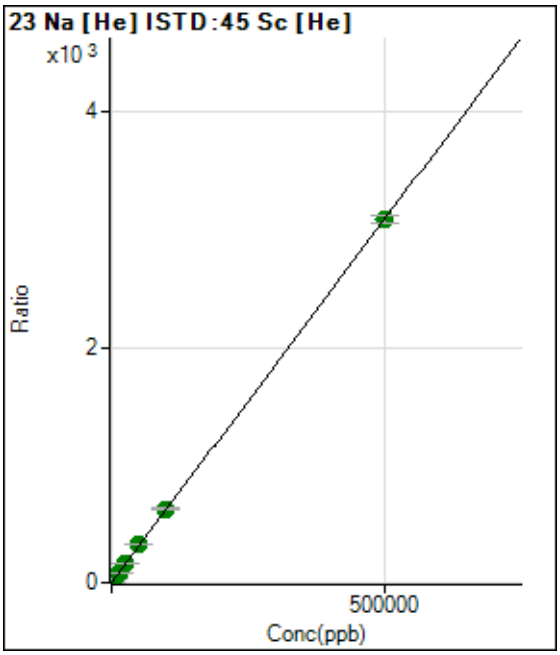


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			3115734.47		A	2.3
2	☐			3397353.14		A	2.1
3	☐			3412875.40		A	1.7
4	☐			3448090.78		A	0.9
5	☐			3504376.02		A	0.9
6	☐			3788816.71		A	0.8
7	☐			4430816.01		A	4.3
8	☐			3680717.38		A	1.5

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			22105.58		P	0.8
2	☐			23442.12		P	0.7
3	☐			23177.22		P	1.0
4	☐			23917.32		P	2.5
5	☐			25101.50		P	0.6
6	☐			28952.96		P	0.6
7	☐			35650.91		P	0.9
8	☐			36124.38		P	1.3

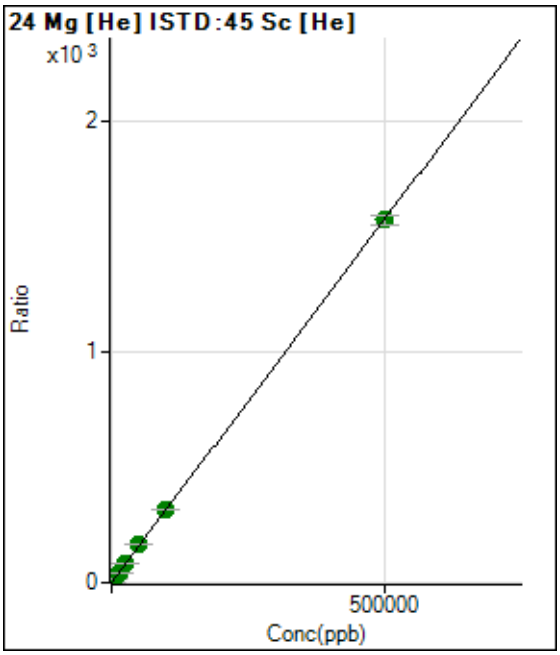


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	28384.26	0.2982	P	0.6
2	☐	500.000	601.161	374702.68	4.0093	P	0.5
3	☐	5000.000	5745.030	3210716.62	35.7632	A	0.7
4	☐	12500.000	13564.402	7510586.21	84.0335	A	0.7
5	☐	25000.000	27111.160	14556736.31	167.6598	A	0.6
6	☐	50000.000	52655.343	28461621.52	325.3483	A	1.4
7	☐	100000.00	101705.83	56155273.61	628.1450	A	0.6
8	☐	500000.00	499253.57	275761875.8	3,082.2725	A	2.1

y = 0.0062 * x + 0.2982
R = 1.0000
DL = 0.9166
BEC = 48.31

Weight: <None>
Min Conc: 0

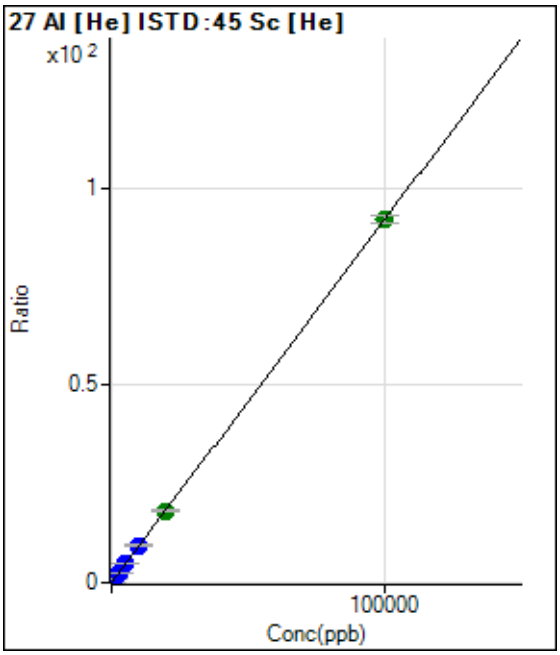
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	370.01	0.0039	P	7.4
2	☐	500.000	604.031	177895.97	1.9036	P	1.1
3	☐	5000.000	5767.229	1628796.99	18.1420	A	0.1
4	☐	12500.000	13619.040	3828353.00	42.8361	A	0.3
5	☐	25000.000	26901.977	7346064.82	84.6112	A	1.4
6	☐	50000.000	52270.382	14380949.23	164.3955	A	1.9
7	☐	100000.00	100227.13	28180082.08	315.2206	A	0.8
8	☐	500000.00	499596.68	140576753.4	1,571.2472	A	2.3

y = 0.0031 * x + 0.0039
R = 1.0000
DL = 0.2736
BEC = 1.235

Weight: <None>
Min Conc: 0

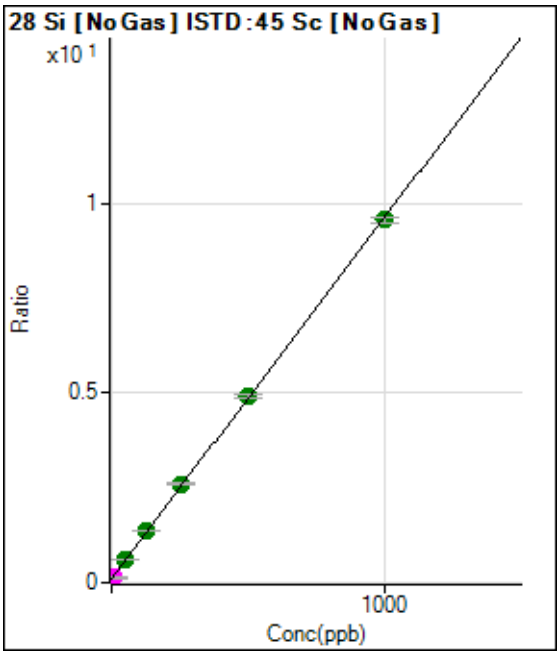


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1	☐	0.000	0.000	323.34	0.0034	P	11.7
2	☐	20.000	22.582	2255.75	0.0241	P	4.0
3	☐	1000.000	1111.582	91979.48	1.0245	P	0.7
4	☐	2500.000	2666.232	219195.58	2.4527	P	1.0
5	☐	5000.000	5284.715	421813.24	4.8582	P	0.8
6	☐	10000.000	10319.872	829611.26	9.4837	P	1.9
7	☐	20000.000	19792.903	1625765.98	18.1860	A	2.8
8	☐	100000.00	99989.924	8219159.81	91.8582	A	2.1

y = 9.1864E-004 * x + 0.0034
R = 1.0000
DL = 1.293
BEC = 3.698

Weight: <None>
Min Conc: 0

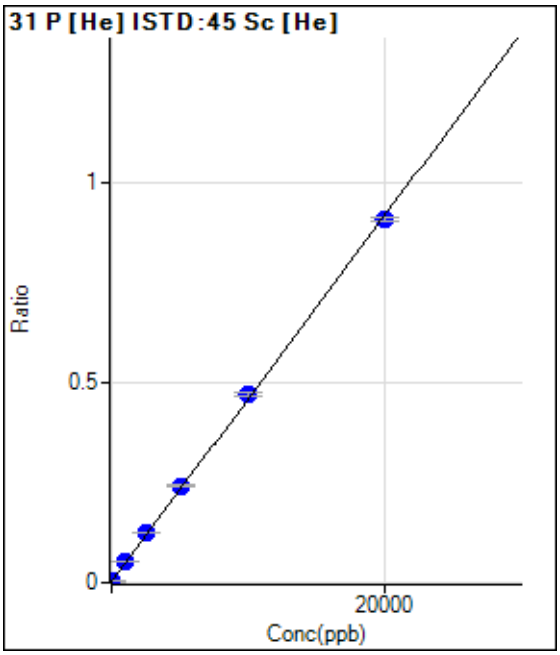
Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	490306.58	0.1065	M	12.7
2	☐	10.000	2.546	579207.74	0.1307	M	9.7
3	☐	50.000	54.000	2787900.03	0.6203	A	1.1
4	☐	125.000	131.640	5972009.70	1.3589	A	0.4
5	☐	250.000	262.875	11221594.14	2.6074	A	1.7
6	☐	500.000	504.906	20926334.83	4.9100	A	1.4
7	☐	1000.000	993.373	39537435.24	9.5570	A	1.8
8	☐			652393.68	0.1581	P	2.2

y = 0.0095 * x + 0.1065
R = 0.9998
DL = 4.273
BEC = 11.2

Weight: <None>
Min Conc: 0

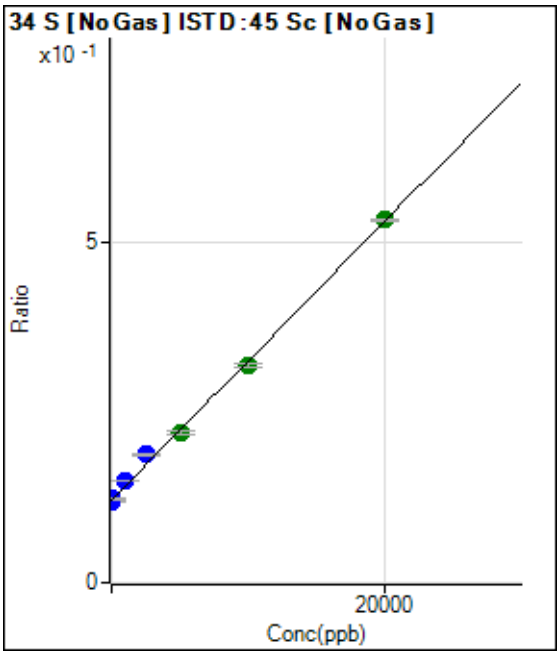


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1	☐	0.000	-16.900	131.11	0.0014	P	28.3
2	☐	0.000	16.900	273.34	0.0029	P	7.7
3	☐	1000.000	1100.308	4701.92	0.0524	P	5.7
4	☐	2500.000	2675.524	11108.77	0.1243	P	1.7
5	☐	5000.000	5216.453	20865.06	0.2403	P	2.0
6	☐	10000.000	10278.353	41237.26	0.4714	P	1.7
7	☐	20000.000	19779.754	80919.44	0.9052	P	1.0
8	☐			112.22	0.0013	P	9.8

y = 4.5654E-005 * x + 0.0022
R = 0.9998
DL = 20.24
BEC = 47.13

Weight: <None>
Min Conc: 0

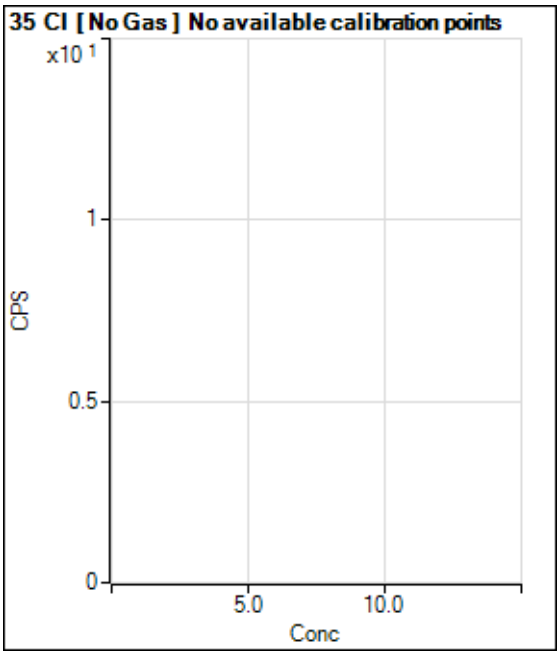
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-85.857	552040.05	0.1199	P	1.3
2	☐	0.000	85.857	546680.49	0.1234	P	2.2
3	☐	1000.000	1382.211	674362.62	0.1500	P	0.9
4	☐	2500.000	3285.187	831040.99	0.1891	P	1.0
5	☐	5000.000	4773.656	945198.62	0.2197	A	2.6
6	☐	10000.000	9672.534	1364758.77	0.3202	A	2.0
7	☐	20000.000	20103.060	2210926.77	0.5344	A	0.6
8	☐			436190.60	0.1057	P	1.9

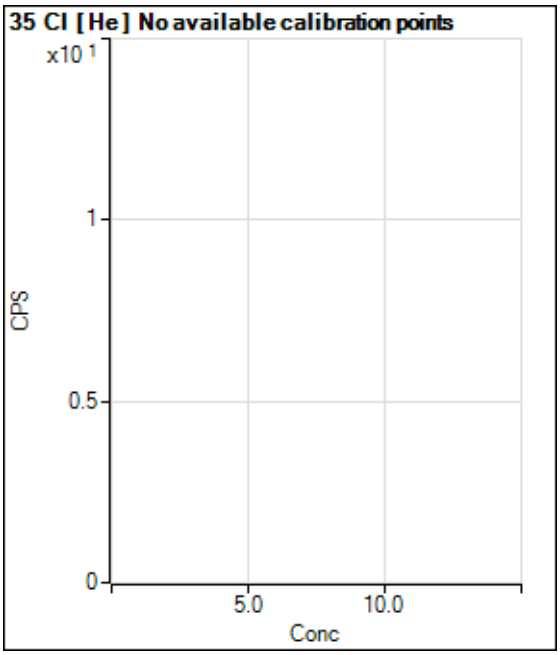
y = 2.0530E-005 * x + 0.1217
R = 0.9987
DL = 308.3
BEC = 5926

Weight: <None>
Min Conc: 0

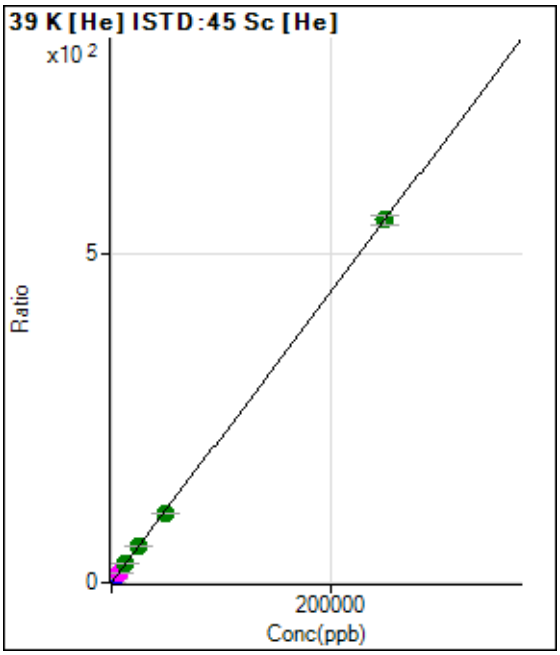


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			136950.44		P	0.4
2	☐			157315.54		P	1.1
3	☐			153823.93		P	0.8
4	☐			160574.02		P	1.4
5	☐			162573.68		P	0.6
6	☐			173609.85		P	1.9
7	☐			212138.70		P	2.3
8	☐			156759.37		P	1.4

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			550.02		P	7.0
2	☐			661.13		P	3.4
3	☐			657.80		P	9.7
4	☐			641.13		P	9.8
5	☐			625.58		P	13.0
6	☐			655.58		P	6.9
7	☐			915.60		P	3.7
8	☐			658.91		P	1.5

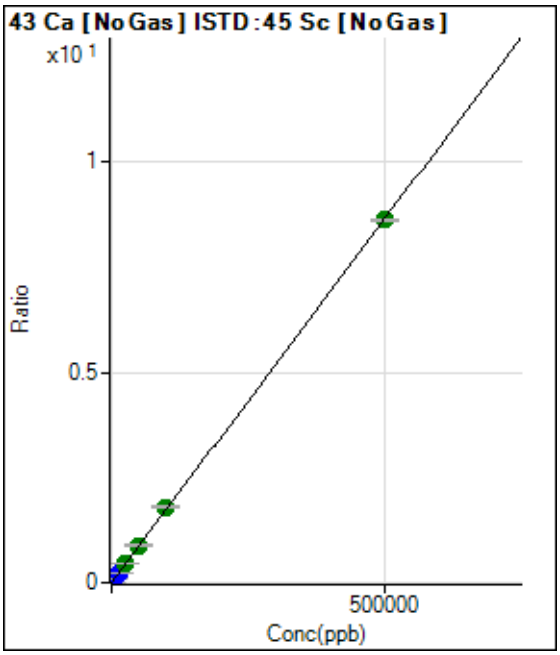


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14311.62	0.1504	P	1.7
2	☐	500.000	545.129	126472.85	1.3533	P	0.9
3	☐	2500.000	2655.054	539491.57	6.0091	P	0.3
4	☐	6250.000	6365.229	1268692.64	14.1961	M	1.3
5	☐	12500.000	12805.263	2466417.67	28.4070	A	0.8
6	☐	25000.000	24833.424	4806993.23	54.9488	A	1.2
7	☐	50000.000	48181.843	9518181.80	106.4703	A	0.4
8	☐	250000.00	250360.50	49434281.49	552.6056	A	2.9

y = 0.0022 * x + 0.1504
R = 1.0000
DL = 3.444
BEC = 68.15

Weight: <None>
Min Conc: 0

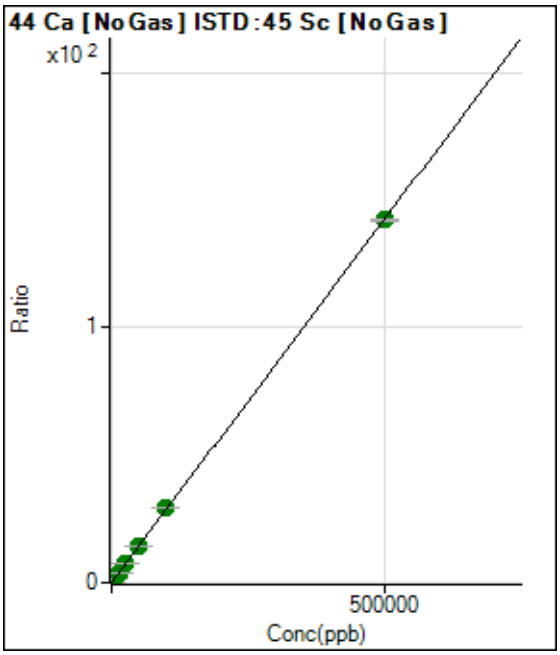
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1013.38	0.0002	P	6.9
2	☐	500.000	570.536	44704.80	0.0101	P	2.5
3	☐	5000.000	5369.275	418620.30	0.0931	P	1.2
4	☐	12500.000	13223.791	1006605.59	0.2290	P	1.0
5	☐	25000.000	26429.942	1969145.16	0.4576	A	1.9
6	☐	50000.000	51470.336	3797196.09	0.8909	A	0.8
7	☐	100000.00	104042.03	7450271.56	1.8006	A	1.5
8	☐	500000.00	498951.20	35633856.13	8.6342	A	0.4

y = 1.7304E-005 * x + 2.2005E-004
R = 1.0000
DL = 2.616
BEC = 12.72

Weight: <None>
Min Conc: 0

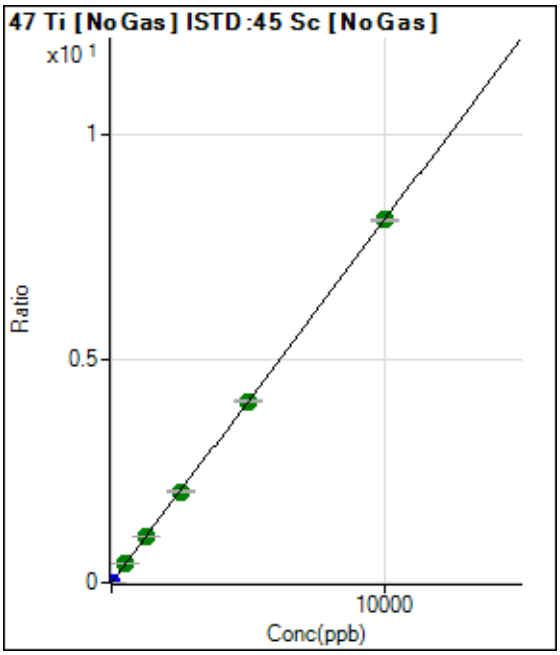


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	28026.38	0.0061	P	1.5
2	☐	500.000	560.744	734916.11	0.1659	P	2.2
3	☐	5000.000	5261.326	6768019.34	1.5057	A	0.6
4	☐	12500.000	12927.348	16220265.73	3.6908	A	0.4
5	☐	25000.000	25867.519	31755299.25	7.3791	A	1.8
6	☐	50000.000	50815.296	61764042.97	14.4899	A	1.0
7	☐	100000.00	103485.40	122068035.9	29.5025	A	0.5
8	☐	500000.00	499164.65	587202937.9	142.2828	A	0.2

y = 2.8503E-004 * x + 0.0061
R = 1.0000
DL = 0.9442
BEC = 21.35

Weight: <None>
Min Conc: 0

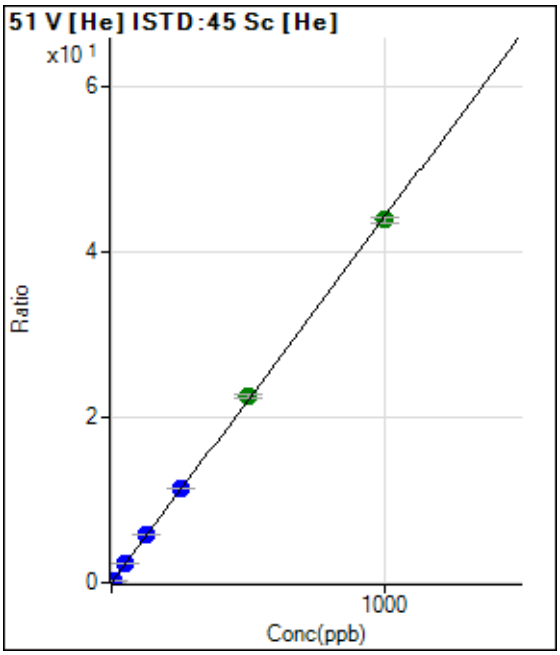
Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	242.23	0.0001	P	8.5
2	☐	5.000	5.454	19833.78	0.0045	P	2.5
3	☐	500.000	524.615	1913384.28	0.4257	A	0.6
4	☐	1250.000	1259.220	4489937.23	1.0217	A	1.4
5	☐	2500.000	2504.597	8744932.79	2.0321	A	1.6
6	☐	5000.000	4994.971	17273807.10	4.0526	A	1.2
7	☐	10000.000	9998.982	33565878.67	8.1124	A	0.6
8	☐			3327.08	0.0008	P	1.9

y = 8.1132E-004 * x + 5.2611E-005
R = 1.0000
DL = 0.01646
BEC = 0.06485

Weight: <None>
Min Conc: 0

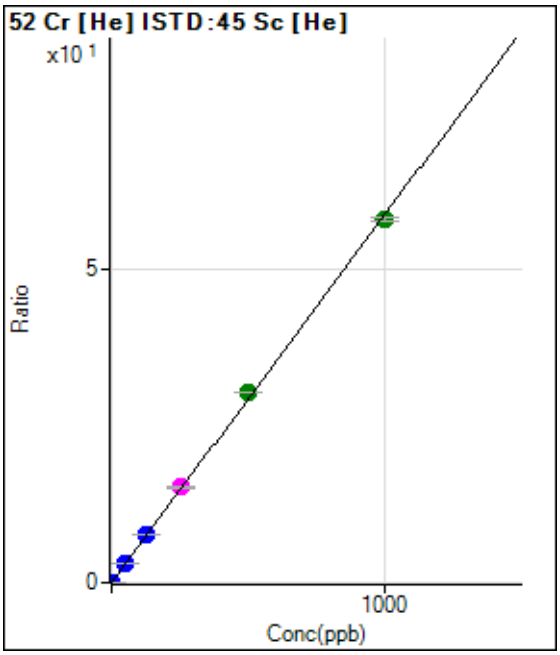


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0003	P	71.7
2	☐	5.000	5.597	23198.83	0.2482	P	1.4
3	☐	50.000	53.460	212648.08	2.3687	P	0.9
4	☐	125.000	129.317	512034.37	5.7292	P	0.5
5	☐	250.000	258.895	995837.00	11.4697	P	0.5
6	☐	500.000	509.699	1975318.23	22.5806	A	1.7
7	☐	1000.000	992.211	3929554.45	43.9565	A	1.3
8	☐			1050.05	0.0117	P	6.9

y = 0.0443 * x + 2.9351E-004
R = 0.9999
DL = 0.01424
BEC = 0.006625

Weight: <None>
Min Conc: 0

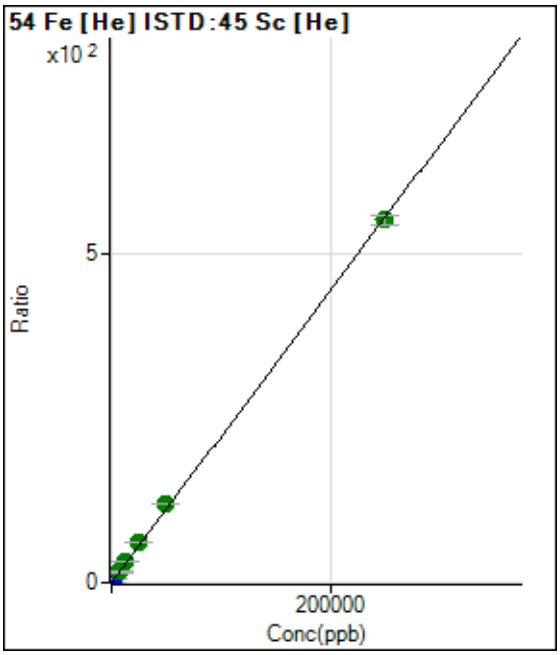
Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1107.83	0.0116	P	2.3
2	☐	2.000	2.185	13049.37	0.1396	P	0.9
3	☐	50.000	53.550	282691.18	3.1487	P	0.3
4	☐	125.000	130.098	682153.27	7.6329	P	0.9
5	☐	250.000	260.198	1324409.33	15.2544	M	1.2
6	☐	500.000	519.523	2663629.46	30.4460	A	0.2
7	☐	1000.000	986.874	5169314.09	57.8240	A	1.1
8	☐			43924.99	0.4910	P	2.3

y = 0.0586 * x + 0.0116
R = 0.9997
DL = 0.01371
BEC = 0.1987

Weight: <None>
Min Conc: 0

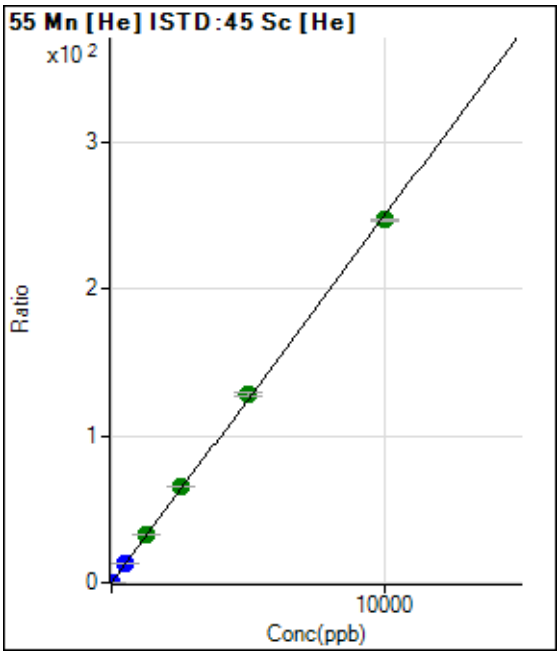


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	700.03	0.0074	P	4.8
2	☐	50.000	62.431	13601.03	0.1455	P	1.3
3	☐	2500.000	2955.192	587865.98	6.5479	P	0.3
4	☐	6250.000	7270.080	1438648.24	16.0979	A	1.5
5	☐	12500.000	14629.625	2811908.39	32.3864	A	0.4
6	☐	25000.000	27810.921	5385390.62	61.5600	A	1.1
7	☐	50000.000	53693.500	10624344.63	118.8447	A	0.9
8	☐	250000.00	248843.67	49272011.49	550.7615	A	2.8

y = 0.0022 * x + 0.0074
R = 0.9998
DL = 0.4834
BEC = 3.324

Weight: <None>
Min Conc: 0

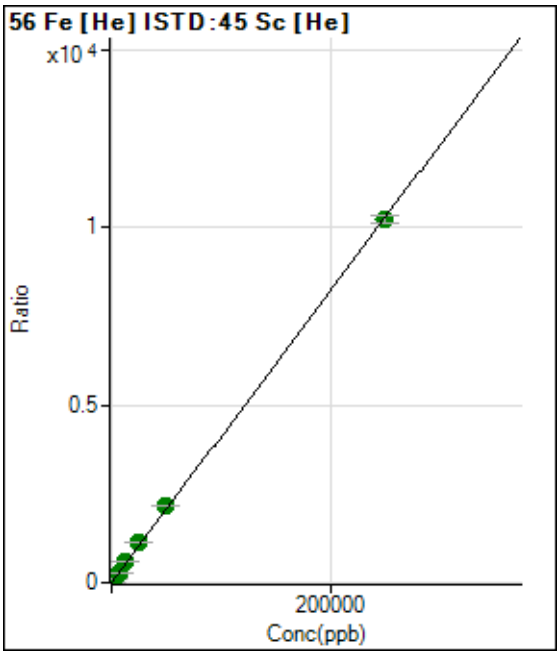
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2483.57	0.0261	P	3.5
2	☐	1.000	1.112	5033.16	0.0539	P	2.4
3	☐	500.000	535.030	1201535.86	13.3832	P	0.7
4	☐	1250.000	1322.782	2953604.37	33.0496	A	1.1
5	☐	2500.000	2621.455	5684604.22	65.4712	A	0.7
6	☐	5000.000	5144.955	11238399.83	128.4709	A	1.8
7	☐	10000.000	9886.310	22066822.17	246.8398	A	0.6
8	☐			11832.75	0.1323	P	3.7

y = 0.0250 * x + 0.0261
R = 0.9998
DL = 0.1111
BEC = 1.045

Weight: <None>
Min Conc: 0

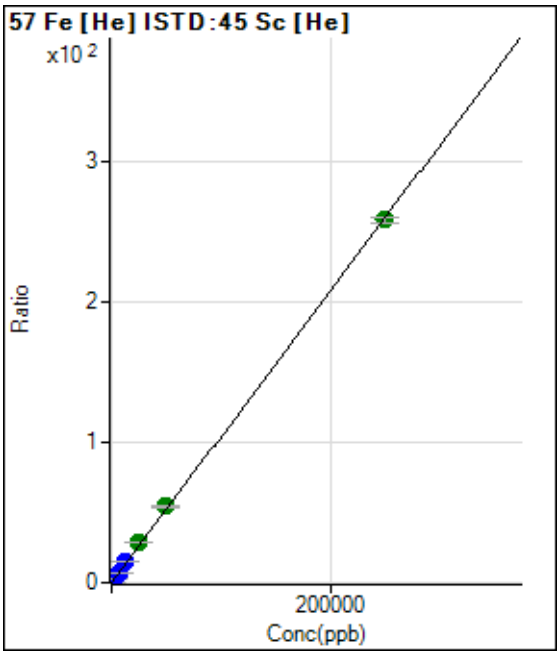


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8985.12	0.0944	P	2.4
2	☐	50.000	60.703	241337.75	2.5823	P	0.8
3	☐	2500.000	2961.888	10906266.09	121.4874	A	1.5
4	☐	6250.000	7151.164	26203006.00	293.1848	A	0.3
5	☐	12500.000	14194.268	50517962.58	581.8464	A	0.8
6	☐	25000.000	27711.834	99372957.41	1,135.8638	A	0.7
7	☐	50000.000	53219.589	195003961.5	2,181.2991	A	0.6
8	☐	250000.00	248973.03	912939701.9	10,204.253	A	2.1

y = 0.0410 * x + 0.0944
R = 0.9999
DL = 0.1687
BEC = 2.303

Weight: <None>
Min Conc: 0

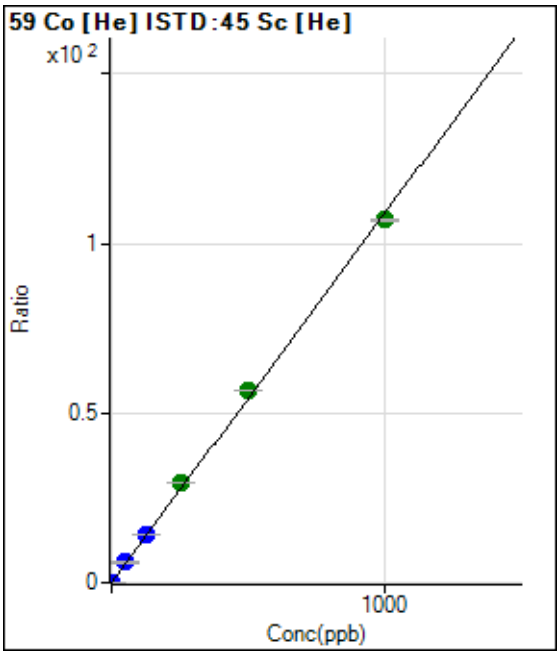
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	227.78	0.0024	P	8.5
2	☐	50.000	60.202	6058.01	0.0648	P	5.4
3	☐	2500.000	2895.127	269797.41	3.0052	P	0.5
4	☐	6250.000	6992.751	648409.49	7.2552	P	0.4
5	☐	12500.000	13920.122	1253752.40	14.4401	P	0.4
6	☐	25000.000	28026.432	2543284.32	29.0710	A	0.7
7	☐	50000.000	52397.210	4858543.40	54.3480	A	1.2
8	☐	250000.00	249124.38	23118072.43	258.3906	A	1.9

y = 0.0010 * x + 0.0024
R = 0.9999
DL = 0.5864
BEC = 2.306

Weight: <None>
Min Conc: 0

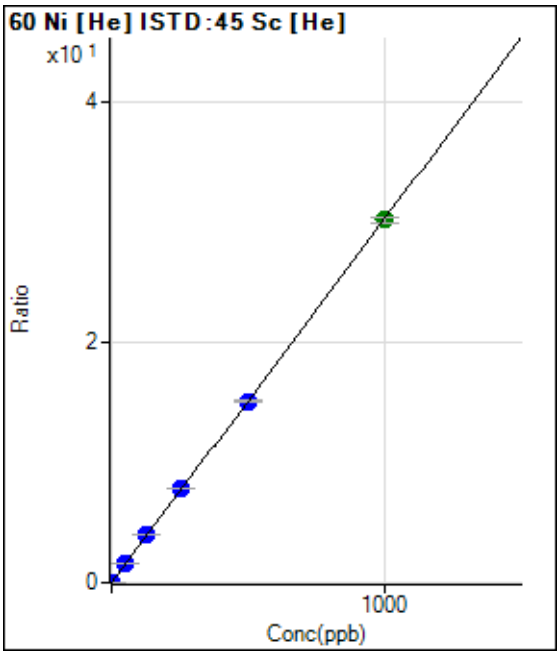


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	115.56	0.0012	P	2.6
2	☐	1.000	1.206	12366.56	0.1323	P	1.6
3	☐	50.000	54.861	535582.50	5.9657	P	0.7
4	☐	125.000	132.038	1283055.87	14.3564	P	0.4
5	☐	250.000	270.320	2551817.36	29.3905	A	1.2
6	☐	500.000	521.011	4955817.43	56.6456	A	0.8
7	☐	1000.000	983.292	9557079.30	106.9048	A	0.5
8	☐			19807.21	0.2214	P	2.8

y = 0.1087 * x + 0.0012
R = 0.9994
DL = 0.0008589
BEC = 0.01117

Weight: <None>
Min Conc: 0

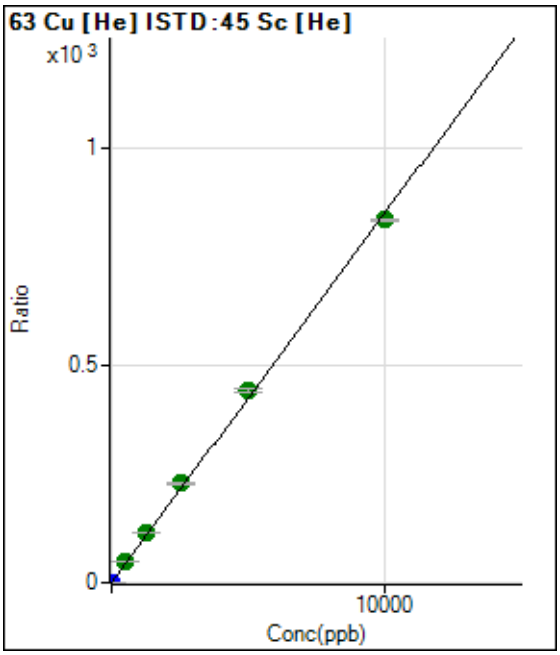
Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	604.47	0.0063	P	9.6
2	☐	1.000	1.190	3955.03	0.0423	P	1.7
3	☐	50.000	54.125	147449.29	1.6424	P	0.2
4	☐	125.000	131.281	355213.55	3.9745	P	0.5
5	☐	250.000	258.799	679744.09	7.8290	P	0.2
6	☐	500.000	498.169	1317865.15	15.0643	P	0.8
7	☐	1000.000	997.724	2696585.60	30.1642	A	1.8
8	☐			12840.34	0.1435	P	2.2

y = 0.0302 * x + 0.0063
R = 0.9999
DL = 0.0605
BEC = 0.2099

Weight: <None>
Min Conc: 0

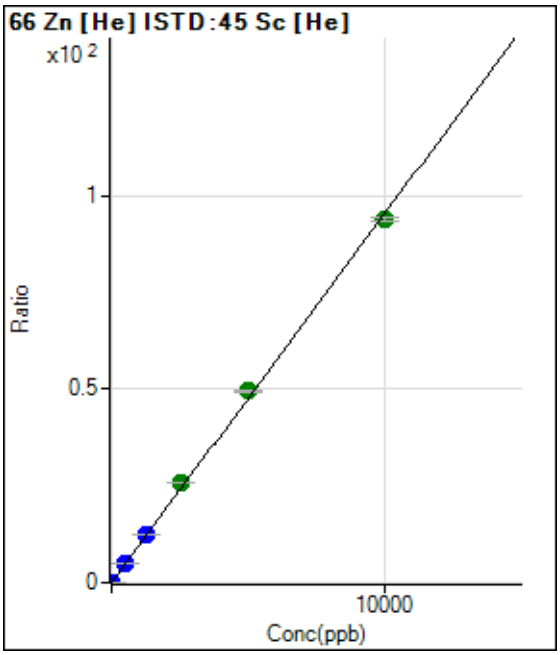


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2388.01	0.0251	P	3.7
2	☐	2.000	2.399	21347.25	0.2284	P	1.4
3	☐	500.000	573.088	4362855.39	48.5982	A	1.1
4	☐	1250.000	1365.383	10344303.46	115.7504	A	2.0
5	☐	2500.000	2689.746	19795525.40	227.9991	A	0.6
6	☐	5000.000	5212.309	38649659.98	441.8032	A	1.1
7	☐	10000.000	9828.332	74471565.56	833.0422	A	0.8
8	☐			20756.37	0.2320	P	2.8

y = 0.0848 * x + 0.0251
R = 0.9994
DL = 0.03307
BEC = 0.2961

Weight: <None>
Min Conc: 0

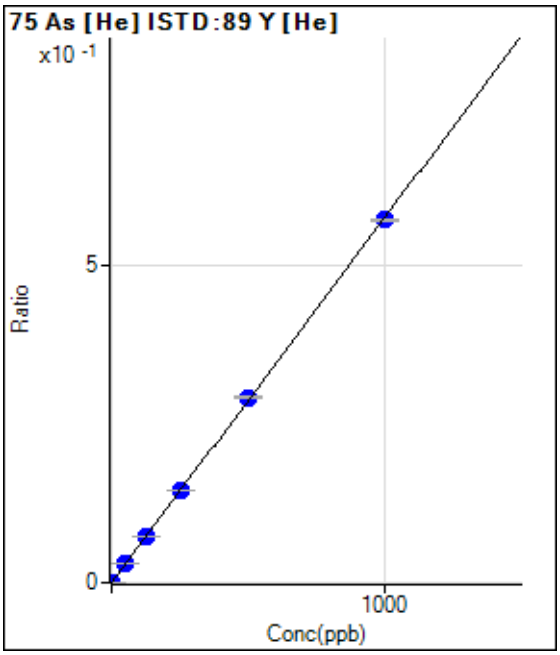
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1490.09	0.0157	P	2.7
2	☐	2.000	5.714	6549.35	0.0701	P	0.6
3	☐	500.000	543.556	466163.99	5.1925	P	0.6
4	☐	1250.000	1317.468	1122790.08	12.5632	P	0.5
5	☐	2500.000	2700.246	2234221.89	25.7328	A	0.2
6	☐	5000.000	5201.867	4335433.79	49.5582	A	1.3
7	☐	10000.000	9838.393	8377962.72	93.7164	A	0.9
8	☐			49937.55	0.5582	P	2.7

y = 0.0095 * x + 0.0157
R = 0.9995
DL = 0.1319
BEC = 1.644

Weight: <None>
Min Conc: 0

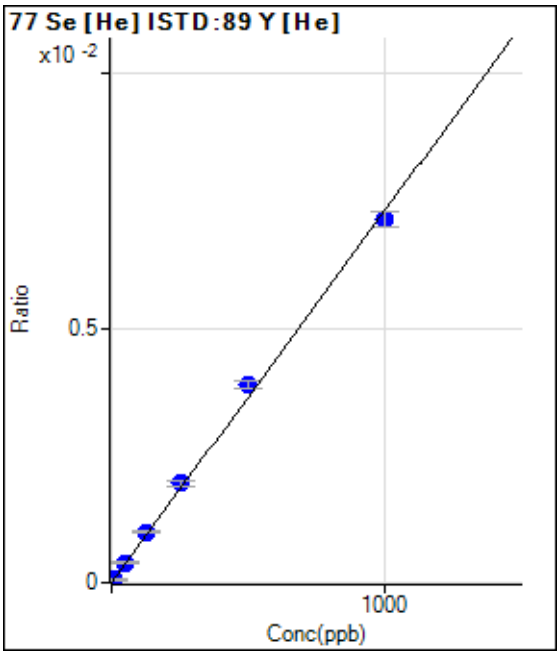


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	57.5
2	☐	1.000	1.203	685.58	0.0007	P	11.2
3	☐	50.000	51.902	28681.45	0.0299	P	0.8
4	☐	125.000	126.838	68824.67	0.0730	P	0.3
5	☐	250.000	253.485	135602.74	0.1458	P	0.3
6	☐	500.000	507.855	267792.96	0.2921	P	1.2
7	☐	1000.000	994.876	522485.88	0.5722	P	0.8
8	☐			273.34	0.0003	P	6.5

y = 5.7516E-004 * x + 1.0065E-005
R = 0.9999
DL = 0.03021
BEC = 0.0175

Weight: <None>
Min Conc: 0

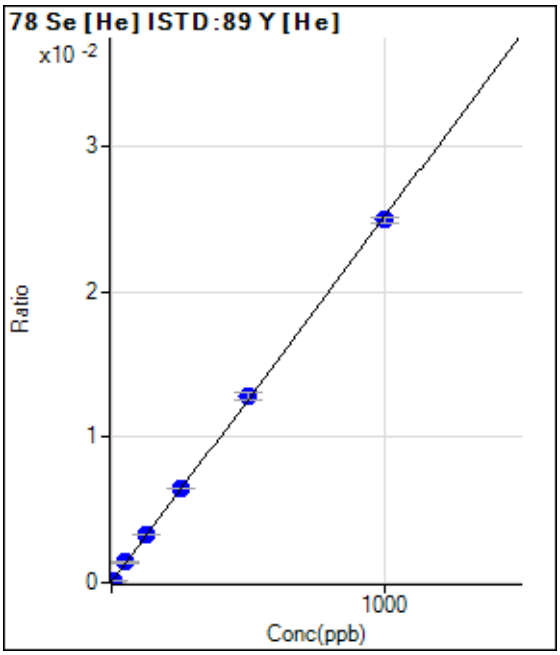
Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	7.967	56.67	0.0001	P	30.0
3	☐	50.000	54.252	380.01	0.0004	P	6.7
4	☐	125.000	136.314	937.82	0.0010	P	3.5
5	☐	250.000	267.517	1814.58	0.0020	P	5.3
6	☐	500.000	534.564	3573.83	0.0039	P	3.4
7	☐	1000.000	976.697	6502.67	0.0071	P	4.3
8	☐			1.11	0.0000	P	173.2

y = 7.2929E-006 * x + 0.0000E+000
R = 0.9989
DL = 0
BEC = 0

Weight: <None>
Min Conc: 0

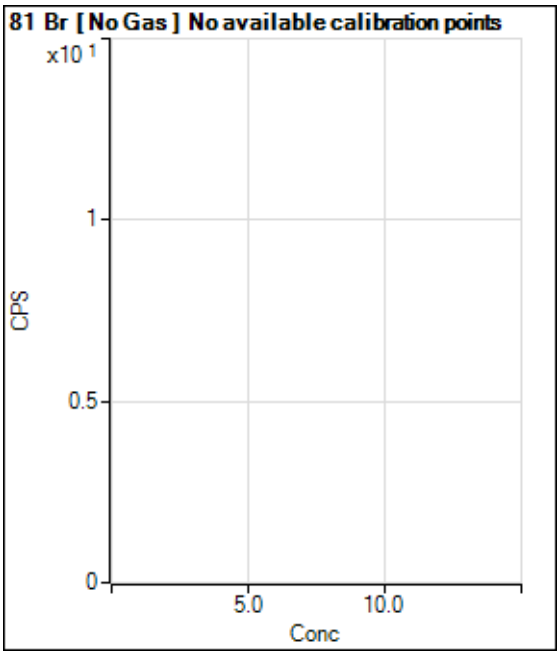


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	28.89	0.0000	P	35.1
2	☐	5.000	5.280	157.78	0.0002	P	28.9
3	☐	50.000	55.657	1371.20	0.0014	P	9.9
4	☐	125.000	131.124	3134.83	0.0033	P	1.1
5	☐	250.000	256.408	6018.01	0.0065	P	1.4
6	☐	500.000	510.906	11792.82	0.0129	P	3.7
7	☐	1000.000	991.895	22779.58	0.0249	P	1.3
8	☐			30.00	0.0000	P	59.7

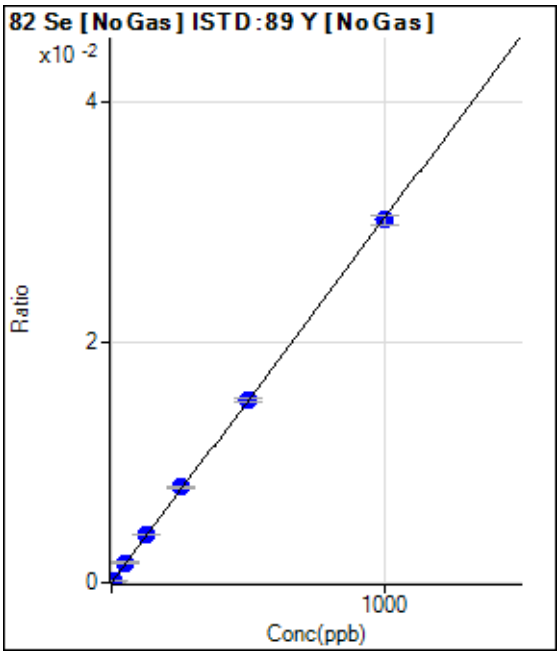
y = 2.5122E-005 * x + 2.9084E-005
R = 0.9999
DL = 1.221
BEC = 1.158

Weight: <None>
Min Conc: 0

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			29055.69		P	1.4
2	☐			28464.51		P	1.1
3	☐			28543.60		P	1.2
4	☐			27261.11		P	1.1
5	☐			27002.78		P	0.7
6	☐			26952.69		P	1.9
7	☐			28219.61		P	1.8
8	☐			26741.13		P	0.4

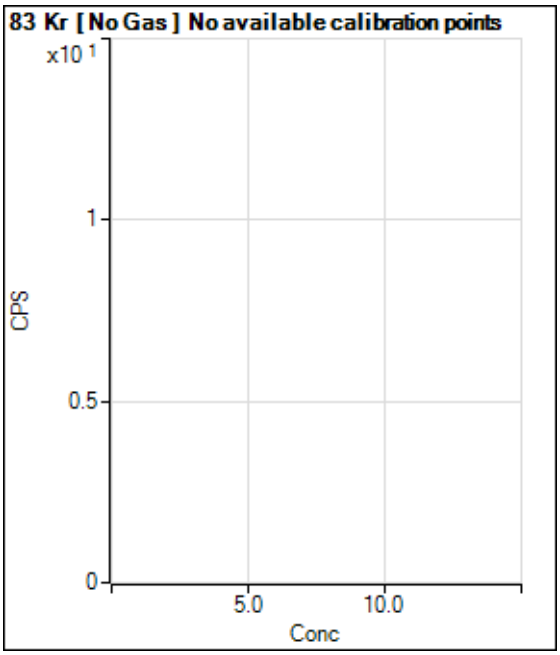


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-20.00	0.0000	P	-294.
2	☐	5.000	5.826	2211.35	0.0002	P	4.2
3	☐	50.000	54.976	20769.29	0.0017	P	2.8
4	☐	125.000	132.124	50228.23	0.0040	P	1.1
5	☐	250.000	262.181	98442.31	0.0080	P	1.7
6	☐	500.000	501.333	188567.62	0.0152	P	1.2
7	☐	1000.000	995.145	366825.44	0.0302	P	2.3
8	☐			305.57	0.0000	P	18.1

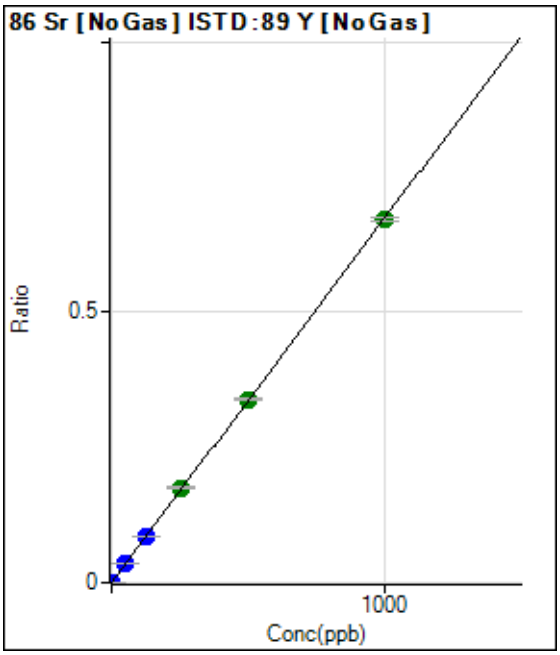
y = 3.0374E-005 * x - 1.5602E-006
R = 0.9999
DL = 0.454
BEC = -0.05137

Weight: <None>
Min Conc: 0

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			281.12		P	14.1
2	☐			261.12		P	6.0
3	☐			304.45		P	14.8
4	☐			248.90		P	15.1
5	☐			303.34		P	16.4
6	☐			277.79		P	4.9
7	☐			302.23		P	5.0
8	☐			350.01		P	14.4

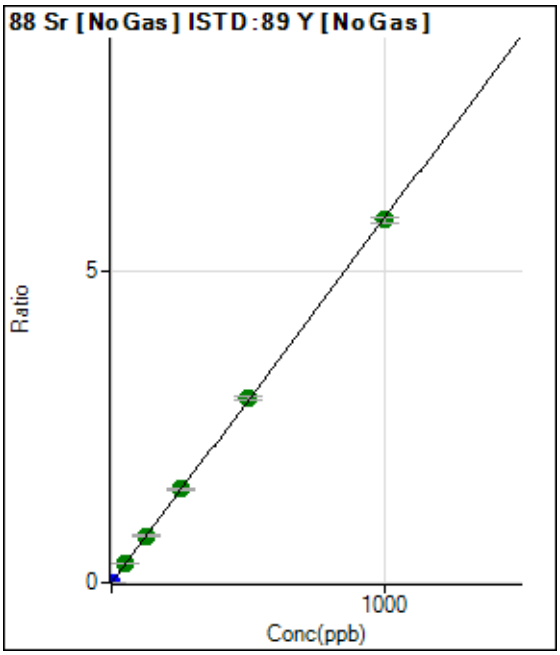


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	504.46	0.0000	P	6.1
2	☐	1.000	1.076	9626.71	0.0008	P	2.0
3	☐	50.000	51.499	432286.23	0.0347	P	0.9
4	☐	125.000	125.161	1056026.32	0.0843	P	0.7
5	☐	250.000	260.507	2169827.12	0.1755	A	1.9
6	☐	500.000	502.894	4195572.09	0.3388	A	0.8
7	☐	1000.000	995.831	8142615.37	0.6708	A	0.9
8	☐			26058.81	0.0022	P	2.0

y = 6.7355E-004 * x + 3.9038E-005
R = 0.9999
DL = 0.01054
BEC = 0.05796

Weight: <None>
Min Conc: 0

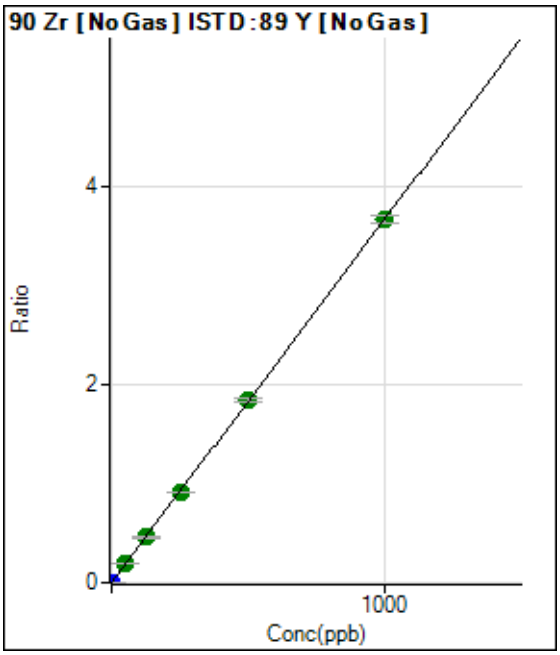
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	590.02	0.0000	P	5.2
2	☐	1.000	1.063	78931.35	0.0063	P	2.1
3	☐	50.000	53.310	3880420.81	0.3117	A	0.5
4	☐	125.000	128.630	9415954.93	0.7520	A	1.1
5	☐	250.000	255.886	18496788.75	1.4960	A	1.2
6	☐	500.000	505.868	36633841.95	2.9574	A	1.4
7	☐	1000.000	994.975	70606156.17	5.8169	A	1.8
8	☐			221817.56	0.0188	P	1.7

y = 0.0058 * x + 4.5685E-005
R = 1.0000
DL = 0.001214
BEC = 0.007815

Weight: <None>
Min Conc: 0

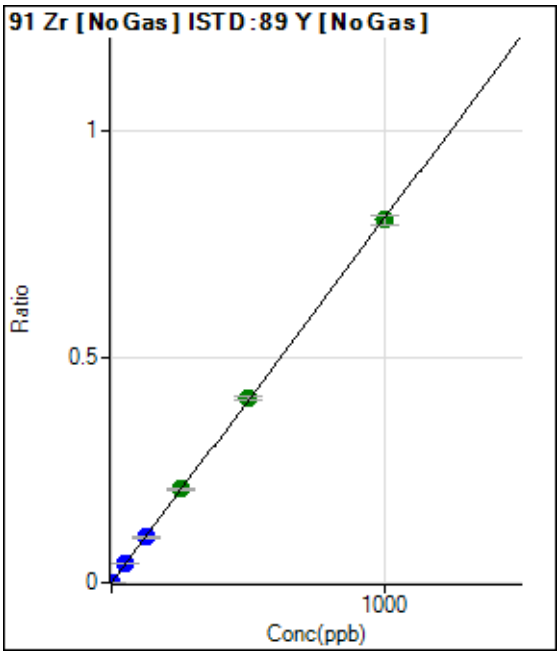


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1115.69	0.0001	P	16.9
2	☐	1.000	1.044	49293.43	0.0039	P	2.0
3	☐	50.000	52.514	2396256.54	0.1925	A	1.7
4	☐	125.000	125.617	5764066.16	0.4604	A	2.4
5	☐	250.000	249.833	11320138.86	0.9155	A	0.3
6	☐	500.000	501.521	22761754.38	1.8377	A	1.9
7	☐	1000.000	999.079	44435909.34	3.6608	A	2.1
8	☐			20175.82	0.0017	P	2.4

y = 0.0037 * x + 8.6343E-005
R = 1.0000
DL = 0.01193
BEC = 0.02356

Weight: <None>
Min Conc: 0

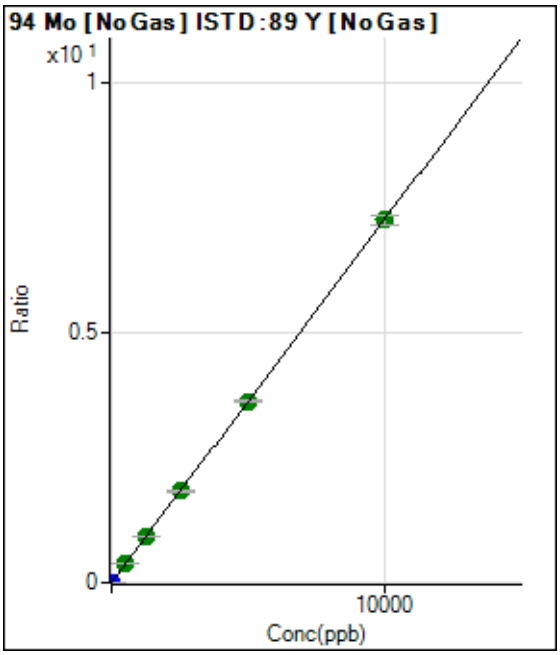
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	245.56	0.0000	P	8.9
2	☐	1.000	1.045	10874.32	0.0009	P	3.7
3	☐	50.000	51.038	512983.98	0.0412	P	0.9
4	☐	125.000	124.179	1254967.49	0.1002	P	2.1
5	☐	250.000	256.192	2556354.47	0.2068	A	2.1
6	☐	500.000	505.762	5055619.79	0.4082	A	1.8
7	☐	1000.000	995.621	9753037.49	0.8035	A	2.4
8	☐			4541.89	0.0004	P	0.2

y = 8.0701E-004 * x + 1.8999E-005
R = 1.0000
DL = 0.006269
BEC = 0.02354

Weight: <None>
Min Conc: 0

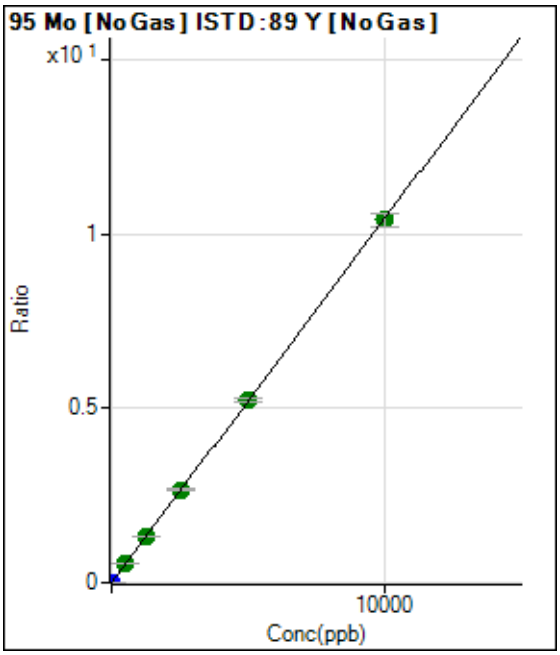


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	453.35	0.0000	P	2.0
2	☐	5.000	6.146	56738.40	0.0045	P	1.1
3	☐	500.000	518.395	4689056.28	0.3767	A	1.2
4	☐	1250.000	1268.911	11544239.27	0.9220	A	0.7
5	☐	2500.000	2519.634	22635161.89	1.8308	A	1.6
6	☐	5000.000	4991.390	44921868.78	3.6267	A	1.5
7	☐	10000.000	9996.112	88145993.13	7.2630	A	2.5
8	☐			17289.75	0.0015	P	2.8

y = 7.2658E-004 * x + 3.5097E-005
R = 1.0000
DL = 0.002846
BEC = 0.0483

Weight: <None>
Min Conc: 0

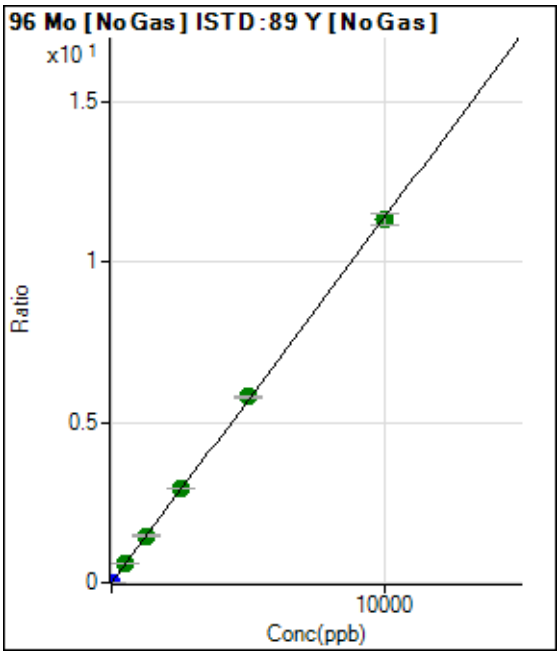
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	234.45	0.0000	P	24.0
2	☐	5.000	5.291	69957.07	0.0055	P	1.4
3	☐	500.000	524.868	6831090.73	0.5487	A	0.3
4	☐	1250.000	1283.169	16795093.64	1.3414	A	0.6
5	☐	2500.000	2551.080	32970392.56	2.6668	A	1.7
6	☐	5000.000	5027.486	65101589.03	5.2554	A	2.0
7	☐	10000.000	9968.098	126454170.3	10.4201	A	3.8
8	☐			16868.09	0.0014	P	3.0

y = 0.0010 * x + 1.8141E-005
R = 1.0000
DL = 0.01251
BEC = 0.01735

Weight: <None>
Min Conc: 0

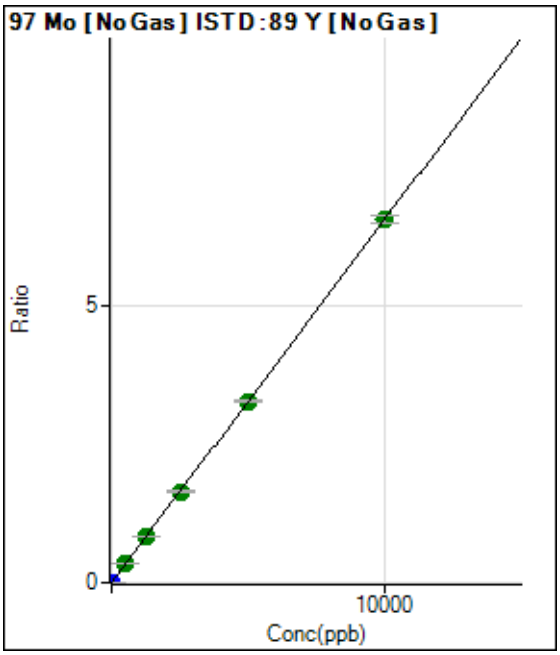


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	295.56	0.0000	P	13.5
2	☐	5.000	5.320	76753.79	0.0061	P	1.3
3	☐	500.000	526.939	7478302.25	0.6007	A	1.0
4	☐	1250.000	1282.637	18307912.37	1.4623	A	2.4
5	☐	2500.000	2573.491	36277438.62	2.9339	A	0.8
6	☐	5000.000	5084.122	71793770.60	5.7961	A	0.9
7	☐	10000.000	9934.139	137441615.7	11.3252	A	3.0
8	☐			31912.25	0.0027	P	2.7

y = 0.0011 * x + 2.2871E-005
R = 0.9999
DL = 0.008107
BEC = 0.02006

Weight: <None>
Min Conc: 0

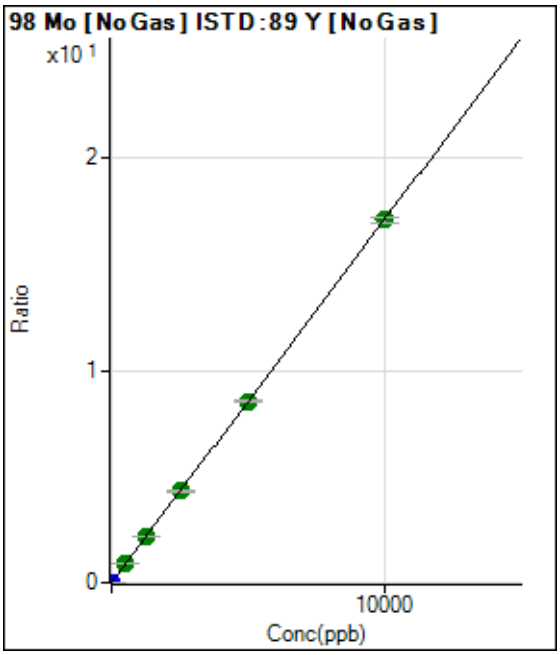
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	152.23	0.0000	P	10.2
2	☐	5.000	5.198	43221.52	0.0034	P	3.0
3	☐	500.000	526.257	4306202.43	0.3460	A	2.3
4	☐	1250.000	1257.954	10354270.95	0.8270	A	1.8
5	☐	2500.000	2515.509	20449750.81	1.6537	A	0.8
6	☐	5000.000	4994.019	40664362.17	3.2831	A	0.6
7	☐	10000.000	9996.806	79764164.37	6.5719	A	2.0
8	☐			10618.62	0.0009	P	7.4

y = 6.5740E-004 * x + 1.1786E-005
R = 1.0000
DL = 0.005474
BEC = 0.01793

Weight: <None>
Min Conc: 0

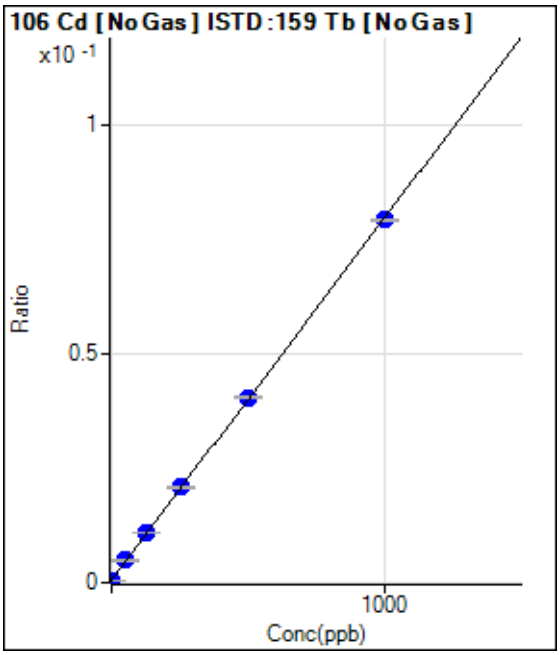


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	341.12	0.0000	P	10.0
2	☐	5.000	5.220	112819.74	0.0089	P	2.1
3	☐	500.000	516.509	10990161.37	0.8829	A	1.4
4	☐	1250.000	1257.065	26902997.38	2.1488	A	1.7
5	☐	2500.000	2517.958	53220974.76	4.3041	A	0.9
6	☐	5000.000	5002.188	105903809.5	8.5504	A	0.3
7	☐	10000.000	9992.708	207327001.3	17.0809	A	1.6
8	☐			26114.65	0.0022	P	6.5

y = 0.0017 * x + 2.6415E-005
R = 1.0000
DL = 0.004647
BEC = 0.01545

Weight: <None>
Min Conc: 0

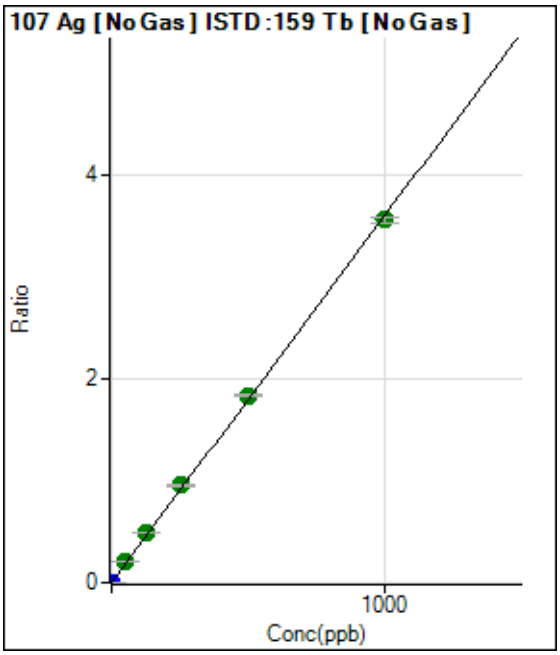
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4810.89	0.0005	P	2.3
2	☐	1.000	1.053	5416.67	0.0006	P	2.3
3	☐	50.000	54.550	43100.46	0.0049	P	1.0
4	☐	125.000	132.037	97882.55	0.0110	P	0.6
5	☐	250.000	257.803	185925.35	0.0210	P	2.3
6	☐	500.000	504.042	360584.51	0.0404	P	1.4
7	☐	1000.000	994.921	694508.10	0.0793	P	0.4
8	☐			4459.65	0.0005	P	1.2

y = 7.9186E-005 * x + 5.3614E-004
R = 0.9999
DL = 0.4612
BEC = 6.771

Weight: <None>
Min Conc: 0

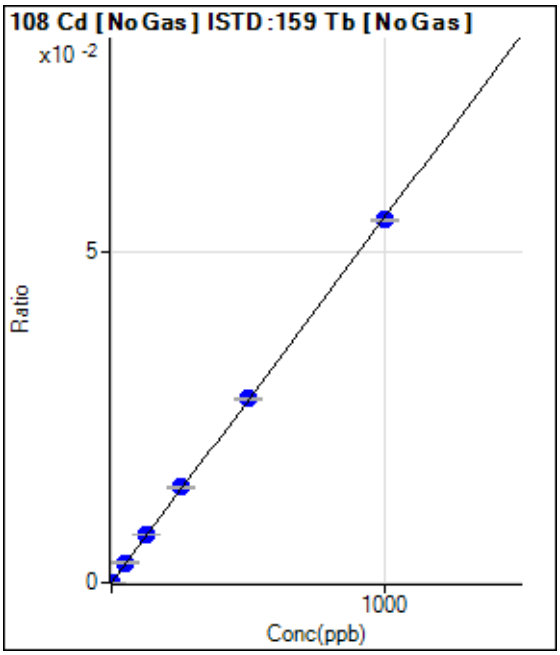


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	150.00	0.0000	P	21.4
2	☐	1.000	1.108	35053.41	0.0040	P	2.0
3	☐	50.000	57.367	1835385.47	0.2068	A	1.6
4	☐	125.000	136.774	4390987.64	0.4931	A	1.5
5	☐	250.000	266.142	8515001.19	0.9594	A	1.7
6	☐	500.000	509.314	16367347.26	1.8360	A	1.1
7	☐	1000.000	989.467	31228737.04	3.5669	A	1.9
8	☐			3127.06	0.0004	P	15.9

y = 0.0036 * x + 1.6715E-005
R = 0.9998
DL = 0.002971
BEC = 0.004637

Weight: <None>
Min Conc: 0

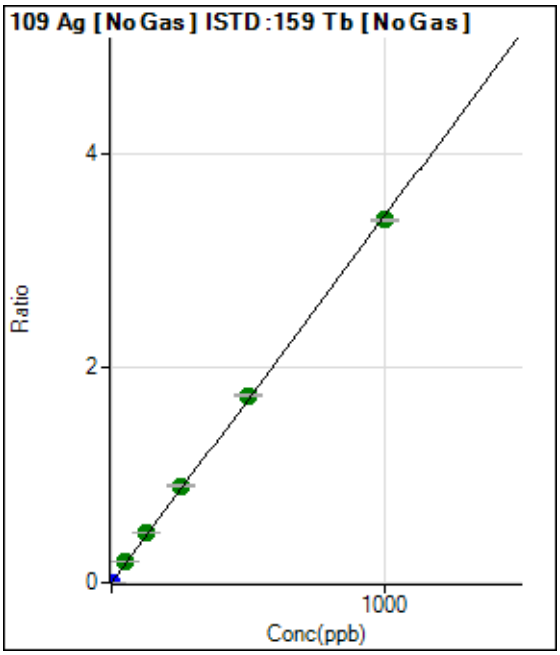
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.44	0.0000	P	13.5
2	☐	1.000	1.119	554.46	0.0001	P	3.5
3	☐	50.000	54.966	26944.12	0.0030	P	2.4
4	☐	125.000	131.279	64557.05	0.0072	P	0.4
5	☐	250.000	261.100	127956.46	0.0144	P	1.3
6	☐	500.000	504.350	248251.69	0.0278	P	0.9
7	☐	1000.000	994.017	480512.08	0.0549	P	0.7
8	☐			184.45	0.0000	P	9.6

y = 5.5207E-005 * x + 1.6098E-006
R = 0.9999
DL = 0.01177
BEC = 0.02916

Weight: <None>
Min Conc: 0

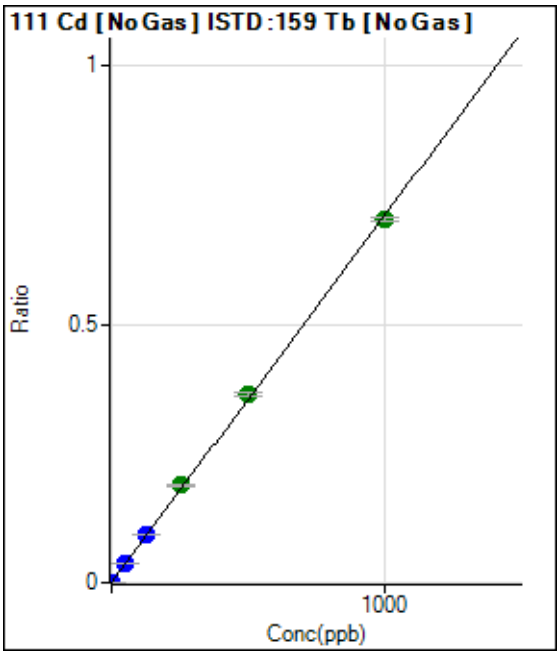


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	81.11	0.0000	P	10.5
2	☐	1.000	1.104	33045.24	0.0038	P	2.8
3	☐	50.000	56.559	1713799.50	0.1931	A	1.3
4	☐	125.000	135.397	4116801.36	0.4623	A	0.6
5	☐	250.000	264.215	8006635.09	0.9021	A	1.5
6	☐	500.000	509.620	15513060.33	1.7399	A	1.0
7	☐	1000.000	990.009	29595175.95	3.3801	A	0.8
8	☐			2894.78	0.0003	P	13.6

y = 0.0034 * x + 9.0400E-006
R = 0.9998
DL = 0.0008305
BEC = 0.002648

Weight: <None>
Min Conc: 0

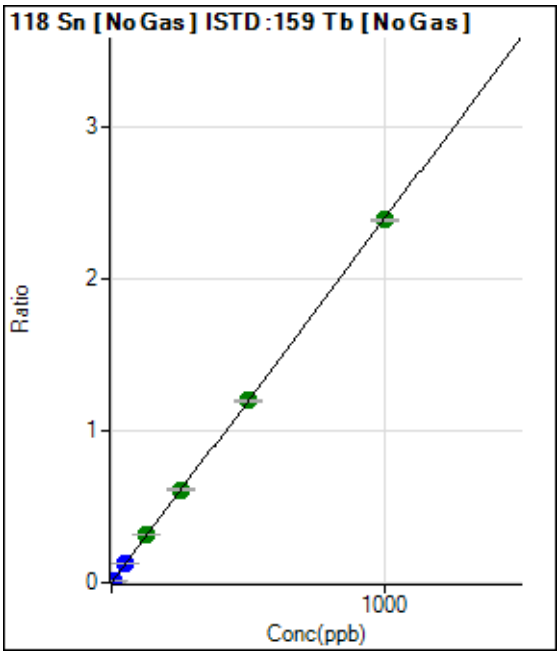
Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3390.84	0.0004	P	1.9
2	☐	1.000	1.165	10537.69	0.0012	P	2.1
3	☐	50.000	53.664	341556.36	0.0385	P	1.0
4	☐	125.000	131.029	831965.34	0.0934	P	0.8
5	☐	250.000	264.661	1671367.38	0.1883	A	1.7
6	☐	500.000	513.278	3252825.28	0.3649	A	2.3
7	☐	1000.000	988.759	6150866.15	0.7025	A	1.1
8	☐			4078.25	0.0005	P	0.5

y = 7.1011E-004 * x + 3.7789E-004
R = 0.9997
DL = 0.03042
BEC = 0.5322

Weight: <None>
Min Conc: 0

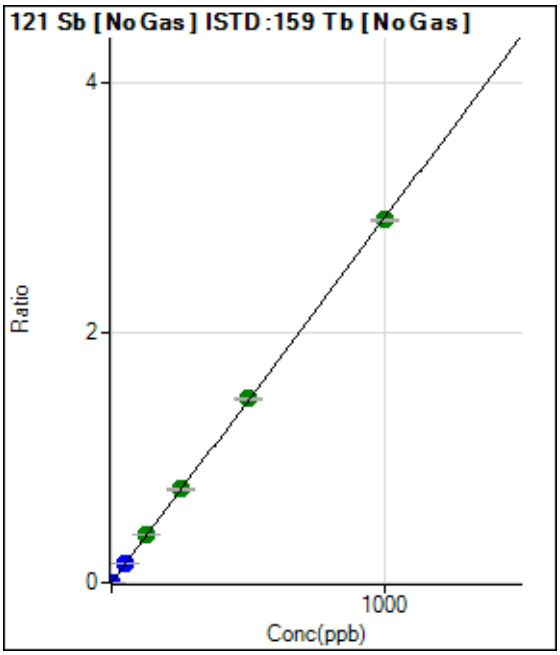


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3468.25	0.0004	P	1.3
2	☐	5.000	5.344	115211.89	0.0132	P	0.6
3	☐	50.000	51.371	1094587.06	0.1233	P	1.1
4	☐	125.000	131.107	2798129.23	0.3142	A	1.0
5	☐	250.000	256.011	5441935.41	0.6131	A	1.3
6	☐	500.000	501.258	10697963.94	1.2000	A	1.0
7	☐	1000.000	997.035	20896606.63	2.3866	A	0.6
8	☐			6566.09	0.0008	P	5.2

y = 0.0024 * x + 3.8652E-004
R = 1.0000
DL = 0.006202
BEC = 0.1615

Weight: <None>
Min Conc: 0

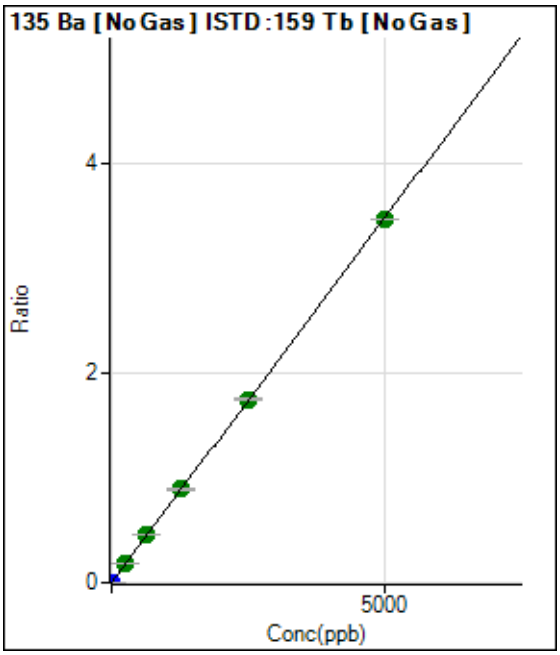
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	76.67	0.0000	P	34.4
2	☐	2.000	2.133	54393.15	0.0062	P	1.2
3	☐	50.000	51.631	1334939.85	0.1504	P	1.1
4	☐	125.000	131.106	3401202.52	0.3819	A	0.9
5	☐	250.000	255.988	6619021.71	0.7457	A	1.2
6	☐	500.000	504.082	13092320.91	1.4685	A	1.1
7	☐	1000.000	995.617	25395113.79	2.9004	A	0.6
8	☐			15286.41	0.0018	P	3.1

y = 0.0029 * x + 8.5427E-006
R = 1.0000
DL = 0.003029
BEC = 0.002932

Weight: <None>
Min Conc: 0

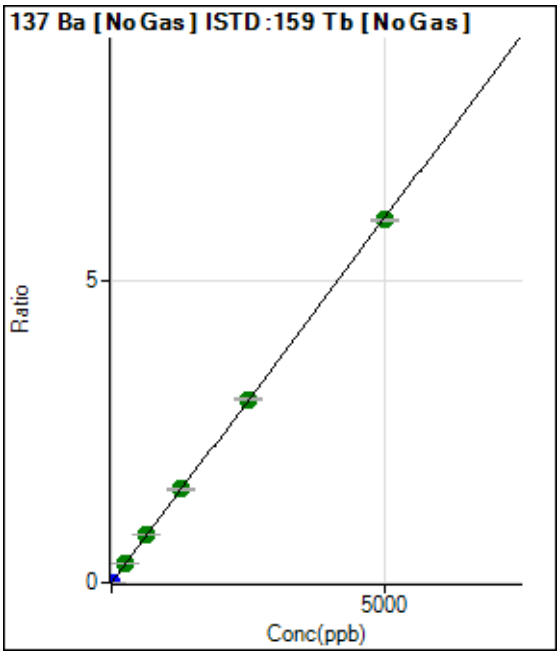


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	162.22	0.0000	P	4.1
2	☐	10.000	10.785	65849.05	0.0075	P	1.0
3	☐	250.000	268.932	1663356.16	0.1874	A	2.0
4	☐	625.000	654.816	4061807.93	0.4562	A	2.5
5	☐	1250.000	1287.419	7960750.02	0.8969	A	1.5
6	☐	2500.000	2518.210	15640669.63	1.7544	A	0.6
7	☐	5000.000	4976.865	30358660.10	3.4672	A	0.1
8	☐			11542.79	0.0014	P	2.5

y = 6.9667E-004 * x + 1.8078E-005
R = 1.0000
DL = 0.003205
BEC = 0.02595

Weight: <None>
Min Conc: 0

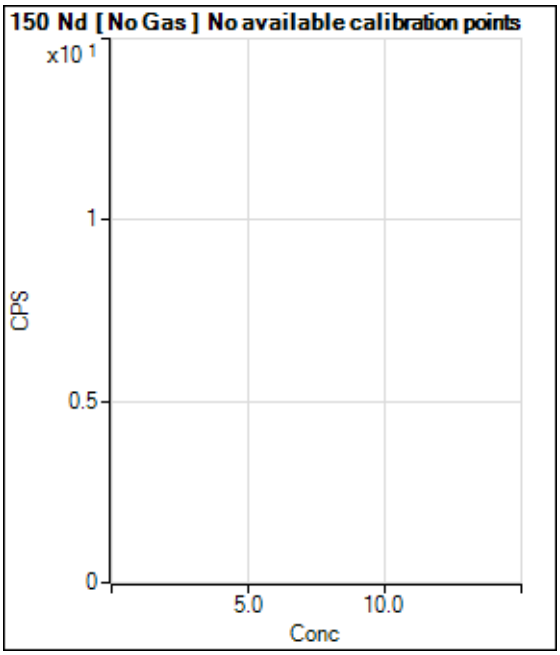
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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	311.12	0.0000	P	5.9
2	☐	10.000	10.914	115186.16	0.0132	P	0.6
3	☐	250.000	270.212	2887628.64	0.3254	A	1.7
4	☐	625.000	652.870	6999602.05	0.7861	A	1.6
5	☐	1250.000	1284.483	13724522.58	1.5466	A	2.9
6	☐	2500.000	2519.046	27036678.76	3.0330	A	1.9
7	☐	5000.000	4977.360	52473525.89	5.9928	A	0.6
8	☐			20369.89	0.0024	P	3.5

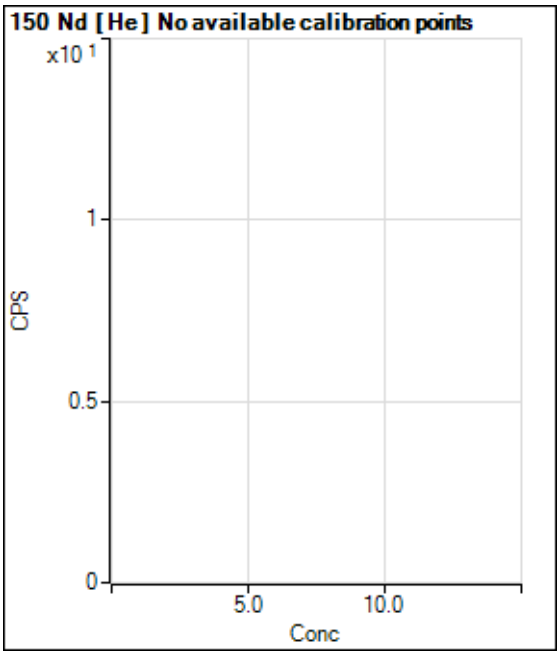
y = 0.0012 * x + 3.4672E-005
R = 1.0000
DL = 0.005096
BEC = 0.0288

Weight: <None>
Min Conc: 0

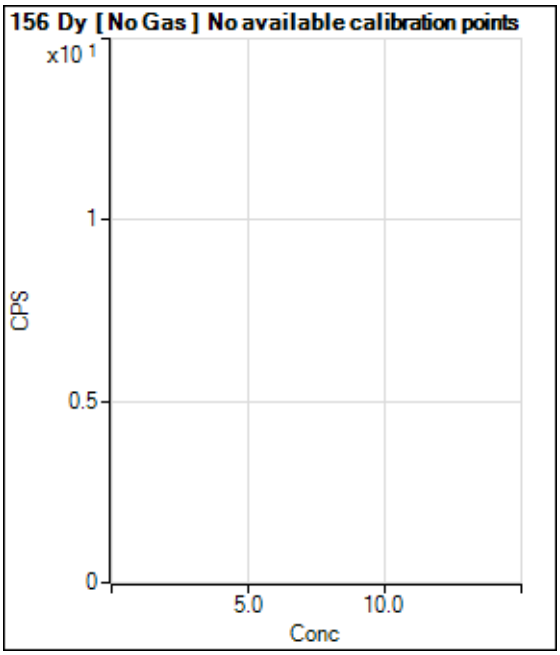


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			6.67		P	50.0
2	☐			14.45		P	26.7
3	☐			163.34		P	12.4
4	☐			282.23		P	7.2
5	☐			574.46		P	4.2
6	☐			1067.83		P	3.7
7	☐			2094.63		P	5.7
8	☐			441.12		P	9.4

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
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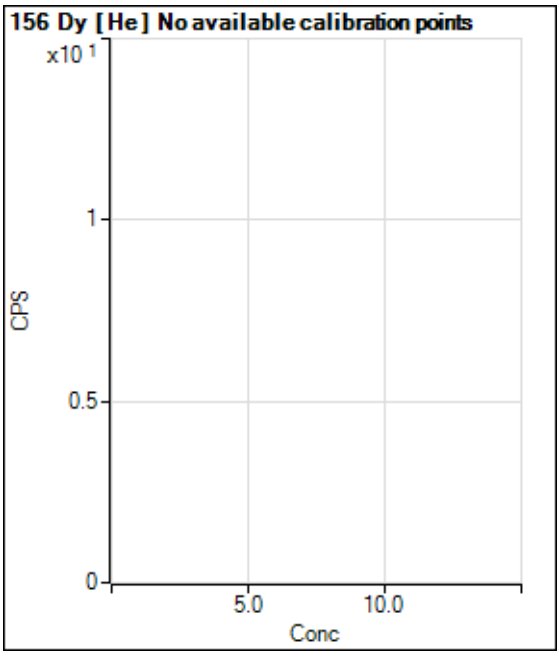


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			0.00		P	
2	☐			1.11		P	173.2
3	☐			4.44		P	173.2
4	☐			12.22		P	15.7
5	☐			31.11		P	27.0
6	☐			26.67		P	25.0
7	☐			110.00		P	16.0
8	☐			120.00		P	25.5

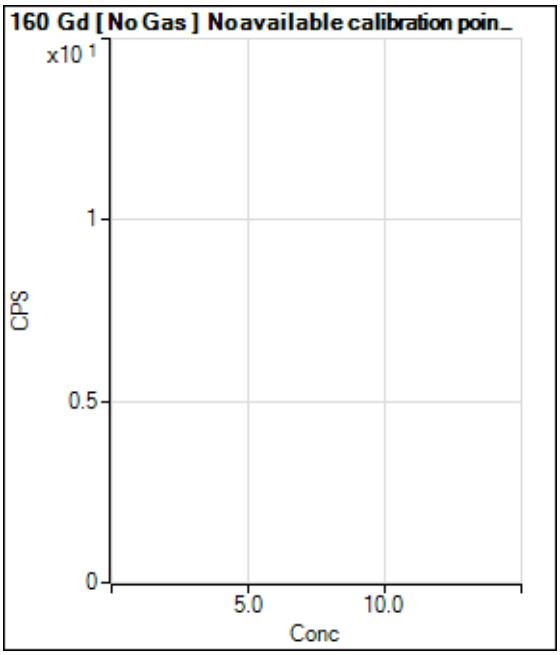


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			14.44		P	81.1
2	☐			17.78		P	28.6
3	☐			53.33		P	28.6
4	☐			92.22		P	11.6
5	☐			165.56		P	14.6
6	☐			281.12		P	6.7
7	☐			576.68		P	4.7
8	☐			860.04		P	5.7

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

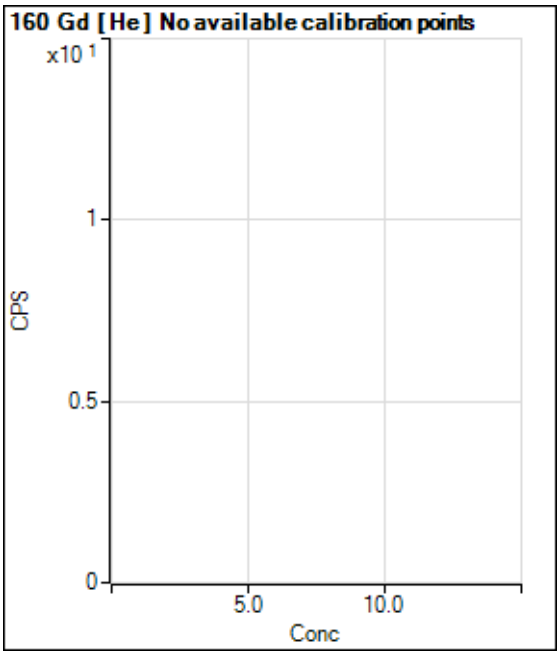


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			3.33		P	0.0
2	☐			7.78		P	24.7
3	☐			8.89		P	43.3
4	☐			14.45		P	26.7
5	☐			30.00		P	33.3
6	☐			56.67		P	35.8
7	☐			98.89		P	1.9
8	☐			263.34		P	7.9

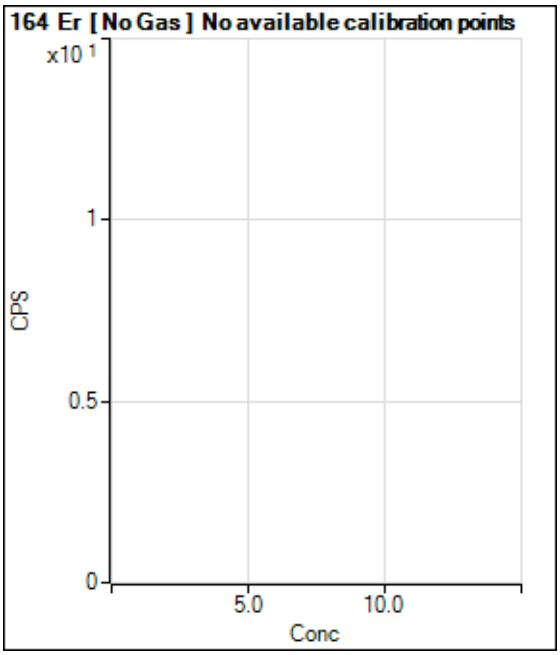


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			88.89		P	21.3
2	☐			104.44		P	13.3
3	☐			110.00		P	10.5
4	☐			136.67		P	21.3
5	☐			138.89		P	20.4
6	☐			216.67		P	17.7
7	☐			323.34		P	3.7
8	☐			828.92		P	4.7

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

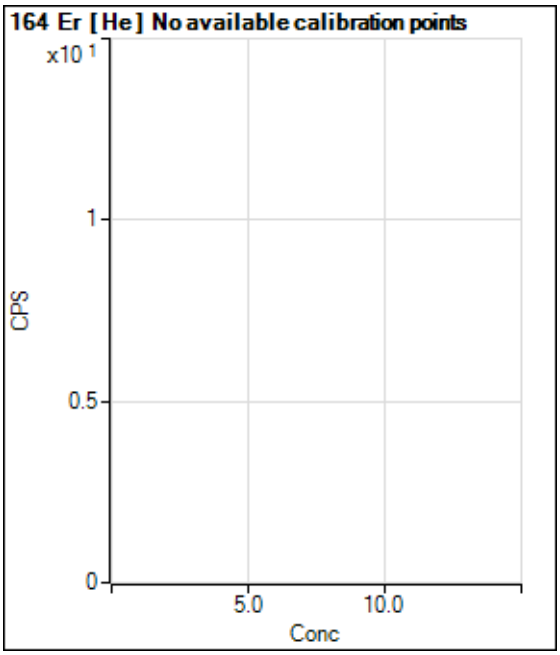


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			21.11		P	45.6
2	☐			18.89		P	40.7
3	☐			23.33		P	57.2
4	☐			23.33		P	37.8
5	☐			48.89		P	35.0
6	☐			74.45		P	5.2
7	☐			93.33		P	3.6
8	☐			334.46		P	14.2

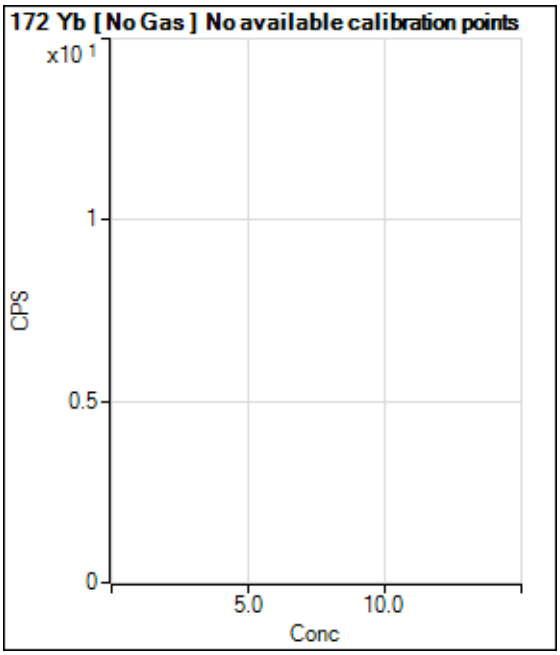


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1	☐			51.11		P	7.5
2	☐			50.00		P	0.0
3	☐			80.00		P	22.0
4	☐			95.56		P	26.2
5	☐			131.11		P	11.5
6	☐			224.45		P	19.1
7	☐			353.34		P	13.9
8	☐			987.83		P	7.1

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
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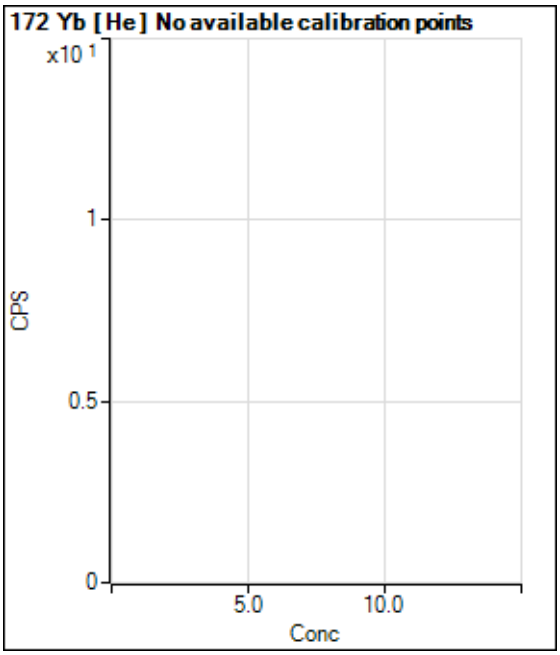


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			20.00		P	33.4
2	☐			22.22		P	22.9
3	☐			24.44		P	34.3
4	☐			41.11		P	18.7
5	☐			48.89		P	21.9
6	☐			67.78		P	5.7
7	☐			141.12		P	14.4
8	☐			386.68		P	8.2

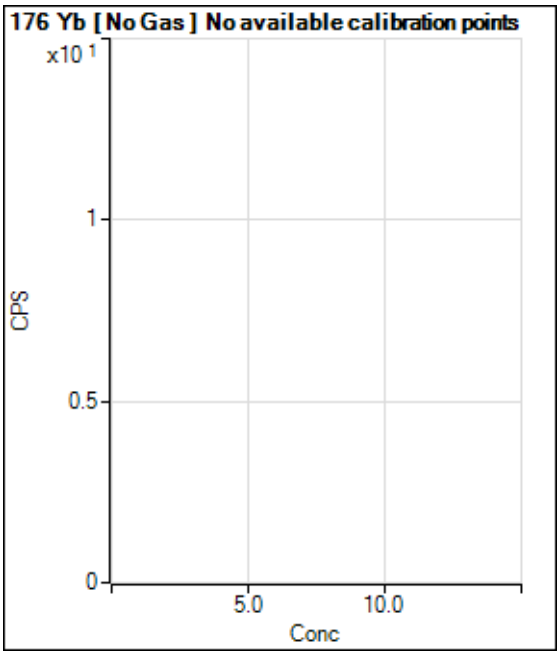


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			57.78		P	18.5
2	☐			43.33		P	20.4
3	☐			56.67		P	42.4
4	☐			95.56		P	22.4
5	☐			152.23		P	8.3
6	☐			233.34		P	19.2
7	☐			464.46		P	7.7
8	☐			1522.33		P	7.3

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

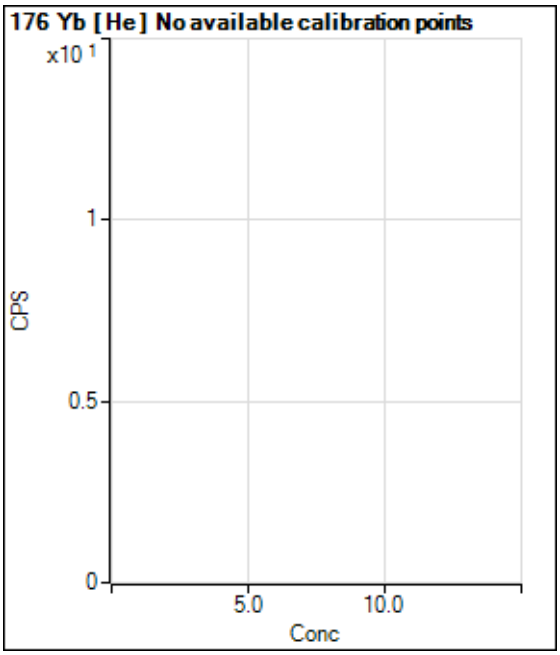


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			25.56		P	37.7
2	☐			12.22		P	41.7
3	☐			34.44		P	5.6
4	☐			44.44		P	11.5
5	☐			64.44		P	23.9
6	☐			97.78		P	30.7
7	☐			184.45		P	2.1
8	☐			750.03		P	5.0

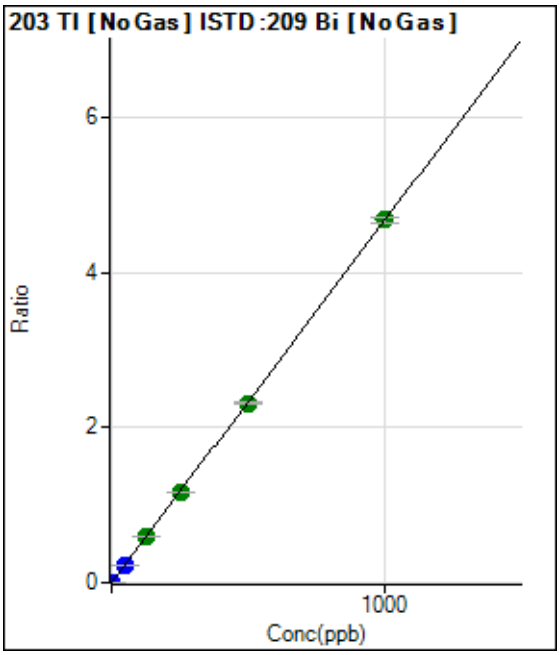


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1338.98		P	6.3
2	☐			1280.08		P	6.7
3	☐			6910.75		P	2.2
4	☐			15468.06		P	2.3
5	☐			29379.33		P	1.2
6	☐			56443.39		P	1.8
7	☐			111157.78		P	1.7
8	☐			2112.41		P	4.3

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			391.12		P	5.2
2	☐			350.01		P	17.2
3	☐			2495.82		P	4.0
4	☐			5803.54		P	2.7
5	☐			11014.68		P	0.9
6	☐			21485.29		P	0.4
7	☐			42105.80		P	1.2
8	☐			744.47		P	5.2

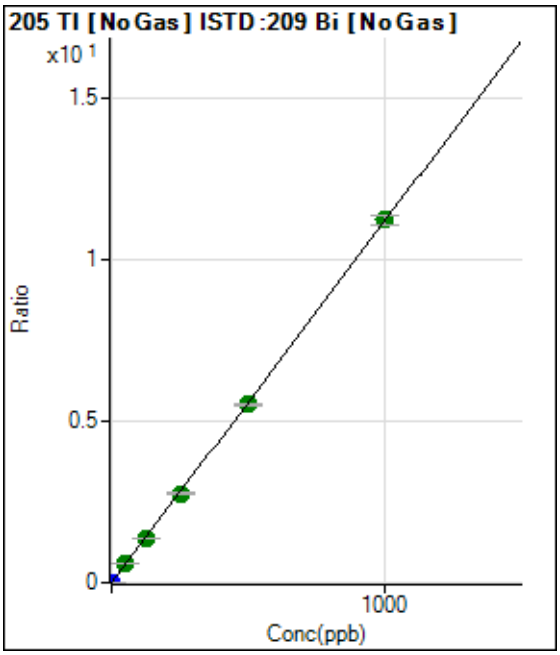


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	226.67	0.0000	P	3.9
2	☐	1.000	1.022	25088.73	0.0048	P	1.5
3	☐	50.000	49.458	1203997.16	0.2308	P	1.3
4	☐	125.000	126.409	3147865.51	0.5899	A	2.3
5	☐	250.000	250.387	6116279.77	1.1685	A	0.3
6	☐	500.000	495.583	11989466.77	2.3127	A	1.4
7	☐	1000.000	1001.963	22847830.21	4.6757	A	1.4
8	☐			2033.52	0.0005	P	10.1

y = 0.0047 * x + 4.2344E-005
R = 1.0000
DL = 0.001054
BEC = 0.009074

Weight: <None>
Min Conc: 0

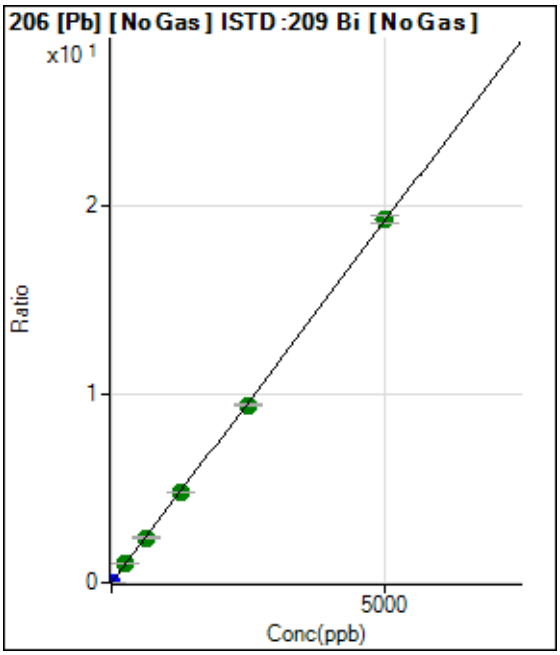
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Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	630.02	0.0001	P	8.7
2	☐	1.000	1.005	59161.85	0.0113	P	0.2
3	☐	50.000	51.458	2999704.19	0.5751	A	0.9
4	☐	125.000	123.707	7377300.93	1.3825	A	1.8
5	☐	250.000	247.244	14462527.84	2.7629	A	1.0
6	☐	500.000	492.758	28551839.57	5.5064	A	0.6
7	☐	1000.000	1004.399	54842465.30	11.2236	A	2.7
8	☐			4764.28	0.0011	P	12.0

y = 0.0112 * x + 1.1761E-004
R = 1.0000
DL = 0.002743
BEC = 0.01052

Weight: <None>
Min Conc: 0

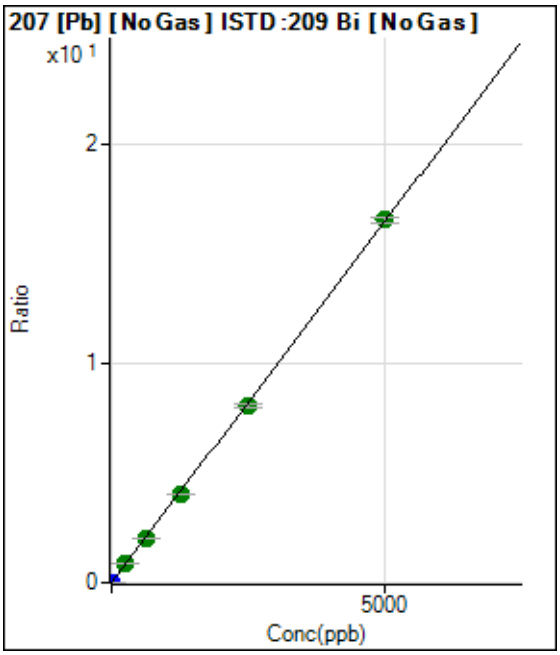


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	911.15	0.0002	P	7.9
2	☐	1.000	0.973	20313.78	0.0039	P	1.4
3	☐	250.000	257.246	5137689.13	0.9851	A	0.6
4	☐	625.000	618.257	12631321.06	2.3673	A	2.5
5	☐	1250.000	1243.667	24924284.07	4.7617	A	0.7
6	☐	2500.000	2459.490	48819888.16	9.4167	A	1.0
7	☐	5000.000	5022.318	93959933.04	19.2289	A	2.0
8	☐			94093.67	0.0217	P	2.2

y = 0.0038 * x + 1.7023E-004
R = 0.9999
DL = 0.01051
BEC = 0.04446

Weight: <None>
Min Conc: 0

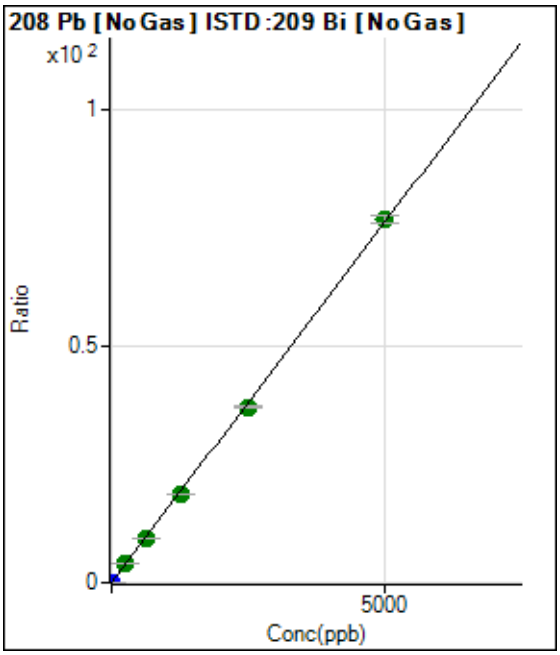
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Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	737.81	0.0001	P	5.5
2	☐	1.000	1.000	17881.32	0.0034	P	0.5
3	☐	250.000	255.239	4384726.36	0.8407	A	0.5
4	☐	625.000	610.213	10724946.51	2.0097	A	1.0
5	☐	1250.000	1231.321	21225770.93	4.0551	A	0.3
6	☐	2500.000	2458.992	41975627.15	8.0980	A	2.5
7	☐	5000.000	5026.760	80891189.35	16.5541	A	1.9
8	☐			82114.68	0.0189	P	1.3

y = 0.0033 * x + 1.3775E-004
R = 0.9999
DL = 0.006945
BEC = 0.04183

Weight: <None>
Min Conc: 0

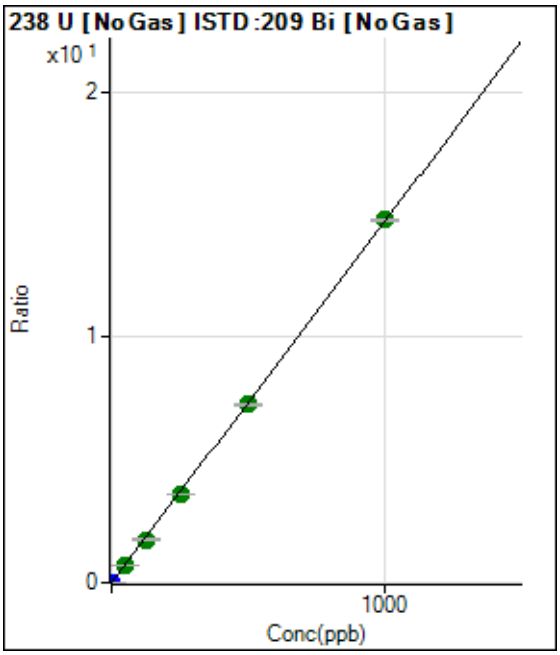


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3526.90	0.0007	P	2.5
2	☐	1.000	0.988	81876.38	0.0157	P	1.1
3	☐	250.000	254.356	20212906.64	3.8754	A	0.2
4	☐	625.000	609.298	49540385.52	9.2825	A	0.5
5	☐	1250.000	1231.821	98227749.23	18.7658	A	0.4
6	☐	2500.000	2441.357	192798794.9	37.1914	A	1.6
7	☐	5000.000	5035.611	374843279.4	76.7114	A	2.1
8	☐			376072.02	0.0867	P	1.6

y = 0.0152 * x + 6.5870E-004
R = 0.9999
DL = 0.003274
BEC = 0.04324

Weight: <None>
Min Conc: 0

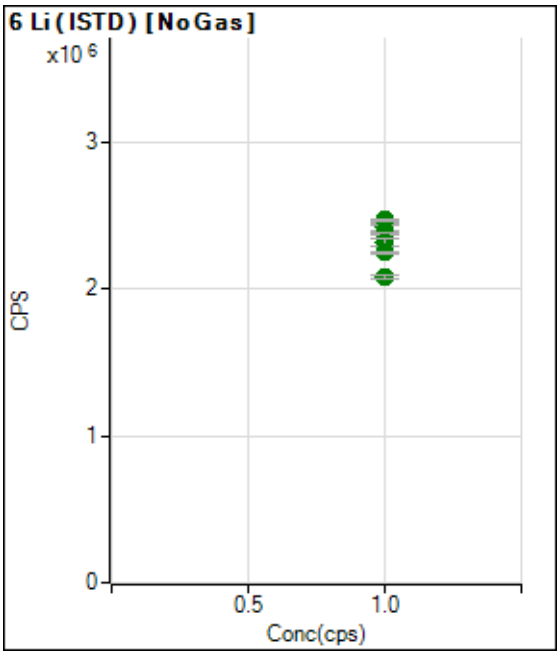
Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	431.13	0.0001	P	8.4
2	☐	1.000	0.997	76784.80	0.0147	P	1.2
3	☐	50.000	50.130	3841727.83	0.7366	A	1.5
4	☐	125.000	119.313	9356600.83	1.7530	A	1.1
5	☐	250.000	243.774	18746600.97	3.5816	A	1.1
6	☐	500.000	494.093	37633163.61	7.2593	A	1.6
7	☐	1000.000	1005.214	72169481.70	14.7688	A	0.7
8	☐			3501.65	0.0008	P	12.8

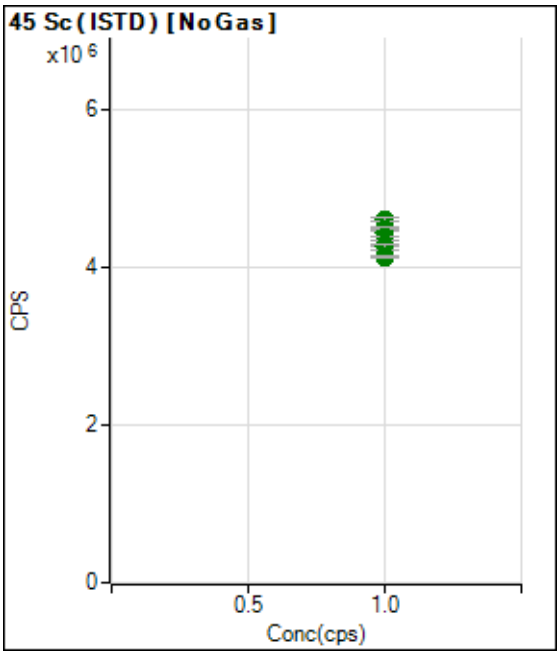
y = 0.0147 * x + 8.0557E-005
R = 0.9999
DL = 0.001375
BEC = 0.005483

Weight: <None>
Min Conc: 0

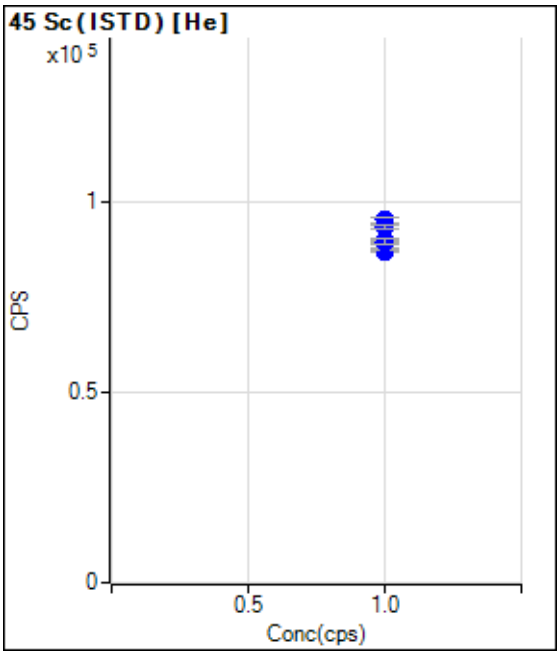


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2458834.89		A	1.1
2	☐	1.000		2423135.11		A	2.1
3	☐	1.000		2433763.29		A	0.4
4	☐	1.000		2467953.75		A	0.8
5	☐	1.000		2379119.80		A	0.4
6	☐	1.000		2314435.93		A	2.0
7	☐	1.000		2244354.35		A	0.7
8	☐	1.000		2079985.71		A	0.9

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

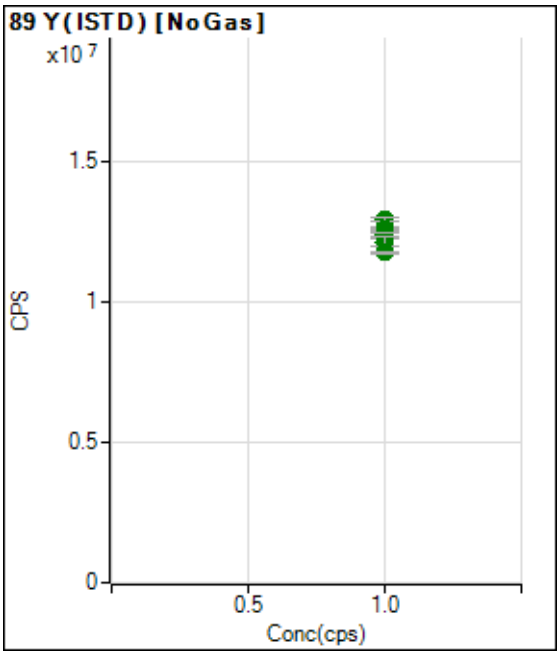


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4604905.59		A	1.2
2	☐	1.000		4430421.36		A	1.4
3	☐	1.000		4494910.87		A	0.5
4	☐	1.000		4394805.94		A	0.3
5	☐	1.000		4304193.20		A	1.6
6	☐	1.000		4262552.23		A	1.4
7	☐	1.000		4137451.46		A	1.1
8	☐	1.000		4126990.94		A	0.6

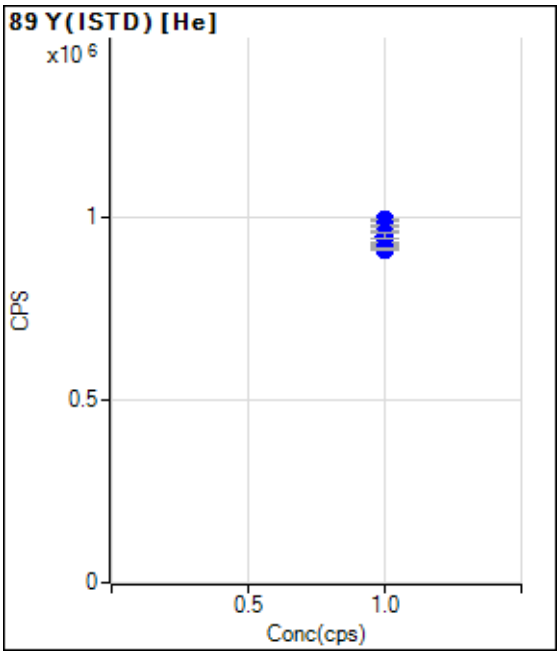


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		95183.50		P	1.3
2	☐	1.000		93458.91		P	0.9
3	☐	1.000		89780.29		P	0.9
4	☐	1.000		89373.36		P	0.7
5	☐	1.000		86824.44		P	0.4
6	☐	1.000		87486.26		P	0.8
7	☐	1.000		89397.93		P	0.2
8	☐	1.000		89491.42		P	2.0

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

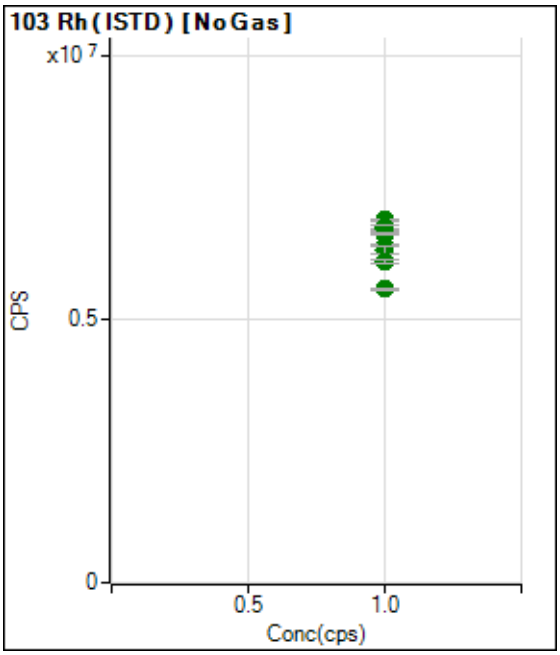


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		12918144.39		A	0.9
2	☐	1.000		12607185.92		A	0.6
3	☐	1.000		12449557.73		A	1.6
4	☐	1.000		12521074.81		A	0.6
5	☐	1.000		12365519.26		A	1.5
6	☐	1.000		12385726.90		A	1.2
7	☐	1.000		12140962.32		A	2.6
8	☐	1.000		11771524.41		A	0.6

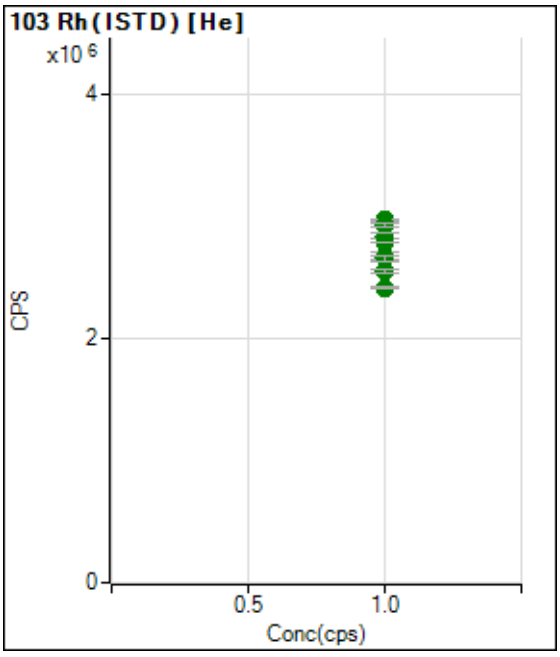


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		993238.10		P	0.4
2	☐	1.000		976610.77		P	0.7
3	☐	1.000		960483.58		P	0.5
4	☐	1.000		943296.14		P	0.4
5	☐	1.000		930028.60		P	0.2
6	☐	1.000		916791.82		P	0.4
7	☐	1.000		913098.00		P	0.7
8	☐	1.000		947999.53		P	1.7

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

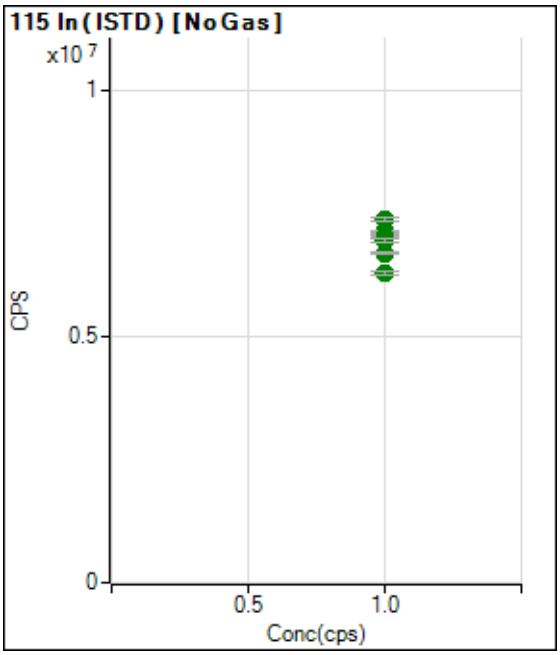


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6894579.14		A	0.7
2	☐	1.000		6746851.50		A	1.0
3	☐	1.000		6735375.46		A	1.6
4	☐	1.000		6628227.68		A	0.2
5	☐	1.000		6412495.81		A	1.0
6	☐	1.000		6316395.26		A	2.0
7	☐	1.000		6109625.05		A	1.0
8	☐	1.000		5573319.08		A	0.4

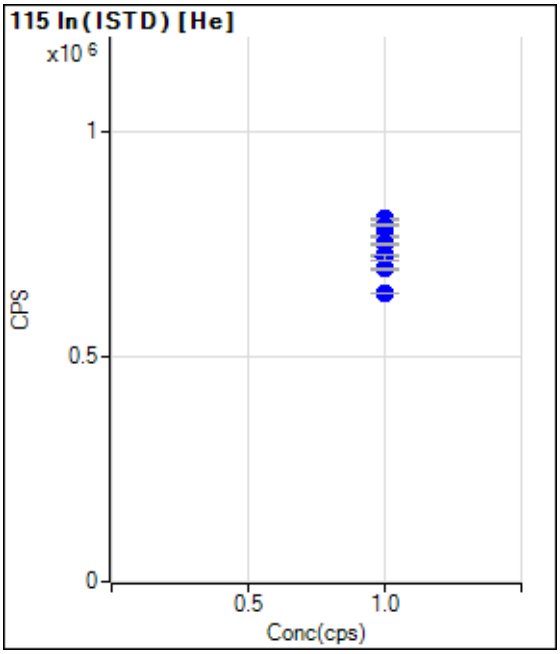


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2965576.10		A	0.6
2	☐	1.000		2917717.63		A	1.1
3	☐	1.000		2835681.94		A	1.2
4	☐	1.000		2777683.50		A	0.2
5	☐	1.000		2667007.37		A	2.2
6	☐	1.000		2648973.69		A	1.2
7	☐	1.000		2542235.74		A	1.2
8	☐	1.000		2409873.73		A	0.8

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

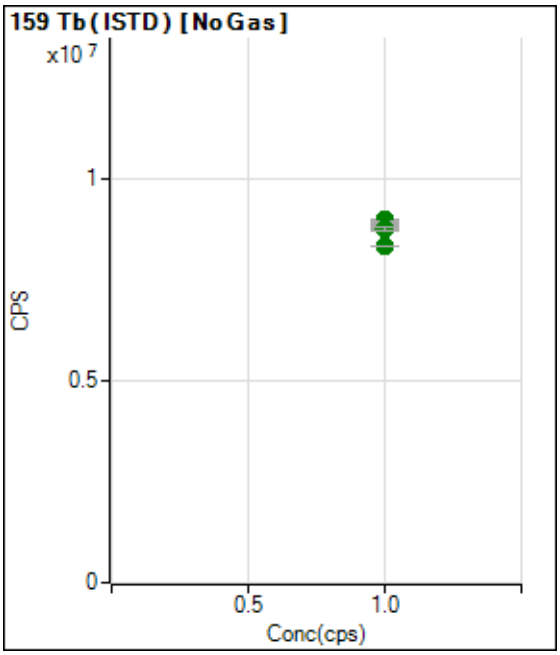


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		7370497.59		A	1.1
2	☐	1.000		7067175.54		A	0.3
3	☐	1.000		7139265.95		A	0.6
4	☐	1.000		7016598.36		A	0.6
5	☐	1.000		6952273.74		A	1.1
6	☐	1.000		6693648.43		A	0.5
7	☐	1.000		6283222.56		A	1.1
8	☐	1.000		6278398.88		A	1.0

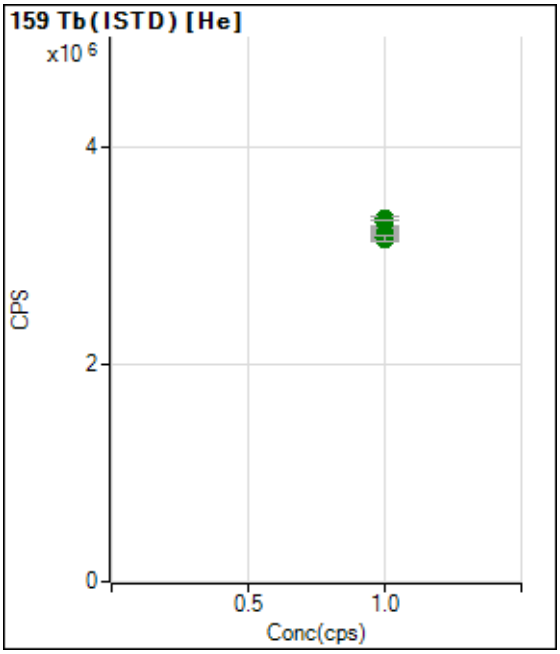


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		805620.30		P	0.4
2	☐	1.000		790623.80		P	0.6
3	☐	1.000		768391.81		P	0.5
4	☐	1.000		750024.55		P	0.4
5	☐	1.000		724851.17		P	0.5
6	☐	1.000		693965.74		P	0.6
7	☐	1.000		640930.63		P	0.5
8	☐	1.000		719645.23		P	1.8

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

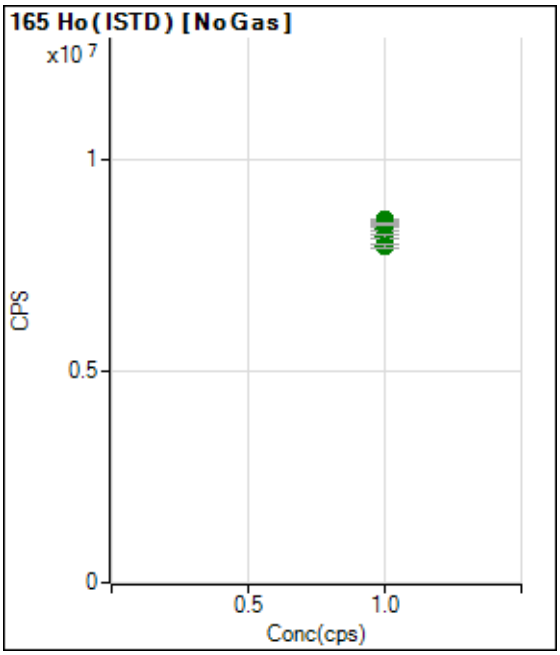


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		8973117.16		A	0.2
2	☐	1.000		8743130.91		A	0.6
3	☐	1.000		8876205.01		A	1.9
4	☐	1.000		8905773.06		A	1.7
5	☐	1.000		8877329.24		A	2.1
6	☐	1.000		8915286.60		A	1.0
7	☐	1.000		8755811.60		A	0.8
8	☐	1.000		8322977.52		A	0.5

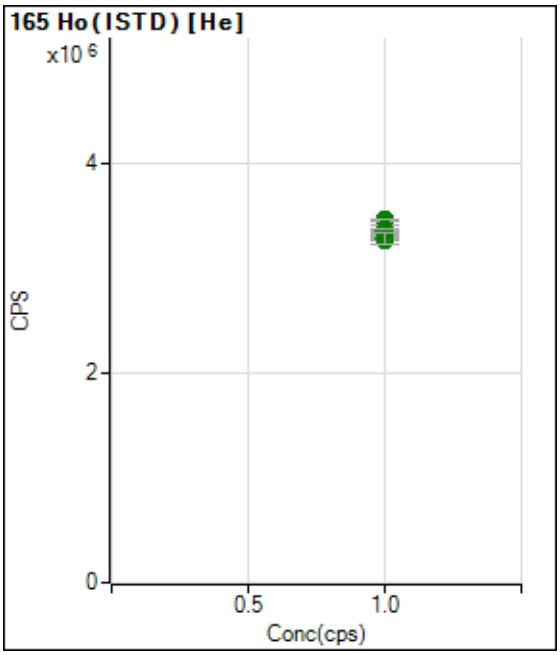


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3339979.71		A	1.2
2	☐	1.000		3309589.74		A	1.6
3	☐	1.000		3230007.80		A	0.7
4	☐	1.000		3243469.15		A	0.8
5	☐	1.000		3212908.91		A	1.0
6	☐	1.000		3184562.80		A	0.9
7	☐	1.000		3152043.88		A	0.6
8	☐	1.000		3163151.13		A	1.5

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

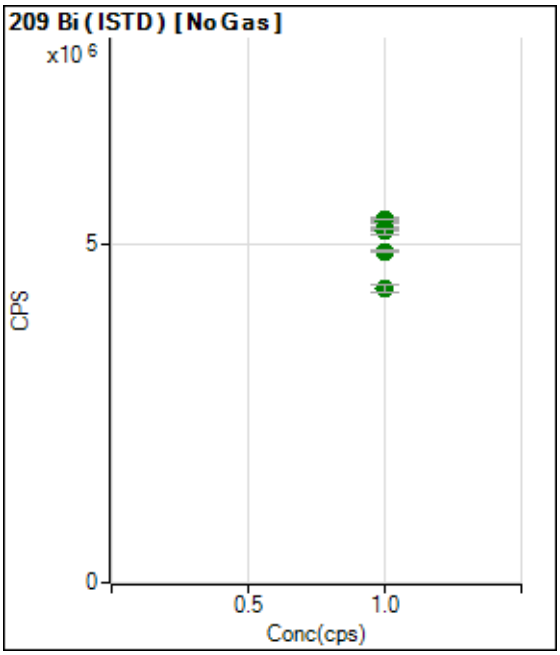


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		8573325.36		A	0.3
2	☐	1.000		8376440.71		A	1.2
3	☐	1.000		8465724.59		A	1.2
4	☐	1.000		8561332.17		A	1.0
5	☐	1.000		8554879.52		A	0.3
6	☐	1.000		8477258.35		A	0.9
7	☐	1.000		8168193.98		A	1.0
8	☐	1.000		7969466.76		A	1.2

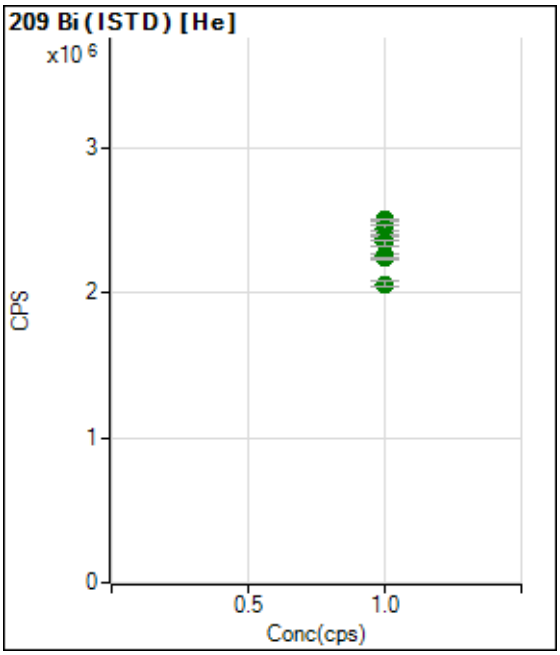


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3457331.03		A	0.6
2	☐	1.000		3380224.39		A	1.3
3	☐	1.000		3320604.15		A	1.3
4	☐	1.000		3348570.19		A	1.1
5	☐	1.000		3284836.93		A	1.5
6	☐	1.000		3275114.74		A	0.7
7	☐	1.000		3264253.42		A	0.4
8	☐	1.000		3281955.33		A	3.0

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		1.000		5354389.37		A	1.0
2		1.000		5213446.69		A	0.6
3		1.000		5215635.72		A	0.5
4		1.000		5337183.57		A	1.5
5		1.000		5234450.51		A	1.0
6		1.000		5184885.51		A	1.7
7		1.000		4886712.91		A	0.7
8		1.000		4337893.68		A	2.2



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1		1.000		2505880.61		A	0.4
2		1.000		2450172.05		A	1.9
3		1.000		2378201.60		A	1.5
4		1.000		2394199.10		A	0.5
5		1.000		2348314.55		A	1.5
6		1.000		2257800.28		A	0.8
7		1.000		2239281.32		A	0.4
8		1.000		2064612.55		A	2.2

US EPA Tune Check Report

Reviewed By:moh
On:4/29/2025 4:10 PM
Inst Id :P8
LB :LB135595

Operator Name	Jaswal
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\P8042925MS.b
Acq. Date-Time	2025-04-29 10:47:31
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		77185	771850.38			0.543	5.000
24		356049	3560487.28			0.514	5.000
25		48975	489753.39			0.174	5.000
26		59326	593255.31			0.395	5.000
59		328575	3285748.09			0.776	5.000
113		40161	401613.96			0.334	5.000
115		515923	5159232.53			0.333	5.000
206		120406	1204063.21			1.591	5.000
207		102768	1027677.46			0.941	5.000
208		252491	2524911.62			0.929	5.000
220		1	5.10			27.205	

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	77236	76696	77271	77804	76918
24	358779	356876	354067	355076	355446
25	48962	48874	48923	49089	49028
26	59382	58993	59438	59607	59208
59	326775	328493	329263	332457	325887
113	40083	40039	40217	40370	40098
115	517497	517349	513676	516543	514552
206	117438	119577	121209	122068	121740
207	101345	102257	103393	103102	103743
208	249605	250493	253775	253416	255167

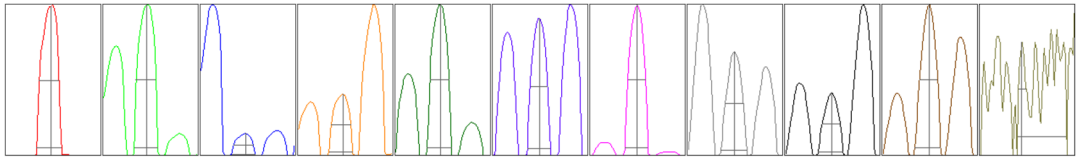
US EPA Tune Check Report

Reviewed By:moh
On:4/29/2025 4:10 PM
Inst Id :P8
LB :LB135595

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	0	0	0	1	1

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	129878.06	8.95	8.90 - 9.10	
24	597142.69	23.90	23.90 - 24.10	
25	84078.43	24.95	24.90 - 25.10	
26	96487.51	25.95	25.90 - 26.10	
59	577984.20	58.95	58.90 - 59.10	
113	77663.60	113.00	112.90 - 113.10	
115	984792.34	115.00	114.90 - 115.10	
206	222623.48	206.00	205.90 - 206.10	
207	191522.09	207.00	206.90 - 207.10	
208	463062.92	208.00	207.90 - 208.10	
220	0.90	219.85	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.63	0.782	0.900	
24	0.64	0.742	0.900	
25	0.62	0.741	0.900	
26	0.63	0.752	0.900	
59	0.60	0.777	0.900	
113	0.55	0.729	0.900	
115	0.55	0.733	0.900	
206	0.56	0.818	0.900	
207	0.56	0.785	0.900	
208	0.57	0.812	0.900	
220	0.23	1.530		

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:4/29/2025 4:10 PM
Inst Id :P8
LB :LB135595

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	9.2 V	Deflect	14.2 V
Extract 2	-205.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-90 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	140 V		

QP Parameters

Mass Gain	104	Axis Gain	0.9967	QP Bias	-4.0 V
Mass Offset	126	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.6 mm	Torch V	-0.3 mm

EM

Discriminator	4.5 mV	Analog HV	2192 V	Pulse HV	953 V

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		63752	637518.10			0.372	
89		54946	549460.72			0.493	
205		78606	786064.67			0.105	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	63964	63429	63600	63787	63980
89	55272	55147	54677	54673	54962
205	78582	78660	78686	78476	78630

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	9.2 V	Deflect	2.8 V

US EPA Tune Check Report

Reviewed By:moh
On:4/29/2025 4:10
PM
Inst Id :P8
LB :LB135595

Extract 2	-205.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-90 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	104	Axis Gain	0.9967	QP Bias	-13.0 V
Mass Offset	126	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.6 mm	Torch V	-0.3 mm

EM

Discriminator	4.5 mV	Analog HV	2192 V	Pulse HV	953 V

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:31:50	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	-0.47	0.09	0.38	0.00	N/A	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	N/A	ppb
Arsenic	75-2	0.01	-0.01	-0.01	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	0.16	-0.15	0.00	0.00	N/A	ppb
Cadmium	111-1	0.01	-0.01	0.00	0.00	N/A	ppb
Calcium	43-1	0.99	-0.34	-0.65	0.00	N/A	ppb
Calcium	44-1	0.26	0.09	-0.35	0.00	N/A	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	0.00	-0.01	0.00	N/A	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	N/A	ppb
Copper	63-2	0.00	0.01	-0.01	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	0.00	0.16	-0.16	0.00	N/A	ppb
Iron	56-2	-0.04	-0.02	0.06	0.00	N/A	ppb
Iron	57-2	0.05	-0.22	0.17	0.00	N/A	ppb
Krypton	83-1						cps
Lead	206-1	0.00	0.00	0.00	0.00	N/A	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:31:50	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	-0.02	-0.08	0.10	0.00	N/A	ppb
Manganese	55-2	-0.04	0.01	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	0.00	-0.02	0.02	0.00	N/A	ppb
Phosphorus	31-2	-13.52	-10.54	-26.64	-16.90		ppb
Potassium	39-2	0.12	1.08	-1.20	0.00	N/A	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	0.03	0.14	-0.16	0.00	N/A	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.44	-0.08	-0.36	0.00	N/A	ppb
Silicon	28-1	1.16	0.43	-1.59	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	0.35	-0.12	-0.23	0.00	N/A	ppb
Strontium	86-1	0.00	0.00	0.00	0.00	N/A	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	N/A	ppb
Sulfur	34-1	-100.07	-5.34	-152.16	-85.86		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	0.00	0.00	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

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:31:50	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.01	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	0.04	0.01	-0.05	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

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:38:36	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	21.95	23.81	21.99	22.58	4.69	ppb
Antimony	121-1	2.12	2.11	2.16	2.13	1.18	ppb
Arsenic	75-2	1.05	1.31	1.24	1.20	11.36	ppb
Barium	135-1	10.79	10.67	10.89	10.79	1.05	ppb
Barium	137-1	10.98	10.84	10.91	10.91	0.64	ppb
Beryllium	9-1	1.19	1.21	1.24	1.21	2.02	ppb
Bismuth	209-1				97		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	1.07	1.15	1.13	1.12	3.55	ppb
Cadmium	106-1	0.87	1.07	1.22	1.05	16.95	ppb
Cadmium	111-1	1.17	1.13	1.20	1.17	3.10	ppb
Calcium	43-1	553.98	582.11	575.52	570.54	2.58	ppb
Calcium	44-1	545.77	567.21	569.25	560.74	2.32	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.16	2.21	2.18	2.18	1.00	ppb
Cobalt	59-2	1.18	1.22	1.21	1.21	1.66	ppb
Copper	63-2	2.38	2.44	2.37	2.40	1.61	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				98		%
Holmium	165-2				98		%
Indium	115-1				96		%
Indium	115-2				98		%
Iron	54-2	63.27	62.45	61.58	62.43	1.36	ppb
Iron	56-2	60.09	61.02	61.00	60.70	0.88	ppb
Iron	57-2	63.13	60.96	56.52	60.20	5.60	ppb
Krypton	83-1						cps
Lead	206-1	0.96	0.97	0.99	0.97	1.46	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:38:36	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1.00	1.00	0.99	1.00	0.53	ppb
Lead	208-1	0.98	0.99	1.00	0.99	1.19	ppb
Lithium	6-1				99		%
Magnesium	24-2	600.92	611.43	599.74	604.03	1.07	ppb
Manganese	55-2	1.17	1.10	1.07	1.11	4.65	ppb
Molybdenum	94-1	6.07	6.20	6.17	6.15	1.08	ppb
Molybdenum	95-1	5.21	5.36	5.31	5.29	1.39	ppb
Molybdenum	96-1	5.24	5.36	5.36	5.32	1.28	ppb
Molybdenum	97-1	5.04	5.34	5.21	5.20	2.98	ppb
Molybdenum	98-1	5.13	5.34	5.19	5.22	2.07	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.18	1.18	1.22	1.19	1.98	ppb
Phosphorus	31-2	16.87	11.99	21.84	16.90	29.16	ppb
Potassium	39-2	539.41	550.49	545.49	545.13	1.02	ppb
Rhodium	103-1				98		%
Rhodium	103-2				98		%
Scandium	45-1				96		%
Scandium	45-2				98		%
Selenium	82-1	5.55	5.92	6.01	5.83	4.20	ppb
Selenium	77-2	10.35	7.98	5.57	7.97	30.00	ppb
Selenium	78-2	5.26	7.15	3.43	5.28	35.26	ppb
Silicon	28-1	2.43	1.28	3.94	2.55	52.37	ppb
Silver	107-1	1.09	1.10	1.13	1.11	2.02	ppb
Silver	109-1	1.08	1.09	1.14	1.10	2.78	ppb
Sodium	23-2	597.28	602.54	603.66	601.16	0.57	ppb
Strontium	86-1	1.05	1.09	1.09	1.08	2.13	ppb
Strontium	88-1	1.04	1.08	1.07	1.06	2.12	ppb
Sulfur	34-1	-65.04	171.89	150.72	85.86	152.70	ppb
Terbium	159-1				97		%
Terbium	159-2				99		%
Thallium	203-1	1.01	1.04	1.02	1.02	1.49	ppb
Thallium	205-1	1.00	1.01	1.01	1.00	0.22	ppb
Tin	118-1	5.31	5.38	5.34	5.34	0.63	ppb
Titanium	47-1	5.32	5.45	5.59	5.45	2.51	ppb
Uranium	238-1	0.99	1.01	0.99	1.00	1.25	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:38:36	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.57	5.68	5.54	5.60	1.36	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				98		%
Yttrium	89-2				98		%
Zinc	66-2	5.76	5.68	5.70	5.71	0.76	ppb
Zirconium	90-1	1.02	1.06	1.05	1.04	2.06	ppb
Zirconium	91-1	1.01	1.04	1.09	1.05	3.77	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:41:58	DataFile Name :	007CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1104.45	1120.49	1109.81	1111.58	0.73	ppb
Antimony	121-1	52.20	51.57	51.12	51.63	1.05	ppb
Arsenic	75-2	51.60	51.74	52.37	51.90	0.80	ppb
Barium	135-1	267.31	264.56	274.92	268.93	2.00	ppb
Barium	137-1	274.44	265.52	270.68	270.21	1.66	ppb
Beryllium	9-1	56.78	57.52	57.02	57.10	0.66	ppb
Bismuth	209-1				97		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Cadmium	108-1	55.69	55.78	53.43	54.97	2.43	ppb
Cadmium	106-1	54.42	55.19	54.04	54.55	1.07	ppb
Cadmium	111-1	54.27	53.53	53.19	53.66	1.03	ppb
Calcium	43-1	5348.02	5441.63	5318.17	5369.28	1.20	ppb
Calcium	44-1	5273.98	5282.01	5227.99	5261.33	0.55	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	53.65	53.39	53.60	53.55	0.25	ppb
Cobalt	59-2	54.45	55.23	54.91	54.86	0.71	ppb
Copper	63-2	567.48	580.13	571.65	573.09	1.13	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				96		%
Indium	115-1				97		%
Indium	115-2				95		%
Iron	54-2	2949.85	2965.47	2950.25	2955.19	0.30	ppb
Iron	56-2	2945.99	3012.24	2927.43	2961.89	1.51	ppb
Iron	57-2	2887.66	2912.22	2885.50	2895.13	0.51	ppb
Krypton	83-1						cps
Lead	206-1	258.82	257.32	255.60	257.25	0.63	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:41:58	DataFile Name :	007CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	253.82	256.58	255.32	255.24	0.54	ppb
Lead	208-1	253.75	254.57	254.74	254.36	0.21	ppb
Lithium	6-1				99		%
Magnesium	24-2	5772.40	5763.52	5765.76	5767.23	0.08	ppb
Manganese	55-2	531.47	535.09	538.53	535.03	0.66	ppb
Molybdenum	94-1	524.28	518.89	512.02	518.40	1.19	ppb
Molybdenum	95-1	523.09	524.98	526.53	524.87	0.33	ppb
Molybdenum	96-1	530.87	528.65	521.30	526.94	0.95	ppb
Molybdenum	97-1	534.48	531.67	512.62	526.26	2.26	ppb
Molybdenum	98-1	523.19	517.85	508.48	516.51	1.44	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	54.07	54.24	54.06	54.12	0.19	ppb
Phosphorus	31-2	1024.21	1140.49	1136.23	1100.31	5.99	ppb
Potassium	39-2	2644.95	2662.17	2658.04	2655.05	0.34	ppb
Rhodium	103-1				98		%
Rhodium	103-2				96		%
Scandium	45-1				98		%
Scandium	45-2				94		%
Selenium	82-1	53.87	56.72	54.33	54.98	2.79	ppb
Selenium	77-2	54.43	57.79	50.54	54.25	6.69	ppb
Selenium	78-2	58.89	49.17	58.91	55.66	10.10	ppb
Silicon	28-1	54.70	53.32	53.97	54.00	1.28	ppb
Silver	107-1	58.19	57.50	56.41	57.37	1.57	ppb
Silver	109-1	57.41	56.32	55.95	56.56	1.34	ppb
Sodium	23-2	5736.55	5789.52	5709.02	5745.03	0.71	ppb
Strontium	86-1	51.76	51.76	50.97	51.50	0.89	ppb
Strontium	88-1	53.46	53.48	52.99	53.31	0.52	ppb
Sulfur	34-1	1454.18	1374.94	1317.52	1382.21	4.96	ppb
Terbium	159-1				99		%
Terbium	159-2				97		%
Thallium	203-1	48.74	49.89	49.74	49.46	1.27	ppb
Thallium	205-1	51.63	50.94	51.80	51.46	0.88	ppb
Tin	118-1	51.97	50.79	51.35	51.37	1.15	ppb
Titanium	47-1	526.49	520.90	526.46	524.61	0.61	ppb
Uranium	238-1	49.68	50.98	49.73	50.13	1.47	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:41:58	DataFile Name :	007CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	53.21	53.99	53.18	53.46	0.87	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				96		%
Yttrium	89-2				97		%
Zinc	66-2	541.21	547.51	541.95	543.56	0.63	ppb
Zirconium	90-1	52.40	53.48	51.66	52.51	1.75	ppb
Zirconium	91-1	51.01	51.52	50.58	51.04	0.92	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:45:01	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2660.90	2642.02	2695.77	2666.23	1.02	ppb
Antimony	121-1	132.52	130.28	130.51	131.11	0.94	ppb
Arsenic	75-2	127.17	126.84	126.51	126.84	0.26	ppb
Barium	135-1	671.89	653.18	639.37	654.82	2.49	ppb
Barium	137-1	658.61	659.03	640.96	652.87	1.58	ppb
Beryllium	9-1	132.34	134.39	136.93	134.56	1.71	ppb
Bismuth	209-1				100		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	131.84	131.15	130.85	131.28	0.38	ppb
Cadmium	106-1	132.91	132.00	131.20	132.04	0.65	ppb
Cadmium	111-1	130.75	132.21	130.13	131.03	0.81	ppb
Calcium	43-1	13137.77	13376.55	13157.06	13223.79	1.00	ppb
Calcium	44-1	12875.94	12933.18	12972.92	12927.35	0.38	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	130.09	128.97	131.23	130.10	0.87	ppb
Cobalt	59-2	132.05	131.55	132.51	132.04	0.36	ppb
Copper	63-2	1385.33	1334.24	1376.57	1365.38	2.00	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				100		%
Holmium	165-2				97		%
Indium	115-1				95		%
Indium	115-2				93		%
Iron	54-2	7342.70	7148.93	7318.61	7270.08	1.45	ppb
Iron	56-2	7178.72	7139.61	7135.16	7151.16	0.34	ppb
Iron	57-2	6966.81	6987.70	7023.74	6992.75	0.41	ppb
Krypton	83-1						cps
Lead	206-1	626.98	627.50	600.29	618.26	2.52	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:45:01	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	614.73	612.75	603.16	610.21	1.01	ppb
Lead	208-1	608.60	612.62	606.67	609.30	0.50	ppb
Lithium	6-1				100		%
Magnesium	24-2	13597.23	13594.56	13665.33	13619.04	0.29	ppb
Manganese	55-2	1324.43	1307.92	1335.99	1322.78	1.07	ppb
Molybdenum	94-1	1276.57	1271.43	1258.73	1268.91	0.72	ppb
Molybdenum	95-1	1275.12	1290.88	1283.51	1283.17	0.61	ppb
Molybdenum	96-1	1254.92	1315.67	1277.32	1282.64	2.40	ppb
Molybdenum	97-1	1239.50	1282.86	1251.51	1257.95	1.78	ppb
Molybdenum	98-1	1250.01	1280.97	1240.22	1257.07	1.69	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	131.80	130.61	131.44	131.28	0.46	ppb
Phosphorus	31-2	2726.16	2631.68	2668.73	2675.52	1.78	ppb
Potassium	39-2	6417.87	6266.37	6411.45	6365.23	1.35	ppb
Rhodium	103-1				96		%
Rhodium	103-2				94		%
Scandium	45-1				95		%
Scandium	45-2				94		%
Selenium	82-1	130.78	133.76	131.83	132.12	1.15	ppb
Selenium	77-2	131.98	135.56	141.41	136.31	3.49	ppb
Selenium	78-2	129.56	131.43	132.37	131.12	1.09	ppb
Silicon	28-1	132.08	131.76	131.09	131.64	0.38	ppb
Silver	107-1	135.47	139.09	135.76	136.77	1.47	ppb
Silver	109-1	135.20	136.34	134.65	135.40	0.64	ppb
Sodium	23-2	13620.14	13616.49	13456.57	13564.40	0.69	ppb
Strontium	86-1	124.24	125.82	125.42	125.16	0.66	ppb
Strontium	88-1	128.85	129.90	127.14	128.63	1.08	ppb
Sulfur	34-1	3305.16	3365.04	3185.37	3285.19	2.78	ppb
Terbium	159-1				99		%
Terbium	159-2				97		%
Thallium	203-1	128.83	127.25	123.15	126.41	2.32	ppb
Thallium	205-1	123.49	126.05	121.58	123.71	1.81	ppb
Tin	118-1	129.56	131.64	132.13	131.11	1.04	ppb
Titanium	47-1	1257.85	1277.19	1242.62	1259.22	1.38	ppb
Uranium	238-1	117.75	120.26	119.93	119.31	1.14	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:45:01	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	130.01	128.61	129.34	129.32	0.54	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				97		%
Yttrium	89-2				95		%
Zinc	66-2	1316.06	1312.08	1324.27	1317.47	0.47	ppb
Zirconium	90-1	122.15	127.51	127.18	125.62	2.39	ppb
Zirconium	91-1	121.57	126.72	124.24	124.18	2.07	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:47:58	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5329.95	5276.76	5247.44	5284.71	0.79	ppb
Antimony	121-1	259.09	255.99	252.88	255.99	1.21	ppb
Arsenic	75-2	253.05	254.37	253.04	253.49	0.30	ppb
Barium	135-1	1309.23	1281.21	1271.82	1287.42	1.51	ppb
Barium	137-1	1326.99	1268.74	1257.72	1284.48	2.90	ppb
Beryllium	9-1	257.81	257.96	267.69	261.16	2.17	ppb
Bismuth	209-1				98		%
Bismuth	209-2				94		%
Bromine	81-1						cps
Cadmium	108-1	264.75	260.42	258.13	261.10	1.29	ppb
Cadmium	106-1	263.52	258.50	251.39	257.80	2.36	ppb
Cadmium	111-1	267.32	267.20	259.47	264.66	1.70	ppb
Calcium	43-1	26136.85	27022.24	26130.74	26429.94	1.94	ppb
Calcium	44-1	25805.44	26352.43	25444.69	25867.52	1.77	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	257.97	258.78	263.84	260.20	1.22	ppb
Cobalt	59-2	267.15	273.52	270.29	270.32	1.18	ppb
Copper	63-2	2679.70	2679.66	2709.87	2689.75	0.65	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				95		%
Indium	115-1				94		%
Indium	115-2				90		%
Iron	54-2	14644.90	14564.29	14679.68	14629.62	0.40	ppb
Iron	56-2	14067.01	14255.16	14260.64	14194.27	0.78	ppb
Iron	57-2	13855.20	13960.90	13944.26	13920.12	0.41	ppb
Krypton	83-1						cps
Lead	206-1	1251.37	1234.68	1244.95	1243.67	0.68	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:47:58	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	1235.43	1228.29	1230.24	1231.32	0.30	ppb
Lead	208-1	1234.32	1226.49	1234.65	1231.82	0.37	ppb
Lithium	6-1				97		%
Magnesium	24-2	26546.39	26864.92	27294.62	26901.98	1.40	ppb
Manganese	55-2	2619.12	2641.65	2603.59	2621.45	0.73	ppb
Molybdenum	94-1	2545.57	2540.34	2472.99	2519.63	1.61	ppb
Molybdenum	95-1	2600.55	2538.58	2514.10	2551.08	1.75	ppb
Molybdenum	96-1	2594.19	2552.24	2574.04	2573.49	0.82	ppb
Molybdenum	97-1	2515.43	2495.51	2535.58	2515.51	0.80	ppb
Molybdenum	98-1	2510.00	2544.34	2499.53	2517.96	0.93	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	258.43	258.59	259.38	258.80	0.20	ppb
Phosphorus	31-2	5201.65	5329.19	5118.52	5216.45	2.03	ppb
Potassium	39-2	12692.73	12907.15	12815.90	12805.26	0.84	ppb
Rhodium	103-1				93		%
Rhodium	103-2				90		%
Scandium	45-1				93		%
Scandium	45-2				91		%
Selenium	82-1	264.04	265.35	257.15	262.18	1.68	ppb
Selenium	77-2	256.24	283.61	262.71	267.52	5.35	ppb
Selenium	78-2	252.36	259.26	257.60	256.41	1.40	ppb
Silicon	28-1	267.69	262.76	258.18	262.87	1.81	ppb
Silver	107-1	270.51	266.38	261.53	266.14	1.69	ppb
Silver	109-1	266.01	266.95	259.68	264.21	1.50	ppb
Sodium	23-2	26952.10	27087.92	27293.46	27111.16	0.63	ppb
Strontium	86-1	263.54	263.25	254.73	260.51	1.92	ppb
Strontium	88-1	259.49	254.45	253.72	255.89	1.23	ppb
Sulfur	34-1	4776.21	5049.77	4494.99	4773.66	5.81	ppb
Terbium	159-1				99		%
Terbium	159-2				96		%
Thallium	203-1	250.55	249.56	251.05	250.39	0.30	ppb
Thallium	205-1	246.94	245.04	249.75	247.24	0.96	ppb
Tin	118-1	256.37	259.03	252.63	256.01	1.25	ppb
Titanium	47-1	2512.24	2541.41	2460.14	2504.60	1.64	ppb
Uranium	238-1	246.56	243.45	241.31	243.77	1.08	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:47:58	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	257.41	259.35	259.93	258.89	0.51	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				96		%
Yttrium	89-2				94		%
Zinc	66-2	2697.85	2697.13	2705.76	2700.25	0.18	ppb
Zirconium	90-1	250.57	249.63	249.30	249.83	0.26	ppb
Zirconium	91-1	262.41	252.75	253.42	256.19	2.11	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:50:47	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10158.94	10268.46	10532.21	10319.87	1.86	ppb
Antimony	121-1	507.54	497.69	507.01	504.08	1.10	ppb
Arsenic	75-2	500.73	511.04	511.79	507.85	1.22	ppb
Barium	135-1	2504.08	2532.55	2518.01	2518.21	0.57	ppb
Barium	137-1	2526.61	2561.43	2469.09	2519.05	1.85	ppb
Beryllium	9-1	505.01	509.00	521.80	511.94	1.71	ppb
Bismuth	209-1				97		%
Bismuth	209-2				90		%
Bromine	81-1						cps
Cadmium	108-1	499.13	508.54	505.38	504.35	0.95	ppb
Cadmium	106-1	505.72	510.42	495.98	504.04	1.46	ppb
Cadmium	111-1	501.00	524.02	514.82	513.28	2.26	ppb
Calcium	43-1	51861.84	51040.35	51508.81	51470.34	0.80	ppb
Calcium	44-1	50909.92	50273.48	51262.49	50815.30	0.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	520.68	519.32	518.58	519.52	0.21	ppb
Cobalt	59-2	518.82	526.03	518.18	521.01	0.84	ppb
Copper	63-2	5201.00	5160.16	5275.76	5212.31	1.12	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				95		%
Indium	115-1				91		%
Indium	115-2				86		%
Iron	54-2	27490.07	27843.17	28099.52	27810.92	1.10	ppb
Iron	56-2	27535.46	27933.13	27666.91	27711.83	0.73	ppb
Iron	57-2	27797.07	28200.63	28081.59	28026.43	0.74	ppb
Krypton	83-1						cps
Lead	206-1	2446.05	2445.09	2487.34	2459.49	0.98	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:50:47	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2456.65	2399.00	2521.33	2458.99	2.49	ppb
Lead	208-1	2434.34	2405.46	2484.27	2441.36	1.63	ppb
Lithium	6-1				94		%
Magnesium	24-2	51607.51	51808.13	53395.51	52270.38	1.87	ppb
Manganese	55-2	5082.75	5101.41	5250.71	5144.95	1.79	ppb
Molybdenum	94-1	4910.13	5053.08	5010.96	4991.39	1.47	ppb
Molybdenum	95-1	4912.54	5064.28	5105.64	5027.49	2.02	ppb
Molybdenum	96-1	5039.71	5081.05	5131.61	5084.12	0.91	ppb
Molybdenum	97-1	5002.34	4962.75	5016.97	4994.02	0.56	ppb
Molybdenum	98-1	4987.12	5018.76	5000.69	5002.19	0.32	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	495.04	496.56	502.90	498.17	0.84	ppb
Phosphorus	31-2	10120.71	10252.04	10462.30	10278.35	1.68	ppb
Potassium	39-2	24562.08	24801.62	25136.57	24833.42	1.16	ppb
Rhodium	103-1				92		%
Rhodium	103-2				89		%
Scandium	45-1				93		%
Scandium	45-2				92		%
Selenium	82-1	506.58	502.74	494.68	501.33	1.21	ppb
Selenium	77-2	522.56	555.73	525.40	534.56	3.44	ppb
Selenium	78-2	490.09	515.23	527.40	510.91	3.72	ppb
Silicon	28-1	512.27	504.56	497.88	504.91	1.43	ppb
Silver	107-1	509.85	514.55	503.55	509.31	1.08	ppb
Silver	109-1	505.31	508.13	515.42	509.62	1.02	ppb
Sodium	23-2	51918.64	52641.03	53406.36	52655.34	1.41	ppb
Strontium	86-1	504.16	505.88	498.63	502.89	0.75	ppb
Strontium	88-1	497.72	508.28	511.61	505.87	1.43	ppb
Sulfur	34-1	10002.87	9620.04	9394.69	9672.53	3.18	ppb
Terbium	159-1				99		%
Terbium	159-2				95		%
Thallium	203-1	490.59	492.42	503.74	495.58	1.44	ppb
Thallium	205-1	491.16	496.38	490.74	492.76	0.64	ppb
Tin	118-1	504.86	503.41	495.50	501.26	1.00	ppb
Titanium	47-1	5018.82	4926.79	5039.30	4994.97	1.20	ppb
Uranium	238-1	489.77	489.43	503.08	494.09	1.57	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:50:47	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	504.28	505.02	519.80	509.70	1.72	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				96		%
Yttrium	89-2				92		%
Zinc	66-2	5126.09	5220.76	5258.75	5201.87	1.31	ppb
Zirconium	90-1	492.36	511.35	500.85	501.52	1.90	ppb
Zirconium	91-1	497.73	515.57	503.99	505.76	1.79	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:53:32	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19279.73	20389.88	19709.10	19792.90	2.83	ppb
Antimony	121-1	999.37	998.48	989.00	995.62	0.58	ppb
Arsenic	75-2	997.89	1000.72	986.02	994.88	0.78	ppb
Barium	135-1	4973.54	4983.01	4974.04	4976.87	0.11	ppb
Barium	137-1	4951.43	5012.91	4967.74	4977.36	0.64	ppb
Beryllium	9-1	992.46	988.90	987.72	989.69	0.25	ppb
Bismuth	209-1				91		%
Bismuth	209-2				89		%
Bromine	81-1						cps
Cadmium	108-1	988.09	992.15	1001.82	994.02	0.71	ppb
Cadmium	106-1	993.32	991.59	999.85	994.92	0.44	ppb
Cadmium	111-1	985.11	980.58	1000.59	988.76	1.06	ppb
Calcium	43-1	102714.71	103628.86	105782.54	104042.04	1.51	ppb
Calcium	44-1	102987.76	103495.43	103973.01	103485.40	0.48	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	976.44	998.62	985.57	986.87	1.13	ppb
Cobalt	59-2	981.24	988.68	979.96	983.29	0.48	ppb
Copper	63-2	9734.82	9877.23	9872.95	9828.33	0.82	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				95		%
Holmium	165-2				94		%
Indium	115-1				85		%
Indium	115-2				80		%
Iron	54-2	53309.25	53526.09	54245.15	53693.50	0.91	ppb
Iron	56-2	53092.20	53584.62	52981.95	53219.59	0.60	ppb
Iron	57-2	51664.26	52916.16	52611.20	52397.21	1.25	ppb
Krypton	83-1						cps
Lead	206-1	4906.94	5104.19	5055.83	5022.32	2.05	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:53:32	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	4915.35	5092.01	5072.93	5026.76	1.93	ppb
Lead	208-1	4915.44	5116.19	5075.19	5035.61	2.11	ppb
Lithium	6-1				91		%
Magnesium	24-2	99774.02	101141.06	99766.33	100227.14	0.79	ppb
Manganese	55-2	9817.15	9924.21	9917.57	9886.31	0.61	ppb
Molybdenum	94-1	10186.34	9711.50	10090.49	9996.11	2.51	ppb
Molybdenum	95-1	10109.55	9539.62	10255.13	9968.10	3.79	ppb
Molybdenum	96-1	10108.87	9584.78	10108.77	9934.14	3.05	ppb
Molybdenum	97-1	10154.48	9765.41	10070.52	9996.81	2.05	ppb
Molybdenum	98-1	10109.81	9804.71	10063.61	9992.71	1.65	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	978.51	1015.20	999.47	997.72	1.84	ppb
Phosphorus	31-2	19731.93	19606.46	20000.87	19779.75	1.02	ppb
Potassium	39-2	47957.66	48291.67	48296.20	48181.84	0.40	ppb
Rhodium	103-1				89		%
Rhodium	103-2				86		%
Scandium	45-1				90		%
Scandium	45-2				94		%
Selenium	82-1	1014.95	969.51	1000.97	995.14	2.34	ppb
Selenium	77-2	1019.16	975.42	935.51	976.70	4.28	ppb
Selenium	78-2	995.31	978.07	1002.30	991.90	1.26	ppb
Silicon	28-1	1006.11	973.04	1000.97	993.37	1.79	ppb
Silver	107-1	991.51	970.19	1006.70	989.47	1.85	ppb
Silver	109-1	986.31	984.99	998.73	990.01	0.77	ppb
Sodium	23-2	102452.52	101335.33	101329.66	101705.84	0.64	ppb
Strontium	86-1	1005.84	988.25	993.41	995.83	0.91	ppb
Strontium	88-1	1003.41	974.26	1007.25	994.98	1.81	ppb
Sulfur	34-1	20072.76	19956.99	20279.43	20103.06	0.81	ppb
Terbium	159-1				98		%
Terbium	159-2				94		%
Thallium	203-1	986.59	1012.37	1006.93	1001.96	1.36	ppb
Thallium	205-1	973.78	1024.52	1014.89	1004.40	2.68	ppb
Tin	118-1	997.92	1002.56	990.62	997.03	0.60	ppb
Titanium	47-1	9934.13	10025.67	10037.14	9998.98	0.56	ppb
Uranium	238-1	997.68	1009.94	1008.02	1005.21	0.66	ppb

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:53:32	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	980.24	990.99	1005.40	992.21	1.27	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				94		%
Yttrium	89-2				92		%
Zinc	66-2	9738.39	9880.45	9896.34	9838.39	0.88	ppb
Zirconium	90-1	1004.00	976.28	1016.95	999.08	2.08	ppb
Zirconium	91-1	1000.20	969.89	1016.77	995.62	2.39	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:56:21	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	99807.94	102205.67	97956.16	99989.92	2.13	ppb
Antimony	121-1	0.64	0.64	0.61	0.63	3.13	ppb
Arsenic	75-2	0.48	0.52	0.46	0.48	6.73	ppb
Barium	135-1	2.02	1.95	1.92	1.96	2.49	ppb
Barium	137-1	2.06	2.03	1.92	2.00	3.53	ppb
Beryllium	9-1	0.14	0.13	0.11	0.13	11.06	ppb
Bismuth	209-1				81		%
Bismuth	209-2				82		%
Bromine	81-1						cps
Cadmium	108-1	0.42	0.34	0.36	0.37	10.39	ppb
Cadmium	106-1	0.05	-0.09	0.04	0.00		ppb
Cadmium	111-1	0.16	0.16	0.15	0.16	2.26	ppb
Calcium	43-1	501056.36	498366.16	497431.09	498951.20	0.38	ppb
Calcium	44-1	500151.87	498443.00	498899.10	499164.66	0.18	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8.37	8.20	7.98	8.18	2.36	ppb
Cobalt	59-2	2.04	2.07	1.96	2.03	2.77	ppb
Copper	63-2	2.52	2.44	2.36	2.44	3.18	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				93		%
Holmium	165-2				95		%
Indium	115-1				85		%
Indium	115-2				89		%
Iron	54-2	252069.89	253591.03	240870.09	248843.67	2.79	ppb
Iron	56-2	253720.15	249774.28	243424.68	248973.04	2.09	ppb
Iron	57-2	252672.74	250822.67	243877.75	249124.39	1.86	ppb
Krypton	83-1						cps
Lead	206-1	5.60	5.51	5.76	5.62	2.19	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:56:21	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	5.66	5.67	5.79	5.71	1.29	ppb
Lead	208-1	5.64	5.57	5.74	5.65	1.57	ppb
Lithium	6-1				85		%
Magnesium	24-2	503390.92	508899.09	486500.05	499596.68	2.34	ppb
Manganese	55-2	4.41	4.31	4.04	4.25	4.55	ppb
Molybdenum	94-1	2.03	1.98	1.91	1.97	2.83	ppb
Molybdenum	95-1	1.39	1.35	1.31	1.35	2.99	ppb
Molybdenum	96-1	2.43	2.32	2.32	2.36	2.77	ppb
Molybdenum	97-1	1.44	1.38	1.24	1.35	7.47	ppb
Molybdenum	98-1	1.37	1.28	1.20	1.28	6.59	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	4.62	4.57	4.42	4.54	2.26	ppb
Phosphorus	31-2	-17.23	-22.56	-19.18	-19.66		ppb
Potassium	39-2	257367.77	250973.15	242740.59	250360.50	2.93	ppb
Rhodium	103-1				81		%
Rhodium	103-2				81		%
Scandium	45-1				90		%
Scandium	45-2				94		%
Selenium	82-1	1.04	0.74	0.93	0.91	17.04	ppb
Selenium	77-2	0.00	0.49	0.00	0.16	173.21	ppb
Selenium	78-2	0.96	-0.45	-0.20	0.10	718.00	ppb
Silicon	28-1	5.78	5.41	5.06	5.42	6.68	ppb
Silver	107-1	0.12	0.09	0.09	0.10	16.66	ppb
Silver	109-1	0.11	0.10	0.09	0.10	13.98	ppb
Sodium	23-2	506188.16	504509.66	487062.92	499253.58	2.12	ppb
Strontium	86-1	3.20	3.18	3.30	3.23	2.02	ppb
Strontium	88-1	3.18	3.19	3.28	3.22	1.73	ppb
Sulfur	34-1	-866.32	-793.76	-671.39	-777.15		ppb
Terbium	159-1				93		%
Terbium	159-2				95		%
Thallium	203-1	0.10	0.09	0.08	0.09	11.13	ppb
Thallium	205-1	0.10	0.09	0.08	0.09	13.46	ppb
Tin	118-1	0.18	0.17	0.15	0.17	10.20	ppb
Titanium	47-1	0.95	0.92	0.91	0.93	2.05	ppb
Uranium	238-1	0.06	0.05	0.04	0.05	14.28	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:56:21	DataFile Name :	012CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.28	0.25	0.25	0.26	7.04	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				91		%
Yttrium	89-2				95		%
Zinc	66-2	58.11	57.65	55.14	56.97	2.81	ppb
Zirconium	90-1	0.46	0.43	0.44	0.44	2.50	ppb
Zirconium	91-1	0.45	0.46	0.45	0.45	0.24	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:14:58	DataFile Name :	015ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	488.19	509.26	507.46	501.64	2.33	ppb
Antimony	121-1	200.82	203.70	203.03	202.52	0.74	ppb
Arsenic	75-2	196.11	200.78	201.96	199.61	1.55	ppb
Barium	135-1	99.67	100.78	100.80	100.42	0.64	ppb
Barium	137-1	100.62	102.90	102.48	102.00	1.19	ppb
Beryllium	9-1	104.01	105.16	108.85	106.01	2.39	ppb
Bismuth	209-1				102		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	86.88	88.57	89.95	88.47	1.74	ppb
Cadmium	106-1	83.11	85.44	84.92	84.49	1.45	ppb
Cadmium	111-1	102.03	103.63	104.73	103.46	1.31	ppb
Calcium	43-1	1966.46	1969.78	1961.56	1965.93	0.21	ppb
Calcium	44-1	1987.40	1967.75	1969.84	1975.00	0.55	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	100.31	101.67	101.48	101.15	0.73	ppb
Cobalt	59-2	103.53	105.79	105.63	104.98	1.20	ppb
Copper	63-2	104.40	108.13	108.27	106.93	2.05	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				102		%
Holmium	165-2				103		%
Indium	115-1				103		%
Indium	115-2				104		%
Iron	54-2	2183.56	2218.89	2223.10	2208.52	0.98	ppb
Iron	56-2	2139.29	2188.55	2182.12	2169.99	1.23	ppb
Iron	57-2	2082.78	2146.19	2153.27	2127.41	1.82	ppb
Krypton	83-1						cps
Lead	206-1	196.58	199.63	198.10	198.10	0.77	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:14:58	DataFile Name :	015ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	190.77	195.40	192.71	192.96	1.20	ppb
Lead	208-1	192.00	195.17	193.46	193.54	0.82	ppb
Lithium	6-1				101		%
Magnesium	24-2	1205.19	1214.32	1232.15	1217.22	1.13	ppb
Manganese	55-2	98.41	101.46	101.22	100.36	1.69	ppb
Molybdenum	94-1	0.09	0.09	0.11	0.10	10.39	ppb
Molybdenum	95-1	0.02	0.02	0.03	0.02	16.02	ppb
Molybdenum	96-1	0.04	0.05	0.05	0.05	12.35	ppb
Molybdenum	97-1	0.02	0.02	0.02	0.02	3.79	ppb
Molybdenum	98-1	0.02	0.02	0.02	0.02	12.01	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	102.68	106.38	106.46	105.17	2.05	ppb
Phosphorus	31-2	-23.07	-18.74	-33.71	-25.18		ppb
Potassium	39-2	1922.87	1963.02	1965.44	1950.45	1.23	ppb
Rhodium	103-1				103		%
Rhodium	103-2				103		%
Scandium	45-1				103		%
Scandium	45-2				104		%
Selenium	82-1	206.90	209.82	214.83	210.52	1.91	ppb
Selenium	77-2	200.83	239.99	206.71	215.84	9.78	ppb
Selenium	78-2	200.32	218.17	217.99	212.16	4.83	ppb
Silicon	28-1	-0.29	0.05	-0.22	-0.15		ppb
Silver	107-1	54.77	54.43	54.41	54.54	0.37	ppb
Silver	109-1	53.61	53.38	54.55	53.85	1.15	ppb
Sodium	23-2	2085.45	2107.18	2093.12	2095.25	0.53	ppb
Strontium	86-1	0.24	0.21	0.24	0.23	8.23	ppb
Strontium	88-1	0.23	0.23	0.24	0.23	3.61	ppb
Sulfur	34-1	-502.44	-596.93	-543.53	-547.63		ppb
Terbium	159-1				103		%
Terbium	159-2				104		%
Thallium	203-1	196.24	199.94	198.30	198.16	0.94	ppb
Thallium	205-1	191.73	192.98	192.77	192.50	0.35	ppb
Tin	118-1	0.01	0.02	0.01	0.02	19.95	ppb
Titanium	47-1	0.01	0.00	0.02	0.01	64.01	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:14:58	DataFile Name :	015ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	98.59	101.19	100.50	100.10	1.35	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				104		%
Yttrium	89-2				104		%
Zinc	66-2	196.12	204.31	202.14	200.86	2.11	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	5.04	ppb
Zirconium	91-1	0.10	0.09	0.10	0.10	8.30	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:18:19	DataFile Name :	016LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	21.55	22.49	23.10	22.38	3.50	ppb
Antimony	121-1	2.03	1.97	1.99	2.00	1.50	ppb
Arsenic	75-2	1.02	0.94	0.99	0.98	4.12	ppb
Barium	135-1	10.05	10.11	9.77	9.98	1.83	ppb
Barium	137-1	10.05	9.96	9.93	9.98	0.67	ppb
Beryllium	9-1	1.12	1.12	1.12	1.12	0.17	ppb
Bismuth	209-1				103		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Cadmium	108-1	1.13	1.13	0.94	1.07	10.19	ppb
Cadmium	106-1	0.97	0.49	0.61	0.69	36.27	ppb
Cadmium	111-1	1.09	1.02	1.06	1.06	3.10	ppb
Calcium	43-1	508.30	516.06	505.87	510.07	1.04	ppb
Calcium	44-1	502.32	513.39	512.29	509.33	1.20	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.98	1.99	2.10	2.02	3.29	ppb
Cobalt	59-2	1.10	1.07	1.09	1.08	1.35	ppb
Copper	63-2	2.11	2.12	2.16	2.13	1.30	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				103		%
Holmium	165-2				101		%
Indium	115-1				103		%
Indium	115-2				103		%
Iron	54-2	57.29	55.46	58.35	57.03	2.56	ppb
Iron	56-2	56.41	55.01	55.65	55.69	1.26	ppb
Iron	57-2	53.22	52.97	52.44	52.88	0.76	ppb
Krypton	83-1						cps
Lead	206-1	0.97	0.95	0.95	0.96	1.32	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:18:19	DataFile Name :	016LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.93	0.95	0.97	0.95	1.94	ppb
Lead	208-1	0.96	0.96	0.96	0.96	0.26	ppb
Lithium	6-1				102		%
Magnesium	24-2	553.54	541.26	545.94	546.91	1.13	ppb
Manganese	55-2	0.97	0.96	1.05	1.00	4.85	ppb
Molybdenum	94-1	5.74	5.76	5.72	5.74	0.37	ppb
Molybdenum	95-1	4.80	4.83	4.84	4.82	0.49	ppb
Molybdenum	96-1	4.93	4.88	4.85	4.89	0.83	ppb
Molybdenum	97-1	4.73	4.79	4.74	4.75	0.61	ppb
Molybdenum	98-1	4.81	4.78	4.78	4.79	0.37	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.03	1.10	1.07	1.07	3.32	ppb
Phosphorus	31-2	0.75	16.21	5.59	7.51	105.26	ppb
Potassium	39-2	505.39	500.07	497.86	501.11	0.77	ppb
Rhodium	103-1				103		%
Rhodium	103-2				102		%
Scandium	45-1				103		%
Scandium	45-2				102		%
Selenium	82-1	5.36	4.85	5.45	5.22	6.25	ppb
Selenium	77-2	6.70	3.59	7.07	5.79	32.98	ppb
Selenium	78-2	5.72	5.62	4.48	5.28	13.02	ppb
Silicon	28-1	1.79	1.64	1.56	1.67	7.10	ppb
Silver	107-1	1.03	1.03	1.01	1.02	1.13	ppb
Silver	109-1	1.02	1.01	1.04	1.02	1.27	ppb
Sodium	23-2	546.56	540.65	542.57	543.26	0.55	ppb
Strontium	86-1	1.00	0.96	0.98	0.98	2.00	ppb
Strontium	88-1	0.98	0.99	0.98	0.99	0.53	ppb
Sulfur	34-1	-562.23	-551.49	-549.74	-554.49		ppb
Terbium	159-1				103		%
Terbium	159-2				103		%
Thallium	203-1	0.92	0.92	0.95	0.93	1.80	ppb
Thallium	205-1	0.96	0.93	0.93	0.94	1.53	ppb
Tin	118-1	4.94	4.97	4.97	4.96	0.32	ppb
Titanium	47-1	4.96	5.02	5.01	4.99	0.64	ppb
Uranium	238-1	0.90	0.90	0.91	0.90	0.65	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:18:19	DataFile Name :	016LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.14	5.05	5.22	5.14	1.70	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				104		%
Yttrium	89-2				103		%
Zinc	66-2	4.92	5.36	5.17	5.15	4.23	ppb
Zirconium	90-1	0.96	0.96	0.97	0.96	0.54	ppb
Zirconium	91-1	0.94	0.99	1.00	0.98	3.00	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:29:07	DataFile Name :	019CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.12	0.67	0.65	0.81	32.75	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	21.28	ppb
Arsenic	75-2	0.00	0.00	-0.01	0.00		ppb
Barium	135-1	-0.01	-0.01	-0.01	-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		ppb
Bismuth	209-1				102		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Cadmium	108-1	-0.01	0.04	0.00	0.01	312.42	ppb
Cadmium	106-1	-0.88	-0.74	-0.91	-0.84		ppb
Cadmium	111-1	-0.07	-0.05	-0.07	-0.06		ppb
Calcium	43-1	-0.64	-1.12	-0.22	-0.66		ppb
Calcium	44-1	1.08	0.79	1.13	1.00	18.43	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	0.00	-0.01	-0.01		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.03	-0.02	-0.03	-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				102		%
Holmium	165-2				99		%
Indium	115-1				102		%
Indium	115-2				99		%
Iron	54-2	1.32	1.58	1.71	1.54	13.04	ppb
Iron	56-2	1.28	1.33	1.43	1.35	5.66	ppb
Iron	57-2	0.65	1.08	1.30	1.01	32.94	ppb
Krypton	83-1						cps
Lead	206-1	0.14	0.13	0.13	0.13	6.12	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:29:07	DataFile Name :	019CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.14	0.14	0.12	0.13	7.69	ppb
Lead	208-1	0.14	0.13	0.12	0.13	7.72	ppb
Lithium	6-1				99		%
Magnesium	24-2	1.30	1.36	1.34	1.33	2.45	ppb
Manganese	55-2	-0.03	-0.04	0.09	0.01	944.29	ppb
Molybdenum	94-1	0.06	0.04	0.05	0.05	15.59	ppb
Molybdenum	95-1	0.06	0.04	0.04	0.05	19.74	ppb
Molybdenum	96-1	0.06	0.05	0.03	0.05	25.96	ppb
Molybdenum	97-1	0.05	0.05	0.04	0.05	16.23	ppb
Molybdenum	98-1	0.05	0.04	0.04	0.04	16.70	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.02	0.00	-0.02	-0.01		ppb
Phosphorus	31-2	-24.03	-11.06	-13.27	-16.12		ppb
Potassium	39-2	17.80	20.96	21.17	19.98	9.45	ppb
Rhodium	103-1				103		%
Rhodium	103-2				99		%
Scandium	45-1				104		%
Scandium	45-2				99		%
Selenium	82-1	0.11	-0.06	0.06	0.04	226.34	ppb
Selenium	77-2	0.00	0.00	0.46	0.15	173.21	ppb
Selenium	78-2	0.14	-0.33	-0.62	-0.27		ppb
Silicon	28-1	-0.62	-0.36	-0.41	-0.47		ppb
Silver	107-1	0.01	0.01	0.01	0.01	6.10	ppb
Silver	109-1	0.01	0.01	0.01	0.01	5.48	ppb
Sodium	23-2	13.73	16.45	15.94	15.38	9.41	ppb
Strontium	86-1	0.00	0.00	0.01	0.00	63.98	ppb
Strontium	88-1	0.00	0.00	0.00	0.00		ppb
Sulfur	34-1	-1228.82	-1189.73	-1128.13	-1182.23		ppb
Terbium	159-1				103		%
Terbium	159-2				99		%
Thallium	203-1	0.04	0.04	0.03	0.04	10.13	ppb
Thallium	205-1	0.04	0.04	0.03	0.04	5.28	ppb
Tin	118-1	-0.01	0.00	0.00	0.00		ppb
Titanium	47-1	0.04	0.02	0.02	0.03	34.86	ppb
Uranium	238-1	0.00	0.00	0.00	0.00		ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:29:07	DataFile Name :	019CCBE.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				103		%
Yttrium	89-2				100		%
Zinc	66-2	-0.02	-0.11	-0.04	-0.05		ppb
Zirconium	90-1	0.01	0.01	0.00	0.01	17.95	ppb
Zirconium	91-1	0.01	0.00	0.00	0.00	460.05	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:32:33	DataFile Name :	020ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	93432.30	94535.27	94007.15	93991.57	0.59	ppb
Antimony	121-1	1.09	1.07	1.08	1.08	0.90	ppb
Arsenic	75-2	0.30	0.36	0.38	0.34	12.03	ppb
Barium	135-1	1.41	1.44	1.43	1.43	1.08	ppb
Barium	137-1	1.42	1.38	1.42	1.41	1.64	ppb
Beryllium	9-1	0.29	0.30	0.29	0.29	1.35	ppb
Bismuth	209-1				90		%
Bismuth	209-2				91		%
Bromine	81-1						cps
Cadmium	108-1	12.76	13.03	13.20	13.00	1.72	ppb
Cadmium	106-1	-0.69	-0.15	-0.29	-0.38		ppb
Cadmium	111-1	0.50	0.44	0.49	0.48	6.47	ppb
Calcium	43-1	96663.88	102536.57	99407.65	99536.03	2.95	ppb
Calcium	44-1	98611.71	100595.34	98367.73	99191.59	1.23	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	19.71	19.47	19.44	19.54	0.76	ppb
Cobalt	59-2	1.18	1.18	1.11	1.15	3.57	ppb
Copper	63-2	7.71	7.67	7.55	7.65	1.09	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				97		%
Indium	115-1				94		%
Indium	115-2				94		%
Iron	54-2	105569.65	106243.92	105262.82	105692.13	0.47	ppb
Iron	56-2	106009.99	107375.19	107000.52	106795.23	0.66	ppb
Iron	57-2	105838.44	105895.95	104917.92	105550.77	0.52	ppb
Krypton	83-1						cps
Lead	206-1	5.09	4.75	4.51	4.79	6.05	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:32:33	DataFile Name :	020ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	4.69	4.36	4.16	4.40	6.09	ppb
Lead	208-1	4.82	4.48	4.24	4.51	6.54	ppb
Lithium	6-1				94		%
Magnesium	24-2	99249.29	97676.62	97227.75	98051.22	1.08	ppb
Manganese	55-2	7.50	7.50	7.39	7.47	0.84	ppb
Molybdenum	94-1	1586.17	1548.47	1579.70	1571.45	1.28	ppb
Molybdenum	95-1	1932.34	1923.11	1939.07	1931.51	0.41	ppb
Molybdenum	96-1	1917.68	1875.26	1917.42	1903.45	1.28	ppb
Molybdenum	97-1	1926.45	1893.48	1919.83	1913.26	0.91	ppb
Molybdenum	98-1	1904.33	1893.44	1912.42	1903.40	0.50	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	5.17	5.27	5.04	5.16	2.24	ppb
Phosphorus	31-2	107997.86	106667.71	105560.97	106742.18	1.14	ppb
Potassium	39-2	99044.48	97968.58	97575.30	98196.12	0.77	ppb
Rhodium	103-1				91		%
Rhodium	103-2				91		%
Scandium	45-1				99		%
Scandium	45-2				100		%
Selenium	82-1	0.33	0.31	0.20	0.28	25.70	ppb
Selenium	77-2	0.00	0.47	0.46	0.31	86.60	ppb
Selenium	78-2	-0.21	-0.34	0.19	-0.12		ppb
Silicon	28-1	7.57	8.17	7.75	7.83	3.88	ppb
Silver	107-1	0.03	0.04	0.04	0.04	22.36	ppb
Silver	109-1	0.03	0.04	0.04	0.04	16.72	ppb
Sodium	23-2	104426.25	106253.98	105374.65	105351.62	0.87	ppb
Strontium	86-1	32.69	32.09	32.80	32.53	1.18	ppb
Strontium	88-1	34.03	33.98	34.10	34.04	0.18	ppb
Sulfur	34-1	99388.86	103348.86	100070.23	100935.98	2.10	ppb
Terbium	159-1				98		%
Terbium	159-2				100		%
Thallium	203-1	0.05	0.06	0.08	0.06	26.42	ppb
Thallium	205-1	0.05	0.06	0.07	0.06	21.84	ppb
Tin	118-1	0.15	0.17	0.17	0.16	6.54	ppb
Titanium	47-1	1979.52	2031.18	1970.70	1993.80	1.64	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	10.67	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:32:33	DataFile Name :	020ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.14	0.15	0.13	0.14	6.53	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				99		%
Zinc	66-2	10.65	10.79	11.40	10.95	3.65	ppb
Zirconium	90-1	0.03	0.05	0.06	0.05	24.53	ppb
Zirconium	91-1	0.04	0.05	0.05	0.05	21.56	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:37:29	DataFile Name :	021ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	93289.46	91892.11	93793.39	92991.65	1.06	ppb
Antimony	121-1	20.63	20.76	20.62	20.67	0.37	ppb
Arsenic	75-2	21.12	20.88	20.91	20.97	0.64	ppb
Barium	135-1	21.58	21.45	21.33	21.45	0.58	ppb
Barium	137-1	21.62	21.67	21.47	21.59	0.47	ppb
Beryllium	9-1	21.14	21.86	22.03	21.68	2.19	ppb
Bismuth	209-1				93		%
Bismuth	209-2				91		%
Bromine	81-1						cps
Cadmium	108-1	29.23	30.03	29.44	29.57	1.41	ppb
Cadmium	106-1	15.94	15.48	14.84	15.42	3.55	ppb
Cadmium	111-1	20.35	20.15	20.16	20.22	0.57	ppb
Calcium	43-1	100696.92	95883.94	98530.00	98370.29	2.45	ppb
Calcium	44-1	98421.37	96881.36	98505.84	97936.19	0.93	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	39.34	39.72	39.38	39.48	0.53	ppb
Cobalt	59-2	21.05	21.24	20.84	21.04	0.94	ppb
Copper	63-2	27.15	27.64	27.31	27.37	0.93	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				99		%
Indium	115-1				97		%
Indium	115-2				96		%
Iron	54-2	105742.02	106184.84	105085.96	105670.94	0.52	ppb
Iron	56-2	106638.88	105217.06	104388.81	105414.92	1.08	ppb
Iron	57-2	104551.07	103555.20	102968.84	103691.70	0.77	ppb
Krypton	83-1						cps
Lead	206-1	23.45	23.62	23.30	23.46	0.69	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:37:29	DataFile Name :	021ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	22.77	22.94	22.75	22.82	0.46	ppb
Lead	208-1	22.85	23.10	22.66	22.87	0.97	ppb
Lithium	6-1				94		%
Magnesium	24-2	97438.69	97949.18	98217.82	97868.56	0.40	ppb
Manganese	55-2	26.85	27.18	27.18	27.07	0.69	ppb
Molybdenum	94-1	1541.27	1485.01	1562.71	1529.66	2.62	ppb
Molybdenum	95-1	1891.82	1861.75	1961.25	1904.94	2.68	ppb
Molybdenum	96-1	1845.91	1842.69	1895.23	1861.28	1.58	ppb
Molybdenum	97-1	1871.37	1824.92	1880.98	1859.09	1.61	ppb
Molybdenum	98-1	1894.59	1768.22	1891.94	1851.58	3.90	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	24.41	24.91	24.28	24.53	1.35	ppb
Phosphorus	31-2	106778.14	106702.35	106135.94	106538.81	0.33	ppb
Potassium	39-2	97438.97	99112.16	97124.55	97891.89	1.09	ppb
Rhodium	103-1				93		%
Rhodium	103-2				94		%
Scandium	45-1				103		%
Scandium	45-2				102		%
Selenium	82-1	21.28	21.04	20.76	21.03	1.25	ppb
Selenium	77-2	20.75	21.34	23.18	21.75	5.82	ppb
Selenium	78-2	23.06	19.67	18.10	20.28	12.51	ppb
Silicon	28-1	7.76	7.96	9.68	8.47	12.44	ppb
Silver	107-1	18.91	19.12	18.98	19.00	0.57	ppb
Silver	109-1	18.97	18.98	18.99	18.98	0.06	ppb
Sodium	23-2	105297.64	103609.59	104858.63	104588.62	0.84	ppb
Strontium	86-1	31.91	31.41	32.23	31.85	1.30	ppb
Strontium	88-1	32.85	33.54	33.98	33.46	1.70	ppb
Sulfur	34-1	101415.23	98209.44	99801.22	99808.63	1.61	ppb
Terbium	159-1				100		%
Terbium	159-2				101		%
Thallium	203-1	19.48	19.70	19.74	19.64	0.70	ppb
Thallium	205-1	19.51	19.65	19.55	19.57	0.37	ppb
Tin	118-1	0.18	0.18	0.17	0.18	4.96	ppb
Titanium	47-1	1951.93	1914.99	1931.60	1932.84	0.96	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	6.14	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:37:29	DataFile Name :	021ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	20.36	20.66	20.07	20.37	1.46	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	29.73	30.17	30.05	29.98	0.76	ppb
Zirconium	90-1	0.03	0.04	0.05	0.04	15.55	ppb
Zirconium	91-1	0.04	0.04	0.05	0.05	17.94	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:40:43	DataFile Name :	022CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	52634.71	48904.69	53295.57	51611.66	4.59	ppb
Antimony	121-1	510.07	527.22	518.26	518.52	1.65	ppb
Arsenic	75-2	506.64	477.32	511.46	498.47	3.71	ppb
Barium	135-1	2607.17	2711.18	2695.02	2671.12	2.10	ppb
Barium	137-1	2577.32	2666.79	2662.73	2635.62	1.92	ppb
Beryllium	9-1	529.93	514.59	519.84	521.45	1.50	ppb
Bismuth	209-1				87		%
Bismuth	209-2				89		%
Bromine	81-1						cps
Cadmium	108-1	493.78	510.91	506.00	503.56	1.75	ppb
Cadmium	106-1	498.39	520.93	515.17	511.50	2.29	ppb
Cadmium	111-1	510.01	524.65	509.05	514.57	1.70	ppb
Calcium	43-1	246726.48	256900.84	255787.19	253138.17	2.20	ppb
Calcium	44-1	248812.11	257563.18	256675.80	254350.36	1.89	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	511.40	492.21	525.06	509.56	3.24	ppb
Cobalt	59-2	487.47	472.52	499.52	486.50	2.78	ppb
Copper	63-2	4631.64	4580.52	4807.16	4673.11	2.54	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				92		%
Indium	115-2				92		%
Iron	54-2	130033.48	126364.96	132769.13	129722.52	2.48	ppb
Iron	56-2	131133.91	122696.71	132788.96	128873.19	4.20	ppb
Iron	57-2	129732.87	122791.88	132310.87	128278.54	3.84	ppb
Krypton	83-1						cps
Lead	206-1	2593.50	2491.82	2595.51	2560.28	2.32	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:40:43	DataFile Name :	022CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2536.12	2486.59	2563.74	2528.82	1.55	ppb
Lead	208-1	2515.91	2474.52	2547.16	2512.53	1.45	ppb
Lithium	6-1				91		%
Magnesium	24-2	254511.07	239167.95	259029.60	250902.87	4.15	ppb
Manganese	55-2	4997.97	4810.76	5072.55	4960.43	2.72	ppb
Molybdenum	94-1	4961.32	5097.81	5074.41	5044.51	1.45	ppb
Molybdenum	95-1	5029.47	5141.85	5107.38	5092.90	1.13	ppb
Molybdenum	96-1	5050.62	5143.37	5078.47	5090.82	0.93	ppb
Molybdenum	97-1	4939.32	5010.04	4960.38	4969.91	0.73	ppb
Molybdenum	98-1	4955.02	5038.43	4998.79	4997.41	0.83	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	449.67	464.80	467.04	460.50	2.05	ppb
Phosphorus	31-2	10349.13	9982.48	10877.03	10402.88	4.32	ppb
Potassium	39-2	125198.65	120782.55	129049.07	125010.09	3.31	ppb
Rhodium	103-1				90		%
Rhodium	103-2				91		%
Scandium	45-1				101		%
Scandium	45-2				106		%
Selenium	82-1	483.97	488.93	487.80	486.90	0.53	ppb
Selenium	77-2	499.37	507.18	513.97	506.84	1.44	ppb
Selenium	78-2	480.18	492.95	507.07	493.40	2.73	ppb
Silicon	28-1	584.97	593.87	587.75	588.86	0.77	ppb
Silver	107-1	500.90	512.49	509.39	507.59	1.18	ppb
Silver	109-1	496.12	511.61	501.88	503.20	1.56	ppb
Sodium	23-2	254955.95	240786.76	260340.52	252027.74	4.01	ppb
Strontium	86-1	504.72	511.43	518.43	511.53	1.34	ppb
Strontium	88-1	510.20	507.62	513.98	510.60	0.63	ppb
Sulfur	34-1	10286.21	10255.95	9908.22	10150.13	2.07	ppb
Terbium	159-1				98		%
Terbium	159-2				100		%
Thallium	203-1	519.25	501.23	523.73	514.74	2.31	ppb
Thallium	205-1	513.60	504.47	514.36	510.81	1.08	ppb
Tin	118-1	499.34	525.81	510.39	511.84	2.60	ppb
Titanium	47-1	4944.69	4962.38	4973.48	4960.18	0.29	ppb
Uranium	238-1	501.01	509.15	518.15	509.44	1.68	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:40:43	DataFile Name :	022CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	515.79	494.08	525.53	511.80	3.15	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				100		%
Yttrium	89-2				103		%
Zinc	66-2	4721.34	4522.84	4949.24	4731.14	4.51	ppb
Zirconium	90-1	498.15	509.46	505.63	504.41	1.14	ppb
Zirconium	91-1	510.42	523.78	509.03	514.41	1.58	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:44:04	DataFile Name :	023CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.33	1.69	0.74	1.26	38.12	ppb
Antimony	121-1	0.10	0.08	0.08	0.09	14.76	ppb
Arsenic	75-2	0.00	0.01	0.00	0.01	50.05	ppb
Barium	135-1	0.05	0.03	0.03	0.03	33.31	ppb
Barium	137-1	0.04	0.03	0.03	0.04	21.91	ppb
Beryllium	9-1	0.04	0.03	0.03	0.03	20.29	ppb
Bismuth	209-1				103		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Cadmium	108-1	0.03	0.04	0.03	0.03	20.00	ppb
Cadmium	106-1	-0.27	-0.37	0.03	-0.20		ppb
Cadmium	111-1	0.00	-0.01	0.02	0.01	324.05	ppb
Calcium	43-1	3.47	3.20	1.14	2.60	48.86	ppb
Calcium	44-1	4.14	3.03	1.58	2.92	43.96	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	-0.01	-0.01	-0.01		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	38.00	ppb
Copper	63-2	0.03	0.01	0.02	0.02	42.36	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				104		%
Indium	115-1				106		%
Indium	115-2				106		%
Iron	54-2	1.96	2.00	1.31	1.76	21.97	ppb
Iron	56-2	2.07	1.95	1.94	1.98	3.55	ppb
Iron	57-2	2.12	1.83	2.20	2.05	9.48	ppb
Krypton	83-1						cps
Lead	206-1	0.15	0.13	0.12	0.13	9.65	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:44:04	DataFile Name :	023CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.14	0.13	0.12	0.13	8.46	ppb
Lead	208-1	0.14	0.13	0.12	0.13	8.55	ppb
Lithium	6-1				102		%
Magnesium	24-2	3.98	3.56	2.92	3.48	15.33	ppb
Manganese	55-2	0.00	-0.01	0.00	0.00		ppb
Molybdenum	94-1	0.23	0.19	0.16	0.19	19.89	ppb
Molybdenum	95-1	0.15	0.12	0.10	0.12	20.37	ppb
Molybdenum	96-1	0.15	0.12	0.11	0.13	17.88	ppb
Molybdenum	97-1	0.15	0.12	0.09	0.12	23.27	ppb
Molybdenum	98-1	0.14	0.11	0.10	0.12	21.18	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	-0.01	0.00	0.00		ppb
Phosphorus	31-2	-21.28	-20.40	-24.08	-21.92		ppb
Potassium	39-2	16.70	16.52	17.51	16.91	3.11	ppb
Rhodium	103-1				107		%
Rhodium	103-2				106		%
Scandium	45-1				108		%
Scandium	45-2				106		%
Selenium	82-1	-0.08	0.14	0.00	0.02	659.29	ppb
Selenium	77-2	0.00	0.43	0.00	0.14	173.21	ppb
Selenium	78-2	-0.28	-0.53	0.60	-0.07		ppb
Silicon	28-1	-0.76	-0.17	-1.16	-0.70		ppb
Silver	107-1	0.04	0.04	0.03	0.04	13.53	ppb
Silver	109-1	0.23	0.04	0.03	0.10	110.08	ppb
Sodium	23-2	20.75	20.04	18.39	19.73	6.13	ppb
Strontium	86-1	0.01	0.01	0.01	0.01	26.01	ppb
Strontium	88-1	0.01	0.01	0.01	0.01	23.27	ppb
Sulfur	34-1	-542.76	-511.60	-662.55	-572.30		ppb
Terbium	159-1				104		%
Terbium	159-2				106		%
Thallium	203-1	0.06	0.06	0.05	0.06	9.01	ppb
Thallium	205-1	0.06	0.05	0.05	0.05	9.38	ppb
Tin	118-1	0.01	0.01	0.01	0.01	14.68	ppb
Titanium	47-1	0.11	0.07	0.08	0.09	25.21	ppb
Uranium	238-1	0.01	0.00	0.00	0.01	55.79	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:44:04	DataFile Name :	023CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.01	0.01	0.00	0.01	67.40	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	0.00	0.03	0.06	0.03	92.12	ppb
Zirconium	90-1	0.05	0.04	0.04	0.04	11.89	ppb
Zirconium	91-1	0.05	0.05	0.04	0.04	14.01	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:47:27	DataFile Name :	024LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	21.52	21.37	19.12	20.67	6.50	ppb
Antimony	121-1	1.95	1.98	2.01	1.98	1.57	ppb
Arsenic	75-2	0.88	1.12	1.01	1.00	11.58	ppb
Barium	135-1	9.79	9.80	9.97	9.86	1.04	ppb
Barium	137-1	10.01	9.93	9.96	9.97	0.37	ppb
Beryllium	9-1	1.06	1.11	1.09	1.09	2.26	ppb
Bismuth	209-1				103		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Cadmium	108-1	1.01	0.94	1.11	1.02	8.05	ppb
Cadmium	106-1	0.82	0.47	0.81	0.70	28.00	ppb
Cadmium	111-1	1.02	1.03	1.04	1.03	1.21	ppb
Calcium	43-1	502.77	491.25	510.96	501.66	1.97	ppb
Calcium	44-1	501.71	488.76	505.75	498.74	1.78	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.02	2.03	2.01	2.02	0.49	ppb
Cobalt	59-2	1.09	1.04	1.08	1.07	2.70	ppb
Copper	63-2	2.21	2.09	2.07	2.12	3.42	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				106		%
Indium	115-2				106		%
Iron	54-2	58.47	56.66	55.57	56.90	2.58	ppb
Iron	56-2	56.02	55.17	55.52	55.57	0.77	ppb
Iron	57-2	53.90	56.66	55.57	55.38	2.51	ppb
Krypton	83-1						cps
Lead	206-1	0.97	0.94	0.98	0.96	2.12	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:47:27	DataFile Name :	024LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.97	0.99	1.01	0.99	1.97	ppb
Lead	208-1	0.96	0.96	0.99	0.97	1.43	ppb
Lithium	6-1				103		%
Magnesium	24-2	554.45	543.16	543.03	546.88	1.20	ppb
Manganese	55-2	1.05	0.95	1.06	1.02	5.83	ppb
Molybdenum	94-1	5.64	5.71	5.70	5.68	0.59	ppb
Molybdenum	95-1	4.64	4.71	4.84	4.73	2.13	ppb
Molybdenum	96-1	4.85	4.99	4.93	4.92	1.43	ppb
Molybdenum	97-1	4.73	4.81	4.74	4.76	0.88	ppb
Molybdenum	98-1	4.66	4.71	4.71	4.70	0.58	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.05	0.98	0.99	1.01	3.67	ppb
Phosphorus	31-2	-3.16	8.91	-2.08	1.22	545.77	ppb
Potassium	39-2	506.37	500.80	510.48	505.88	0.96	ppb
Rhodium	103-1				105		%
Rhodium	103-2				106		%
Scandium	45-1				108		%
Scandium	45-2				107		%
Selenium	82-1	4.57	5.16	5.27	5.00	7.60	ppb
Selenium	77-2	7.32	6.45	2.58	5.45	46.31	ppb
Selenium	78-2	3.47	4.58	5.58	4.55	23.26	ppb
Silicon	28-1	2.23	0.75	1.34	1.44	51.86	ppb
Silver	107-1	0.99	0.98	1.01	0.99	1.41	ppb
Silver	109-1	1.00	0.99	1.02	1.00	1.49	ppb
Sodium	23-2	552.86	544.56	550.11	549.18	0.77	ppb
Strontium	86-1	0.91	0.95	0.95	0.93	2.47	ppb
Strontium	88-1	0.96	0.98	0.98	0.97	1.34	ppb
Sulfur	34-1	-487.32	-599.60	-469.22	-518.72		ppb
Terbium	159-1				106		%
Terbium	159-2				105		%
Thallium	203-1	0.95	0.93	0.97	0.95	1.97	ppb
Thallium	205-1	0.93	0.95	0.97	0.95	2.15	ppb
Tin	118-1	4.83	4.91	4.91	4.88	0.96	ppb
Titanium	47-1	4.84	4.79	4.89	4.84	0.95	ppb
Uranium	238-1	0.88	0.90	0.89	0.89	1.17	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:47:27	DataFile Name :	024LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	5.04	5.06	5.09	5.06	0.47	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				107		%
Yttrium	89-2				107		%
Zinc	66-2	5.08	5.03	5.14	5.08	1.08	ppb
Zirconium	90-1	0.98	0.98	0.96	0.97	1.15	ppb
Zirconium	91-1	0.96	1.00	0.98	0.98	2.00	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-02	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-TANK-041525	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:50:49	DataFile Name :	025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	26.17	24.86	24.27	25.10	3.88	ppb
Antimony	121-1	0.07	0.07	0.07	0.07	2.81	ppb
Arsenic	75-2	0.19	0.16	0.20	0.19	11.39	ppb
Barium	135-1	23.74	23.67	23.58	23.66	0.33	ppb
Barium	137-1	23.99	23.47	23.85	23.77	1.13	ppb
Beryllium	9-1	0.00	0.00	0.00	0.00	169.90	ppb
Bismuth	209-1				106		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.02	0.01	0.01	91.00	ppb
Cadmium	106-1	-0.28	-0.51	-0.45	-0.41		ppb
Cadmium	111-1	-0.02	-0.04	-0.03	-0.03		ppb
Calcium	43-1	23727.28	23808.89	23420.28	23652.15	0.87	ppb
Calcium	44-1	23629.55	23358.07	23014.51	23334.04	1.32	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.27	0.21	0.21	0.23	14.58	ppb
Cobalt	59-2	0.03	0.03	0.03	0.03	7.79	ppb
Copper	63-2	19.69	19.53	19.69	19.63	0.47	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				109		%
Indium	115-1				109		%
Indium	115-2				109		%
Iron	54-2	30.27	29.64	28.96	29.63	2.21	ppb
Iron	56-2	29.48	29.52	29.55	29.52	0.14	ppb
Iron	57-2	31.44	29.93	30.67	30.68	2.46	ppb
Krypton	83-1						cps
Lead	206-1	0.22	0.22	0.20	0.21	4.17	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-02	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-TANK-041525	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:50:49	DataFile Name :	025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.20	0.20	0.20	0.20	2.26	ppb
Lead	208-1	0.21	0.21	0.20	0.21	3.28	ppb
Lithium	6-1				105		%
Magnesium	24-2	6799.31	6685.23	6580.06	6688.20	1.64	ppb
Manganese	55-2	4.62	4.53	4.70	4.62	1.89	ppb
Molybdenum	94-1	0.19	0.17	0.19	0.18	6.77	ppb
Molybdenum	95-1	0.20	0.17	0.19	0.18	8.95	ppb
Molybdenum	96-1	0.19	0.19	0.19	0.19	1.50	ppb
Molybdenum	97-1	0.18	0.19	0.19	0.19	2.60	ppb
Molybdenum	98-1	0.18	0.19	0.20	0.19	3.14	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	1.21	1.18	1.14	1.17	3.06	ppb
Phosphorus	31-2	-9.87	-28.71	-17.56	-18.71		ppb
Potassium	39-2	2425.08	2416.60	2420.89	2420.85	0.18	ppb
Rhodium	103-1				107		%
Rhodium	103-2				106		%
Scandium	45-1				111		%
Scandium	45-2				112		%
Selenium	82-1	0.16	0.12	0.39	0.22	65.83	ppb
Selenium	77-2	0.42	0.84	0.00	0.42	100.01	ppb
Selenium	78-2	-0.18	-0.06	-0.43	-0.23		ppb
Silicon	28-1	668.25	655.67	654.35	659.42	1.16	ppb
Silver	107-1	0.01	0.01	0.01	0.01	15.38	ppb
Silver	109-1	0.01	0.01	0.01	0.01	7.73	ppb
Sodium	23-2	21099.47	20651.54	21003.31	20918.11	1.13	ppb
Strontium	86-1	89.03	87.19	88.65	88.29	1.10	ppb
Strontium	88-1	94.40	90.55	93.03	92.66	2.11	ppb
Sulfur	34-1	5043.69	4674.35	4658.22	4792.08	4.55	ppb
Terbium	159-1				108		%
Terbium	159-2				109		%
Thallium	203-1	0.03	0.03	0.02	0.03	8.17	ppb
Thallium	205-1	0.03	0.03	0.02	0.03	18.61	ppb
Tin	118-1	1.13	1.08	1.11	1.10	2.30	ppb
Titanium	47-1	0.35	0.34	0.35	0.35	2.00	ppb
Uranium	238-1	0.00	0.01	0.01	0.01	4.86	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-02	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-TANK-041525	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:50:49	DataFile Name :	025AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.11	0.11	0.11	0.11	1.27	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				111		%
Yttrium	89-2				110		%
Zinc	66-2	15.01	14.84	15.10	14.98	0.89	ppb
Zirconium	90-1	0.02	0.01	0.01	0.01	21.11	ppb
Zirconium	91-1	0.02	0.01	0.01	0.01	79.16	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-03	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-PUMP-04152	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:54:06	DataFile Name :	026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	28.93	30.12	32.54	30.53	6.01	ppb
Antimony	121-1	0.15	0.15	0.14	0.15	4.00	ppb
Arsenic	75-2	0.36	0.40	0.34	0.37	7.31	ppb
Barium	135-1	24.61	25.19	24.76	24.85	1.20	ppb
Barium	137-1	24.93	25.22	24.94	25.03	0.66	ppb
Beryllium	9-1	0.00	0.00	0.00	0.00		ppb
Bismuth	209-1				106		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Cadmium	108-1	0.00	0.01	0.01	0.01	150.68	ppb
Cadmium	106-1	-0.33	-0.23	-0.49	-0.35		ppb
Cadmium	111-1	-0.02	-0.01	-0.04	-0.03		ppb
Calcium	43-1	24369.11	24188.25	24620.11	24392.49	0.89	ppb
Calcium	44-1	23784.10	23804.60	24179.24	23922.64	0.93	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.30	0.32	0.35	0.32	7.10	ppb
Cobalt	59-2	0.05	0.05	0.05	0.05	1.93	ppb
Copper	63-2	14.19	14.16	14.68	14.34	2.03	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				107		%
Indium	115-1				107		%
Indium	115-2				107		%
Iron	54-2	608.22	594.82	615.03	606.02	1.70	ppb
Iron	56-2	653.96	615.46	648.07	639.16	3.24	ppb
Iron	57-2	609.62	588.61	616.35	604.86	2.39	ppb
Krypton	83-1						cps
Lead	206-1	0.15	0.14	0.14	0.14	4.36	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-03	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-PUMP-04152	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:54:06	DataFile Name :	026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.15	0.15	0.14	0.14	3.72	ppb
Lead	208-1	0.14	0.14	0.14	0.14	1.82	ppb
Lithium	6-1				105		%
Magnesium	24-2	6965.92	6572.95	7110.78	6883.22	4.04	ppb
Manganese	55-2	15.76	15.32	15.78	15.62	1.65	ppb
Molybdenum	94-1	0.21	0.21	0.21	0.21	0.77	ppb
Molybdenum	95-1	0.19	0.20	0.20	0.20	0.79	ppb
Molybdenum	96-1	0.21	0.21	0.21	0.21	1.13	ppb
Molybdenum	97-1	0.19	0.20	0.20	0.20	3.21	ppb
Molybdenum	98-1	0.19	0.19	0.20	0.19	2.58	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.70	0.71	0.70	0.70	0.78	ppb
Phosphorus	31-2	-10.08	-9.00	-21.43	-13.50		ppb
Potassium	39-2	2518.86	2437.41	2580.12	2512.13	2.85	ppb
Rhodium	103-1				107		%
Rhodium	103-2				106		%
Scandium	45-1				111		%
Scandium	45-2				110		%
Selenium	82-1	0.23	0.09	0.43	0.25	69.19	ppb
Selenium	77-2	0.00	0.83	0.00	0.28	173.21	ppb
Selenium	78-2	0.32	-0.44	-0.03	-0.05		ppb
Silicon	28-1	668.12	658.12	659.20	661.81	0.83	ppb
Silver	107-1	0.01	0.01	0.01	0.01	7.84	ppb
Silver	109-1	0.01	0.01	0.01	0.01	16.46	ppb
Sodium	23-2	22289.85	21326.62	22809.03	22141.83	3.40	ppb
Strontium	86-1	90.13	89.78	91.21	90.37	0.83	ppb
Strontium	88-1	92.80	94.43	93.87	93.70	0.88	ppb
Sulfur	34-1	5462.21	5458.88	5625.33	5515.48	1.73	ppb
Terbium	159-1				107		%
Terbium	159-2				108		%
Thallium	203-1	0.02	0.02	0.02	0.02	5.51	ppb
Thallium	205-1	0.02	0.02	0.02	0.02	9.42	ppb
Tin	118-1	2.22	2.21	2.24	2.22	0.77	ppb
Titanium	47-1	0.39	0.37	0.41	0.39	4.93	ppb
Uranium	238-1	0.01	0.01	0.01	0.01	9.16	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-03	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-PUMP-04152	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:54:06	DataFile Name :	026AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.14	0.12	0.12	0.13	9.18	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	43.51	41.50	43.34	42.78	2.61	ppb
Zirconium	90-1	0.02	0.02	0.02	0.02	2.58	ppb
Zirconium	91-1	0.02	0.02	0.02	0.02	10.62	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BL	Instrumnet Name :	P8
Client Sample ID :	PB167612BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:57:20	DataFile Name :	027CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.90	0.51	0.11	0.51	78.69	ppb
Antimony	121-1	0.01	0.01	0.01	0.01	11.50	ppb
Arsenic	75-2	-0.01	-0.01	-0.02	-0.01		ppb
Barium	135-1	-0.01	0.00	0.00	0.00		ppb
Barium	137-1	-0.01	-0.01	-0.01	-0.01		ppb
Beryllium	9-1	-0.01	-0.01	0.00	0.00		ppb
Bismuth	209-1				103		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Cadmium	108-1	0.02	0.00	-0.02	0.00	1321.80	ppb
Cadmium	106-1	-0.23	-0.15	-0.22	-0.20		ppb
Cadmium	111-1	-0.01	-0.01	-0.01	-0.01		ppb
Calcium	43-1	-0.99	-2.87	-1.45	-1.77		ppb
Calcium	44-1	-0.12	-1.00	-0.86	-0.66		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.01	-0.01	-0.01	-0.01		ppb
Cobalt	59-2	-0.01	-0.01	0.00	0.00		ppb
Copper	63-2	-0.06	-0.07	-0.07	-0.07		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				105		%
Holmium	165-2				102		%
Indium	115-1				105		%
Indium	115-2				105		%
Iron	54-2	0.63	0.53	0.19	0.45	51.09	ppb
Iron	56-2	0.06	0.04	0.13	0.08	62.73	ppb
Iron	57-2	0.27	0.40	0.11	0.26	56.20	ppb
Krypton	83-1						cps
Lead	206-1	0.02	0.02	0.02	0.02	11.85	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BL	Instrumnet Name :	P8
Client Sample ID :	PB167612BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:57:20	DataFile Name :	027CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.03	0.02	0.03	0.02	21.99	ppb
Lead	208-1	0.02	0.02	0.02	0.02	11.29	ppb
Lithium	6-1				101		%
Magnesium	24-2	0.59	0.51	0.83	0.64	25.92	ppb
Manganese	55-2	-0.03	-0.03	-0.06	-0.04		ppb
Molybdenum	94-1	0.03	0.03	0.03	0.03	5.86	ppb
Molybdenum	95-1	0.00	0.00	0.00	0.00	21.11	ppb
Molybdenum	96-1	0.01	0.00	0.00	0.01	52.71	ppb
Molybdenum	97-1	0.00	0.00	0.00	0.00	113.27	ppb
Molybdenum	98-1	0.00	0.00	0.00	0.00	43.51	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	0.01	0.01	0.01	39.06	ppb
Phosphorus	31-2	-20.39	-24.70	-29.81	-24.97		ppb
Potassium	39-2	10.69	10.32	8.75	9.92	10.36	ppb
Rhodium	103-1				105		%
Rhodium	103-2				104		%
Scandium	45-1				106		%
Scandium	45-2				106		%
Selenium	82-1	-0.04	-0.08	0.19	0.02	600.68	ppb
Selenium	77-2	0.44	0.00	0.00	0.15	173.21	ppb
Selenium	78-2	-0.39	-0.40	-0.91	-0.57		ppb
Silicon	28-1	0.20	-0.70	-0.66	-0.39		ppb
Silver	107-1	0.00	0.01	0.01	0.01	18.56	ppb
Silver	109-1	0.00	0.00	0.00	0.00	12.71	ppb
Sodium	23-2	8.53	7.15	6.70	7.46	12.76	ppb
Strontium	86-1	0.00	0.01	0.00	0.00	102.60	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	48.44	ppb
Sulfur	34-1	-42.57	-129.40	-67.23	-79.73		ppb
Terbium	159-1				103		%
Terbium	159-2				104		%
Thallium	203-1	0.02	0.01	0.01	0.01	3.88	ppb
Thallium	205-1	0.01	0.01	0.01	0.01	6.46	ppb
Tin	118-1	0.00	0.00	0.00	0.00	928.07	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

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BL	Instrumnet Name :	P8
Client Sample ID :	PB167612BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:57:20	DataFile Name :	027CCBE.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				106		%
Zinc	66-2	-0.02	0.05	-0.01	0.01	765.16	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	19.53	ppb
Zirconium	91-1	0.01	0.02	0.01	0.01	32.39	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BS	Instrumnet Name :	P8
Client Sample ID :	PB167612BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:00:45	DataFile Name :	028LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10199.23	10210.45	10210.18	10206.62	0.06	ppb
Antimony	121-1	516.93	516.06	523.26	518.75	0.76	ppb
Arsenic	75-2	514.65	511.64	503.69	509.99	1.11	ppb
Barium	135-1	2558.83	2602.59	2568.01	2576.48	0.90	ppb
Barium	137-1	2620.13	2627.16	2531.30	2592.86	2.06	ppb
Beryllium	9-1	512.92	526.56	528.84	522.77	1.65	ppb
Bismuth	209-1				98		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Cadmium	108-1	525.67	530.86	514.36	523.63	1.61	ppb
Cadmium	106-1	525.94	525.47	510.43	520.61	1.69	ppb
Cadmium	111-1	528.31	546.41	528.08	534.27	1.97	ppb
Calcium	43-1	51291.59	50860.73	51564.66	51238.99	0.69	ppb
Calcium	44-1	51524.21	50355.29	51337.56	51072.35	1.23	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	511.93	510.29	507.34	509.85	0.46	ppb
Cobalt	59-2	506.01	514.73	512.50	511.08	0.89	ppb
Copper	63-2	4947.43	5066.94	5041.75	5018.71	1.26	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				103		%
Holmium	165-2				100		%
Indium	115-1				98		%
Indium	115-2				93		%
Iron	54-2	27552.26	27522.82	27336.40	27470.49	0.43	ppb
Iron	56-2	26854.82	27353.07	27341.06	27182.98	1.05	ppb
Iron	57-2	27019.30	27862.73	27597.78	27493.27	1.57	ppb
Krypton	83-1						cps
Lead	206-1	2380.06	2458.28	2481.88	2440.07	2.18	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BS	Instrumnet Name :	P8
Client Sample ID :	PB167612BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:00:45	DataFile Name :	028LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2407.69	2462.71	2477.52	2449.30	1.50	ppb
Lead	208-1	2412.84	2451.77	2479.64	2448.08	1.37	ppb
Lithium	6-1				99		%
Magnesium	24-2	52199.10	51876.20	53148.40	52407.90	1.26	ppb
Manganese	55-2	5055.60	5090.75	5028.27	5058.20	0.62	ppb
Molybdenum	94-1	5038.44	5163.27	4972.20	5057.97	1.92	ppb
Molybdenum	95-1	4961.35	5238.63	4980.94	5060.30	3.06	ppb
Molybdenum	96-1	4956.32	5222.50	5033.23	5070.68	2.70	ppb
Molybdenum	97-1	4959.31	5034.71	4958.66	4984.23	0.88	ppb
Molybdenum	98-1	5008.16	5131.05	4970.02	5036.41	1.67	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	513.99	528.76	516.84	519.86	1.51	ppb
Phosphorus	31-2	10259.20	10217.53	10280.17	10252.30	0.31	ppb
Potassium	39-2	25554.69	25568.22	25522.86	25548.59	0.09	ppb
Rhodium	103-1				97		%
Rhodium	103-2				97		%
Scandium	45-1				104		%
Scandium	45-2				105		%
Selenium	82-1	495.13	513.85	497.41	502.13	2.03	ppb
Selenium	77-2	528.21	490.75	542.27	520.41	5.12	ppb
Selenium	78-2	517.80	519.41	502.77	513.33	1.79	ppb
Silicon	28-1	572.46	555.08	567.05	564.86	1.57	ppb
Silver	107-1	528.47	540.80	518.64	529.30	2.10	ppb
Silver	109-1	522.17	532.87	534.84	529.96	1.29	ppb
Sodium	23-2	52770.06	53174.06	53481.90	53142.01	0.67	ppb
Strontium	86-1	503.95	509.29	503.88	505.71	0.61	ppb
Strontium	88-1	497.01	505.67	504.41	502.37	0.93	ppb
Sulfur	34-1	10417.14	9896.80	9995.89	10103.28	2.73	ppb
Terbium	159-1				102		%
Terbium	159-2				102		%
Thallium	203-1	480.14	493.42	497.95	490.51	1.89	ppb
Thallium	205-1	491.38	490.92	503.55	495.28	1.45	ppb
Tin	118-1	523.31	522.14	515.92	520.46	0.76	ppb
Titanium	47-1	4978.22	4895.91	4961.27	4945.14	0.88	ppb
Uranium	238-1	491.63	495.46	491.64	492.91	0.45	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BS	Instrumnet Name :	P8
Client Sample ID :	PB167612BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:00:45	DataFile Name :	028LCS6.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	507.31	513.41	521.49	514.07	1.38	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				102		%
Yttrium	89-2				102		%
Zinc	66-2	5006.47	4995.90	4966.41	4989.59	0.42	ppb
Zirconium	90-1	505.63	513.47	496.50	505.20	1.68	ppb
Zirconium	91-1	507.34	522.05	498.85	509.41	2.30	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:03:26	DataFile Name :	029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51534.24	52532.27	51922.18	51996.23	0.97	ppb
Antimony	121-1	505.76	523.29	519.84	516.30	1.80	ppb
Arsenic	75-2	496.90	497.47	500.33	498.23	0.37	ppb
Barium	135-1	2620.63	2670.73	2658.66	2650.01	0.99	ppb
Barium	137-1	2597.63	2667.30	2624.76	2629.90	1.34	ppb
Beryllium	9-1	529.08	519.93	519.97	522.99	1.01	ppb
Bismuth	209-1				90		%
Bismuth	209-2				88		%
Bromine	81-1						cps
Cadmium	108-1	497.66	512.89	507.75	506.10	1.53	ppb
Cadmium	106-1	498.26	517.66	512.63	509.52	1.98	ppb
Cadmium	111-1	508.14	521.33	512.53	514.00	1.31	ppb
Calcium	43-1	250090.82	258030.89	250220.49	252780.73	1.80	ppb
Calcium	44-1	252227.87	255290.13	250931.17	252816.39	0.89	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	507.02	513.89	511.50	510.80	0.68	ppb
Cobalt	59-2	489.56	491.20	490.37	490.38	0.17	ppb
Copper	63-2	4750.95	4665.84	4642.67	4686.49	1.22	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				99		%
Holmium	165-2				99		%
Indium	115-1				90		%
Indium	115-2				90		%
Iron	54-2	130846.72	129582.12	130097.88	130175.57	0.49	ppb
Iron	56-2	130388.38	131352.00	132293.24	131344.54	0.73	ppb
Iron	57-2	127666.89	131031.07	130530.40	129742.79	1.40	ppb
Krypton	83-1						cps
Lead	206-1	2480.23	2550.44	2551.44	2527.37	1.62	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:03:26	DataFile Name :	029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	2433.71	2478.09	2534.86	2482.22	2.04	ppb
Lead	208-1	2453.08	2474.54	2532.03	2486.55	1.64	ppb
Lithium	6-1				93		%
Magnesium	24-2	252321.02	255508.11	254970.24	254266.46	0.67	ppb
Manganese	55-2	4982.77	5045.99	5009.73	5012.83	0.63	ppb
Molybdenum	94-1	5074.55	4950.86	4925.74	4983.72	1.60	ppb
Molybdenum	95-1	5072.12	5026.06	5024.30	5040.83	0.54	ppb
Molybdenum	96-1	5075.18	5044.90	5132.42	5084.17	0.87	ppb
Molybdenum	97-1	4967.66	4953.92	5004.82	4975.47	0.53	ppb
Molybdenum	98-1	5010.79	4957.47	4937.14	4968.47	0.77	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	454.13	455.27	454.16	454.52	0.14	ppb
Phosphorus	31-2	10347.77	10361.78	10430.10	10379.88	0.42	ppb
Potassium	39-2	127670.07	124986.76	125048.97	125901.93	1.22	ppb
Rhodium	103-1				89		%
Rhodium	103-2				90		%
Scandium	45-1				99		%
Scandium	45-2				104		%
Selenium	82-1	487.63	479.73	482.95	483.44	0.82	ppb
Selenium	77-2	488.99	507.54	490.00	495.51	2.11	ppb
Selenium	78-2	518.18	492.94	502.16	504.43	2.53	ppb
Silicon	28-1	589.62	593.74	586.85	590.07	0.59	ppb
Silver	107-1	494.12	511.49	510.64	505.41	1.94	ppb
Silver	109-1	497.35	501.70	504.51	501.19	0.72	ppb
Sodium	23-2	258704.70	258315.45	260812.57	259277.57	0.52	ppb
Strontium	86-1	504.53	503.48	505.42	504.48	0.19	ppb
Strontium	88-1	512.84	509.38	512.87	511.69	0.39	ppb
Sulfur	34-1	10395.53	10028.28	9944.00	10122.60	2.37	ppb
Terbium	159-1				97		%
Terbium	159-2				99		%
Thallium	203-1	507.13	511.61	513.15	510.63	0.61	ppb
Thallium	205-1	501.71	505.80	508.65	505.39	0.69	ppb
Tin	118-1	503.93	513.27	507.18	508.13	0.93	ppb
Titanium	47-1	4915.49	5052.39	5011.10	4992.99	1.41	ppb
Uranium	238-1	511.59	504.46	517.09	511.05	1.24	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:03:26	DataFile Name :	029AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	514.07	503.49	512.92	510.16	1.14	ppb
Ytterbium	172-1						cps
Ytterbium	172-2						cps
Ytterbium	176-1						cps
Ytterbium	176-2						cps
Yttrium	89-1				99		%
Yttrium	89-2				101		%
Zinc	66-2	4776.74	4707.13	4783.70	4755.85	0.89	ppb
Zirconium	90-1	509.17	501.63	495.10	501.96	1.40	ppb
Zirconium	91-1	510.49	503.10	505.10	506.23	0.75	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:07:44	DataFile Name :	030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.40	0.59	-0.19	0.27	152.55	ppb
Antimony	121-1	0.09	0.08	0.07	0.08	12.16	ppb
Arsenic	75-2	0.01	0.01	0.01	0.01	0.92	ppb
Barium	135-1	0.04	0.02	0.02	0.03	42.54	ppb
Barium	137-1	0.02	0.02	0.02	0.02	16.46	ppb
Beryllium	9-1	0.05	0.04	0.03	0.04	19.81	ppb
Bismuth	209-1				106		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Cadmium	108-1	0.03	0.05	0.02	0.03	45.67	ppb
Cadmium	106-1	-0.75	-0.24	-0.37	-0.46		ppb
Cadmium	111-1	-0.04	0.00	-0.01	-0.02		ppb
Calcium	43-1	1.34	1.37	0.29	1.00	61.20	ppb
Calcium	44-1	0.48	0.94	0.18	0.53	72.32	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	0.00	2859.88	ppb
Cobalt	59-2	0.01	0.00	0.00	0.00	39.87	ppb
Copper	63-2	-0.01	0.02	-0.01	0.00	17056.54	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				106		%
Indium	115-1				108		%
Indium	115-2				106		%
Iron	54-2	1.09	1.42	1.12	1.21	15.13	ppb
Iron	56-2	1.12	1.13	1.01	1.09	6.10	ppb
Iron	57-2	1.42	1.52	1.14	1.36	14.46	ppb
Krypton	83-1						cps
Lead	206-1	0.10	0.11	0.08	0.10	15.57	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:07:44	DataFile Name :	030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	207-1	0.12	0.11	0.11	0.11	4.45	ppb
Lead	208-1	0.11	0.11	0.10	0.10	7.95	ppb
Lithium	6-1				102		%
Magnesium	24-2	2.62	2.07	2.51	2.40	12.05	ppb
Manganese	55-2	-0.01	0.08	0.12	0.07	100.86	ppb
Molybdenum	94-1	0.19	0.16	0.16	0.17	11.52	ppb
Molybdenum	95-1	0.10	0.09	0.08	0.09	12.33	ppb
Molybdenum	96-1	0.12	0.09	0.09	0.10	18.06	ppb
Molybdenum	97-1	0.10	0.08	0.07	0.08	18.98	ppb
Molybdenum	98-1	0.11	0.08	0.08	0.09	17.08	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.03	0.01	0.01	0.00		ppb
Phosphorus	31-2	-21.07	-19.38	-23.37	-21.27		ppb
Potassium	39-2	11.67	11.30	12.01	11.66	3.08	ppb
Rhodium	103-1				108		%
Rhodium	103-2				107		%
Scandium	45-1				109		%
Scandium	45-2				108		%
Selenium	82-1	0.08	0.28	0.18	0.18	55.36	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	-0.29	-0.41	-0.66	-0.45		ppb
Silicon	28-1	-0.90	-0.64	-0.96	-0.83		ppb
Silver	107-1	0.03	0.03	0.03	0.03	7.91	ppb
Silver	109-1	0.03	0.03	0.03	0.03	13.23	ppb
Sodium	23-2	16.20	16.39	16.37	16.32	0.63	ppb
Strontium	86-1	0.01	0.00	0.01	0.01	84.63	ppb
Strontium	88-1	0.01	0.01	0.00	0.01	14.03	ppb
Sulfur	34-1	-408.12	-284.45	-413.69	-368.75		ppb
Terbium	159-1				105		%
Terbium	159-2				105		%
Thallium	203-1	0.03	0.03	0.03	0.03	4.92	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	10.84	ppb
Tin	118-1	0.00	0.01	0.06	0.02	141.56	ppb
Titanium	47-1	0.06	0.06	0.06	0.06	4.63	ppb
Uranium	238-1	0.00	0.00	0.00	0.00	38.10	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:07:44	DataFile Name :	030AREF.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Vanadium	51-2	0.00	0.00	0.00	0.00	106.04	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	-0.02	0.19	0.01	0.06	181.05	ppb
Zirconium	90-1	0.06	0.05	0.05	0.05	6.25	ppb
Zirconium	91-1	0.07	0.06	0.05	0.06	13.20	ppb

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:31:50	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	283	327	360	323	11.89	cps
Antimony	121-1	47	87	97	77	34.51	cps
Arsenic	75-2	17	7	7	10	57.72	cps
Barium	135-1	160	157	170	162	4.28	cps
Barium	137-1	330	293	310	311	5.90	cps
Beryllium	9-1	138	139	127	135	5.12	cps
Bismuth	209-1	5314512	5413838	5334819	5354389	0.98	cps
Bismuth	209-2	2496634	2516440	2504568	2505881	0.40	cps
Bromine	81-1	29217	28586	29364	29056	1.42	cps
Cadmium	108-1	13	17	13	14	13.35	cps
Cadmium	106-1	4918	4698	4818	4811	2.29	cps
Cadmium	111-1	3456	3327	3390	3391	1.91	cps
Calcium	43-1	1097	973	970	1013	7.12	cps
Calcium	44-1	28482	27777	27820	28026	1.41	cps
Carbon	12-1	3191878	3049585	3105741	3115734	2.30	cps
Carbon	12-2	22057	22294	21967	22106	0.76	cps
Chlorine	35-1	136886	137583	136382	136950	0.44	cps
Chlorine	35-2	507	563	580	550	6.99	cps
Chromium	52-2	1127	1107	1090	1108	1.66	cps
Cobalt	59-2	113	113	120	116	3.33	cps
Copper	63-2	2394	2444	2327	2388	2.45	cps
Dysprosium	156-1	27	3	13	14	81.07	cps
Dysprosium	156-2	3	3	3	3	0.00	cps
Erbium	164-1	53	47	53	51	7.52	cps
Erbium	164-2	13	27	20	20	33.35	cps
Gadolinium	160-1	73	110	83	89	21.33	cps
Gadolinium	160-2	27	10	27	21	45.58	cps
Holmium	165-1	8569211	8600342	8550423	8573325	0.29	cps
Holmium	165-2	3459585	3435498	3476911	3457331	0.60	cps
Indium	115-1	7376131	7283417	7451945	7370498	1.15	cps
Indium	115-2	808837	801714	806310	805620	0.45	cps
Iron	54-2	703	723	673	700	3.60	cps
Iron	56-2	8849	8776	9330	8985	3.35	cps
Iron	57-2	233	203	247	228	9.74	cps
Krypton	83-1	253	263	327	281	14.15	cps
Lead	206-1	897	853	983	911	7.27	cps

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:31:50	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	710	793	710	738	6.52	cps
Lead	208-1	3430	3537	3614	3527	2.61	cps
Lithium	6-1	2454929	2434292	2487283	2458835	1.09	cps
Magnesium	24-2	367	340	403	370	8.59	cps
Manganese	55-2	2397	2467	2587	2484	3.87	cps
Molybdenum	94-1	453	447	460	453	1.47	cps
Molybdenum	95-1	237	290	177	234	24.19	cps
Molybdenum	96-1	330	250	307	296	13.92	cps
Molybdenum	97-1	153	137	167	152	9.87	cps
Molybdenum	98-1	333	313	377	341	9.49	cps
Neodymium	150-1	3	10	7	7	50.03	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	597	543	673	604	10.81	cps
Phosphorus	31-2	147	157	90	131	27.42	cps
Potassium	39-2	14397	14327	14210	14312	0.66	cps
Rhodium	103-1	6843195	6929100	6911443	6894579	0.66	cps
Rhodium	103-2	2960757	2951323	2984648	2965576	0.58	cps
Scandium	45-1	4623918	4543541	4647258	4604906	1.18	cps
Scandium	45-2	95572	93783	96196	95184	1.32	cps
Selenium	82-1	-10	33	-83	-20	-294.92	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	40	27	20	29	35.25	cps
Silicon	28-1	543585	502565	424770	490307	12.31	cps
Silver	107-1	113	163	173	150	21.43	cps
Silver	109-1	90	80	73	81	10.34	cps
Sodium	23-2	28705	27897	28551	28384	1.51	cps
Strontium	86-1	543	477	493	504	6.88	cps
Strontium	88-1	563	617	590	590	4.52	cps
Sulfur	34-1	553025	552248	550847	552040	0.20	cps
Terbium	159-1	8966650	8963277	8989424	8973117	0.16	cps
Terbium	159-2	3295563	3349725	3374652	3339980	1.21	cps
Thallium	203-1	233	220	227	227	2.94	cps
Thallium	205-1	567	687	637	630	9.57	cps
Tin	118-1	3510	3464	3430	3468	1.16	cps
Titanium	47-1	263	240	223	242	8.30	cps
Uranium	238-1	467	403	423	431	7.51	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P8
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:31:50	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	13	50	20	28	70.32	cps
Ytterbium	172-1	70	50	53	58	18.55	cps
Ytterbium	172-2	20	37	20	26	37.66	cps
Ytterbium	176-1	1403	1243	1370	1339	6.31	cps
Ytterbium	176-2	413	373	387	391	5.21	cps
Yttrium	89-1	13051563	12886221	12816650	12918144	0.93	cps
Yttrium	89-2	995063	989106	995546	993238	0.36	cps
Zinc	66-2	1533	1473	1463	1490	2.54	cps
Zirconium	90-1	1120	1304	923	1116	17.04	cps
Zirconium	91-1	273	233	230	246	9.82	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:38:36	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2204	2340	2224	2256	3.27	cps
Antimony	121-1	53852	54304	55023	54393	1.09	cps
Arsenic	75-2	597	747	713	686	11.49	cps
Barium	135-1	65564	65595	66388	65849	0.71	cps
Barium	137-1	115323	115253	114983	115186	0.16	cps
Beryllium	9-1	7459	7434	7437	7443	0.18	cps
Bismuth	209-1	5195544	5193668	5251129	5213447	0.63	cps
Bismuth	209-2	2446036	2406239	2498241	2450172	1.88	cps
Bromine	81-1	28205	28369	28820	28465	1.12	cps
Cadmium	108-1	530	573	560	554	4.00	cps
Cadmium	106-1	5261	5464	5524	5417	2.55	cps
Cadmium	111-1	10500	10379	10734	10538	1.71	cps
Calcium	43-1	44168	45251	44696	44705	1.21	cps
Calcium	44-1	728060	737506	739183	734916	0.82	cps
Carbon	12-1	3456832	3415328	3319899	3397353	2.07	cps
Carbon	12-2	23582	23279	23466	23442	0.65	cps
Chlorine	35-1	155360	157783	158803	157316	1.12	cps
Chlorine	35-2	667	680	637	661	3.36	cps
Chromium	52-2	12949	13059	13139	13049	0.73	cps
Cobalt	59-2	12145	12405	12549	12367	1.65	cps
Copper	63-2	21233	21506	21303	21347	0.67	cps
Dysprosium	156-1	13	17	23	18	28.64	cps
Dysprosium	156-2	10	7	7	8	24.71	cps
Erbium	164-1	50	50	50	50	0.00	cps
Erbium	164-2	17	27	23	22	22.91	cps
Gadolinium	160-1	120	93	100	104	13.29	cps
Gadolinium	160-2	10	23	23	19	40.75	cps
Holmium	165-1	8266961	8473781	8388581	8376441	1.24	cps
Holmium	165-2	3397151	3328953	3414569	3380224	1.34	cps
Indium	115-1	7073885	7087594	7040048	7067176	0.35	cps
Indium	115-2	786405	790239	795228	790624	0.56	cps
Iron	54-2	13787	13483	13533	13601	1.20	cps
Iron	56-2	239181	240384	244448	241338	1.14	cps
Iron	57-2	6348	6078	5748	6058	4.96	cps
Krypton	83-1	267	243	273	261	6.03	cps
Lead	206-1	19995	20176	20770	20314	2.00	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:38:36	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	17859	17879	17906	17881	0.13	cps
Lead	208-1	80598	81705	83326	81876	1.68	cps
Lithium	6-1	2467679	2433666	2368060	2423135	2.09	cps
Magnesium	24-2	177143	178475	178070	177896	0.38	cps
Manganese	55-2	5168	4968	4964	5033	2.31	cps
Molybdenum	94-1	56280	56792	57143	56738	0.77	cps
Molybdenum	95-1	69178	70276	70417	69957	0.97	cps
Molybdenum	96-1	75923	76791	77548	76754	1.06	cps
Molybdenum	97-1	42047	44103	43515	43222	2.45	cps
Molybdenum	98-1	111360	114558	112542	112820	1.43	cps
Neodymium	150-1	17	17	10	14	26.66	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	3921	3881	4064	3955	2.44	cps
Phosphorus	31-2	273	250	297	273	8.54	cps
Potassium	39-2	125402	126445	127571	126473	0.86	cps
Rhodium	103-1	6707552	6822566	6710437	6746852	0.97	cps
Rhodium	103-2	2897239	2901318	2954596	2917718	1.10	cps
Scandium	45-1	4503977	4396275	4391012	4430421	1.44	cps
Scandium	45-2	93538	92626	94213	93459	0.85	cps
Selenium	82-1	2114	2230	2290	2211	4.06	cps
Selenium	77-2	73	57	40	57	29.41	cps
Selenium	78-2	157	203	113	158	28.53	cps
Silicon	28-1	583735	521725	632163	579208	9.56	cps
Silver	107-1	34456	34904	35800	35053	1.95	cps
Silver	109-1	32235	32869	34032	33045	2.76	cps
Sodium	23-2	372780	372152	379176	374703	1.04	cps
Strontium	86-1	9443	9697	9740	9627	1.67	cps
Strontium	88-1	77366	79625	79803	78931	1.72	cps
Sulfur	34-1	541920	550344	547777	546680	0.79	cps
Terbium	159-1	8698108	8804400	8726884	8743131	0.63	cps
Terbium	159-2	3249522	3341312	3337936	3309590	1.57	cps
Thallium	203-1	24737	25415	25114	25089	1.35	cps
Thallium	205-1	58829	58943	59713	59162	0.81	cps
Tin	118-1	113973	116772	114890	115212	1.24	cps
Titanium	47-1	19670	19680	20151	19834	1.38	cps
Uranium	238-1	75731	77545	77078	76785	1.23	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P8
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:38:36	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	23099	23349	23149	23199	0.57	cps
Ytterbium	172-1	50	47	33	43	20.36	cps
Ytterbium	172-2	7	17	13	12	41.65	cps
Ytterbium	176-1	1270	1200	1370	1280	6.68	cps
Ytterbium	176-2	293	413	343	350	17.22	cps
Yttrium	89-1	12657130	12513268	12651160	12607186	0.65	cps
Yttrium	89-2	971265	974356	984211	976611	0.69	cps
Zinc	66-2	6598	6462	6588	6549	1.16	cps
Zirconium	90-1	48451	49859	49571	49293	1.51	cps
Zirconium	91-1	10517	10788	11318	10874	3.75	cps

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:41:58	DataFile Name :	007CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	92079	91760	92099	91979	0.21	cps
Antimony	121-1	1320346	1343550	1340925	1334940	0.95	cps
Arsenic	75-2	28666	28489	28890	28681	0.70	cps
Barium	135-1	1616993	1648367	1724709	1663356	3.33	cps
Barium	137-1	2869079	2859114	2934694	2887629	1.42	cps
Beryllium	9-1	343000	349965	344657	345874	1.05	cps
Bismuth	209-1	5194488	5205551	5246868	5215636	0.53	cps
Bismuth	209-2	2382141	2412240	2340224	2378202	1.52	cps
Bromine	81-1	28279	28917	28436	28544	1.16	cps
Cadmium	108-1	26709	27551	26572	26944	1.97	cps
Cadmium	106-1	42071	43873	43358	43100	2.15	cps
Cadmium	111-1	337866	343332	343472	341556	0.94	cps
Calcium	43-1	414690	425144	416027	418620	1.36	cps
Calcium	44-1	6747282	6808959	6747818	6768019	0.52	cps
Carbon	12-1	3478579	3390798	3369249	3412875	1.70	cps
Carbon	12-2	23372	23222	22938	23177	0.95	cps
Chlorine	35-1	152790	153561	155121	153824	0.77	cps
Chlorine	35-2	730	610	633	658	9.67	cps
Chromium	52-2	285334	278956	283783	282691	1.18	cps
Cobalt	59-2	535557	533609	537581	535583	0.37	cps
Copper	63-2	4352789	4371120	4364657	4362855	0.21	cps
Dysprosium	156-1	70	40	50	53	28.64	cps
Dysprosium	156-2	7	7	13	9	43.25	cps
Erbium	164-1	73	67	100	80	22.05	cps
Erbium	164-2	23	33	17	24	34.31	cps
Gadolinium	160-1	97	117	117	110	10.50	cps
Gadolinium	160-2	23	37	10	23	57.15	cps
Holmium	165-1	8392456	8426213	8578505	8465725	1.17	cps
Holmium	165-2	3372029	3299879	3289904	3320604	1.35	cps
Indium	115-1	7175688	7147652	7094458	7139266	0.58	cps
Indium	115-2	772851	765327	766997	768392	0.51	cps
Iron	54-2	591207	583823	588568	587866	0.64	cps
Iron	56-2	10929862	10977818	10811119	10906266	0.79	cps
Iron	57-2	271124	268593	269676	269797	0.47	cps
Krypton	83-1	350	260	303	304	14.78	cps
Lead	206-1	5148319	5129236	5135512	5137689	0.19	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:41:58	DataFile Name :	007CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4342620	4399283	4412276	4384726	0.84	cps
Lead	208-1	20083302	20190552	20364866	20212907	0.70	cps
Lithium	6-1	2427573	2444819	2428898	2433763	0.39	cps
Magnesium	24-2	1642451	1610921	1633020	1628797	0.99	cps
Manganese	55-2	1202496	1189275	1212836	1201536	0.98	cps
Molybdenum	94-1	4676979	4676429	4713761	4689056	0.46	cps
Molybdenum	95-1	6713184	6806542	6973546	6831091	1.93	cps
Molybdenum	96-1	7430133	7475138	7529636	7478302	0.67	cps
Molybdenum	97-1	4313716	4335169	4269722	4306202	0.77	cps
Molybdenum	98-1	10979418	10978940	11012126	10990161	0.17	cps
Neodymium	150-1	187	150	153	163	12.41	cps
Neodymium	150-2	0	0	13	4	173.21	cps
Nickel	60-2	148415	146249	147684	147449	0.75	cps
Phosphorus	31-2	4424	4818	4864	4702	5.14	cps
Potassium	39-2	541522	535321	541632	539492	0.67	cps
Rhodium	103-1	6793995	6800199	6611932	6735375	1.59	cps
Rhodium	103-2	2858050	2795793	2853202	2835682	1.22	cps
Scandium	45-1	4470392	4504426	4509914	4494911	0.48	cps
Scandium	45-2	90452	88852	90036	89780	0.92	cps
Selenium	82-1	20068	21350	20889	20769	3.13	cps
Selenium	77-2	383	403	353	380	6.62	cps
Selenium	78-2	1457	1210	1447	1371	10.18	cps
Silicon	28-1	2802657	2764897	2796147	2787900	0.72	cps
Silver	107-1	1821369	1853737	1831050	1835385	0.91	cps
Silver	109-1	1701706	1719635	1720057	1713800	0.61	cps
Sodium	23-2	3230126	3202050	3199974	3210717	0.52	cps
Strontium	86-1	428496	432914	435449	432286	0.81	cps
Strontium	88-1	3837656	3878290	3925316	3880421	1.13	cps
Sulfur	34-1	677308	675137	670643	674363	0.50	cps
Terbium	159-1	8682024	8942497	9004093	8876205	1.93	cps
Terbium	159-2	3252752	3206254	3231018	3230008	0.72	cps
Thallium	203-1	1181601	1212226	1218164	1203997	1.63	cps
Thallium	205-1	2997512	2963916	3037685	2999704	1.23	cps
Tin	118-1	1083197	1090498	1110066	1094587	1.27	cps
Titanium	47-1	1909745	1903861	1926546	1913384	0.62	cps
Uranium	238-1	3792272	3899270	3833642	3841728	1.40	cps

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Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P8
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:41:58	DataFile Name :	007CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	213235	212565	212145	212648	0.26	cps
Ytterbium	172-1	50	37	83	57	42.41	cps
Ytterbium	172-2	37	33	33	34	5.60	cps
Ytterbium	176-1	6765	6899	7069	6911	2.20	cps
Ytterbium	176-2	2410	2474	2604	2496	3.95	cps
Yttrium	89-1	12276596	12402662	12669416	12449558	1.61	cps
Yttrium	89-2	965637	957095	958719	960484	0.47	cps
Zinc	66-2	467650	464712	466131	466164	0.32	cps
Zirconium	90-1	2358026	2431581	2399162	2396257	1.54	cps
Zirconium	91-1	505574	515941	517437	512984	1.26	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:45:01	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	219004	218692	219890	219196	0.28	cps
Antimony	121-1	3389113	3367024	3447470	3401203	1.22	cps
Arsenic	75-2	68911	68639	68924	68825	0.23	cps
Barium	135-1	4109237	4037063	4039124	4061808	1.01	cps
Barium	137-1	6961401	7039503	6997903	6999602	0.56	cps
Beryllium	9-1	816210	829264	833055	826176	1.07	cps
Bismuth	209-1	5298915	5283006	5429630	5337184	1.51	cps
Bismuth	209-2	2406958	2381219	2394421	2394199	0.54	cps
Bromine	81-1	27056	27106	27621	27261	1.15	cps
Cadmium	108-1	63907	64246	65518	64557	1.32	cps
Cadmium	106-1	97095	97488	99065	97883	1.07	cps
Cadmium	111-1	818363	836214	841319	831965	1.45	cps
Calcium	43-1	999402	1015081	1005333	1006606	0.79	cps
Calcium	44-1	16144842	16177154	16338801	16220266	0.64	cps
Carbon	12-1	3474218	3412884	3457171	3448091	0.92	cps
Carbon	12-2	24581	23419	23753	23917	2.50	cps
Chlorine	35-1	157941	162251	161530	160574	1.44	cps
Chlorine	35-2	713	597	613	641	9.84	cps
Chromium	52-2	682881	680860	682719	682153	0.16	cps
Cobalt	59-2	1284538	1287050	1277581	1283056	0.38	cps
Copper	63-2	10507408	10177672	10347830	10344303	1.59	cps
Dysprosium	156-1	97	100	80	92	11.62	cps
Dysprosium	156-2	17	10	17	14	26.66	cps
Erbium	164-1	70	97	120	96	26.18	cps
Erbium	164-2	50	37	37	41	18.72	cps
Gadolinium	160-1	117	123	170	137	21.26	cps
Gadolinium	160-2	33	17	20	23	37.78	cps
Holmium	165-1	8663466	8496628	8523902	8561332	1.05	cps
Holmium	165-2	3310500	3349050	3386160	3348570	1.13	cps
Indium	115-1	6973478	7027109	7049208	7016598	0.56	cps
Indium	115-2	747846	753740	748488	750025	0.43	cps
Iron	54-2	1454650	1424352	1436943	1438648	1.06	cps
Iron	56-2	26332157	26338005	25938856	26203006	0.87	cps
Iron	57-2	646710	652345	646174	648409	0.53	cps
Krypton	83-1	290	240	217	249	15.05	cps
Lead	206-1	12720950	12693172	12479841	12631321	1.04	cps

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:45:01	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	10727955	10661294	10785590	10724947	0.58	cps
Lead	208-1	49130503	49307159	50183495	49540386	1.14	cps
Lithium	6-1	2478770	2479980	2445111	2467954	0.80	cps
Magnesium	24-2	3826386	3847440	3811233	3828353	0.47	cps
Manganese	55-2	2960624	2940402	2959787	2953604	0.39	cps
Molybdenum	94-1	11617740	11491103	11523874	11544239	0.57	cps
Molybdenum	95-1	16695133	16784695	16905453	16795094	0.63	cps
Molybdenum	96-1	17919030	18656789	18347918	18307912	2.02	cps
Molybdenum	97-1	10206085	10490137	10366590	10354271	1.38	cps
Molybdenum	98-1	26762040	27235581	26711371	26902997	1.07	cps
Neodymium	150-1	300	260	287	282	7.22	cps
Neodymium	150-2	13	13	10	12	15.73	cps
Nickel	60-2	356991	355808	352842	355214	0.60	cps
Phosphorus	31-2	11328	11004	10994	11109	1.71	cps
Potassium	39-2	1280514	1257733	1267831	1268693	0.90	cps
Rhodium	103-1	6620569	6642067	6622046	6628228	0.18	cps
Rhodium	103-2	2775717	2773687	2783646	2777683	0.19	cps
Scandium	45-1	4391826	4381174	4411418	4394806	0.35	cps
Scandium	45-2	89470	89979	88671	89373	0.74	cps
Selenium	82-1	49732	50518	50435	50228	0.86	cps
Selenium	77-2	907	930	977	938	3.80	cps
Selenium	78-2	3094	3134	3177	3135	1.33	cps
Silicon	28-1	5986219	5958487	5971323	5972010	0.23	cps
Silver	107-1	4287151	4448198	4437615	4390988	2.05	cps
Silver	109-1	4052130	4129608	4168666	4116801	1.44	cps
Sodium	23-2	7549219	7590222	7392318	7510586	1.39	cps
Strontium	86-1	1048586	1054577	1064916	1056026	0.78	cps
Strontium	88-1	9435307	9446621	9365937	9415955	0.46	cps
Sulfur	34-1	832297	835665	825161	831041	0.65	cps
Terbium	159-1	8778471	8871327	9067521	8905773	1.66	cps
Terbium	159-2	3215141	3257971	3257295	3243469	0.76	cps
Thallium	203-1	3185830	3137259	3120508	3147866	1.08	cps
Thallium	205-1	7312870	7441829	7377204	7377301	0.87	cps
Tin	118-1	2725265	2798330	2870792	2798129	2.60	cps
Titanium	47-1	4482157	4540007	4447648	4489937	1.04	cps
Uranium	238-1	9167671	9334902	9567229	9356601	2.14	cps

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P8
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:45:01	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	515337	512678	508088	512034	0.72	cps
Ytterbium	172-1	120	80	87	96	22.43	cps
Ytterbium	172-2	50	40	43	44	11.46	cps
Ytterbium	176-1	15212	15326	15866	15468	2.26	cps
Ytterbium	176-2	5711	5981	5718	5804	2.65	cps
Yttrium	89-1	12524912	12438451	12599861	12521075	0.65	cps
Yttrium	89-2	942044	940771	947073	943296	0.35	cps
Zinc	66-2	1122826	1125810	1119734	1122790	0.27	cps
Zirconium	90-1	5606980	5812546	5872673	5764066	2.42	cps
Zirconium	91-1	1229064	1272266	1263572	1254967	1.82	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:47:58	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	426361	422322	416757	421813	1.14	cps
Antimony	121-1	6575360	6594161	6687544	6619022	0.91	cps
Arsenic	75-2	135016	136305	135487	135603	0.48	cps
Barium	135-1	7946002	7892652	8043596	7960750	0.96	cps
Barium	137-1	13918876	13507599	13747093	13724523	1.51	cps
Beryllium	9-1	1525980	1533362	1577719	1545687	1.81	cps
Bismuth	209-1	5176038	5257969	5269344	5234451	0.97	cps
Bismuth	209-2	2362746	2374377	2307821	2348315	1.51	cps
Bromine	81-1	26792	27113	27103	27003	0.68	cps
Cadmium	108-1	127345	127140	129384	127956	0.97	cps
Cadmium	106-1	186458	185738	185580	185925	0.25	cps
Cadmium	111-1	1656957	1681072	1676073	1671367	0.76	cps
Calcium	43-1	1944673	1983630	1979133	1969145	1.08	cps
Calcium	44-1	31636539	31874530	31754829	31755299	0.37	cps
Carbon	12-1	3476539	3498245	3538344	3504376	0.89	cps
Carbon	12-2	25275	25011	25018	25101	0.60	cps
Chlorine	35-1	161473	162672	163576	162574	0.65	cps
Chlorine	35-2	657	533	687	626	12.99	cps
Chromium	52-2	1316036	1320849	1336343	1324409	0.80	cps
Cobalt	59-2	2527508	2589055	2538889	2551817	1.28	cps
Copper	63-2	19765860	19775572	19845144	19795525	0.22	cps
Dysprosium	156-1	153	150	193	166	14.57	cps
Dysprosium	156-2	40	20	30	30	33.33	cps
Erbium	164-1	117	130	147	131	11.46	cps
Erbium	164-2	37	57	53	49	21.91	cps
Gadolinium	160-1	110	167	140	139	20.41	cps
Gadolinium	160-2	30	53	63	49	34.99	cps
Holmium	165-1	8548164	8583372	8533103	8554880	0.30	cps
Holmium	165-2	3327827	3295021	3231663	3284837	1.49	cps
Indium	115-1	6867943	7009105	6979773	6952274	1.07	cps
Indium	115-2	720682	726834	727038	724851	0.50	cps
Iron	54-2	2821132	2807027	2807566	2811908	0.28	cps
Iron	56-2	50177028	50873783	50503078	50517963	0.69	cps
Iron	57-2	1250687	1260865	1249705	1253752	0.49	cps
Krypton	83-1	247	340	323	303	16.41	cps
Lead	206-1	24799625	24856164	25117064	24924284	0.68	cps

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:47:58	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	21059368	21269077	21348867	21225771	0.70	cps
Lead	208-1	97329341	98243050	99110857	98227749	0.91	cps
Lithium	6-1	2379130	2389251	2368978	2379120	0.43	cps
Magnesium	24-2	7265354	7356248	7416592	7346065	1.04	cps
Manganese	55-2	5692072	5743939	5617802	5684604	1.12	cps
Molybdenum	94-1	22530038	22840606	22534841	22635162	0.79	cps
Molybdenum	95-1	33113759	32837858	32959561	32970393	0.42	cps
Molybdenum	96-1	36024976	36005172	36802168	36277439	1.25	cps
Molybdenum	97-1	20143233	20301007	20905012	20449751	1.97	cps
Molybdenum	98-1	52262039	53817986	53582899	53220975	1.58	cps
Neodymium	150-1	547	590	587	574	4.20	cps
Neodymium	150-2	40	23	30	31	26.97	cps
Nickel	60-2	680279	681055	677898	679744	0.24	cps
Phosphorus	31-2	20852	21369	20374	20865	2.38	cps
Potassium	39-2	2450299	2492733	2456221	2466418	0.93	cps
Rhodium	103-1	6366088	6382546	6488854	6412496	1.04	cps
Rhodium	103-2	2711587	2688361	2601074	2667007	2.18	cps
Scandium	45-1	4297625	4240153	4374802	4304193	1.57	cps
Scandium	45-2	87018	87062	86394	86824	0.43	cps
Selenium	82-1	97672	99717	97938	98442	1.13	cps
Selenium	77-2	1733	1927	1783	1815	5.53	cps
Selenium	78-2	5908	6095	6051	6018	1.62	cps
Silicon	28-1	11402448	11050917	11211417	11221594	1.57	cps
Silver	107-1	8495176	8491118	8558710	8515001	0.45	cps
Silver	109-1	7912101	8059210	8048594	8006635	1.02	cps
Sodium	23-2	14503917	14584256	14582036	14556736	0.31	cps
Strontium	86-1	2162679	2194559	2152243	2169827	1.02	cps
Strontium	88-1	18479423	18408100	18602844	18496789	0.53	cps
Sulfur	34-1	944237	955424	935936	945199	1.03	cps
Terbium	159-1	8711635	8842352	9078001	8877329	2.09	cps
Terbium	159-2	3175159	3225926	3237642	3212909	1.03	cps
Thallium	203-1	6051948	6123447	6173445	6116280	1.00	cps
Thallium	205-1	14283585	14397876	14706123	14462528	1.51	cps
Tin	118-1	5348520	5485014	5492272	5441935	1.49	cps
Titanium	47-1	8759744	8742923	8732132	8744933	0.16	cps
Uranium	238-1	18750172	18807347	18682284	18746601	0.33	cps

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P8
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:47:58	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	992324	1000329	994858	995837	0.41	cps
Ytterbium	172-1	143	167	147	152	8.29	cps
Ytterbium	172-2	73	47	73	64	23.88	cps
Ytterbium	176-1	29109	29262	29767	29379	1.17	cps
Ytterbium	176-2	11105	11038	10901	11015	0.94	cps
Yttrium	89-1	12181006	12374373	12541179	12365519	1.46	cps
Yttrium	89-2	927617	931589	930880	930029	0.23	cps
Zinc	66-2	2237217	2237752	2227696	2234222	0.25	cps
Zirconium	90-1	11184355	11319437	11456625	11320139	1.20	cps
Zirconium	91-1	2579756	2524255	2565053	2556354	1.12	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:50:47	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	820835	828829	839170	829611	1.11	cps
Antimony	121-1	13123745	12838425	13314793	13092321	1.83	cps
Arsenic	75-2	265301	268385	269693	267793	0.84	cps
Barium	135-1	15484562	15623514	15813933	15640670	1.06	cps
Barium	137-1	27001734	27309028	26799275	27036679	0.95	cps
Beryllium	9-1	2919857	2982192	2939123	2947057	1.08	cps
Bismuth	209-1	5181257	5273664	5099736	5184886	1.68	cps
Bismuth	209-2	2235974	2269533	2267894	2257800	0.84	cps
Bromine	81-1	27470	26926	26462	26953	1.87	cps
Cadmium	108-1	244602	248621	251532	248252	1.40	cps
Cadmium	106-1	360212	362655	358886	360585	0.53	cps
Cadmium	111-1	3161110	3298398	3298967	3252825	2.44	cps
Calcium	43-1	3763183	3788955	3839450	3797196	1.02	cps
Calcium	44-1	60858584	61483322	62950222	61764043	1.74	cps
Carbon	12-1	3760787	3786234	3819429	3788817	0.78	cps
Carbon	12-2	28812	28905	29142	28953	0.59	cps
Chlorine	35-1	169951	174893	175986	173610	1.85	cps
Chlorine	35-2	700	610	657	656	6.87	cps
Chromium	52-2	2682858	2673099	2634931	2663629	0.95	cps
Cobalt	59-2	4959540	5023300	4884612	4955817	1.40	cps
Copper	63-2	38760488	38416710	38771782	38649660	0.52	cps
Dysprosium	156-1	260	287	297	281	6.74	cps
Dysprosium	156-2	47	43	80	57	35.78	cps
Erbium	164-1	273	207	193	224	19.10	cps
Erbium	164-2	70	70	63	68	5.68	cps
Gadolinium	160-1	173	230	247	217	17.74	cps
Gadolinium	160-2	77	70	77	74	5.17	cps
Holmium	165-1	8407773	8558669	8465333	8477258	0.90	cps
Holmium	165-2	3269198	3254254	3301892	3275115	0.74	cps
Indium	115-1	6713111	6714410	6653424	6693648	0.52	cps
Indium	115-2	689550	696654	695694	693966	0.56	cps
Iron	54-2	5350114	5413267	5392791	5385391	0.60	cps
Iron	56-2	99233195	100562982	98322695	99372957	1.13	cps
Iron	57-2	2535099	2569263	2525491	2543284	0.90	cps
Krypton	83-1	290	263	280	278	4.85	cps
Lead	206-1	48523641	49369693	48566331	48819888	0.98	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:50:47	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	41917958	41664312	42344612	41975627	0.82	cps
Lead	208-1	192144814	193251503	193000068	192798795	0.30	cps
Lithium	6-1	2324073	2355092	2264143	2314436	2.00	cps
Magnesium	24-2	14270876	14311658	14560314	14380949	1.09	cps
Manganese	55-2	11159027	11188507	11367665	11238400	1.00	cps
Molybdenum	94-1	43736898	45322278	45706431	44921869	2.32	cps
Molybdenum	95-1	62955056	65349489	67000222	65101589	3.12	cps
Molybdenum	96-1	70435177	71505126	73441009	71793771	2.12	cps
Molybdenum	97-1	40315444	40273689	41403953	40664362	1.58	cps
Molybdenum	98-1	104506508	105898665	107306255	105903810	1.32	cps
Neodymium	150-1	1023	1100	1080	1068	3.72	cps
Neodymium	150-2	27	20	33	27	24.99	cps
Nickel	60-2	1316195	1318874	1318526	1317865	0.11	cps
Phosphorus	31-2	40814	41299	41599	41237	0.96	cps
Potassium	39-2	4778627	4820153	4822199	4806993	0.51	cps
Rhodium	103-1	6348535	6175891	6424759	6316395	2.02	cps
Rhodium	103-2	2683320	2644341	2619260	2648974	1.22	cps
Scandium	45-1	4192252	4288881	4306523	4262552	1.44	cps
Scandium	45-2	87923	87833	86703	87486	0.78	cps
Selenium	82-1	188615	188484	188605	188568	0.04	cps
Selenium	77-2	3510	3701	3510	3574	3.07	cps
Selenium	78-2	11368	11845	12165	11793	3.40	cps
Silicon	28-1	20877564	21044258	20857183	20926335	0.49	cps
Silver	107-1	16313482	16424868	16363692	16367347	0.34	cps
Silver	109-1	15313151	15362315	15863714	15513060	1.96	cps
Sodium	23-2	28205800	28568560	28610504	28461622	0.78	cps
Strontium	86-1	4163453	4206616	4216647	4195572	0.67	cps
Strontium	88-1	35672559	36681329	37547637	36633842	2.56	cps
Sulfur	34-1	1370930	1368820	1354527	1364759	0.65	cps
Terbium	159-1	8876078	8855044	9014737	8915287	0.97	cps
Terbium	159-2	3191272	3210871	3151545	3184563	0.95	cps
Thallium	203-1	11861761	12118398	11988241	11989467	1.07	cps
Thallium	205-1	28437256	29252374	27965889	28551840	2.28	cps
Tin	118-1	10728152	10671929	10693811	10697964	0.26	cps
Titanium	47-1	17070438	17143672	17607311	17273807	1.69	cps
Uranium	238-1	37283596	37922163	37693732	37633164	0.86	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P8
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:50:47	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1964253	1965110	1996592	1975318	0.93	cps
Ytterbium	172-1	283	220	197	233	19.22	cps
Ytterbium	172-2	67	100	127	98	30.74	cps
Ytterbium	176-1	55342	57287	56701	56443	1.77	cps
Ytterbium	176-2	21434	21581	21441	21485	0.39	cps
Yttrium	89-1	12259309	12344291	12553580	12385727	1.22	cps
Yttrium	89-2	921147	913064	916164	916792	0.44	cps
Zinc	66-2	4293859	4368649	4343794	4335434	0.88	cps
Zirconium	90-1	22117265	23129605	23038393	22761754	2.46	cps
Zirconium	91-1	4924422	5136326	5106111	5055620	2.27	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:53:32	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1586755	1674960	1615582	1625766	2.77	cps
Antimony	121-1	25291572	25684598	25209171	25395114	1.00	cps
Arsenic	75-2	519569	527408	520481	522486	0.82	cps
Barium	135-1	30100979	30654257	30320745	30358660	0.92	cps
Barium	137-1	51790189	53295498	52334891	52473526	1.45	cps
Beryllium	9-1	5507354	5512975	5556895	5525741	0.49	cps
Bismuth	209-1	4905130	4846243	4908766	4886713	0.72	cps
Bismuth	209-2	2238760	2247577	2231506	2239281	0.36	cps
Bromine	81-1	28025	27828	28806	28220	1.83	cps
Cadmium	108-1	473906	483680	483951	480512	1.19	cps
Cadmium	106-1	687978	698086	697460	694508	0.82	cps
Cadmium	111-1	6080332	6151943	6220323	6150866	1.14	cps
Calcium	43-1	7266108	7489015	7595691	7450272	2.26	cps
Calcium	44-1	120012785	123207698	122983625	122068036	1.46	cps
Carbon	12-1	4229625	4456478	4606345	4430816	4.28	cps
Carbon	12-2	35469	35469	36014	35651	0.88	cps
Chlorine	35-1	207475	211722	217219	212139	2.30	cps
Chlorine	35-2	920	880	947	916	3.66	cps
Chromium	52-2	5124728	5231306	5151909	5169314	1.07	cps
Cobalt	59-2	9555824	9610252	9505162	9557079	0.55	cps
Copper	63-2	73908624	74849289	74656784	74471566	0.67	cps
Dysprosium	156-1	547	600	583	577	4.73	cps
Dysprosium	156-2	100	100	97	99	1.94	cps
Erbium	164-1	323	410	327	353	13.90	cps
Erbium	164-2	163	137	123	141	14.43	cps
Gadolinium	160-1	327	333	310	323	3.72	cps
Gadolinium	160-2	97	93	90	93	3.57	cps
Holmium	165-1	8078378	8186113	8240091	8168194	1.01	cps
Holmium	165-2	3273853	3249248	3269659	3264253	0.40	cps
Indium	115-1	6317992	6329133	6202542	6283223	1.12	cps
Indium	115-2	637760	643585	641446	640931	0.46	cps
Iron	54-2	10569169	10592274	10711591	10624345	0.72	cps
Iron	56-2	194919110	196358277	193734497	195003962	0.67	cps
Iron	57-2	4800053	4907148	4868430	4858543	1.12	cps
Krypton	83-1	287	303	317	302	4.97	cps
Lead	206-1	92153285	94706785	95019729	93959933	1.67	cps

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:53:32	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	79400372	81266629	82006567	80891189	1.66	cps
Lead	208-1	367300268	377711211	379518359	374843279	1.76	cps
Lithium	6-1	2230620	2240950	2261493	2244354	0.70	cps
Magnesium	24-2	28107791	28439517	27992938	28180082	0.82	cps
Manganese	55-2	21955662	22153495	22091310	22066822	0.46	cps
Molybdenum	94-1	87410089	87710702	89317189	88145993	1.16	cps
Molybdenum	95-1	124808948	123956061	130597501	126454170	2.86	cps
Molybdenum	96-1	136105548	135824525	140394775	137441616	1.86	cps
Molybdenum	97-1	78839872	79799742	80652879	79764164	1.14	cps
Molybdenum	98-1	204092224	208324717	209564064	207327001	1.38	cps
Neodymium	150-1	1980	2217	2087	2095	5.66	cps
Neodymium	150-2	90	117	123	110	16.04	cps
Nickel	60-2	2649901	2744072	2695784	2696586	1.75	cps
Phosphorus	31-2	80884	80220	81655	80919	0.89	cps
Potassium	39-2	9492616	9540727	9521203	9518182	0.25	cps
Rhodium	103-1	6100258	6176952	6051666	6109625	1.03	cps
Rhodium	103-2	2508992	2548408	2569307	2542236	1.20	cps
Scandium	45-1	4087539	4175776	4149040	4137451	1.09	cps
Scandium	45-2	89574	89406	89214	89398	0.20	cps
Selenium	82-1	364069	366030	370377	366825	0.88	cps
Selenium	77-2	6728	6518	6261	6503	3.60	cps
Selenium	78-2	22662	22541	23136	22780	1.38	cps
Silicon	28-1	39559916	39100024	39952366	39537435	1.08	cps
Silver	107-1	31050543	30882481	31753187	31228737	1.48	cps
Silver	109-1	29254171	29695500	29835856	29595176	1.03	cps
Sodium	23-2	56678086	55955294	55832441	56155274	0.81	cps
Strontium	86-1	8001594	8274409	8151844	8142615	1.68	cps
Strontium	88-1	69280797	70799857	71737814	70606156	1.76	cps
Sulfur	34-1	2181726	2218897	2232157	2210927	1.18	cps
Terbium	159-1	8687337	8830203	8749894	8755812	0.82	cps
Terbium	159-2	3157950	3166399	3131782	3152044	0.57	cps
Thallium	203-1	22582937	22894910	23065643	22847830	1.07	cps
Thallium	205-1	53375343	55482298	55669756	54842465	2.32	cps
Tin	118-1	20751317	21190558	20747945	20896607	1.22	cps
Titanium	47-1	32944648	33965916	33787072	33565879	1.62	cps
Uranium	238-1	71899771	71909709	72698966	72169482	0.64	cps

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On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P8
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:53:32	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	3889824	3925138	3973702	3929554	1.07	cps
Ytterbium	172-1	457	503	433	464	7.67	cps
Ytterbium	172-2	187	180	187	184	2.09	cps
Ytterbium	176-1	109056	111873	112545	111158	1.67	cps
Ytterbium	176-2	41739	42679	41900	42106	1.19	cps
Yttrium	89-1	11810174	12430227	12182486	12140962	2.57	cps
Yttrium	89-2	905244	916301	917749	913098	0.75	cps
Zinc	66-2	8309204	8414593	8410091	8377963	0.71	cps
Zirconium	90-1	43447003	44465778	45394948	44435909	2.19	cps
Zirconium	91-1	9533067	9729523	9996523	9753037	2.39	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:56:21	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8060555	8369152	8227773	8219160	1.88	cps
Antimony	121-1	15552	15496	14811	15286	2.70	cps
Arsenic	75-2	267	290	263	273	5.32	cps
Barium	135-1	11799	11478	11352	11543	2.00	cps
Barium	137-1	20843	20599	19668	20370	3.04	cps
Beryllium	9-1	854	762	704	774	9.80	cps
Bismuth	209-1	4376937	4406313	4230431	4337894	2.17	cps
Bismuth	209-2	2014370	2080511	2098956	2064613	2.15	cps
Bromine	81-1	26629	26832	26762	26741	0.39	cps
Cadmium	108-1	203	170	180	184	9.28	cps
Cadmium	106-1	4471	4401	4507	4460	1.22	cps
Cadmium	111-1	4071	4092	4073	4078	0.28	cps
Calcium	43-1	36012914	35577733	35310921	35633856	0.99	cps
Calcium	44-1	592130591	586123511	583354711	587202938	0.76	cps
Carbon	12-1	3626497	3676095	3739560	3680717	1.54	cps
Carbon	12-2	36545	35593	36235	36124	1.34	cps
Chlorine	35-1	154255	157405	158618	156759	1.44	cps
Chlorine	35-2	650	657	670	659	1.55	cps
Chromium	52-2	44121	43830	43824	43925	0.39	cps
Cobalt	59-2	19614	20184	19624	19807	1.65	cps
Copper	63-2	20966	20702	20602	20756	0.91	cps
Dysprosium	156-1	803	893	883	860	5.74	cps
Dysprosium	156-2	270	280	240	263	7.90	cps
Erbium	164-1	1030	907	1027	988	7.11	cps
Erbium	164-2	423	370	367	387	8.22	cps
Gadolinium	160-1	810	803	873	829	4.66	cps
Gadolinium	160-2	367	280	357	334	14.18	cps
Holmium	165-1	7996336	8044731	7867333	7969467	1.15	cps
Holmium	165-2	3194332	3264469	3387065	3281955	2.97	cps
Indium	115-1	6290344	6211671	6333181	6278399	0.98	cps
Indium	115-2	710580	713519	734837	719645	1.84	cps
Iron	54-2	49045139	50028311	48742584	49272011	1.36	cps
Iron	56-2	914159320	912476493	912183293	912939702	0.12	cps
Iron	57-2	23038640	23188477	23127100	23118072	0.33	cps
Krypton	83-1	310	407	333	350	14.41	cps
Lead	206-1	94628	93719	93934	94094	0.51	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:56:21	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	82246	82822	81276	82115	0.95	cps
Lead	208-1	378971	376451	372794	376072	0.83	cps
Lithium	6-1	2095152	2059856	2084949	2079986	0.87	cps
Magnesium	24-2	139177308	142659825	139893128	140576753	1.31	cps
Manganese	55-2	11982	11912	11605	11833	1.69	cps
Molybdenum	94-1	17812	17384	16673	17290	3.33	cps
Molybdenum	95-1	17438	16910	16256	16868	3.51	cps
Molybdenum	96-1	33063	31436	31238	31912	3.14	cps
Molybdenum	97-1	11308	10868	9680	10619	7.93	cps
Molybdenum	98-1	27925	26178	24241	26115	7.06	cps
Neodymium	150-1	440	483	400	441	9.45	cps
Neodymium	150-2	127	87	147	120	25.46	cps
Nickel	60-2	12846	12866	12809	12840	0.22	cps
Phosphorus	31-2	120	100	117	112	9.55	cps
Potassium	39-2	49938844	49376636	48987364	49434281	0.97	cps
Rhodium	103-1	5559960	5559161	5600836	5573319	0.43	cps
Rhodium	103-2	2391706	2409926	2427989	2409874	0.75	cps
Scandium	45-1	4153432	4125391	4102150	4126991	0.62	cps
Scandium	45-2	87910	89134	91430	89491	2.00	cps
Selenium	82-1	357	247	313	306	18.13	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	50	17	23	30	58.79	cps
Silicon	28-1	671006	651691	634484	652394	2.80	cps
Silver	107-1	3681	2914	2787	3127	15.46	cps
Silver	109-1	3307	2820	2557	2895	13.15	cps
Sodium	23-2	274725729	277628436	274931463	275761876	0.59	cps
Strontium	86-1	25981	25727	26468	26059	1.45	cps
Strontium	88-1	220219	220507	224726	221818	1.14	cps
Sulfur	34-1	431416	434649	442506	436191	1.31	cps
Terbium	159-1	8283527	8324162	8361243	8322978	0.47	cps
Terbium	159-2	3166253	3113114	3210086	3163151	1.54	cps
Thallium	203-1	2234	2104	1763	2034	11.94	cps
Thallium	205-1	5428	4718	4147	4764	13.47	cps
Tin	118-1	6805	6682	6211	6566	4.77	cps
Titanium	47-1	3420	3304	3257	3327	2.53	cps
Uranium	238-1	3934	3634	2937	3502	14.61	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P8
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 11:56:21	DataFile Name :	012CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	1113	997	1040	1050	5.62	cps
Ytterbium	172-1	1540	1403	1623	1522	7.30	cps
Ytterbium	172-2	793	733	723	750	5.05	cps
Ytterbium	176-1	2057	2064	2217	2112	4.29	cps
Ytterbium	176-2	743	783	707	744	5.15	cps
Yttrium	89-1	11822609	11798859	11693105	11771524	0.59	cps
Yttrium	89-2	938572	938468	966958	948000	1.73	cps
Zinc	66-2	50031	50336	49446	49938	0.91	cps
Zirconium	90-1	20746	19744	20038	20176	2.55	cps
Zirconium	91-1	4557	4564	4504	4542	0.72	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:14:58	DataFile Name :	015ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	45243	46053	45986	45761	0.98	cps
Antimony	121-1	5405596	5452101	5441225	5432974	0.45	cps
Arsenic	75-2	117844	119004	118681	118510	0.51	cps
Barium	135-1	641785	645214	646226	644408	0.36	cps
Barium	137-1	1119669	1138565	1135425	1131220	0.90	cps
Beryllium	9-1	649462	657340	661532	656111	0.93	cps
Bismuth	209-1	5452047	5469755	5424704	5448835	0.42	cps
Bismuth	209-2	2602948	2503046	2561357	2555784	1.96	cps
Bromine	81-1	31262	30871	31408	31180	0.89	cps
Cadmium	108-1	44334	44940	45702	44992	1.52	cps
Cadmium	106-1	65762	67089	66797	66549	1.05	cps
Cadmium	111-1	672963	679567	687640	680057	1.08	cps
Calcium	43-1	162163	164051	162662	162959	0.60	cps
Calcium	44-1	2711011	2711194	2702281	2708162	0.19	cps
Carbon	12-1	3642405	3707572	3696950	3682309	0.95	cps
Carbon	12-2	26521	25849	26100	26157	1.30	cps
Chlorine	35-1	194468	200202	201198	198622	1.83	cps
Chlorine	35-2	830	867	810	836	3.44	cps
Chromium	52-2	589521	583199	583330	585350	0.62	cps
Cobalt	59-2	1127064	1124132	1124768	1125321	0.14	cps
Copper	63-2	888474	898088	901136	895900	0.74	cps
Dysprosium	156-1	20	30	27	26	19.92	cps
Dysprosium	156-2	7	10	0	6	91.64	cps
Erbium	164-1	50	83	50	61	31.49	cps
Erbium	164-2	27	23	17	22	22.91	cps
Gadolinium	160-1	97	103	107	102	4.98	cps
Gadolinium	160-2	20	10	40	23	65.47	cps
Holmium	165-1	8768832	8884006	8692631	8781823	1.10	cps
Holmium	165-2	3601243	3560088	3511564	3557632	1.26	cps
Indium	115-1	7479321	7713223	7618458	7603667	1.55	cps
Indium	115-2	848213	833955	836343	839504	0.91	cps
Iron	54-2	484619	480665	482569	482618	0.41	cps
Iron	56-2	8788315	8775314	8767619	8777083	0.12	cps
Iron	57-2	216533	217779	218947	217753	0.55	cps
Krypton	83-1	227	287	260	258	11.66	cps
Lead	206-1	4104306	4181561	4115323	4133730	1.01	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:14:58	DataFile Name :	015ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3426019	3520399	3443390	3463269	1.45	cps
Lead	208-1	15949667	16266073	15990463	16068734	1.07	cps
Lithium	6-1	2509642	2512178	2442461	2488094	1.59	cps
Magnesium	24-2	379900	373614	379878	377798	0.96	cps
Manganese	55-2	248592	250094	250019	249569	0.34	cps
Molybdenum	94-1	1383	1333	1487	1401	5.58	cps
Molybdenum	95-1	527	597	627	583	8.80	cps
Molybdenum	96-1	953	1080	1120	1051	8.28	cps
Molybdenum	97-1	337	340	343	340	0.98	cps
Molybdenum	98-1	793	917	880	863	7.34	cps
Neodymium	150-1	67	83	47	66	28.00	cps
Neodymium	150-2	0	3	10	4	114.60	cps
Nickel	60-2	311395	314863	315751	314003	0.73	cps
Phosphorus	31-2	110	127	60	99	35.09	cps
Potassium	39-2	439897	438028	439456	439127	0.22	cps
Rhodium	103-1	7117211	7142497	7043211	7100973	0.73	cps
Rhodium	103-2	3033884	3037279	3054029	3041731	0.35	cps
Scandium	45-1	4734946	4782033	4761304	4759428	0.50	cps
Scandium	45-2	100125	97729	97931	98595	1.35	cps
Selenium	82-1	84075	86335	86084	85498	1.45	cps
Selenium	77-2	1530	1803	1540	1625	9.54	cps
Selenium	78-2	5288	5678	5625	5530	3.83	cps
Silicon	28-1	491142	511741	497273	500052	2.12	cps
Silver	107-1	1824617	1802744	1804743	1810701	0.67	cps
Silver	109-1	1691273	1674593	1713401	1693089	1.15	cps
Sodium	23-2	1318850	1300401	1294588	1304613	0.97	cps
Strontium	86-1	2707	2434	2654	2598	5.58	cps
Strontium	88-1	18426	18830	19370	18875	2.51	cps
Sulfur	34-1	527191	523157	526108	525485	0.40	cps
Terbium	159-1	9240015	9187703	9199779	9209165	0.30	cps
Terbium	159-2	3614748	3365363	3433339	3471150	3.71	cps
Thallium	203-1	4992832	5103696	5020020	5038850	1.15	cps
Thallium	205-1	11681511	11795997	11686083	11721197	0.55	cps
Tin	118-1	3887	3964	3841	3897	1.60	cps
Titanium	47-1	280	267	310	286	7.77	cps
Uranium	238-1	227	253	327	269	19.26	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P8
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:14:58	DataFile Name :	015ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	437356	438146	436060	437188	0.24	cps
Ytterbium	172-1	33	53	40	42	24.12	cps
Ytterbium	172-2	17	30	17	21	36.45	cps
Ytterbium	176-1	1210	1227	1210	1216	0.79	cps
Ytterbium	176-2	320	297	323	313	4.64	cps
Yttrium	89-1	13381687	13550335	13195293	13375772	1.33	cps
Yttrium	89-2	1044695	1030439	1021614	1032250	1.13	cps
Zinc	66-2	188590	191694	190064	190116	0.82	cps
Zirconium	90-1	2474	2574	2577	2541	2.31	cps
Zirconium	91-1	1307	1207	1340	1285	5.40	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:18:19	DataFile Name :	016LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2264	2357	2387	2336	2.75	cps
Antimony	121-1	54180	53156	53886	53741	0.98	cps
Arsenic	75-2	610	560	600	590	4.48	cps
Barium	135-1	64218	65253	63481	64317	1.38	cps
Barium	137-1	111075	111047	111478	111200	0.22	cps
Beryllium	9-1	7123	7214	7131	7156	0.71	cps
Bismuth	209-1	5441786	5525828	5503567	5490394	0.79	cps
Bismuth	209-2	2550065	2584537	2553669	2562757	0.74	cps
Bromine	81-1	30176	30654	30450	30426	0.79	cps
Cadmium	108-1	587	593	500	560	9.30	cps
Cadmium	106-1	5605	5308	5434	5449	2.73	cps
Cadmium	111-1	10514	10189	10516	10406	1.81	cps
Calcium	43-1	42670	42971	42489	42710	0.57	cps
Calcium	44-1	706426	715782	720197	714135	0.98	cps
Carbon	12-1	3219275	3178638	3126067	3174660	1.47	cps
Carbon	12-2	21856	21583	21573	21670	0.74	cps
Chlorine	35-1	146711	147749	148378	147613	0.57	cps
Chlorine	35-2	687	573	510	590	15.17	cps
Chromium	52-2	12429	12566	13039	12678	2.53	cps
Cobalt	59-2	11765	11501	11555	11607	1.20	cps
Copper	63-2	19891	20031	20178	20033	0.72	cps
Dysprosium	156-1	20	27	23	23	14.29	cps
Dysprosium	156-2	3	7	0	3	100.05	cps
Erbium	164-1	90	67	67	74	18.09	cps
Erbium	164-2	27	20	17	21	24.12	cps
Gadolinium	160-1	97	93	63	84	21.74	cps
Gadolinium	160-2	13	27	20	20	33.35	cps
Holmium	165-1	8980960	8801340	8800697	8860999	1.17	cps
Holmium	165-2	3497728	3491910	3518527	3502722	0.40	cps
Indium	115-1	7568333	7609906	7573473	7583904	0.30	cps
Indium	115-2	834242	829387	830822	831483	0.30	cps
Iron	54-2	13093	12749	13233	13025	1.91	cps
Iron	56-2	234850	230155	230257	231754	1.16	cps
Iron	57-2	5621	5618	5504	5581	1.19	cps
Krypton	83-1	300	353	257	303	15.96	cps
Lead	206-1	21204	21124	20940	21089	0.64	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:18:19	DataFile Name :	016LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	17475	18113	18343	17977	2.50	cps
Lead	208-1	83292	84171	84124	83862	0.59	cps
Lithium	6-1	2509872	2534338	2506491	2516901	0.60	cps
Magnesium	24-2	170289	167176	166836	168100	1.13	cps
Manganese	55-2	4921	4911	5074	4969	1.84	cps
Molybdenum	94-1	55932	56755	56146	56278	0.76	cps
Molybdenum	95-1	66893	68122	68126	67714	1.05	cps
Molybdenum	96-1	74971	75196	74384	74850	0.56	cps
Molybdenum	97-1	41475	42482	41977	41978	1.20	cps
Molybdenum	98-1	109696	110385	109904	109995	0.32	cps
Neodymium	150-1	7	7	17	10	57.72	cps
Neodymium	150-2	3	0	0	1	173.21	cps
Nickel	60-2	3657	3881	3754	3764	2.98	cps
Phosphorus	31-2	213	283	233	243	14.82	cps
Potassium	39-2	123520	122858	121086	122488	1.03	cps
Rhodium	103-1	7078438	7225587	7041959	7115328	1.37	cps
Rhodium	103-2	2984403	3018551	3039240	3014065	0.92	cps
Scandium	45-1	4732799	4696225	4734876	4721300	0.46	cps
Scandium	45-2	97599	97985	96947	97510	0.54	cps
Selenium	82-1	2144	1960	2200	2101	5.97	cps
Selenium	77-2	50	27	53	43	33.52	cps
Selenium	78-2	177	173	147	166	9.93	cps
Silicon	28-1	584898	573678	574644	577740	1.08	cps
Silver	107-1	34132	34526	34065	34241	0.73	cps
Silver	109-1	31947	31907	32953	32269	1.84	cps
Sodium	23-2	358405	356248	353626	356093	0.67	cps
Strontium	86-1	9460	9223	9400	9361	1.32	cps
Strontium	88-1	77135	78636	77554	77775	1.00	cps
Sulfur	34-1	521141	518150	522585	520625	0.43	cps
Terbium	159-1	9149063	9236352	9301303	9228906	0.83	cps
Terbium	159-2	3427317	3467464	3470074	3454952	0.69	cps
Thallium	203-1	23715	23969	24670	24118	2.05	cps
Thallium	205-1	58829	58197	57969	58332	0.76	cps
Tin	118-1	111731	113331	114248	113103	1.13	cps
Titanium	47-1	19283	19363	19483	19377	0.52	cps
Uranium	238-1	72347	73109	73752	73069	0.96	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	LLICV	Instrumnet Name :	P8
Client Sample ID :	LLICV	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:18:19	DataFile Name :	016LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	22261	21930	22444	22212	1.17	cps
Ytterbium	172-1	33	53	53	47	24.75	cps
Ytterbium	172-2	30	37	40	36	14.32	cps
Ytterbium	176-1	1387	1253	1303	1315	5.12	cps
Ytterbium	176-2	380	360	337	359	6.04	cps
Yttrium	89-1	13291245	13454218	13406818	13384094	0.63	cps
Yttrium	89-2	1022821	1017511	1034798	1025043	0.86	cps
Zinc	66-2	6105	6535	6288	6309	3.42	cps
Zirconium	90-1	48076	48461	48795	48444	0.74	cps
Zirconium	91-1	10374	11018	11041	10811	3.50	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:29:07	DataFile Name :	019CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	433	373	370	392	9.09	cps
Antimony	121-1	207	160	197	188	13.09	cps
Arsenic	75-2	10	10	3	8	49.52	cps
Barium	135-1	110	117	130	119	8.57	cps
Barium	137-1	197	163	237	199	18.46	cps
Beryllium	9-1	112	120	112	115	3.87	cps
Bismuth	209-1	5532102	5443839	5463286	5479742	0.85	cps
Bismuth	209-2	2507190	2412142	2456192	2458508	1.93	cps
Bromine	81-1	32658	31926	33059	32548	1.76	cps
Cadmium	108-1	10	33	13	19	66.81	cps
Cadmium	106-1	4344	4371	4281	4332	1.07	cps
Cadmium	111-1	3087	3120	3044	3084	1.23	cps
Calcium	43-1	1010	970	1030	1003	3.05	cps
Calcium	44-1	30897	30509	30522	30643	0.72	cps
Carbon	12-1	3175161	3123870	3133624	3144218	0.87	cps
Carbon	12-2	22020	21976	21716	21904	0.75	cps
Chlorine	35-1	3167355	2840289	2589037	2865561	10.12	cps
Chlorine	35-2	9436	9156	8162	8918	7.51	cps
Chromium	52-2	1103	1070	1020	1064	3.94	cps
Cobalt	59-2	97	63	100	87	23.40	cps
Copper	63-2	2247	2144	2107	2166	3.35	cps
Dysprosium	156-1	10	13	10	11	17.30	cps
Dysprosium	156-2	0	0	3	1	173.21	cps
Erbium	164-1	53	90	67	70	26.51	cps
Erbium	164-2	27	13	30	23	37.81	cps
Gadolinium	160-1	67	117	97	93	26.96	cps
Gadolinium	160-2	20	27	23	23	14.29	cps
Holmium	165-1	8865970	8588275	8788392	8747546	1.64	cps
Holmium	165-2	3501589	3368815	3358988	3409797	2.34	cps
Indium	115-1	7579564	7539396	7461977	7526979	0.79	cps
Indium	115-2	824683	772671	792273	796543	3.30	cps
Iron	54-2	1007	1010	1033	1017	1.43	cps
Iron	56-2	14394	13874	14190	14153	1.85	cps
Iron	57-2	300	327	347	324	7.22	cps
Krypton	83-1	247	297	327	290	13.94	cps
Lead	206-1	3937	3711	3547	3732	5.25	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:29:07	DataFile Name :	019CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3244	3330	2974	3183	5.85	cps
Lead	208-1	15094	14697	13396	14395	6.17	cps
Lithium	6-1	2395073	2499063	2432633	2442256	2.16	cps
Magnesium	24-2	780	760	750	763	2.00	cps
Manganese	55-2	2494	2330	2630	2485	6.05	cps
Molybdenum	94-1	1017	890	923	943	6.96	cps
Molybdenum	95-1	1013	820	807	880	13.14	cps
Molybdenum	96-1	1173	983	840	999	16.74	cps
Molybdenum	97-1	590	580	487	552	10.32	cps
Molybdenum	98-1	1513	1273	1240	1342	11.11	cps
Neodymium	150-1	0	17	13	10	88.20	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	573	587	527	562	5.60	cps
Phosphorus	31-2	103	153	143	133	19.85	cps
Potassium	39-2	18582	18305	18272	18386	0.93	cps
Rhodium	103-1	7047503	7068219	7144600	7086774	0.72	cps
Rhodium	103-2	3054327	2849807	2880769	2928301	3.76	cps
Scandium	45-1	4832179	4833919	4762469	4809522	0.85	cps
Scandium	45-2	97975	93095	92704	94591	3.10	cps
Selenium	82-1	23	-43	3	-6	-616.44	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	33	20	13	22	45.83	cps
Silicon	28-1	486012	498186	488830	491009	1.30	cps
Silver	107-1	410	393	427	410	4.07	cps
Silver	109-1	310	293	320	308	4.38	cps
Sodium	23-2	37522	37217	36770	37170	1.02	cps
Strontium	86-1	547	530	587	554	5.25	cps
Strontium	88-1	480	523	527	510	5.11	cps
Sulfur	34-1	465956	470003	469078	468346	0.45	cps
Terbium	159-1	9311584	9152308	9217948	9227280	0.87	cps
Terbium	159-2	3453486	3191035	3287552	3310691	4.01	cps
Thallium	203-1	1287	1197	1080	1188	8.72	cps
Thallium	205-1	3000	2990	2777	2923	4.32	cps
Tin	118-1	3484	3480	3597	3521	1.89	cps
Titanium	47-1	397	340	327	354	10.49	cps
Uranium	238-1	223	267	223	238	10.52	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P8
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:29:07	DataFile Name :	019CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	17	30	13	20	44.10	cps
Ytterbium	172-1	67	27	80	58	48.03	cps
Ytterbium	172-2	30	13	23	22	37.76	cps
Ytterbium	176-1	1207	1130	1153	1163	3.38	cps
Ytterbium	176-2	293	327	237	286	15.93	cps
Yttrium	89-1	13120426	13237151	13493214	13283597	1.44	cps
Yttrium	89-2	1023898	959546	983999	989148	3.28	cps
Zinc	66-2	1517	1363	1417	1432	5.43	cps
Zirconium	90-1	1460	1417	1400	1426	2.17	cps
Zirconium	91-1	340	200	263	268	26.18	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:32:33	DataFile Name :	020ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8153176	8287910	8315793	8252293	1.05	cps
Antimony	121-1	27832	27424	27681	27646	0.75	cps
Arsenic	75-2	177	210	223	203	11.82	cps
Barium	135-1	8776	8990	8890	8885	1.20	cps
Barium	137-1	15252	14908	15322	15161	1.46	cps
Beryllium	9-1	1780	1820	1807	1802	1.12	cps
Bismuth	209-1	4826522	4794723	4878296	4833180	0.87	cps
Bismuth	209-2	2244744	2313093	2290281	2282706	1.52	cps
Bromine	81-1	32782	33406	33406	33198	1.09	cps
Cadmium	108-1	6188	6338	6405	6310	1.76	cps
Cadmium	106-1	4217	4611	4497	4442	4.56	cps
Cadmium	111-1	6423	6086	6380	6296	2.91	cps
Calcium	43-1	7663829	8031894	7911613	7869112	2.38	cps
Calcium	44-1	128790358	129805111	128965341	129186937	0.42	cps
Carbon	12-1	48367414	50988531	51773924	50376623	3.54	cps
Carbon	12-2	355813	355691	358568	356691	0.46	cps
Chlorine	35-1	104928348	112920768	115795755	111214957	5.06	cps
Chlorine	35-2	526234	532553	532465	530417	0.68	cps
Chromium	52-2	110799	109975	110785	110520	0.43	cps
Cobalt	59-2	12275	12322	11692	12096	2.90	cps
Copper	63-2	64489	64432	64054	64325	0.37	cps
Dysprosium	156-1	110	130	120	120	8.33	cps
Dysprosium	156-2	43	10	20	24	69.97	cps
Erbium	164-1	153	143	180	159	11.93	cps
Erbium	164-2	63	40	50	51	22.90	cps
Gadolinium	160-1	130	153	183	156	17.19	cps
Gadolinium	160-2	57	47	33	46	25.70	cps
Holmium	165-1	8408343	8455801	8500504	8454882	0.55	cps
Holmium	165-2	3349919	3390963	3338097	3359659	0.83	cps
Indium	115-1	6828711	6843923	7033573	6902069	1.65	cps
Indium	115-2	759462	754369	755733	756521	0.35	cps
Iron	54-2	22194782	22440751	22433652	22356395	0.63	cps
Iron	56-2	412712927	419978154	422279687	418323589	1.19	cps
Iron	57-2	10427404	10481748	10478417	10462523	0.29	cps
Krypton	83-1	277	273	333	294	11.45	cps
Lead	206-1	94867	88080	85114	89354	5.60	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:32:33	DataFile Name :	020ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	75187	69569	67444	70733	5.66	cps
Lead	208-1	357777	330261	317953	335331	6.08	cps
Lithium	6-1	2296341	2296758	2329843	2307647	0.83	cps
Magnesium	24-2	29649928	29316258	29444197	29470128	0.57	cps
Manganese	55-2	20275	20355	20285	20305	0.21	cps
Molybdenum	94-1	14533830	14531323	14606280	14557144	0.29	cps
Molybdenum	95-1	25472706	25963851	25794196	25743585	0.97	cps
Molybdenum	96-1	27569415	27611280	27816587	27665760	0.48	cps
Molybdenum	97-1	15970747	16076823	16060701	16036090	0.36	cps
Molybdenum	98-1	41049134	41800866	41598681	41482894	0.94	cps
Neodymium	150-1	97	103	130	110	16.03	cps
Neodymium	150-2	43	43	33	40	14.43	cps
Nickel	60-2	15459	15812	15285	15519	1.73	cps
Phosphorus	31-2	468540	464931	464250	465907	0.49	cps
Potassium	39-2	20774336	20644700	20746959	20721999	0.33	cps
Rhodium	103-1	6238439	6306321	6332529	6292430	0.77	cps
Rhodium	103-2	2771552	2687118	2643659	2700776	2.41	cps
Scandium	45-1	4581112	4526180	4598712	4568668	0.83	cps
Scandium	45-2	94988	95431	96290	95569	0.69	cps
Selenium	82-1	107	103	57	89	31.45	cps
Selenium	77-2	0	3	3	2	86.60	cps
Selenium	78-2	23	20	33	26	27.15	cps
Silicon	28-1	818054	833789	829085	826976	0.98	cps
Silver	107-1	983	1437	1407	1276	19.88	cps
Silver	109-1	957	1210	1307	1158	15.61	cps
Sodium	23-2	61261166	62623731	62664716	62183204	1.28	cps
Strontium	86-1	278165	279626	281619	279804	0.62	cps
Strontium	88-1	2509687	2565891	2537339	2537639	1.11	cps
Sulfur	34-1	9904894	10154098	10007275	10022089	1.25	cps
Terbium	159-1	8763675	8788371	8766739	8772929	0.15	cps
Terbium	159-2	3409781	3287661	3346111	3347851	1.82	cps
Thallium	203-1	1297	1513	2047	1619	23.84	cps
Thallium	205-1	3134	3777	4608	3840	19.24	cps
Tin	118-1	6578	7015	6938	6844	3.41	cps
Titanium	47-1	7357577	7459066	7352928	7389857	0.81	cps
Uranium	238-1	1247	1163	1370	1260	8.25	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P8
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:32:33	DataFile Name :	020ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	637	650	583	623	5.66	cps
Ytterbium	172-1	50	80	90	73	28.39	cps
Ytterbium	172-2	30	33	40	34	14.78	cps
Ytterbium	176-1	1130	1210	1237	1192	4.66	cps
Ytterbium	176-2	287	277	287	283	2.04	cps
Yttrium	89-1	12610470	12915266	12725270	12750335	1.21	cps
Yttrium	89-2	975511	978473	983761	979248	0.43	cps
Zinc	66-2	11118	11305	11962	11461	3.87	cps
Zirconium	90-1	2650	3324	3711	3228	16.62	cps
Zirconium	91-1	597	757	800	718	14.92	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:37:29	DataFile Name :	021ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	8361606	8119348	8402388	8294447	1.84	cps
Antimony	121-1	536545	545334	546240	542706	0.99	cps
Arsenic	75-2	12322	12099	12105	12175	1.04	cps
Barium	135-1	134344	134904	135247	134832	0.34	cps
Barium	137-1	232621	235506	235307	234478	0.69	cps
Beryllium	9-1	124555	125890	125071	125172	0.54	cps
Bismuth	209-1	4926571	4967615	5001075	4965087	0.75	cps
Bismuth	209-2	2287995	2273836	2303737	2288523	0.65	cps
Bromine	81-1	34917	34272	33838	34342	1.58	cps
Cadmium	108-1	14418	14962	14788	14722	1.89	cps
Cadmium	106-1	16049	15883	15559	15830	1.58	cps
Cadmium	111-1	132372	132388	133568	132776	0.52	cps
Calcium	43-1	8268700	7927635	8128360	8108232	2.11	cps
Calcium	44-1	133133155	131950941	133866185	132983427	0.73	cps
Carbon	12-1	50689874	52735831	52761524	52062410	2.28	cps
Carbon	12-2	364304	363585	365831	364573	0.31	cps
Chlorine	35-1	112545485	117890475	120949915	117128625	3.63	cps
Chlorine	35-2	544766	543904	551525	546732	0.76	cps
Chromium	52-2	225958	224893	226093	225648	0.29	cps
Cobalt	59-2	223352	222192	221073	222206	0.51	cps
Copper	63-2	226923	227758	228161	227614	0.28	cps
Dysprosium	156-1	103	97	110	103	6.45	cps
Dysprosium	156-2	53	47	57	52	9.75	cps
Erbium	164-1	130	173	167	157	14.90	cps
Erbium	164-2	47	97	50	64	43.38	cps
Gadolinium	160-1	180	177	193	183	4.81	cps
Gadolinium	160-2	70	87	87	81	11.87	cps
Holmium	165-1	8537162	8929976	8699813	8722317	2.26	cps
Holmium	165-2	3451512	3365268	3429513	3415431	1.31	cps
Indium	115-1	7184568	7048192	7149437	7127399	0.99	cps
Indium	115-2	773198	771222	776062	773494	0.31	cps
Iron	54-2	22834245	22604092	22680747	22706362	0.52	cps
Iron	56-2	426426420	414763314	417211394	419467043	1.47	cps
Iron	57-2	10580074	10330415	10414530	10441673	1.22	cps
Krypton	83-1	333	323	363	340	6.12	cps
Lead	206-1	443103	450148	447012	446755	0.79	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:37:29	DataFile Name :	021ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	370036	375935	375392	373788	0.87	cps
Lead	208-1	1718421	1751162	1729369	1732984	0.96	cps
Lithium	6-1	2366318	2312993	2279553	2319621	1.89	cps
Magnesium	24-2	29898891	29628520	30122249	29883220	0.83	cps
Manganese	55-2	67951	67763	68708	68140	0.73	cps
Molybdenum	94-1	14665789	14679458	14820021	14721756	0.58	cps
Molybdenum	95-1	25898303	26476690	26758692	26377895	1.66	cps
Molybdenum	96-1	27558823	28579528	28200269	28112873	1.84	cps
Molybdenum	97-1	16111066	16321514	16139524	16190701	0.71	cps
Molybdenum	98-1	42410598	41119460	42209405	41913154	1.66	cps
Neodymium	150-1	133	160	117	137	15.99	cps
Neodymium	150-2	37	37	27	33	17.32	cps
Nickel	60-2	72600	73026	72199	72608	0.57	cps
Phosphorus	31-2	475821	468728	472713	472421	0.75	cps
Potassium	39-2	20992386	21049243	20913785	20985138	0.32	cps
Rhodium	103-1	6440053	6502218	6351750	6431340	1.18	cps
Rhodium	103-2	2774387	2776172	2790490	2780350	0.32	cps
Scandium	45-1	4744743	4777345	4766777	4762955	0.35	cps
Scandium	45-2	97565	96179	97514	97086	0.81	cps
Selenium	82-1	8446	8673	8209	8443	2.75	cps
Selenium	77-2	153	157	170	160	5.51	cps
Selenium	78-2	617	527	487	543	12.26	cps
Silicon	28-1	855630	870862	946627	891040	5.47	cps
Silver	107-1	608579	621624	622120	617441	1.24	cps
Silver	109-1	578248	584166	589505	583973	0.96	cps
Sodium	23-2	63448282	61544604	63150934	62714607	1.63	cps
Strontium	86-1	281956	288337	283877	284723	1.15	cps
Strontium	88-1	2515795	2668103	2593743	2592547	2.94	cps
Sulfur	34-1	10456071	10213496	10346677	10338748	1.18	cps
Terbium	159-1	8925942	9015589	9090114	9010548	0.91	cps
Terbium	159-2	3342316	3409324	3359706	3370449	1.03	cps
Thallium	203-1	448129	456842	460853	455275	1.43	cps
Thallium	205-1	1074898	1091597	1093300	1086598	0.94	cps
Tin	118-1	7392	7332	7152	7292	1.71	cps
Titanium	47-1	7514194	7422630	7470457	7469094	0.61	cps
Uranium	238-1	1377	1420	1313	1370	3.92	cps

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P8
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:37:29	DataFile Name :	021ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	88049	88079	86730	87619	0.88	cps
Ytterbium	172-1	83	53	97	78	28.54	cps
Ytterbium	172-2	37	47	40	41	12.39	cps
Ytterbium	176-1	1090	1080	1277	1149	9.64	cps
Ytterbium	176-2	323	293	373	330	12.25	cps
Yttrium	89-1	13095723	13604446	13051825	13250665	2.32	cps
Yttrium	89-2	1013419	1006730	1005838	1008662	0.41	cps
Zinc	66-2	29150	29140	29431	29240	0.56	cps
Zirconium	90-1	2780	3164	3370	3105	9.64	cps
Zirconium	91-1	653	750	823	742	11.49	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:40:43	DataFile Name :	022CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4844925	4698986	4777027	4773646	1.53	cps
Antimony	121-1	13143559	13296507	13299937	13246668	0.67	cps
Arsenic	75-2	293974	290755	292523	292417	0.55	cps
Barium	135-1	16066451	16351901	16539703	16319351	1.46	cps
Barium	137-1	27448678	27797200	28241993	27829290	1.43	cps
Beryllium	9-1	2881770	2891071	2917599	2896813	0.64	cps
Bismuth	209-1	4642353	4742089	4662132	4682192	1.13	cps
Bismuth	209-2	2218242	2309087	2200401	2242577	2.60	cps
Bromine	81-1	31769	32668	32407	32282	1.43	cps
Cadmium	108-1	241142	244202	246097	243814	1.03	cps
Cadmium	106-1	353831	361757	364089	359892	1.49	cps
Cadmium	111-1	3206807	3228587	3187690	3207695	0.64	cps
Calcium	43-1	19824458	20600246	20563258	20329321	2.15	cps
Calcium	44-1	329312608	340205688	339898302	336472199	1.84	cps
Carbon	12-1	4319487	4369176	4380921	4356528	0.75	cps
Carbon	12-2	35483	35917	36362	35921	1.22	cps
Chlorine	35-1	4903795	4724646	4463821	4697421	4.71	cps
Chlorine	35-2	17194	16283	15135	16204	6.37	cps
Chromium	52-2	3002825	3016920	3002094	3007280	0.28	cps
Cobalt	59-2	5310191	5372928	5298661	5327260	0.75	cps
Copper	63-2	39334664	40606135	39753938	39898246	1.62	cps
Dysprosium	156-1	650	690	650	663	3.48	cps
Dysprosium	156-2	180	180	143	168	12.62	cps
Erbium	164-1	577	603	583	588	2.36	cps
Erbium	164-2	203	233	273	237	14.84	cps
Gadolinium	160-1	500	527	560	529	5.68	cps
Gadolinium	160-2	233	240	210	228	6.92	cps
Holmium	165-1	8624879	8528788	8583684	8579117	0.56	cps
Holmium	165-2	3427536	3581146	3400568	3469750	2.81	cps
Indium	115-1	6699425	6859277	6712494	6757065	1.31	cps
Indium	115-2	729838	770841	718727	739802	3.71	cps
Iron	54-2	28836073	29251252	28670151	28919159	1.04	cps
Iron	56-2	538500579	525945979	530988619	531811725	1.19	cps
Iron	57-2	13481952	13320159	13389066	13397059	0.61	cps
Krypton	83-1	383	320	380	361	9.87	cps
Lead	206-1	46097519	45241776	46329716	45889670	1.25	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:40:43	DataFile Name :	022CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	38773016	38832532	39362225	38989258	0.83	cps
Lead	208-1	177928551	178760943	180905986	179198493	0.86	cps
Lithium	6-1	2185892	2258342	2256047	2233427	1.84	cps
Magnesium	24-2	80199439	78669122	79481522	79450028	0.96	cps
Manganese	55-2	12504276	12563710	12357821	12475269	0.85	cps
Molybdenum	94-1	46739864	47896956	47612039	47416287	1.27	cps
Molybdenum	95-1	68168169	69504586	68944496	68872417	0.97	cps
Molybdenum	96-1	74655774	75823002	74764054	75080943	0.86	cps
Molybdenum	97-1	42101829	42590151	42110477	42267485	0.66	cps
Molybdenum	98-1	109818348	111367495	110340475	110508773	0.71	cps
Neodymium	150-1	1283	1393	1467	1381	6.68	cps
Neodymium	150-2	113	50	107	90	38.67	cps
Nickel	60-2	1362472	1470042	1377928	1403481	4.14	cps
Phosphorus	31-2	47554	47889	48658	48034	1.18	cps
Potassium	39-2	27695289	27890456	27797532	27794426	0.35	cps
Rhodium	103-1	6162822	6203854	6201386	6189354	0.37	cps
Rhodium	103-2	2637235	2835997	2652025	2708419	4.09	cps
Scandium	45-1	4643117	4633742	4645559	4640806	0.13	cps
Scandium	45-2	100193	104586	97564	100781	3.52	cps
Selenium	82-1	190582	192017	191315	191305	0.38	cps
Selenium	77-2	3674	3917	3727	3773	3.39	cps
Selenium	78-2	12199	13146	12696	12680	3.74	cps
Silicon	28-1	26334222	26673442	26470780	26492815	0.64	cps
Silver	107-1	15971976	15993819	16176069	16047288	0.70	cps
Silver	109-1	14983061	15121959	15094681	15066567	0.49	cps
Sodium	23-2	157722584	155490091	156827051	156679909	0.72	cps
Strontium	86-1	4408300	4454902	4509740	4457647	1.14	cps
Strontium	88-1	38674068	38375591	38803026	38617562	0.57	cps
Sulfur	34-1	1545378	1539380	1510141	1531633	1.23	cps
Terbium	159-1	8845453	8657256	8809187	8770632	1.14	cps
Terbium	159-2	3286931	3470001	3249138	3335357	3.54	cps
Thallium	203-1	11248976	11091886	11394397	11245086	1.35	cps
Thallium	205-1	26643647	26732435	26796769	26724283	0.29	cps
Tin	118-1	10574177	10897690	10763806	10745224	1.51	cps
Titanium	47-1	18627059	18655971	18745384	18676138	0.33	cps
Uranium	238-1	34172533	35473815	35492053	35046134	2.16	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P8
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:40:43	DataFile Name :	022CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2289473	2289266	2271505	2283415	0.45	cps
Ytterbium	172-1	913	1023	890	942	7.56	cps
Ytterbium	172-2	463	443	410	439	6.14	cps
Ytterbium	176-1	55449	57109	57370	56643	1.84	cps
Ytterbium	176-2	22092	22035	22179	22102	0.33	cps
Yttrium	89-1	12965857	12931105	12913457	12936806	0.21	cps
Yttrium	89-2	1008794	1059054	994355	1020734	3.33	cps
Zinc	66-2	4506862	4506742	4600367	4537990	1.19	cps
Zirconium	90-1	23667054	24139324	23925140	23910506	0.99	cps
Zirconium	91-1	5341022	5466209	5304975	5370736	1.58	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:44:04	DataFile Name :	023CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	470	500	413	461	9.54	cps
Antimony	121-1	2770	2330	2127	2409	13.65	cps
Arsenic	75-2	13	17	13	14	13.35	cps
Barium	135-1	480	357	353	397	18.20	cps
Barium	137-1	813	670	680	721	11.10	cps
Beryllium	9-1	391	312	341	348	11.42	cps
Bismuth	209-1	5368416	5504251	5596423	5489697	2.09	cps
Bismuth	209-2	2634388	2614735	2602260	2617128	0.62	cps
Bromine	81-1	32087	32133	31519	31913	1.07	cps
Cadmium	108-1	30	37	30	32	11.95	cps
Cadmium	106-1	4784	4821	5024	4876	2.65	cps
Cadmium	111-1	3495	3552	3683	3577	2.69	cps
Calcium	43-1	1390	1350	1213	1318	7.03	cps
Calcium	44-1	36059	34077	33075	34403	4.41	cps
Carbon	12-1	3489977	3429915	3388180	3436024	1.49	cps
Carbon	12-2	23212	22434	22334	22660	2.12	cps
Chlorine	35-1	1930450	1814351	1739370	1828057	5.27	cps
Chlorine	35-2	6855	6622	6211	6563	4.96	cps
Chromium	52-2	1130	1120	1127	1126	0.45	cps
Cobalt	59-2	147	143	163	151	7.09	cps
Copper	63-2	2817	2640	2744	2734	3.25	cps
Dysprosium	156-1	7	13	20	13	49.99	cps
Dysprosium	156-2	3	0	3	2	86.60	cps
Erbium	164-1	47	70	57	58	20.26	cps
Erbium	164-2	17	13	7	12	41.65	cps
Gadolinium	160-1	87	80	93	87	7.69	cps
Gadolinium	160-2	33	20	23	26	27.15	cps
Holmium	165-1	9019364	9010989	9041715	9024023	0.18	cps
Holmium	165-2	3599008	3630465	3595018	3608164	0.54	cps
Indium	115-1	7744744	7803670	7930392	7826269	1.21	cps
Indium	115-2	850681	853893	849421	851332	0.27	cps
Iron	54-2	1190	1190	1040	1140	7.60	cps
Iron	56-2	18205	17598	17631	17811	1.92	cps
Iron	57-2	467	433	473	458	4.68	cps
Krypton	83-1	320	317	290	309	5.32	cps
Lead	206-1	3904	3621	3547	3691	5.11	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:44:04	DataFile Name :	023CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3277	3194	3004	3158	4.44	cps
Lead	208-1	15294	14417	14070	14593	4.32	cps
Lithium	6-1	2475316	2494869	2560485	2510223	1.78	cps
Magnesium	24-2	1667	1523	1323	1505	11.46	cps
Manganese	55-2	2650	2610	2647	2636	0.84	cps
Molybdenum	94-1	2817	2324	2040	2394	16.42	cps
Molybdenum	95-1	2397	1923	1673	1998	18.39	cps
Molybdenum	96-1	2714	2194	2000	2302	16.03	cps
Molybdenum	97-1	1487	1193	983	1221	20.70	cps
Molybdenum	98-1	3754	2917	2600	3090	19.29	cps
Neodymium	150-1	10	10	13	11	17.30	cps
Neodymium	150-2	3	3	3	3	0.00	cps
Nickel	60-2	637	613	653	634	3.17	cps
Phosphorus	31-2	120	123	107	117	7.56	cps
Potassium	39-2	19036	18879	19156	19024	0.73	cps
Rhodium	103-1	7333823	7373917	7494875	7400872	1.13	cps
Rhodium	103-2	3184985	3115972	3153970	3151643	1.10	cps
Scandium	45-1	4962253	4902886	5059261	4974800	1.59	cps
Scandium	45-2	101674	101045	101347	101355	0.31	cps
Selenium	82-1	-57	37	-23	-14	-327.42	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	23	17	47	29	54.53	cps
Silicon	28-1	492686	514332	483235	496751	3.21	cps
Silver	107-1	1610	1460	1270	1447	11.78	cps
Silver	109-1	7283	1350	1167	3267	106.52	cps
Sodium	23-2	43344	42632	41729	42569	1.90	cps
Strontium	86-1	657	603	653	638	4.69	cps
Strontium	88-1	1297	1157	1037	1163	11.19	cps
Sulfur	34-1	548391	544967	546669	546676	0.31	cps
Terbium	159-1	9288030	9513362	9329317	9376903	1.28	cps
Terbium	159-2	3504618	3550367	3528743	3527910	0.65	cps
Thallium	203-1	1750	1740	1570	1687	6.00	cps
Thallium	205-1	4157	4021	3704	3961	5.87	cps
Tin	118-1	3844	3887	3801	3844	1.13	cps
Titanium	47-1	720	547	590	619	14.58	cps
Uranium	238-1	1080	780	680	847	24.59	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P8
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:44:04	DataFile Name :	023CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	73	63	37	58	32.80	cps
Ytterbium	172-1	63	67	53	61	11.36	cps
Ytterbium	172-2	27	27	7	20	57.73	cps
Ytterbium	176-1	1010	1203	1273	1162	11.74	cps
Ytterbium	176-2	283	377	370	343	15.17	cps
Yttrium	89-1	13821694	13637241	13706532	13721822	0.68	cps
Yttrium	89-2	1059600	1062577	1056434	1059537	0.29	cps
Zinc	66-2	1593	1613	1643	1617	1.56	cps
Zirconium	90-1	3584	3280	3050	3305	8.10	cps
Zirconium	91-1	787	767	660	738	9.23	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:47:27	DataFile Name :	024LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2347	2370	2140	2286	5.54	cps
Antimony	121-1	53735	54913	55392	54680	1.56	cps
Arsenic	75-2	550	693	627	623	11.51	cps
Barium	135-1	64727	65032	65893	65217	0.93	cps
Barium	137-1	114365	113887	113760	114004	0.28	cps
Beryllium	9-1	6909	7092	6967	6989	1.34	cps
Bismuth	209-1	5554383	5571758	5491527	5539223	0.76	cps
Bismuth	209-2	2668271	2588992	2601785	2619683	1.62	cps
Bromine	81-1	31639	31846	31733	31739	0.33	cps
Cadmium	108-1	543	510	593	549	7.64	cps
Cadmium	106-1	5688	5448	5678	5605	2.42	cps
Cadmium	111-1	10410	10545	10568	10507	0.81	cps
Calcium	43-1	44074	44331	44853	44419	0.89	cps
Calcium	44-1	736646	739116	743631	739798	0.48	cps
Carbon	12-1	3322393	3266304	3268798	3285832	0.96	cps
Carbon	12-2	22237	22761	22728	22575	1.30	cps
Chlorine	35-1	1170384	1123164	1080704	1124750	3.99	cps
Chlorine	35-2	4361	4251	4111	4241	2.96	cps
Chromium	52-2	13143	13436	13213	13264	1.16	cps
Cobalt	59-2	12155	11745	12142	12014	1.94	cps
Copper	63-2	21480	20822	20488	20930	2.41	cps
Dysprosium	156-1	17	20	7	14	48.02	cps
Dysprosium	156-2	0	7	0	2	173.21	cps
Erbium	164-1	60	70	77	69	12.18	cps
Erbium	164-2	20	33	30	28	24.98	cps
Gadolinium	160-1	80	123	123	109	22.98	cps
Gadolinium	160-2	10	20	33	21	55.45	cps
Holmium	165-1	8944210	9008932	9080615	9011252	0.76	cps
Holmium	165-2	3640089	3619641	3599470	3619733	0.56	cps
Indium	115-1	7667381	7835349	7857057	7786596	1.33	cps
Indium	115-2	854026	853815	850682	852841	0.22	cps
Iron	54-2	13853	13663	13306	13608	2.04	cps
Iron	56-2	242126	242423	241942	242164	0.10	cps
Iron	57-2	5905	6295	6128	6109	3.20	cps
Krypton	83-1	280	273	263	272	3.08	cps
Lead	206-1	21615	21010	21515	21380	1.51	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:47:27	DataFile Name :	024LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	18560	18944	19054	18853	1.38	cps
Lead	208-1	85136	85320	86149	85535	0.63	cps
Lithium	6-1	2560651	2515224	2512877	2529584	1.06	cps
Magnesium	24-2	177020	176222	174748	175996	0.66	cps
Manganese	55-2	5308	5134	5361	5268	2.25	cps
Molybdenum	94-1	57729	57742	57960	57810	0.22	cps
Molybdenum	95-1	67955	68290	70457	68901	1.97	cps
Molybdenum	96-1	77441	78849	78229	78173	0.90	cps
Molybdenum	97-1	43565	43822	43431	43606	0.46	cps
Molybdenum	98-1	111631	111594	112095	111773	0.25	cps
Neodymium	150-1	23	10	27	20	44.10	cps
Neodymium	150-2	0	3	0	1	173.21	cps
Nickel	60-2	3854	3714	3691	3753	2.35	cps
Phosphorus	31-2	203	263	210	226	14.58	cps
Potassium	39-2	128412	129219	130349	129326	0.75	cps
Rhodium	103-1	7126960	7287977	7292913	7235950	1.30	cps
Rhodium	103-2	3126141	3179000	3140388	3148510	0.87	cps
Scandium	45-1	4940976	5083428	4949621	4991342	1.60	cps
Scandium	45-2	101291	102925	102089	102102	0.80	cps
Selenium	82-1	1914	2144	2200	2086	7.28	cps
Selenium	77-2	57	50	20	42	46.26	cps
Selenium	78-2	123	153	180	152	18.62	cps
Silicon	28-1	631372	577692	590547	599870	4.67	cps
Silver	107-1	33868	33658	34460	33995	1.22	cps
Silver	109-1	32325	32254	33036	32538	1.33	cps
Sodium	23-2	375902	376689	377132	376574	0.17	cps
Strontium	86-1	9083	9337	9427	9282	1.92	cps
Strontium	88-1	78630	79739	79883	79417	0.86	cps
Sulfur	34-1	551663	555850	554468	553994	0.39	cps
Terbium	159-1	9466562	9496553	9459218	9474111	0.21	cps
Terbium	159-2	3476862	3549802	3514108	3513591	1.04	cps
Thallium	203-1	24957	24446	25047	24817	1.31	cps
Thallium	205-1	58310	59502	60135	59316	1.56	cps
Tin	118-1	113066	115199	114863	114376	1.00	cps
Titanium	47-1	19674	20034	19877	19862	0.91	cps
Uranium	238-1	72468	74409	72532	73137	1.51	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CRI	Instrumnet Name :	P8
Client Sample ID :	CRI	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:47:27	DataFile Name :	024LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	22635	23102	23029	22922	1.10	cps
Ytterbium	172-1	63	80	50	64	23.32	cps
Ytterbium	172-2	33	13	23	23	42.86	cps
Ytterbium	176-1	1297	1263	1477	1346	8.53	cps
Ytterbium	176-2	377	350	363	363	3.67	cps
Yttrium	89-1	13955622	13810625	13876233	13880827	0.52	cps
Yttrium	89-2	1060869	1063508	1062866	1062415	0.13	cps
Zinc	66-2	6488	6542	6595	6542	0.82	cps
Zirconium	90-1	51167	50668	49909	50581	1.25	cps
Zirconium	91-1	11064	11385	11195	11215	1.44	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-02	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-TANK-041525	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:50:49	DataFile Name :	025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2904	2807	2727	2813	3.15	cps
Antimony	121-1	2140	2064	2070	2091	2.03	cps
Arsenic	75-2	130	113	140	128	10.54	cps
Barium	135-1	159954	161760	160081	160599	0.63	cps
Barium	137-1	279373	277272	279767	278804	0.48	cps
Beryllium	9-1	145	167	140	151	9.72	cps
Bismuth	209-1	5789075	5667527	5611610	5689404	1.59	cps
Bismuth	209-2	2656169	2663048	2679310	2666175	0.45	cps
Bromine	81-1	58652	63319	64956	62309	5.25	cps
Cadmium	108-1	17	27	20	21	24.12	cps
Cadmium	106-1	4964	4861	4874	4900	1.15	cps
Cadmium	111-1	3523	3451	3485	3486	1.04	cps
Calcium	43-1	2071812	2115869	2094343	2094008	1.05	cps
Calcium	44-1	33998040	34204860	33912604	34038502	0.44	cps
Carbon	12-1	5517979	6029187	6422782	5989983	7.57	cps
Carbon	12-2	47600	48169	49232	48334	1.71	cps
Chlorine	35-1	4872159	5321485	5537715	5243786	6.47	cps
Chlorine	35-2	25045	26411	25943	25800	2.69	cps
Chromium	52-2	2907	2587	2540	2678	7.45	cps
Cobalt	59-2	513	463	497	491	5.18	cps
Copper	63-2	179237	179776	179766	179593	0.17	cps
Dysprosium	156-1	90	113	80	94	18.11	cps
Dysprosium	156-2	27	23	23	24	7.89	cps
Erbium	164-1	103	107	130	113	12.82	cps
Erbium	164-2	37	27	50	38	30.98	cps
Gadolinium	160-1	153	120	163	146	15.59	cps
Gadolinium	160-2	47	53	33	44	22.92	cps
Holmium	165-1	9380404	9314525	9403050	9365993	0.49	cps
Holmium	165-2	3742237	3760155	3764292	3755561	0.31	cps
Indium	115-1	8062229	8017726	7985737	8021897	0.48	cps
Indium	115-2	875234	875341	872326	874300	0.20	cps
Iron	54-2	7869	7806	7585	7753	1.92	cps
Iron	56-2	137821	139564	138595	138660	0.63	cps
Iron	57-2	3704	3577	3631	3637	1.75	cps
Krypton	83-1	320	287	293	300	5.88	cps
Lead	206-1	5795	5631	5271	5566	4.81	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-02	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-TANK-041525	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:50:49	DataFile Name :	025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	4681	4441	4548	4556	2.64	cps
Lead	208-1	22575	21471	20730	21592	4.30	cps
Lithium	6-1	2586881	2561184	2595885	2581317	0.70	cps
Magnesium	24-2	2263244	2249990	2197088	2236774	1.56	cps
Manganese	55-2	14958	14891	15235	15028	1.21	cps
Molybdenum	94-1	2470	2287	2457	2405	4.25	cps
Molybdenum	95-1	3227	2787	3010	3008	7.32	cps
Molybdenum	96-1	3430	3417	3427	3425	0.20	cps
Molybdenum	97-1	1873	1957	1953	1928	2.45	cps
Molybdenum	98-1	4868	5151	5124	5048	3.10	cps
Neodymium	150-1	97	100	90	96	5.33	cps
Neodymium	150-2	10	20	13	14	35.26	cps
Nickel	60-2	4541	4481	4324	4449	2.52	cps
Phosphorus	31-2	180	90	143	138	32.85	cps
Potassium	39-2	582179	586643	583009	583943	0.41	cps
Rhodium	103-1	7323326	7425307	7343781	7364138	0.73	cps
Rhodium	103-2	3198130	3137990	3115552	3150557	1.36	cps
Scandium	45-1	5043317	5132915	5164956	5113729	1.23	cps
Scandium	45-2	105819	106994	106148	106320	0.57	cps
Selenium	82-1	47	30	147	74	84.77	cps
Selenium	77-2	3	7	0	3	100.05	cps
Selenium	78-2	27	30	20	26	19.92	cps
Silicon	28-1	32599786	32564535	32703048	32622456	0.22	cps
Silver	107-1	663	607	533	601	10.84	cps
Silver	109-1	517	467	517	500	5.77	cps
Sodium	23-2	13814536	13672094	13794487	13760372	0.56	cps
Strontium	86-1	857527	854289	849157	853657	0.49	cps
Strontium	88-1	7887812	7696505	7730531	7771616	1.31	cps
Sulfur	34-1	1135768	1117025	1122288	1125027	0.86	cps
Terbium	159-1	9660724	9799438	9732130	9730764	0.71	cps
Terbium	159-2	3694020	3603507	3604000	3633842	1.43	cps
Thallium	203-1	987	937	850	924	7.48	cps
Thallium	205-1	2774	2297	2074	2381	15.02	cps
Tin	118-1	29769	29031	29632	29477	1.33	cps
Titanium	47-1	1687	1677	1743	1702	2.11	cps
Uranium	238-1	873	880	887	880	0.76	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-02	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-TANK-041525	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:50:49	DataFile Name :	025AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	540	533	533	536	0.72	cps
Ytterbium	172-1	117	97	97	103	11.17	cps
Ytterbium	172-2	43	50	67	53	22.54	cps
Ytterbium	176-1	1330	1327	1387	1348	2.50	cps
Ytterbium	176-2	323	363	397	361	10.17	cps
Yttrium	89-1	14291158	14537616	14212080	14346951	1.18	cps
Yttrium	89-2	1091068	1092313	1095658	1093013	0.22	cps
Zinc	66-2	16780	16793	16927	16833	0.48	cps
Zirconium	90-1	2020	1800	1804	1875	6.73	cps
Zirconium	91-1	537	370	330	412	26.59	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-03	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-PUMP-04152	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:54:06	DataFile Name :	026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3130	3330	3404	3288	4.30	cps
Antimony	121-1	4351	4337	4057	4248	3.90	cps
Arsenic	75-2	237	263	220	240	9.11	cps
Barium	135-1	165608	168770	166295	166891	1.00	cps
Barium	137-1	289875	292120	289593	290530	0.48	cps
Beryllium	9-1	115	145	140	133	12.06	cps
Bismuth	209-1	5593238	5721685	5686622	5667181	1.17	cps
Bismuth	209-2	2655203	2693305	2609236	2652581	1.59	cps
Bromine	81-1	60751	64856	65502	63703	4.04	cps
Cadmium	108-1	13	20	23	19	26.96	cps
Cadmium	106-1	4918	4974	4788	4893	1.96	cps
Cadmium	111-1	3496	3535	3372	3468	2.46	cps
Calcium	43-1	2155106	2146096	2148457	2149886	0.22	cps
Calcium	44-1	34658926	34801908	34767598	34742811	0.21	cps
Carbon	12-1	6131010	6628392	6822340	6527247	5.46	cps
Carbon	12-2	49717	50416	51088	50407	1.36	cps
Chlorine	35-1	5259020	5624965	5818818	5567601	5.11	cps
Chlorine	35-2	26424	26678	27329	26810	1.74	cps
Chromium	52-2	3074	3237	3277	3196	3.37	cps
Cobalt	59-2	667	670	633	657	3.09	cps
Copper	63-2	128212	131351	129794	129786	1.21	cps
Dysprosium	156-1	107	83	103	98	12.91	cps
Dysprosium	156-2	37	43	17	32	43.06	cps
Erbium	164-1	137	130	167	144	13.52	cps
Erbium	164-2	53	30	33	39	32.45	cps
Gadolinium	160-1	177	143	167	162	10.54	cps
Gadolinium	160-2	53	60	53	56	6.93	cps
Holmium	165-1	9357520	9226625	9385235	9323127	0.91	cps
Holmium	165-2	3669884	3772013	3627011	3689636	2.02	cps
Indium	115-1	7909909	7874518	7913285	7899237	0.27	cps
Indium	115-2	864503	883415	845933	864617	2.17	cps
Iron	54-2	141345	141930	139951	141075	0.72	cps
Iron	56-2	2808821	2714422	2725798	2749680	1.87	cps
Iron	57-2	66280	65707	65617	65868	0.55	cps
Krypton	83-1	270	327	247	281	14.63	cps
Lead	206-1	4087	3934	3947	3990	2.13	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-03	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-PUMP-04152	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:54:06	DataFile Name :	026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	3484	3537	3357	3459	2.67	cps
Lead	208-1	15964	15954	15834	15917	0.45	cps
Lithium	6-1	2584659	2558961	2577856	2573825	0.52	cps
Magnesium	24-2	2288236	2216663	2287306	2264068	1.81	cps
Manganese	55-2	43800	43804	42945	43516	1.14	cps
Molybdenum	94-1	2690	2667	2657	2671	0.64	cps
Molybdenum	95-1	3157	3174	3144	3158	0.48	cps
Molybdenum	96-1	3671	3737	3647	3685	1.27	cps
Molybdenum	97-1	1963	2077	1997	2012	2.89	cps
Molybdenum	98-1	4964	5078	5111	5051	1.52	cps
Neodymium	150-1	80	70	90	80	12.50	cps
Neodymium	150-2	23	40	27	30	29.40	cps
Nickel	60-2	2884	2970	2800	2885	2.95	cps
Phosphorus	31-2	177	187	120	161	22.32	cps
Potassium	39-2	596143	592748	597587	595493	0.42	cps
Rhodium	103-1	7278871	7306955	7465678	7350501	1.37	cps
Rhodium	103-2	3149735	3215073	3047221	3137343	2.70	cps
Scandium	45-1	5107975	5124634	5040328	5090979	0.88	cps
Scandium	45-2	104429	107210	102260	104633	2.37	cps
Selenium	82-1	77	17	163	86	86.19	cps
Selenium	77-2	0	7	0	2	173.21	cps
Selenium	78-2	40	20	30	30	33.33	cps
Silicon	28-1	33011270	32631353	32146533	32596385	1.33	cps
Silver	107-1	387	423	407	406	4.53	cps
Silver	109-1	380	350	297	342	12.33	cps
Sodium	23-2	14400463	14146408	14429154	14325341	1.09	cps
Strontium	86-1	868138	862567	862215	864307	0.38	cps
Strontium	88-1	7754495	7870524	7698074	7774364	1.13	cps
Sulfur	34-1	1194219	1197763	1195283	1195755	0.15	cps
Terbium	159-1	9647361	9608358	9631368	9629029	0.20	cps
Terbium	159-2	3615168	3647067	3529692	3597309	1.69	cps
Thallium	203-1	680	717	743	713	4.46	cps
Thallium	205-1	1984	1894	1787	1888	5.22	cps
Tin	118-1	55023	54454	55371	54950	0.84	cps
Titanium	47-1	1873	1807	1933	1871	3.39	cps
Uranium	238-1	913	887	967	922	4.42	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	Q1812-03	Instrumnet Name :	P8
Client Sample ID :	RINSE-EB-PUMP-04152	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:54:06	DataFile Name :	026AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	687	623	570	627	9.32	cps
Ytterbium	172-1	130	113	113	119	8.09	cps
Ytterbium	172-2	53	40	40	44	17.32	cps
Ytterbium	176-1	1297	1473	1360	1377	6.50	cps
Ytterbium	176-2	300	270	327	299	9.48	cps
Yttrium	89-1	14291602	14255583	14026328	14191171	1.01	cps
Yttrium	89-2	1080365	1102655	1056429	1079816	2.14	cps
Zinc	66-2	44908	44048	43807	44254	1.31	cps
Zirconium	90-1	2224	2184	2197	2201	0.93	cps
Zirconium	91-1	493	450	460	468	4.85	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BL	Instrumnet Name :	P8
Client Sample ID :	PB167612BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:57:20	DataFile Name :	027CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	427	390	353	390	9.40	cps
Antimony	121-1	257	283	243	261	7.80	cps
Arsenic	75-2	3	7	0	3	100.05	cps
Barium	135-1	117	140	157	138	14.58	cps
Barium	137-1	230	213	213	219	4.40	cps
Beryllium	9-1	102	105	116	107	6.82	cps
Bismuth	209-1	5514727	5511482	5545979	5524063	0.34	cps
Bismuth	209-2	2564038	2601391	2611857	2592429	0.97	cps
Bromine	81-1	32080	32481	32464	32342	0.70	cps
Cadmium	108-1	27	13	7	16	65.47	cps
Cadmium	106-1	4721	4844	4834	4800	1.43	cps
Cadmium	111-1	3363	3438	3439	3413	1.29	cps
Calcium	43-1	990	843	947	927	8.13	cps
Calcium	44-1	29524	28705	28368	28866	2.06	cps
Carbon	12-1	3857108	3714675	3620930	3730904	3.19	cps
Carbon	12-2	25105	24180	24307	24530	2.04	cps
Chlorine	35-1	1027725	960162	890411	959432	7.16	cps
Chlorine	35-2	3550	3274	3300	3375	4.52	cps
Chromium	52-2	1103	1110	1127	1113	1.08	cps
Cobalt	59-2	63	63	77	68	11.36	cps
Copper	63-2	2020	1930	1913	1955	2.94	cps
Dysprosium	156-1	10	17	3	10	66.70	cps
Dysprosium	156-2	3	0	0	1	173.21	cps
Erbium	164-1	73	83	50	69	24.83	cps
Erbium	164-2	13	17	23	18	28.64	cps
Gadolinium	160-1	83	140	73	99	36.36	cps
Gadolinium	160-2	20	13	23	19	26.96	cps
Holmium	165-1	8916000	9054425	9013542	8994655	0.79	cps
Holmium	165-2	3541229	3494126	3594169	3543175	1.41	cps
Indium	115-1	7825814	7706334	7648322	7726823	1.17	cps
Indium	115-2	841992	840428	846840	843087	0.40	cps
Iron	54-2	883	860	787	843	5.98	cps
Iron	56-2	9763	9700	10090	9851	2.13	cps
Iron	57-2	270	283	253	269	5.59	cps
Krypton	83-1	310	313	237	287	15.12	cps
Lead	206-1	1417	1320	1413	1383	3.97	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BL	Instrumnet Name :	P8
Client Sample ID :	PB167612BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:57:20	DataFile Name :	027CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	1247	1073	1223	1181	7.96	cps
Lead	208-1	5674	5281	5664	5539	4.05	cps
Lithium	6-1	2464111	2516455	2498844	2493137	1.07	cps
Magnesium	24-2	580	553	657	597	8.99	cps
Manganese	55-2	2567	2564	2487	2539	1.78	cps
Molybdenum	94-1	750	773	783	769	2.22	cps
Molybdenum	95-1	287	307	300	298	3.42	cps
Molybdenum	96-1	460	387	370	406	11.81	cps
Molybdenum	97-1	203	170	167	180	11.27	cps
Molybdenum	98-1	450	403	470	441	7.75	cps
Neodymium	150-1	17	0	13	10	88.20	cps
Neodymium	150-2	0	3	0	1	173.21	cps
Nickel	60-2	653	667	670	663	1.33	cps
Phosphorus	31-2	123	103	80	102	21.22	cps
Potassium	39-2	17574	17471	17164	17403	1.23	cps
Rhodium	103-1	7220964	7298804	7202159	7240643	0.71	cps
Rhodium	103-2	3055815	3075943	3118422	3083393	1.04	cps
Scandium	45-1	4878536	4948134	4855224	4893964	0.99	cps
Scandium	45-2	101025	100897	101146	101023	0.12	cps
Selenium	82-1	-40	-53	60	-11	-557.54	cps
Selenium	77-2	3	0	0	1	173.21	cps
Selenium	78-2	20	20	7	16	49.47	cps
Silicon	28-1	529184	493912	486655	503250	4.52	cps
Silver	107-1	313	323	383	340	11.13	cps
Silver	109-1	223	203	240	222	8.26	cps
Sodium	23-2	35446	34544	34347	34779	1.69	cps
Strontium	86-1	573	590	533	566	5.15	cps
Strontium	88-1	820	730	707	752	7.96	cps
Sulfur	34-1	589237	588822	583963	587341	0.50	cps
Terbium	159-1	9110531	9243696	9319526	9224584	1.15	cps
Terbium	159-2	3464362	3434398	3497720	3465493	0.91	cps
Thallium	203-1	623	600	600	608	2.22	cps
Thallium	205-1	1497	1410	1517	1475	3.85	cps
Tin	118-1	3447	3571	3711	3576	3.69	cps
Titanium	47-1	220	253	210	228	9.96	cps
Uranium	238-1	173	217	187	192	11.55	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BL	Instrumnet Name :	P8
Client Sample ID :	PB167612BL	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 12:57:20	DataFile Name :	027CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	40	10	20	23	65.47	cps
Ytterbium	172-1	40	53	53	49	15.74	cps
Ytterbium	172-2	33	23	30	29	17.63	cps
Ytterbium	176-1	1203	1230	1240	1225	1.55	cps
Ytterbium	176-2	287	330	320	312	7.27	cps
Yttrium	89-1	13746251	13740709	13762156	13749705	0.08	cps
Yttrium	89-2	1040205	1051524	1051922	1047884	0.63	cps
Zinc	66-2	1560	1630	1570	1587	2.39	cps
Zirconium	90-1	1687	1874	1927	1829	6.89	cps
Zirconium	91-1	400	447	357	401	11.22	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BS	Instrumnet Name :	P8
Client Sample ID :	PB167612BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:00:45	DataFile Name :	028LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	937894	935302	944314	939170	0.49	cps
Antimony	121-1	13598602	13719423	14247182	13855069	2.49	cps
Arsenic	75-2	295378	296876	295270	295841	0.30	cps
Barium	135-1	16097805	16546623	16721392	16455273	1.95	cps
Barium	137-1	28487295	28866387	28485324	28613002	0.77	cps
Beryllium	9-1	3129772	3218216	3141240	3163076	1.52	cps
Bismuth	209-1	5272432	5275266	5219466	5255722	0.60	cps
Bismuth	209-2	2405817	2396668	2399290	2400592	0.20	cps
Bromine	81-1	31041	31255	30570	30955	1.13	cps
Cadmium	108-1	262080	267469	265421	264990	1.03	cps
Cadmium	106-1	380921	384623	382784	382776	0.48	cps
Cadmium	111-1	3391157	3544369	3508396	3481307	2.30	cps
Calcium	43-1	4211609	4271226	4271128	4251321	0.81	cps
Calcium	44-1	69698266	69666982	70054422	69806557	0.31	cps
Carbon	12-1	4105254	4240502	4329506	4225088	2.67	cps
Carbon	12-2	31978	32112	32476	32189	0.80	cps
Chlorine	35-1	671404	666750	663471	667208	0.60	cps
Chlorine	35-2	2624	2537	2634	2598	2.05	cps
Chromium	52-2	3002079	2980912	2992304	2991765	0.35	cps
Cobalt	59-2	5505042	5578301	5607770	5563704	0.95	cps
Copper	63-2	41962702	42810369	43009109	42594060	1.30	cps
Dysprosium	156-1	337	313	287	312	8.01	cps
Dysprosium	156-2	30	67	53	50	37.12	cps
Erbium	164-1	217	193	260	223	15.15	cps
Erbium	164-2	97	63	80	80	20.84	cps
Gadolinium	160-1	157	233	197	196	19.61	cps
Gadolinium	160-2	67	50	67	61	15.75	cps
Holmium	165-1	8721833	8923438	8875227	8840166	1.19	cps
Holmium	165-2	3485630	3454837	3470224	3470230	0.44	cps
Indium	115-1	7124741	7241726	7256796	7207754	1.00	cps
Indium	115-2	740942	748452	757309	748901	1.09	cps
Iron	54-2	6102729	6072683	6089829	6088414	0.25	cps
Iron	56-2	110145755	111756145	112786392	111562764	1.19	cps
Iron	57-2	2804471	2880846	2881023	2855446	1.55	cps
Krypton	83-1	327	303	297	309	5.10	cps
Lead	206-1	48045458	49651083	49597574	49098038	1.86	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BS	Instrumnet Name :	P8
Client Sample ID :	PB167612BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:00:45	DataFile Name :	028LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	41805409	42783791	42585807	42391669	1.22	cps
Lead	208-1	193798862	197031232	197163240	195997778	0.97	cps
Lithium	6-1	2452749	2456713	2387623	2432362	1.59	cps
Magnesium	24-2	16427844	16263211	16823023	16504693	1.74	cps
Manganese	55-2	12632245	12670968	12636401	12646538	0.17	cps
Molybdenum	94-1	48429044	48644901	48713553	48595833	0.31	cps
Molybdenum	95-1	68608686	71006787	70207247	69940907	1.75	cps
Molybdenum	96-1	74747651	77200546	77370836	76439677	1.92	cps
Molybdenum	97-1	43129524	42917159	43955156	43333947	1.27	cps
Molybdenum	98-1	113247105	113725525	114550878	113841169	0.58	cps
Neodymium	150-1	1170	1243	1313	1242	5.77	cps
Neodymium	150-2	60	53	70	61	13.73	cps
Nickel	60-2	1555273	1593758	1572909	1573980	1.22	cps
Phosphorus	31-2	47083	46712	47451	47082	0.78	cps
Potassium	39-2	5657726	5638865	5683273	5659954	0.39	cps
Rhodium	103-1	6659603	6621421	6799087	6693370	1.40	cps
Rhodium	103-2	2835017	2898605	2892846	2875489	1.22	cps
Scandium	45-1	4743957	4851856	4785528	4793780	1.14	cps
Scandium	45-2	100065	99679	100642	100129	0.48	cps
Selenium	82-1	198932	202360	203699	201664	1.22	cps
Selenium	77-2	3844	3611	4031	3828	5.50	cps
Selenium	78-2	13009	13193	12903	13035	1.13	cps
Silicon	28-1	26341337	26138454	26326019	26268603	0.43	cps
Silver	107-1	17203052	17790798	17474041	17489297	1.68	cps
Silver	109-1	16099010	16602940	17067030	16589660	2.92	cps
Sodium	23-2	32626926	32749595	33257270	32877930	1.02	cps
Strontium	86-1	4490807	4448425	4576752	4505328	1.45	cps
Strontium	88-1	38438724	38333138	39762503	38844788	2.05	cps
Sulfur	34-1	1591692	1576065	1564253	1577337	0.87	cps
Terbium	159-1	9030168	9125853	9346416	9167479	1.77	cps
Terbium	159-2	3448832	3398813	3396422	3414689	0.87	cps
Thallium	203-1	11813579	12146838	12128601	12029673	1.56	cps
Thallium	205-1	28950760	28939146	29369544	29086483	0.84	cps
Tin	118-1	11313044	11407494	11544093	11421543	1.02	cps
Titanium	47-1	19160679	19272456	19262768	19231968	0.32	cps
Uranium	238-1	38083964	38401006	37702069	38062347	0.92	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	PB167612BS	Instrumnet Name :	P8
Client Sample ID :	PB167612BS	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:00:45	DataFile Name :	028LCS6.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2248966	2267202	2325143	2280437	1.74	cps
Ytterbium	172-1	280	243	257	260	7.14	cps
Ytterbium	172-2	103	147	87	112	27.60	cps
Ytterbium	176-1	57344	57581	57561	57496	0.23	cps
Ytterbium	176-2	22319	22486	22589	22465	0.61	cps
Yttrium	89-1	13228812	12966531	13483806	13226383	1.96	cps
Yttrium	89-2	997852	1008801	1019182	1008612	1.06	cps
Zinc	66-2	4772836	4744376	4761952	4759722	0.30	cps
Zirconium	90-1	24509625	24396107	24530931	24478888	0.30	cps
Zirconium	91-1	5416461	5463075	5428530	5436022	0.45	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:03:26	DataFile Name :	029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4680519	4791903	4720709	4731044	1.19	cps
Antimony	121-1	12891878	13214391	13304895	13137055	1.65	cps
Arsenic	75-2	285351	286577	287805	286578	0.43	cps
Barium	135-1	15974988	16128729	16273040	16125586	0.92	cps
Barium	137-1	27366225	27838408	27764960	27656531	0.92	cps
Beryllium	9-1	2956395	2961776	2970540	2962904	0.24	cps
Bismuth	209-1	4803948	4853318	4743731	4800332	1.14	cps
Bismuth	209-2	2195726	2217683	2234049	2215820	0.87	cps
Bromine	81-1	30941	31582	31759	31428	1.37	cps
Cadmium	108-1	240414	245466	246290	244057	1.30	cps
Cadmium	106-1	349924	359976	361352	357084	1.75	cps
Cadmium	111-1	3160576	3212339	3200906	3191274	0.85	cps
Calcium	43-1	19633022	20359529	19936121	19976224	1.83	cps
Calcium	44-1	326162135	331803802	329324222	329096720	0.86	cps
Carbon	12-1	4110483	4293726	4320346	4241518	2.69	cps
Carbon	12-2	35426	35734	35770	35643	0.53	cps
Chlorine	35-1	549654	556210	553825	553230	0.60	cps
Chlorine	35-2	2194	2300	2440	2311	5.35	cps
Chromium	52-2	2937461	2990206	2966537	2964735	0.89	cps
Cobalt	59-2	5261991	5302560	5276196	5280249	0.39	cps
Copper	63-2	39811009	39267869	38944633	39341171	1.11	cps
Dysprosium	156-1	597	753	720	690	11.96	cps
Dysprosium	156-2	143	180	177	167	12.16	cps
Erbium	164-1	680	643	593	639	6.81	cps
Erbium	164-2	223	250	287	253	12.55	cps
Gadolinium	160-1	493	457	510	487	5.61	cps
Gadolinium	160-2	230	223	183	212	11.89	cps
Holmium	165-1	8473708	8556777	8476793	8502426	0.55	cps
Holmium	165-2	3424027	3461524	3403283	3429611	0.86	cps
Indium	115-1	6674613	6629775	6638401	6647596	0.36	cps
Indium	115-2	726796	719652	723224	723224	0.49	cps
Iron	54-2	28630328	28476922	28496416	28534555	0.29	cps
Iron	56-2	528314739	534533432	536596499	533148223	0.81	cps
Iron	57-2	13090727	13494102	13398416	13327748	1.58	cps
Krypton	83-1	317	370	417	368	13.61	cps
Lead	206-1	45618726	47392239	46340343	46450436	1.92	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:03:26	DataFile Name :	029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	38502446	39607431	39600024	39236634	1.62	cps
Lead	208-1	179523911	182954966	182978921	181819266	1.09	cps
Lithium	6-1	2246125	2289809	2296372	2277435	1.20	cps
Magnesium	24-2	78451406	79787772	79358460	79199213	0.86	cps
Manganese	55-2	12300376	12510579	12379908	12396954	0.86	cps
Molybdenum	94-1	46412599	46634511	46294474	46447195	0.37	cps
Molybdenum	95-1	66741692	68111951	67936386	67596676	1.10	cps
Molybdenum	96-1	72831417	74560234	75684697	74358783	1.93	cps
Molybdenum	97-1	41108701	42220114	42558818	41962544	1.81	cps
Molybdenum	98-1	107816055	109856452	109161968	108944825	0.95	cps
Neodymium	150-1	1323	1357	1350	1343	1.31	cps
Neodymium	150-2	80	93	90	88	7.90	cps
Nickel	60-2	1357672	1367000	1359192	1361288	0.37	cps
Phosphorus	31-2	46916	47183	47337	47145	0.45	cps
Potassium	39-2	27865920	27399185	27322833	27529313	1.07	cps
Rhodium	103-1	6061833	6238595	6141637	6147355	1.44	cps
Rhodium	103-2	2677054	2656663	2681237	2671651	0.49	cps
Scandium	45-1	4536426	4559541	4604073	4566680	0.75	cps
Scandium	45-2	98860	99290	98964	99038	0.23	cps
Selenium	82-1	186423	188883	189728	188345	0.91	cps
Selenium	77-2	3560	3707	3574	3614	2.24	cps
Selenium	78-2	13026	12432	12646	12701	2.37	cps
Silicon	28-1	25929843	26240610	26195165	26121872	0.64	cps
Silver	107-1	15585690	15983089	16172358	15913713	1.88	cps
Silver	109-1	14857765	14848334	15133284	14946461	1.08	cps
Sodium	23-2	157911768	158359844	159365568	158545727	0.47	cps
Strontium	86-1	4278129	4396824	4403932	4359629	1.62	cps
Strontium	88-1	37740809	38606050	38784023	38376961	1.45	cps
Sulfur	34-1	1520049	1493417	1500036	1504501	0.92	cps
Terbium	159-1	8749949	8668425	8785688	8734687	0.69	cps
Terbium	159-2	3317352	3310253	3308939	3312181	0.14	cps
Thallium	203-1	11368714	11587160	11359547	11438474	1.13	cps
Thallium	205-1	26932945	27431373	26963139	27109152	1.03	cps
Tin	118-1	10556111	10651591	10667652	10625118	0.57	cps
Titanium	47-1	18091568	18690172	18718511	18500084	1.91	cps
Uranium	238-1	36108512	35971444	36038936	36039631	0.19	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P8
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:03:26	DataFile Name :	029AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	2251459	2214721	2248773	2238318	0.91	cps
Ytterbium	172-1	893	947	910	917	2.98	cps
Ytterbium	172-2	453	423	423	433	4.00	cps
Ytterbium	176-1	55613	57494	57484	56864	1.91	cps
Ytterbium	176-2	22145	21841	22212	22066	0.90	cps
Yttrium	89-1	12587789	12963949	12935051	12828930	1.63	cps
Yttrium	89-2	998407	1001556	1000094	1000019	0.16	cps
Zinc	66-2	4499049	4452788	4510347	4487394	0.68	cps
Zirconium	90-1	23484935	23828572	23466168	23593225	0.86	cps
Zirconium	91-1	5186041	5263710	5272871	5240874	0.91	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:07:44	DataFile Name :	030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	390	393	337	373	8.52	cps
Antimony	121-1	2560	2270	1944	2258	13.67	cps
Arsenic	75-2	17	17	17	17	0.00	cps
Barium	135-1	420	287	300	336	21.88	cps
Barium	137-1	613	567	513	564	8.86	cps
Beryllium	9-1	423	376	325	375	13.11	cps
Bismuth	209-1	5674993	5609831	5692211	5659012	0.77	cps
Bismuth	209-2	2602810	2627055	2675444	2635103	1.40	cps
Bromine	81-1	31225	31766	31362	31451	0.89	cps
Cadmium	108-1	33	40	23	32	26.04	cps
Cadmium	106-1	4554	4958	4644	4719	4.49	cps
Cadmium	111-1	3355	3592	3415	3454	3.58	cps
Calcium	43-1	1230	1197	1133	1187	4.14	cps
Calcium	44-1	31478	31201	30893	31191	0.94	cps
Carbon	12-1	3519389	3448143	3414725	3460752	1.54	cps
Carbon	12-2	23549	23258	23445	23418	0.63	cps
Chlorine	35-1	400415	392578	389436	394143	1.43	cps
Chlorine	35-2	1613	1613	1600	1609	0.48	cps
Chromium	52-2	1100	1247	1247	1198	7.07	cps
Cobalt	59-2	197	163	160	173	11.70	cps
Copper	63-2	2554	2647	2527	2576	2.45	cps
Dysprosium	156-1	23	13	13	17	34.65	cps
Dysprosium	156-2	7	0	3	3	100.05	cps
Erbium	164-1	67	60	53	60	11.12	cps
Erbium	164-2	7	27	13	16	65.47	cps
Gadolinium	160-1	73	80	77	77	4.35	cps
Gadolinium	160-2	17	23	13	18	28.64	cps
Holmium	165-1	9241134	9132903	9216212	9196750	0.62	cps
Holmium	165-2	3701950	3666651	3639406	3669336	0.85	cps
Indium	115-1	7835718	7961328	7995124	7930723	1.06	cps
Indium	115-2	854892	856095	850455	853814	0.35	cps
Iron	54-2	1013	1050	1027	1030	1.80	cps
Iron	56-2	14544	14080	14197	14274	1.69	cps
Iron	57-2	400	397	373	390	3.73	cps
Krypton	83-1	263	243	260	256	4.19	cps
Lead	206-1	3157	3397	2777	3110	10.05	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:07:44	DataFile Name :	030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	207-1	2957	2847	2780	2861	3.12	cps
Lead	208-1	13306	12959	12009	12758	5.26	cps
Lithium	6-1	2505062	2561810	2466657	2511176	1.91	cps
Magnesium	24-2	1257	1040	1230	1176	10.05	cps
Manganese	55-2	2684	2817	3037	2846	6.27	cps
Molybdenum	94-1	2420	2154	2070	2215	8.26	cps
Molybdenum	95-1	1697	1627	1390	1571	10.23	cps
Molybdenum	96-1	2214	1823	1687	1908	14.33	cps
Molybdenum	97-1	1040	893	770	901	15.00	cps
Molybdenum	98-1	2914	2314	2320	2516	13.70	cps
Neodymium	150-1	13	20	13	16	24.76	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	573	667	707	649	10.54	cps
Phosphorus	31-2	123	127	113	121	5.73	cps
Potassium	39-2	18252	17524	18479	18085	2.76	cps
Rhodium	103-1	7376541	7468250	7575097	7473296	1.33	cps
Rhodium	103-2	3170266	3152588	3195925	3172926	0.69	cps
Scandium	45-1	5057408	4909468	5034237	5000371	1.59	cps
Scandium	45-2	103630	99962	104463	102685	2.33	cps
Selenium	82-1	13	100	53	56	78.08	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	23	20	13	19	26.96	cps
Silicon	28-1	495275	493042	490371	492896	0.50	cps
Silver	107-1	1210	1150	1013	1125	8.96	cps
Silver	109-1	1180	953	937	1023	13.28	cps
Sodium	23-2	41268	39921	41709	40966	2.27	cps
Strontium	86-1	653	567	600	607	7.21	cps
Strontium	88-1	1100	1127	1003	1077	6.03	cps
Sulfur	34-1	572887	568593	569686	570389	0.39	cps
Terbium	159-1	9557986	9581921	9169933	9436613	2.45	cps
Terbium	159-2	3553780	3455530	3492027	3500445	1.42	cps
Thallium	203-1	1133	1090	1053	1092	3.67	cps
Thallium	205-1	2784	2490	2387	2554	8.06	cps
Tin	118-1	3661	3934	4786	4127	14.23	cps
Titanium	47-1	527	493	503	508	3.37	cps
Uranium	238-1	847	687	650	728	14.37	cps

Reviewed By:mohan
On:4/29/2025 4:10:15 PM
Inst Id :P8
LB :LB135595

LB Number :	LB135595	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P8
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-04-29 13:07:44	DataFile Name :	030AREF.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Vanadium	51-2	37	40	30	36	14.32	cps
Ytterbium	172-1	20	70	27	39	69.81	cps
Ytterbium	172-2	20	43	37	33	36.05	cps
Ytterbium	176-1	1183	1253	1220	1219	2.87	cps
Ytterbium	176-2	287	303	323	304	6.03	cps
Yttrium	89-1	13908831	14205748	13999519	14038033	1.08	cps
Yttrium	89-2	1064141	1064990	1058554	1062562	0.33	cps
Zinc	66-2	1607	1743	1647	1666	4.22	cps
Zirconium	90-1	4141	4037	3821	4000	4.08	cps
Zirconium	91-1	1013	917	850	927	8.86	cps

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB167634

SOP ID : M7470A-Mercury-19

SDG No : NA

Matrix : WATER

Pippete ID: HG A

Balance ID : N/A

Filter paper ID : NA

pH Strip ID : M6069

Hood ID : #1

Block ID: 1. HG HOT BLOCK#3 2. N/A

Start Digest Date: 04/16/2025 **Time :** 14:40 **Temp :** 94 °C

End Digest Date: 04/16/2025 **Time :** 16:40 **Temp :** 95 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: 12

Temp : 1. 94°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP85251
CCV	30mL	MP85253
CRA	30mL	MP85255
Blank Spike	0.48mL	MP85244
Matrix Spike	0.48mL	MP85244

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	2.5mL	MP85240
KMnO4 (5%)	4.5mL	MP85241
K2S2O8 (5%)	2.5mL	MP85242
Hydroxylamine HCL (12%)	2.0mL	MP85243
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

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
0.0 ppb	S0	30mL	MP85245
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP85246
2.5 ppb	S2.5	30mL	MP85247
5.0 ppb	S5.0	30mL	MP85248
7.5 ppb	S7.5	30mL	MP85249
10.0 ppb	S10.0	30mL	MP85250
ICV	ICV	30mL	MP85251
ICB	ICB	30mL	MP85252
CCV	CCV	30mL	MP85253
CCB	CCB	30mL	MP85254
CRI	CRI	30mL	MP85255
CHK STD	CHK STD	30mL	MP85256

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
4/16/25 @ 19:14	MB ~ Digestion Lab	MB ~ Metals Lab
	Preparation Group	**Analysis Group**

Alliance TECHNICAL GROUP

Water Mercury Preparation Sheet

PB167634

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
PB167634BL	PBW634	30	30	<2	N/A	3-1
PB167634BS	LCS634	30	30	<2	MP85244	2
Q1812-02	RINSE-EB-TANK-041525	30	30	<2	N/A	3
Q1812-03	RINSE-EB-PUMP-041525	30	30	<2	N/A	4
Q1814-01	A3729	30	30	<2	N/A	5
Q1814-02	SCRUBBLE-TANK-LIQUID	30	30	<2	N/A	6
Q1816-01	441	30	30	<2	N/A	7
Q1818-05	3828	30	30	<2	N/A	8
Q1818-06	3829	30	30	<2	N/A	9
Q1818-07	3651	30	30	<2	N/A	10
Q1824-04	285	30	30	<2	N/A	11
Q1824-04DUP	285DUP	30	30	<2	N/A	12
Q1824-04MS	285MS	30	30	<2	MP85244	13
Q1824-04MSD	285MSD	30	30	<2	MP85244	14

Q1812-METALS

WORKLIST(Hardcopy Internal Chain)

WorkList Name : 041625_7470 **WorkList ID :** 188956 **Department :** Digestion **Date :** 04-16-2025 09:57:22

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1812-02	RINSE-EB-TANK-041525	Water	Mercury	1:1 HNO3 to pH < 2	JACO05	L31	04/15/2025	7470A
Q1812-03	RINSE-EB-PUMP-041525	Water	Mercury	1:1 HNO3 to pH < 2	JACO05	L31	04/15/2025	7470A
Q1814-01	A3729	Water	Mercury	1:1 HNO3 to pH < 2	PSEG03		04/16/2025	7470A
Q1814-02	SCRUBBLE-TANK-LIQUID	Water	Mercury	1:1 HNO3 to pH < 2	PSEG03	L41	04/16/2025	7470A
Q1816-01	441	Water	Mercury	1:1 HNO3 to pH < 2	PSEG03	L41	04/16/2025	7470A
Q1818-05	3828	Water	Mercury	1:1 HNO3 to pH < 2	PSEG03	L41	04/16/2025	7470A
Q1818-06	3829	Water	Mercury	1:1 HNO3 to pH < 2	PSEG03	L41	04/16/2025	7470A
Q1818-07	3651	Water	Mercury	1:1 HNO3 to pH < 2	PSEG03	L41	04/16/2025	7470A
Q1824-04	285	Water	Mercury	1:1 HNO3 to pH < 2	PSEG03	L31	04/16/2025	7470A

684 of 931

Date/Time 4/16/25 @ 14:20

Raw Sample Received by: MB - Dig Lab

Raw Sample Relinquished by: MB - Dig Lab

Date/Time 4/16/25 @ 17:05

Raw Sample Received by: MB - Dig Lab

Raw Sample Relinquished by: MB - Dig Lab

17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB167612

SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pippete 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: 04/17/2025 **Time :** 11:35 **Temp :** 96 °C

End Digest Date: 04/17/2025 **Time :** 13:45 **Temp :** 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SLS.

Supervisor Signature: SO.

Temp : 1. 96°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
Spike Sol 1	0.50mL	MP85371
Spike Sol 2	1.00mL	MP85372
Spike Sol 3	1.00mL	MP85373
Spike Sol 4	1.00mL	MP85374
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6158
1:1 HCL	5.00	MP85156
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
04/17/25 14:45	SLS. MEA HB	SO (Metals Lab)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Water Metals Preparation Sheet

PB167612

Lab Sample ID	Client Sample ID	pH	Initial Vol (ml)	Final Vol (ml)	Color Before	Color After	Clarity Before	Clarity After	Comment	Prep Pos
PB167612BL	PBW612	<2	50	50	Colorless	Colorless	Clear	Clear	N/A	1
PB167612BS	LCS612	<2	50	50	Colorless	Colorless	Clear	Clear	MP85371,MP85372,MP85373,N	2
Q1812-02	RINSE-EB-TANK-041525	<2	50	50	Light Gray	Colorless	Cloudy	Clear	N/A	3
Q1812-03	RINSE-EB-PUMP-041525	<2	50	50	Light Gray	Colorless	Cloudy	Clear	N/A	4
Q1816-01	441	<2	50	50	Light Gray	Colorless	Cloudy	Clear	N/A	5
Q1818-05	3828	<2	50	50	Light Gray	Colorless	Cloudy	Clear	N/A	6
Q1818-06	3829	<2	50	50	Light Gray	Colorless	Cloudy	Clear	N/A	7
Q1818-07	3651	<2	50	50	Light Gray	Colorless	Cloudy	Clear	N/A	8
Q1824-04	285	<2	50	50	Light Gray	Colorless	Cloudy	Clear	N/A	9
Q1824-04MS	285MS	<2	50	50	Light Gray	Colorless	Cloudy	Clear	N/A	10
Q1824-04MSD	285MSD	<2	50	50	Light Gray	Colorless	Cloudy	Clear	MP85371,MP85372,MP85373,N	11
Q1824-04DUP	285DUP	<2	50	50	Light Gray	Colorless	Cloudy	Clear	MP85371,MP85372,MP85373,N	12
									N/A	10

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB167612 **WorkList ID :** 188962 **Department :** Digestion **Date :** 04-17-2025 10:56:20

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1812-02	RINSE-EB-TANK-041525	Water	Metals ICP-RCRA	1:1 HNO3 to pH < 2	JACO05	L31	04/15/2025	6020B
Q1812-03	RINSE-EB-PUMP-041525	Water	Metals ICP-RCRA	1:1 HNO3 to pH < 2	JACO05	L31	04/15/2025	6020B
Q1816-01	441	Water	Metals ICP-TAL	1:1 HNO3 to pH < 2	PSEG03	L41	04/16/2025	6020B
Q1818-05	3828	Water	Metals ICP-TAL	Cool 4 deg C	PSEG03	L41	04/16/2025	6020B
Q1818-06	3829	Water	Metals ICP-TAL	Cool 4 deg C	PSEG03	L41	04/16/2025	6020B
Q1818-07	3651	Water	Metals ICP-TAL	Cool 4 deg C	PSEG03	L41	04/16/2025	6020B
Q1824-04	285	Water	Metals ICP-TAL	1:1 HNO3 to pH < 2	PSEG03	L31	04/16/2025	6020B

Date/Time 04/17/25 11:10
Raw Sample Received by: SLS. metals
Raw Sample Relinquished by: SH

Date/Time 04/17/25 12:10
Raw Sample Received by: SH
Raw Sample Relinquished by: SLS. metals

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB135470

Review By	mohan	Review On	4/17/2025 4:47:27 PM
Supervise By	jaswal	Supervise On	4/17/2025 11:13:23 PM

STD. NAME	STD REF.#
ICAL Standard	MP85245,MP85246,MP85247,MP85248,MP85249,MP85250
ICV Standard	MP85251
CCV Standard	MP85253
ICSA Standard	
CRI Standard	MP85255
LCS Standard	
Chk Standard	MP85252,MP85254,MP85256,MP85364

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	04/17/25 11:53		mohan	OK
2	S0.2	S0.2	CAL2	04/17/25 11:55		mohan	OK
3	S2.5	S2.5	CAL3	04/17/25 11:58		mohan	OK
4	S5	S5	CAL4	04/17/25 12:00		mohan	OK
5	S7.5	S7.5	CAL5	04/17/25 12:04		mohan	OK
6	S10	S10	CAL6	04/17/25 12:09		mohan	OK
7	ICV92	ICV92	ICV	04/17/25 12:15		mohan	OK
8	ICB92	ICB92	ICB	04/17/25 12:17		mohan	OK
9	CCV85	CCV85	CCV	04/17/25 12:20		mohan	OK
10	CCB85	CCB85	CCB	04/17/25 12:22		mohan	OK
11	CRA	CRA	CRDL	04/17/25 12:24		mohan	OK
12	HighStd	HighStd	HIGH STD	04/17/25 12:26		mohan	OK
13	ChkStd	ChkStd	SAM	04/17/25 12:29		mohan	OK
14	PB167634BL	PB167634BL	MB	04/17/25 12:31		mohan	OK
15	PB167634BS	PB167634BS	LCS	04/17/25 12:36		mohan	OK
16	Q1812-02	RINSE-EB-TANK-041	SAM	04/17/25 12:38		mohan	OK
17	Q1812-03	RINSE-EB-PUMP-041	SAM	04/17/25 12:41		mohan	OK
18	Q1814-01	A3729	SAM	04/17/25 12:43		mohan	OK

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Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB135470

Review By	mohan	Review On	4/17/2025 4:47:27 PM
Supervise By	jaswal	Supervise On	4/17/2025 11:13:23 PM

STD. NAME	STD REF.#
ICAL Standard	MP85245,MP85246,MP85247,MP85248,MP85249,MP85250
ICV Standard	MP85251
CCV Standard	MP85253
ICSA Standard	
CRI Standard	MP85255
LCS Standard	
Chk Standard	MP85252,MP85254,MP85256,MP85364

19	Q1814-02	SCRUBBLE-TANK-LI	SAM	04/17/25 12:45		mohan	OK
20	Q1816-01	441	SAM	04/17/25 12:47		mohan	OK
21	CCV86	CCV86	CCV	04/17/25 12:53		mohan	OK
22	CCB86	CCB86	CCB	04/17/25 12:55		mohan	OK
23	Q1818-05	3828	SAM	04/17/25 12:58		mohan	OK
24	Q1818-06	3829	SAM	04/17/25 13:00		mohan	OK
25	Q1818-07	3651	SAM	04/17/25 13:02		mohan	OK
26	Q1824-04	285	SAM	04/17/25 13:05		mohan	OK
27	Q1824-04DUP	285DUP	DUP	04/17/25 13:07		mohan	OK
28	Q1824-04MS	285MS	MS	04/17/25 13:14		mohan	OK
29	Q1824-04MSD	285MSD	MSD	04/17/25 13:16		mohan	OK
30	Q1824-04L	285L	SD	04/17/25 13:18		mohan	OK
31	Q1824-04A	285A	PS	04/17/25 13:21		mohan	OK
32	CCV87	CCV87	CCV	04/17/25 13:23		mohan	OK
33	CCB87	CCB87	CCB	04/17/25 13:25		mohan	OK

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Instrument ID: P8

Daily Analysis Runlog For Sequence/QCBatch ID # LB135513

Review By	jaswal	Review On	4/22/2025 9:12:19 AM
Supervise By	mohan	Supervise On	4/29/2025 5:43:52 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85022,MP85020,MP85019,MP85018,MP85017
ICV Standard	MP85023,MP85022
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	TUNE	TUNE	TUNE	04/21/25 14:40		Jaswal	OK
2	S0	S0	CAL1	04/21/25 15:14		Jaswal	OK
3	S2	S2	CAL3	04/21/25 15:20		Jaswal	OK
4	S3	S3	CAL4	04/21/25 15:24		Jaswal	OK
5	S4	S4	CAL5	04/21/25 15:27		Jaswal	OK
6	S5	S5	CAL6	04/21/25 15:30		Jaswal	OK
7	S6	S6	CAL7	04/21/25 15:33		Jaswal	OK
8	S7	S7	CAL8	04/21/25 15:36		Jaswal	OK
9	S8	S8	CAL9	04/21/25 15:38		Jaswal	OK
10	ICV01	ICV01	ICV	04/21/25 15:46		Jaswal	OK
11	LLICV	LLICV	LLICV	04/21/25 15:54		Jaswal	OK
12	ICB01	ICB01	ICB	04/21/25 16:01		Jaswal	OK
13	ICSA01	ICSA01	ICSA	04/21/25 16:05		Jaswal	OK
14	ICSAB01	ICSAB01	ICSAB	04/21/25 16:12		Jaswal	OK
15	CCV01	CCV01	CCV	04/21/25 16:15		Jaswal	OK
16	CCB01	CCB01	CCB	04/21/25 16:18		Jaswal	OK
17	CRI	CRI	CRDL	04/21/25 16:32		Jaswal	OK
18	Q1816-01	441	SAM	04/21/25 16:36	Pb,K High	Jaswal	Dilution

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Instrument ID: P8

Daily Analysis Runlog For Sequence/QCBatch ID # LB135513

Review By	jaswal	Review On	4/22/2025 9:12:19 AM
Supervise By	mohan	Supervise On	4/29/2025 5:43:52 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85022,MP85020,MP85019,MP85018,MP85017
ICV Standard	MP85023,MP85022
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

19	Q1818-05	3828	SAM	04/21/25 16:39	Na High , INT_STD 45Sc(1) Fail	Jaswal	Dilution
20	Q1818-06	3829	SAM	04/21/25 16:42		Jaswal	OK
21	Q1818-07	3651	SAM	04/21/25 16:45		Jaswal	OK
22	Q1824-04	285	SAM	04/21/25 16:48		Jaswal	OK
23	Q1824-04DUP	285DUP	DUP	04/21/25 16:52		Jaswal	OK
24	Q1824-04L	285L	SD	04/21/25 16:55		Jaswal	OK
25	Q1824-04MS	285MS	MS	04/21/25 16:58		Jaswal	OK
26	CCV02	CCV02	CCV	04/21/25 17:01		Jaswal	OK
27	CCB02	CCB02	CCB	04/21/25 17:04		Jaswal	OK
28	Q1824-04MSD	285MSD	MSD	04/21/25 17:07		Jaswal	OK
29	Q1824-04A	285A	PS	04/21/25 17:10	0.1ml each mp85371,mp85375,0.2ml each mp85372,mp85373,mp85374-10ml sample	Jaswal	OK
30	Q1816-01DL	441DL	SAM	04/21/25 17:13	5X For Pb,K	Jaswal	Confirms
31	Q1818-05DL	3828DL	SAM	04/21/25 17:16	5X For Na , 5X For INT_STD 45Sc(1)	Jaswal	Confirms
32	Q1818-06DL	3829DL	SAM	04/21/25 17:19	Not Required	Jaswal	Not Ok
33	PB167626BS	PB167626BS	LCS	04/21/25 17:26		Jaswal	OK
34	PB167626BL	PB167626BL	MB	04/21/25 17:33		Jaswal	OK
35	Q1818-01	3822	SAM	04/21/25 17:37		Jaswal	OK

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Instrument ID: P8

Daily Analysis Runlog For Sequence/QCBatch ID # LB135513

Review By	jaswal	Review On	4/22/2025 9:12:19 AM
Supervise By	mohan	Supervise On	4/29/2025 5:43:52 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85022,MP85020,MP85019,MP85018,MP85017
ICV Standard	MP85023,MP85022
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

36	CCV03	CCV03	CCV	04/21/25 17:44		Jaswal	OK
37	CCB03	CCB03	CCB	04/21/25 17:48		Jaswal	OK
38	Q1818-02	3833	SAM	04/21/25 17:52		Jaswal	OK
39	Q1818-03	RT-3873	SAM	04/21/25 17:55	INT_STD 45Sc(1&2),89Y(1&2) Fail	Jaswal	Dilution
40	Q1818-03DUP	RT-3873DUP	DUP	04/21/25 17:58	INT_STD 45Sc(1&2),89Y(1&2) Fail	Jaswal	Dilution
41	Q1818-03L	RT-3873L	SD	04/21/25 18:01	INT_STD 45Sc(1&2),89Y(1&2) Fail	Jaswal	Dilution
42	Q1818-03MS	RT-3873MS	MS	04/21/25 18:04	INT_STD 45Sc(1&2),89Y(1&2) Fail	Jaswal	Dilution
43	Q1818-03MSD	RT-3873MSD	MSD	04/21/25 18:07	Al High, INT_STD 45Sc(1&2),89Y(1&2) Fail(0.1ml each mp85371,mp85375,0.2ml each mp85372,mp85373,mp85374-10ml sample)	Jaswal	Dilution
44	Q1818-03A	RT-3873A	PS	04/21/25 18:09	INT_STD 45Sc(1&2),89Y(1&2) Fail	Jaswal	Dilution
45	Q1824-01	284	SAM	04/21/25 18:12	Zn High	Jaswal	Dilution
46	Q1824-03	288	SAM	04/21/25 18:15		Jaswal	OK
47	CCV04	CCV04	CCV	04/21/25 18:18		Jaswal	OK
48	CCB04	CCB04	CCB	04/21/25 18:21		Jaswal	OK
49	Q1818-03DL	RT-3873DL	SAM	04/21/25 18:25	5X For INT_STD 45Sc(1&2),89Y(1&2) , Still INT_STD 89Y(2) Fail	Jaswal	Dilution

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Instrument ID: P8

Daily Analysis Runlog For Sequence/QCBatch ID # LB135513

Review By	jaswal	Review On	4/22/2025 9:12:19 AM
Supervise By	mohan	Supervise On	4/29/2025 5:43:52 PM

STD. NAME	STD REF.#
ICAL Standard	MP85016,MP85022,MP85020,MP85019,MP85018,MP85017
ICV Standard	MP85023,MP85022
CCV Standard	MP85026
ICSA Standard	MP85024,MP85025
CRI Standard	MP85022
LCS Standard	
Chk Standard	MP85030,MP85031

50	Q1818-03DUPDL	RT-3873DUPDL	DUP	04/21/25 18:28	5X For INT_STD 45Sc(1&2),89Y(1&2) , Still INT_STD 89Y(2) Fail	Jaswal	Dilution
51	Q1818-03LDL	RT-3873LDL	SD	04/21/25 18:31	25X For INT_STD 45Sc(1&2),89Y(1&2) , Still INT_STD 89Y(2) Fail	Jaswal	Dilution
52	Q1818-03MSDL	RT-3873MSDL	MS	04/21/25 18:35	5X For INT_STD 45Sc(1&2),89Y(1&2) , Still INT_STD 89Y(2) Fail	Jaswal	Dilution
53	Q1818-03MSDDL	RT-3873MSDDL	MSD	04/21/25 18:37	5X For INT_STD 45Sc(1&2),89Y(1&2) , Still INT_STD 89Y(2) Fail	Jaswal	Dilution
54	Q1818-03ADL	RT-3873ADL	PS	04/21/25 18:40	5X For INT_STD 45Sc(1&2),89Y(1&2) , Still INT_STD 89Y(2) Fail	Jaswal	Dilution
55	Q1824-01DL	284DL	SAM	04/21/25 18:43	5X For Zn	Jaswal	Confirms
56	CCV05	CCV05	CCV	04/21/25 18:46		Jaswal	OK
57	CCB05	CCB05	CCB	04/21/25 18:49		Jaswal	OK
58	Q1818-03DL2	RT-3873DL2	SAM	04/21/25 18:53	10X For INT_STD 89Y(2)	Jaswal	Confirms
59	Q1818-03DUPDL2	RT-3873DUPDL2	DUP	04/21/25 18:56	10X For INT_STD 89Y(2)	Jaswal	Confirms
60	Q1818-03LDL2	RT-3873LDL2	SD	04/21/25 18:59	50X For INT_STD 89Y(2)	Jaswal	Confirms
61	Q1818-03MSDL2	RT-3873MSDL2	MS	04/21/25 19:02	10X For INT_STD 89Y(2)	Jaswal	Confirms
62	Q1818-03MSDDL2	RT-3873MSDDL2	MSD	04/21/25 19:05	10X For INT_STD 89Y(2)	Jaswal	Confirms
63	Q1818-03ADL2	RT-3873ADL2	PS	04/21/25 19:08	10X For INT_STD 89Y(2)	Jaswal	Confirms
64	CCV06	CCV06	CCV	04/21/25 19:11		Jaswal	OK
65	CCB06	CCB06	CCB	04/21/25 19:14		Jaswal	OK

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Instrument ID: P8

Daily Analysis Runlog For Sequence/QCBatch ID # LB135595

Review By	jaswal	Review On	4/29/2025 4:08:50 PM
Supervise By	mohan	Supervise On	4/29/2025 4:10:15 PM

STD. NAME	STD REF.#
ICAL Standard	MP85351,MP85362,MP85361,MP85358,MP85357,MP85356,MP85355,MP85353,MP85352
ICV Standard	MP85363,MP85361
CCV Standard	MP85365
ICSA Standard	MP85366,MP85367
CRI Standard	MP85362
LCS Standard	
Chk Standard	MP85369,MP85370

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	TUNE	TUNE	TUNE	04/29/25 10:50		Jaswal	OK
2	S0	S0	CAL1	04/29/25 11:31		Jaswal	OK
3	S2	S2	CAL3	04/29/25 11:38		Jaswal	OK
4	S3	S3	CAL4	04/29/25 11:41		Jaswal	OK
5	S4	S4	CAL5	04/29/25 11:45		Jaswal	OK
6	S5	S5	CAL6	04/29/25 11:47		Jaswal	OK
7	S6	S6	CAL7	04/29/25 11:50		Jaswal	OK
8	S7	S7	CAL8	04/29/25 11:53		Jaswal	OK
9	S8	S8	CAL9	04/29/25 11:56		Jaswal	OK
10	ICV01	ICV01	ICV	04/29/25 12:14		Jaswal	OK
11	LLICV	LLICV	LLICV	04/29/25 12:18		Jaswal	OK
12	ICB01	ICB01	ICB	04/29/25 12:29		Jaswal	OK
13	ICSA01	ICSA01	ICSA	04/29/25 12:32		Jaswal	OK
14	ICSAB01	ICSAB01	ICSAB	04/29/25 12:37		Jaswal	OK
15	CCV01	CCV01	CCV	04/29/25 12:40		Jaswal	OK
16	CCB01	CCB01	CCB	04/29/25 12:44		Jaswal	OK
17	CRI	CRI	CRDL	04/29/25 12:47		Jaswal	OK
18	Q1812-02	RINSE-EB-TANK-041	SAM	04/29/25 12:50		Jaswal	OK

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Instrument ID: P8

Daily Analysis Runlog For Sequence/QCBatch ID # LB135595

Review By	jaswal	Review On	4/29/2025 4:08:50 PM
Supervise By	mohan	Supervise On	4/29/2025 4:10:15 PM

STD. NAME	STD REF.#
ICAL Standard	MP85351,MP85362,MP85361,MP85358,MP85357,MP85356,MP85355,MP85353,MP85352
ICV Standard	MP85363,MP85361
CCV Standard	MP85365
ICSA Standard	MP85366,MP85367
CRI Standard	MP85362
LCS Standard	
Chk Standard	MP85369,MP85370

19	Q1812-03	RINSE-EB-PUMP-041	SAM	04/29/25 12:54		Jaswal	OK
20	PB167612BL	PB167612BL	MB	04/29/25 12:57		Jaswal	OK
21	PB167612BS	PB167612BS	LCS	04/29/25 13:00		Jaswal	OK
22	CCV02	CCV02	CCV	04/29/25 13:03		Jaswal	OK
23	CCB02	CCB02	CCB	04/29/25 13:07		Jaswal	OK

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Prep Standard - Chemical Standard Summary

Order ID : Q1812

Test : Mercury,Metals ICP-TAL

Prepbatch ID : PB167612,PB167634,

Sequence ID/Qc Batch ID: LB135470,LB135513,LB135595,

Standard ID :
MP85016,MP85017,MP85018,MP85019,MP85020,MP85021,MP85022,MP85023,MP85024,MP85025,MP85026,MP850
30,MP85031,MP85156,MP85240,MP85241,MP85242,MP85243,MP85244,MP85245,MP85246,MP85247,MP85248,MP
85249,MP85250,MP85251,MP85252,MP85253,MP85254,MP85255,MP85256,MP85351,MP85352,MP85353,MP85355,
MP85356,MP85357,MP85358,MP85360,MP85361,MP85362,MP85363,MP85364,MP85365,MP85366,MP85367,MP853
68,MP85369,MP85370,MP85371,MP85372,MP85373,MP85374,

Chemical ID :
M4251,M4465,M4883,M4891,M4916,M5020,M5062,M5288,M5305,M5387,M5395,M5429,M5466,M5471,M5472,M5496
,M5497,M5516,M5520,M5521,M5532,M5658,M5697,M5739,M5747,M5748,M5751,M5768,M5789,M5798,M5799,M580
0,M5801,M5811,M5814,M5815,M5816,M5817,M5820,M5873,M5874,M5875,M5882,M5884,M5942,M5959,M5961,M596
2,M5970,M5977,M5978,M5981,M5985,M6021,M6023,M6025,M6026,M6028,M6030,M6032,M6041,M6055,M6058,M60
76,M6079,M6086,M6087,M6127,M6128,M6137,M6144,M6145,M6146,M6150,M6151,M6152,M6153,M6155,M6156,M6
158,M6159,M6160,W3112,

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
902	ICP AES CAL BLK (SO/ICB/CCB)	MP85016	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 125.00000ml of M6151 + 2350.00000ml of W3112 + 25.00000ml of M5789 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
907	ICP AES STD S (S5)	MP85017	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 5.00000ml of M5395 + 5.00000ml of M5466 + 5.00000ml of M5472 + 5.00000ml of M5816 + 5.00000ml of M5820 + 5.00000ml of M5875 + 5.00000ml of M5970 + 5.00000ml of M6076 + 5.00000ml of M6160 + 455.00000ml of MP85016 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
910	ICP AES STD S4	MP85018	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 50.00000ml of MP85016 + 50.00000ml of MP85017 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
909	ICP AES STD S3	MP85019	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 25.00000ml of MP85017 + 75.00000ml of MP85016 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3913	ICP AES STD S2	MP85020	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 16.00000ml of MP85017 + 184.00000ml of MP85016 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2950	ICP AES S1/CRI STOCK STD	MP85021	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 0.03000ml of M5798 + 0.03000ml of M6028 + 0.04000ml of M6137 + 0.05000ml of M5496 + 0.05000ml of M5658 + 0.05000ml of M5811 + 0.05000ml of M6030 + 0.06000ml of M5747 + 0.10000ml of M4883 + 0.10000ml of M5472 + 0.10000ml of M5521 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5970 + 0.10000ml of M6128 + 0.15000ml of M5800 + 0.20000ml of M4891 + 0.20000ml of M5748 + 0.20000ml of M5799 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.25000ml of M5466 + 0.25000ml of M6160 + 0.50000ml of M5387 + 0.50000ml of M5814 + 1.00000ml of M5288 + 1.00000ml of M5497 + 1.00000ml of M5516 + 1.00000ml of M5768 + 1.00000ml of M5978 + 1.00000ml of M6156 + 2.00000ml of M5816 + 77.68000ml of MP85016 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2951	ICP AES S1/CRI WORK STD	MP85022	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 2.00000ml of MP85021 + 98.00000ml of MP85016 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
912	ICP AES ICV SOLN	MP85023	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 0.02500ml of M5020 + 0.02500ml of M5429 + 0.02500ml of M5817 + 0.10000ml of M5466 + 0.25000ml of M5472 + 0.25000ml of M6058 + 10.00000ml of M6150 + 89.77500ml of MP85016 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
904	ICP AES ICSA SOLN	MP85024	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 25.00000ml of M6152 + 225.00000ml of MP85016 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3494	ICP AES ICSAB SOLN-1	MP85025	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 0.01000ml of M5020 + 0.01000ml of M5817 + 0.10000ml of M5472 + 0.10000ml of M5970 + 0.10000ml of M6076 + 10.00000ml of M6152 + 10.00000ml of M6155 + 79.50000ml of MP85016 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
911	ICP AES CCV SOLN	MP85026	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 50.00000ml of MP85016 + 50.00000ml of MP85017 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
919	ICP AES INTERNAL STD	MP85030	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 1.00000ml of M5959 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M5789 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
513	RINSE SOLN	MP85031	03/26/2025	04/26/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 200.00000ml of M5789 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
170	1:1HCL	MP85156	04/07/2025	08/18/2025	Kareem Khairalla	None	None	Sarabjit Jaswal 04/07/2025

FROM 1250.00000ml of M6151 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3965	2:1 H2SO4 : HNO3	MP85240	04/16/2025	10/16/2025	Mohan Bera	None	None	Sarabjit Jaswal 04/29/2025

FROM 1600.00000ml of M6041 + 800.00000ml of M6158 = Final Quantity: 3200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP85241	04/16/2025	10/16/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 04/29/2025

FROM 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
66	POTASSIUM PERSULFATE SOLUTION 5 %	MP85242	04/16/2025	08/06/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 04/29/2025

FROM 100.00000ml of M4465 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP85243	04/16/2025	06/25/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 04/29/2025

FROM 2000.00000ml of W3112 + 240.00000gram of M4251 + 240.00000gram of M5884 = Final Quantity: 2000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP85244	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 1.00000ml of M6158 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1340	Hg 0.00 PPB STD	MP85245	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1341	Hg 0.2 PPB STD	MP85246	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 247.30000ml of W3112 + 0.20000ml of MP85244 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1342	Hg 2.5 PPB STD	MP85247	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 245.00000ml of W3112 + 2.50000ml of MP85244 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1343	Hg 5.0 PPB STD	MP85248	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 242.50000ml of W3112 + 5.00000ml of MP85244 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1344	Hg 7.5 PPB STD	MP85249	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 240.00000ml of W3112 + 7.50000ml of MP85244 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1345	Hg 10.0 PPB STD	MP85250	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 237.50000ml of W3112 + 10.00000ml of MP85244 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP85251	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M5532 + 2.50000ml of M6158 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1351	ICB (Hg 0.00 PPB SOLUTION)	MP85252	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1358	CCV (Hg 5.0 PPB SOLUTION)	MP85253	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 485.00000ml of W3112 + 5.00000ml of M6158 + 10.00000ml of MP85244 = Final Quantity: 500.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1352	CCB (Hg 0.00 PPB SOLUTION)	MP85254	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 495.00000ml of W3112 + 5.00000ml of M6158 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP85255	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 247.30000ml of W3112 + 0.20000ml of MP85244 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP85256	04/16/2025	04/17/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 04/29/2025

FROM 2.50000ml of M6158 + 240.50000ml of W3112 + 7.00000ml of MP85244 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1122	ICPMS CALIB BLANK(S0/ICB/CCB)	MP85351	04/14/2025	05/05/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 25.00000ml of M6151 + 4925.00000ml of W3112 + 50.00000ml of M6158 = Final Quantity: 5000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2902	S8 ICPMS	MP85352	04/14/2025	05/05/2025	Janvi Patel	METALS_SCALE_3 (M SC-3)	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

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 MP85351 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3947	S7(SFAM,6020,200.8)	MP85353	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.10000ml of M6153 + 1.00000ml of M5799 + 1.00000ml of M5981 + 1.00000ml of M6079 + 1.00000ml of M6137 + 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 M5520 + 4.90000ml of M5811 + 5.00000ml of M6151 + 50.00000ml of M5305 + 830.50000ml of W3112 + 9.00000ml of M5697 + 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

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3948	S6(SFAM,6020,200.8)	MP85355	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 48.50000ml of W3112 + 50.00000ml of MP85353 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3949	S5(SFAM,6020,200.8)	MP85356	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 73.50000ml of W3112 + 25.00000ml of MP85353 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3954	S4(SFAM,6020,200.8)	MP85357	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 86.00000ml of W3112 + 12.50000ml of MP85353 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3951	S3(SFAM, 6020,200.8)	MP85358	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 88.50000ml of W3112 + 10.00000ml of MP85355 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3955	S2CONC(SFAM,6020,200.8)	MP85360	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

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 M6087 + 2.50000ml of M6127 + 2.50000ml of M6144 + 2.50000ml of M6158 + 230.04500ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3956	S2(SFAM,6020,200.8)	MP85361	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 98.00000ml of W3112 + 0.50000ml of MP85360 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3957	S1(SFAM,6020,200.8)	MP85362	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.50000ml of M6151 + 1.00000ml of M6158 + 88.50000ml of W3112 + 10.00000ml of MP85361 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3958	ICV(SFAM)	MP85363	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 2.00000ml of M6150 + 98.00000ml of MP85351 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
68	STANNOUS CHLORIDE SOLUTION	MP85364	04/17/2025	04/18/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 04/29/2025

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6151 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3961	CCV	MP85365	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.20000ml of M6026 + 0.50000ml of M5471 + 0.50000ml of M5799 + 0.50000ml of M5981 + 0.50000ml of M6079 + 0.50000ml of M6137 + 1.00000ml of M5815 + 1.00000ml of M5817 + 10.00000ml of M6158 + 12.45000ml of M5520 + 12.45000ml of M5811 + 2.00000ml of M6032 + 24.90000ml of M6087 + 24.95000ml of M6127 + 24.95000ml of M6144 + 25.00000ml of M5305 + 4.50000ml of M5697 + 4.50000ml of M6128 + 4.50000ml of M6145 + 4.95000ml of M6159 + 5.00000ml of M6151 + 5.50000ml of M5942 + 5.50000ml of M5977 + 824.15000ml of W3112 = Final Quantity: 1000.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1142	ICSA ICPMS	MP85366	04/14/2025	04/30/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 10.00000ml of M5873 + 90.00000ml of MP85351 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1143	ICSAB ICPMS	MP85367	04/14/2025	04/30/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 10.00000ml of M5873 + 10.00000ml of M5874 + 80.00000ml of MP85351 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3962	MG 10PPM FOR TUNE	MP85368	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.01000ml of M6127 + 9.99000ml of MP85351 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3894	TUNE 200PPB	MP85369	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 2.00000ml of M6055 + 2.00000ml of MP85368 + 96.00000ml of MP85351 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3903	ISS 3PPM	MP85370	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 5.00000ml of M6158 + 75.00000ml of M5739 + 170.00000ml of MP85351 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3880	M&B SPIKE-1	MP85371	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 5.00000ml of M5471 + 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 M6160 + 35.00000ml of MP85351 = Final Quantity: 100.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3881	M&B SPIKE-2	MP85372	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 10.00000ml of M5942 + 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 MP85351 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3882	M&B SPIKE-3	MP85373	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 0.62500ml of M6026 + 12.50000ml of M5697 + 12.50000ml of M6128 + 12.50000ml of M6145 + 11.87500ml of MP85351 = Final Quantity: 50.000 ml

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Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3900	M&B SPIKE-4	MP85374	04/14/2025	05/05/2025	Janvi Patel	None	METALS_PIPETTE_3 (A)	Sarabjit Jaswal 04/29/2025

FROM 6.25000ml of M6087 + 6.25000ml of M6127 + 6.25000ml of M6144 + 6.25000ml of MP85351 = Final Quantity: 25.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)	0000215387	06/25/2025	12/19/2018 / mohan	12/05/2018 / mohan	M4251

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3238-05 / Potassium Persulfate (2.5kg)	0000234156	08/06/2025	07/23/2019 / manojkumar	07/25/2019 / manojkumar	M4465

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	070221	09/07/2025	08/06/2021 / jaswal	08/05/2021 / jaswal	M4883

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	031921	05/19/2025	08/25/2021 / bin	08/05/2021 / jaswal	M4891

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3227-05 / Potassium Permanganate (2.5kg)	210800	03/31/2026	11/30/2022 / mohan	07/28/2021 / mohan	M4916

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	032921	05/17/2025	12/13/2021 / bin	12/09/2021 / bin	M5020

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	MSHG-10PPM / MERCURY HCl 125mL 10ug/mL	S2-HG709270	09/22/2026	05/28/2022 / mohan	01/27/2022 / mohan	M5062

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58119 / K, 10000 PPM, 500 ml	071122	07/11/2025	09/01/2022 / jaswal	07/21/2022 / jaswal	M5288

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.	57056 / Ba, 1000 PPM, 125 ml	072122	07/21/2025	11/01/2022 / jaswal	09/18/2022 / jaswal	M5387

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-CAL-3 / CLP CAL SOLUTION #3, 125mL	T2-MEB714159	01/13/2027	01/30/2024 / bin	09/19/2022 / bin	M5395

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57103 / Li, 10000 PPM, 125 ml	070622	07/06/2025	01/30/2023 / bin	01/26/2023 / bin	M5429

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57058 / Cerium, 1000PPM, 100ML	061322	06/13/2025	03/06/2023 / bin	03/01/2023 / bin	M5466

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	04/14/2025 / jaswal	03/16/2023 / jaswal	M5471

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.	58113 / Al, 10000 PPM, 500 ml	011623	01/16/2026	08/15/2023 / jaswal	03/17/2023 / bin	M5496

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58120 / Ca, 10000 PPM, 500 ml	031523	03/15/2026	03/18/2023 / bin	03/17/2023 / bin	M5497

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	022123	11/06/2025	11/06/2024 / kareem	03/17/2023 / bin	M5516

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CHEMICAL RECEIPT LOG BOOK

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.	58029 / Cu, 1000 PPM, 500 ml	102622	10/26/2025	11/21/2022 / bin	11/20/2022 / bin	M5521

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-5 / ICV (HG) STOCK SOLN	ICV5-0415	04/30/2025	01/02/2025 / mohan	03/30/2023 / mohan	M5532

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 #
Absolute Standards, Inc.	58029 / Cu, 1000 PPM, 500 ml	102523	10/25/2026	04/03/2024 / jaswal	10/27/2023 / jaswal	M5697

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Lead (Pb) 1000PPM	100923	10/09/2026	05/20/2024 / Jaswal	12/20/2023 / jaswal	M5747

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	/ Nickel (Ni) 1000PPM	091223	09/12/2026	01/02/2024 / bin	12/20/2023 / jaswal	M5748

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.	58112 / Mg, 10000 PPM, 500 ml	091823	09/18/2026	01/08/2024 / bin	01/03/2024 / bin	M5768

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)	23G1262003	07/30/2025	02/08/2024 / Al-Terek	06/26/2023 / Al-Terek	M5789

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

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CHEMICAL RECEIPT LOG BOOK

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

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.	57005 / B, 1000 PPM, 125 ml	071123	07/11/2026	03/26/2024 / Sohil	01/03/2024 / jaswal	M5814

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57016 / S, 1000 PPM, 125 ml	122923	12/29/2026	05/20/2024 / Jaswal	02/09/2024 / jaswal	M5816

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 #
Absolute Standards, Inc.	57015 / P, 1000 PPM, 125 ml	091123	09/11/2026	05/01/2024 / jaswal	02/09/2024 / jaswal	M5820

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CLPP-CAL-1 / CLP CAL SOLUTION #1, 125mL	T2-MEB714417	01/27/2027	04/19/2024 / jaswal	02/22/2024 / jaswal	M5875

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3980-01 / Stannous Chloride (cs/4x500g)	232820	08/31/2028	04/30/2024 / mohan	04/25/2024 / mohan	M5882

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	04/30/2024 / mohan	04/25/2024 / mohan	M5884

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 #
Inorganic Ventures	CGY10-1 / YTTRIUM 125mL 10,000ug/mL	V2-Y740548	02/20/2029	07/01/2024 / Jaswal	06/14/2024 / Jaswal	M5959

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57003 / Li, 1000 PPM, 125 ml	061224	06/21/2027	07/01/2024 / Jaswal	07/01/2024 / Jaswal	M5970

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 #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	06/17/2027	08/07/2024 / jaswal	02/22/2024 / Jaswal	M5978

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 #
Inorganic Ventures	CGIN10-5 / INDIUM 1 x 500 ml	U2-IN729349	02/21/2028	10/08/2024 / Jaswal	06/14/2024 / Jaswal	M5985

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57081 / Tl, 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

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041

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 #
Inorganic Ventures	Z9651Q / CHEM-CLP-4/.25L	V2-MEB746762	01/01/2026	01/01/2025 / kareem	09/19/2024 / kareem	M6076

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

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

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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	01/03/2025 / janvi	10/14/2024 / jaswal	M6087

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

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

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 #
EPA	PART A / ICSA (ICP) STOCK SOLN	ICSA-1211	08/24/2025	02/24/2025 / kareem	04/20/2021 / kareem	M6152

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 #
EPA	PART B / ICSAB (ICP) STOCK SOLN	ICSB-0710	06/20/2025	02/10/2025 / kareem	02/09/2024 / kareem	M6155

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

CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	58113 / Al, 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 #
Absolute Standards, Inc.	57051 / Sb, 1000 PPM, 125 ml	071724	03/24/2026	03/24/2025 / kareem	10/18/2024 / kareem	M6160

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 / Iwona	07/03/2024 / Iwona	W3112

ThermoFisher SCIENTIFIC

M5882 M3

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	T142	Quality Test / Release Date	08/17/2023
Lot Number	232820		
Description	STANNOUS CHLORIDE, DIHYDRATE CERTIFIED ACS (Suitable for Mercury Determination)		
Country of Origin	United States	Suggested Retest Date	Aug/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear crystals
ASSAY	%	Inclusive Between 98 - 103	100.65
CALCIUM	%	<= 0.005	0.0017
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.003	0.0011
LEAD (Pb)	%	<= 0.01	0.0006
MERCURY (Hg)	ppm	<= 0.05	<0.05
POTASSIUM (K)	%	<= 0.005	0.0001
SODIUM (Na)	%	<= 0.01	<0.01
SOLUBILITY IN HCL	PASS/FAIL	= PASS TEST	PASS TEST
SULFATE (SO4)	PASS/FAIL	= P.T. (ABOUT 0.003%)	P.T. (ABOUT 0.003%)

Harout Sahagian - Quality Control Supervisor - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6032

R: 8/5/24

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https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**010924**	**Solvent:**	24002546	Nitric Acid	
Description:	**Barium (Ba)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	010927				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

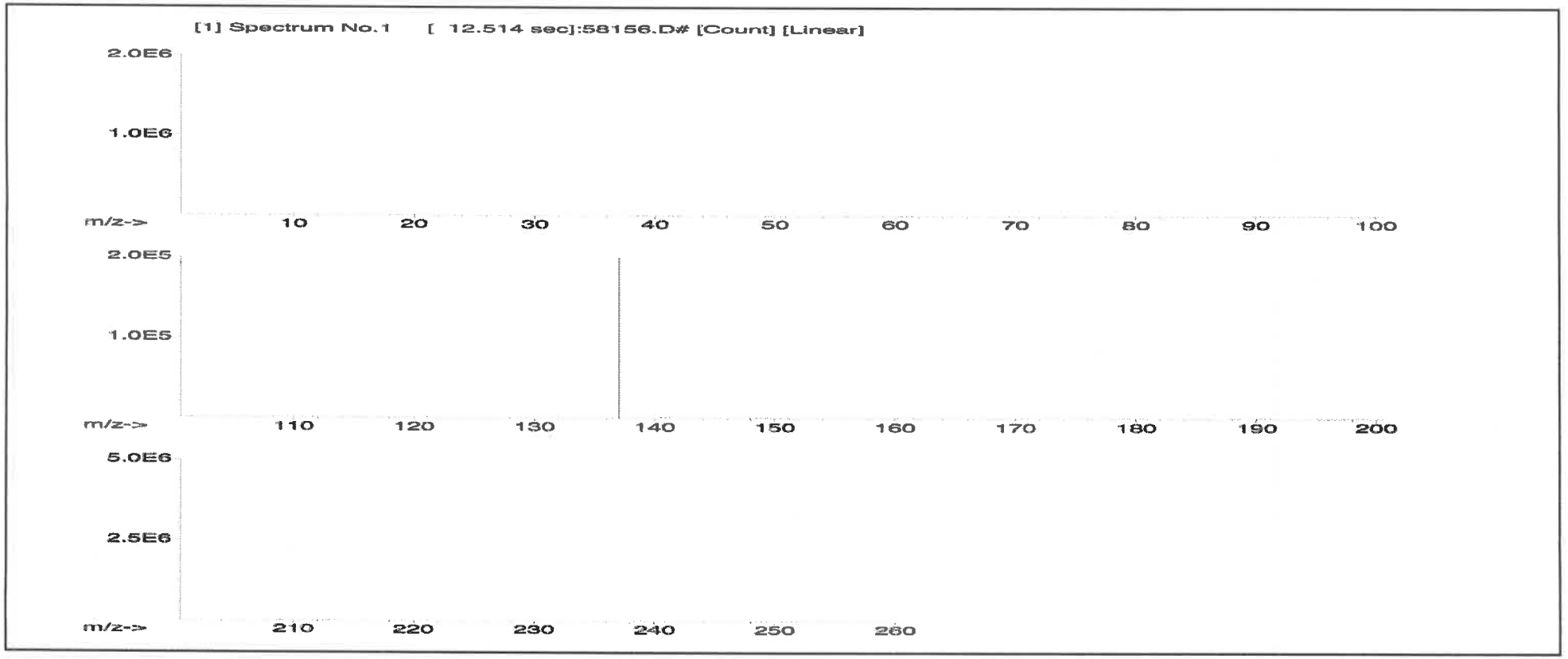
Giovanni Esposito

Formulated By:	Giovanni Esposito	010924

Pedro Rentas

Reviewed By:	Pedro L. Rentas	010924

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82441	**1000.1**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



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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	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:

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 certifed (+/-) 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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Revd 10/14/2024 M6085/M6086/M6087

CERTIFIED WEIGHT REPORT:

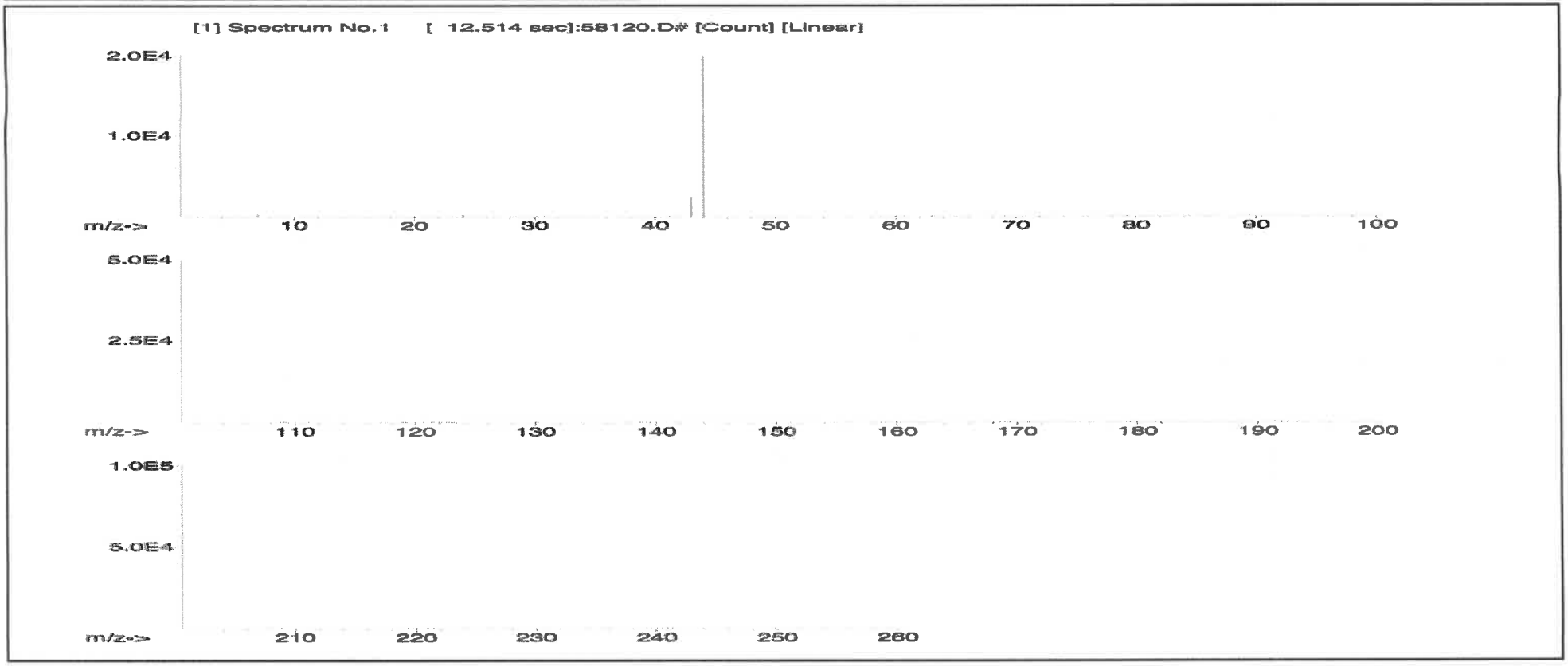
Part Number: 58120
Lot Number: 082324
Description: Calcium (Ca)
Expiration Date: 082327
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.1

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.15	Flask Uncertainty	

Giovanni Esposito
Formulated By: Giovanni Esposito 082324

Pedro Rentas
Reviewed By: Pedro L. Rentas 082324

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD03203B3	10000	99.999	0.10	39.9	100.2537	100.2656	**10001.2**	**20.0**	471-34-1	5 mg/m3	ori-rat >2000mg/kg	3109a



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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	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	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:

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.
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* Standards are certifed (+/-) 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).

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Revd 10/14/2024 M6085/M6086/M6087

CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 082324
Description: Calcium (Ca)
Expiration Date: 082327
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.1

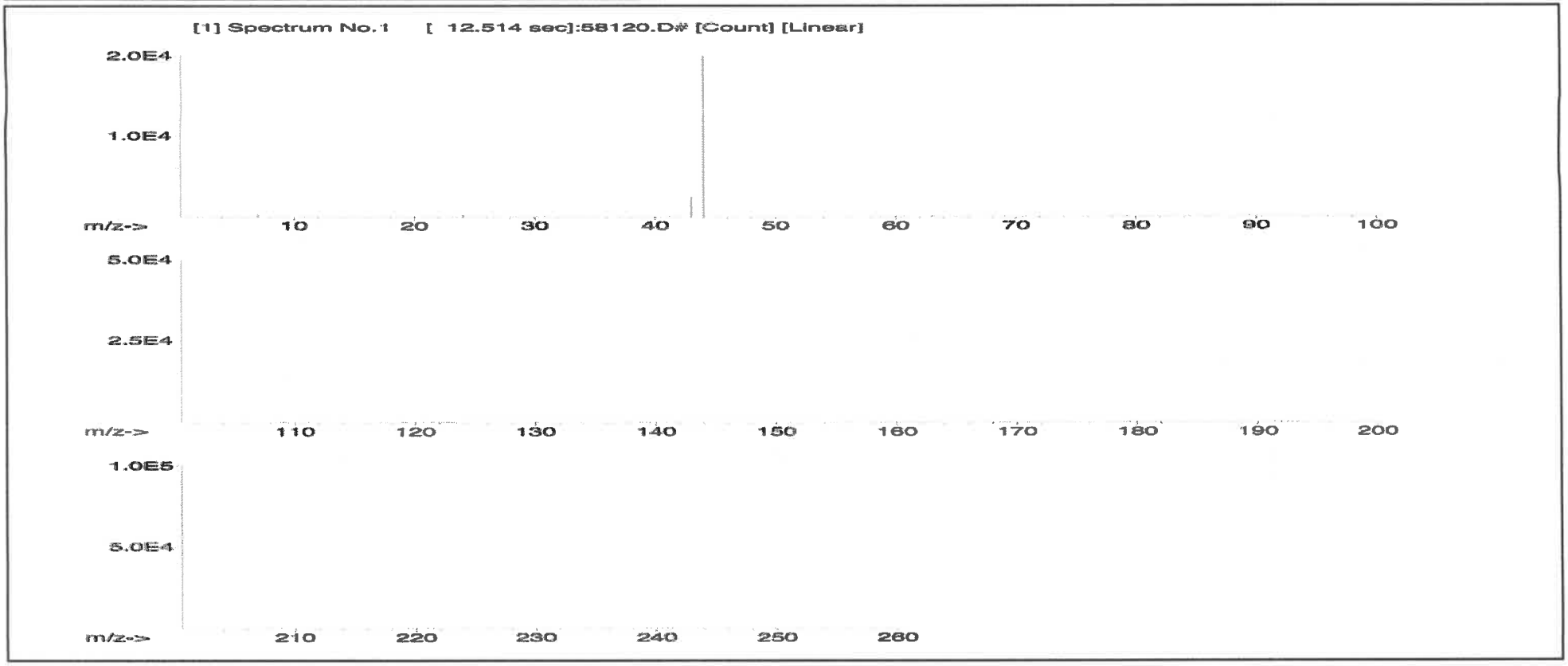
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.15 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 082324

Pedro Rentas
Reviewed By: Pedro L. Rentas 082324

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD03203B3	10000	99.999	0.10	39.9	100.2537	100.2656	**10001.2**	**20.0**	471-34-1	5 mg/m3	ori-rat >2000mg/kg	3109a



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Certified Reference Material CRM

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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	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	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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certified Reference Material CRM

M6028

R: 8/5/24

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AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57048
Lot Number: 070124
Description: Cadmium (Cd)

Expiration Date: 070127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

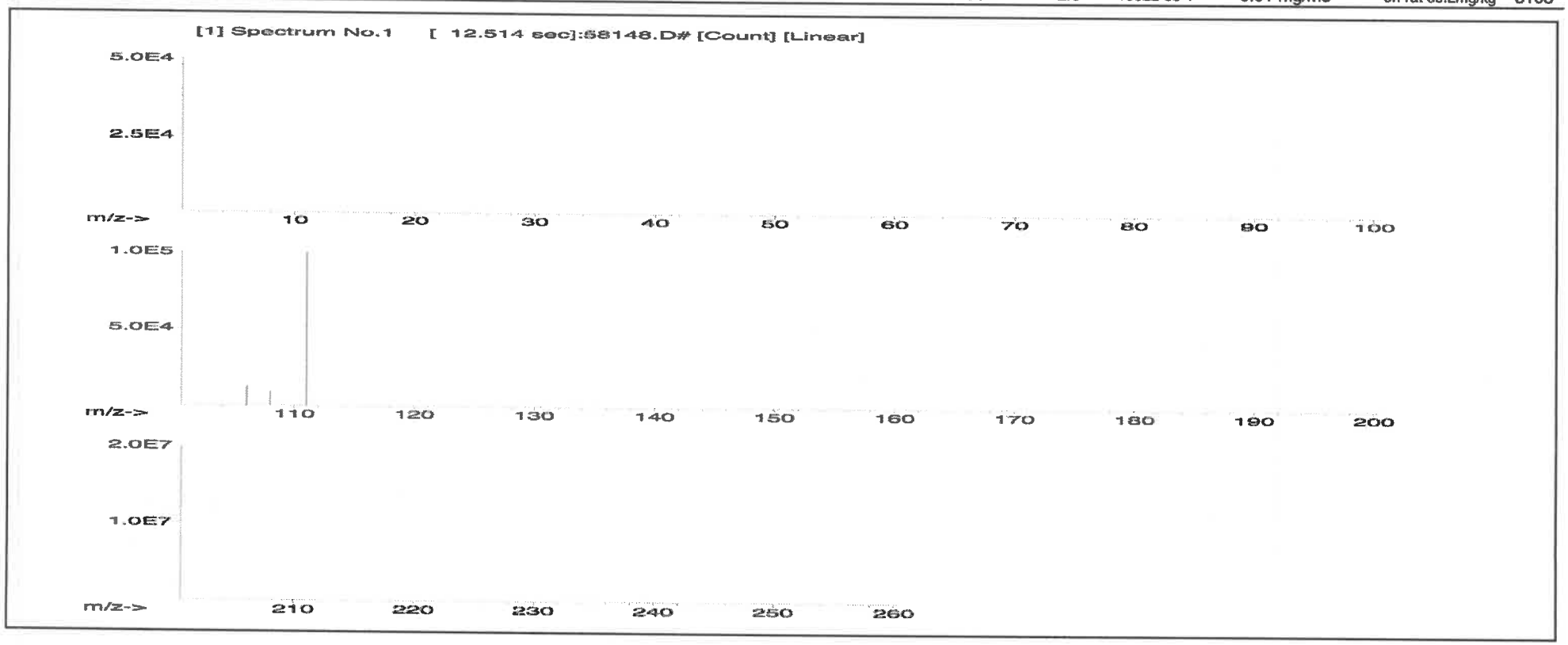
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
Weight shown below was diluted to (mL): 2000.07 0.100 Flask Uncertainty

Aleah O'Brady

Formulated By:	Aleah O'Brady	070124
Reviewed By:	Pedro L. Rentas	070124

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cadmium nitrate tetrahydrate (Cd)	IN024	CDM092021A1	1000	99.999	0.10	36.5	5.4797	5.4804	**1000.1**	**2.0**	10022-68-1	0.01 mg/m3	orl-rat 60.2mg/kg	3108



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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	T	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	<0.02

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* 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 certifed (+/-) 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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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

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).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-1
Lot Number:	T2-MEB714417
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Calcium, Potassium, Magnesium, Sodium, 2 000 µg/mL ea: Aluminum, Barium, 1 000 µg/mL ea: Iron, 500 µg/mL ea: Nickel, Vanadium, Zinc, Cobalt, Manganese, 250 µg/mL ea: Silver, Copper, 200 µg/mL ea: Chromium, 50 µg/mL ea: Beryllium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	2 000 ± 7 µg/mL	Barium, Ba	2 000 ± 9 µg/mL
Beryllium, Be	50.00 ± 0.26 µg/mL	Calcium, Ca	5 000 ± 22 µg/mL
Chromium, Cr	200.0 ± 1.0 µg/mL	Cobalt, Co	500.0 ± 2.4 µg/mL
Copper, Cu	250.0 ± 1.0 µg/mL	Iron, Fe	1 000 ± 4 µg/mL
Magnesium, Mg	5 000 ± 20 µg/mL	Manganese, Mn	500.0 ± 2.0 µg/mL
Nickel, Ni	500.0 ± 2.2 µg/mL	Potassium, K	5 000 ± 19 µg/mL
Silver, Ag	250.0 ± 1.1 µg/mL	Sodium, Na	5 000 ± 18 µg/mL
Vanadium, V	499.7 ± 2.2 µg/mL	Zinc, Zn	500.0 ± 2.2 µg/mL

Density: 1.118 g/mL (measured at 20 ± 4 ºC)

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
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
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
V	IC 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, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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)

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**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

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

January 27, 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

- **January 27, 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

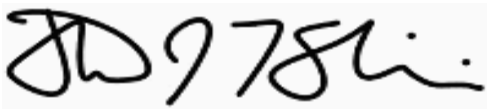
- Sealed TCT Bag Open Date: _____

- 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



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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-CAL-3
Lot Number:	T2-MEB714159
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Arsenic, Lead, Selenium, Thallium, 500 µg/mL ea: Cadmium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	**1 000 ± 8 µg/mL**	**Cadmium, Cd**	**500.0 ± 2.1 µg/mL**
Lead, Pb	**1 000 ± 5 µg/mL**	**Selenium, Se**	**1 000 ± 8 µg/mL**
Thallium, Tl	**1 000 ± 7 µg/mL**		

Density: 1.043 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Tl	ICP Assay	3158	151215

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:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ 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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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)

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

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 13, 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

- **January 13, 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

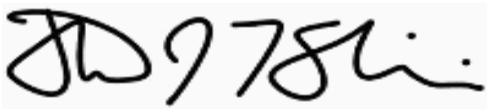
- Sealed TCT Bag Open Date: _____

- 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

R : 01/03/24. M5810, M5811

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AR-1539 Certificate Number
https://Absolutestandards.com

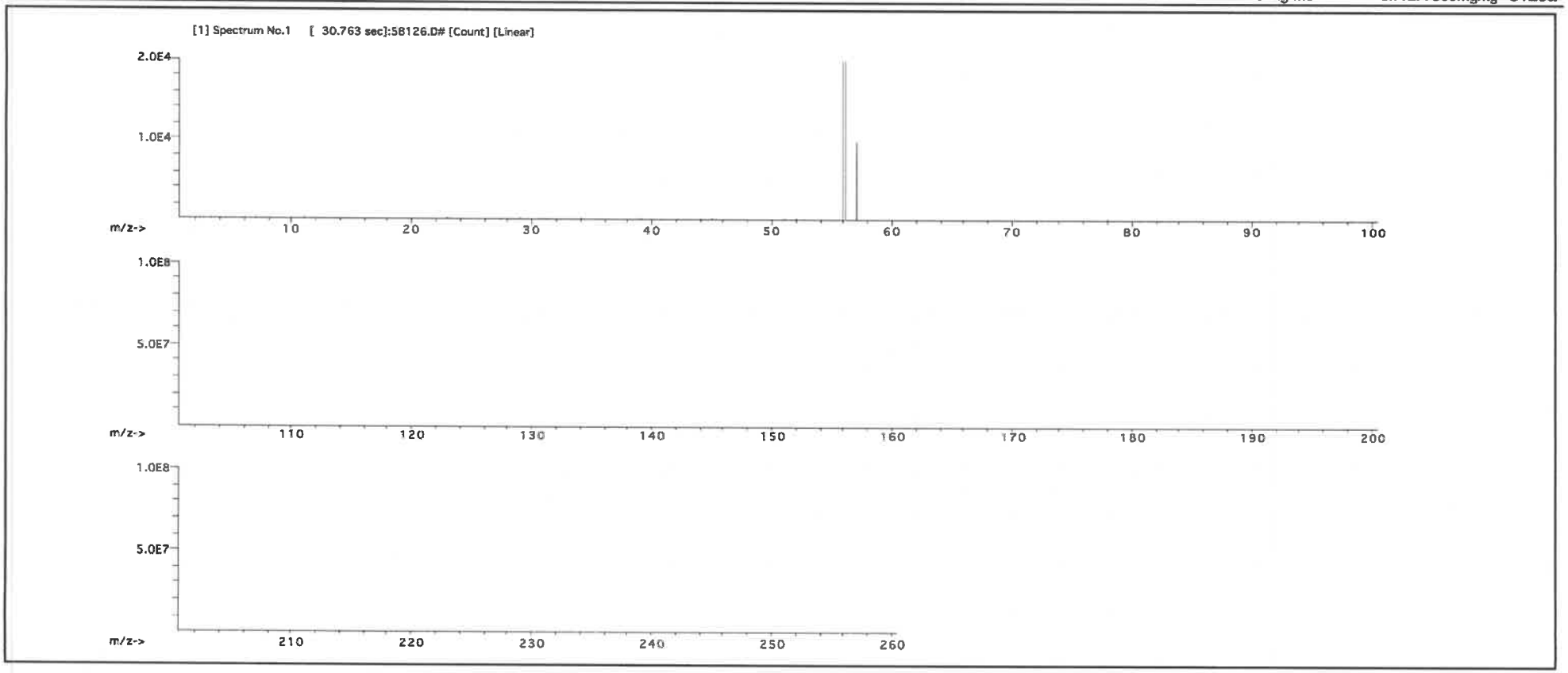
CERTIFIED WEIGHT REPORT:

Part Number:	**58126**		**Lot #**	
Lot Number:	**051523**	**Solvent:**	21110221	Nitric Acid
Description:	**Iron (Fe)**	5.0%	250.0 (mL)	Nitric Acid
Expiration Date:	051526			
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	

Giovanni Esposito

Formulated By:	Giovanni Esposito	051523
Reviewed By:	Pedro L. Rentas	051523

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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	orl-rat 7500mg/kg	3126a



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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	<0.10	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	<0.10	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	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 certifed (+/-) 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

R: 8/15/24 M6025

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AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

Expiration Date: 110926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

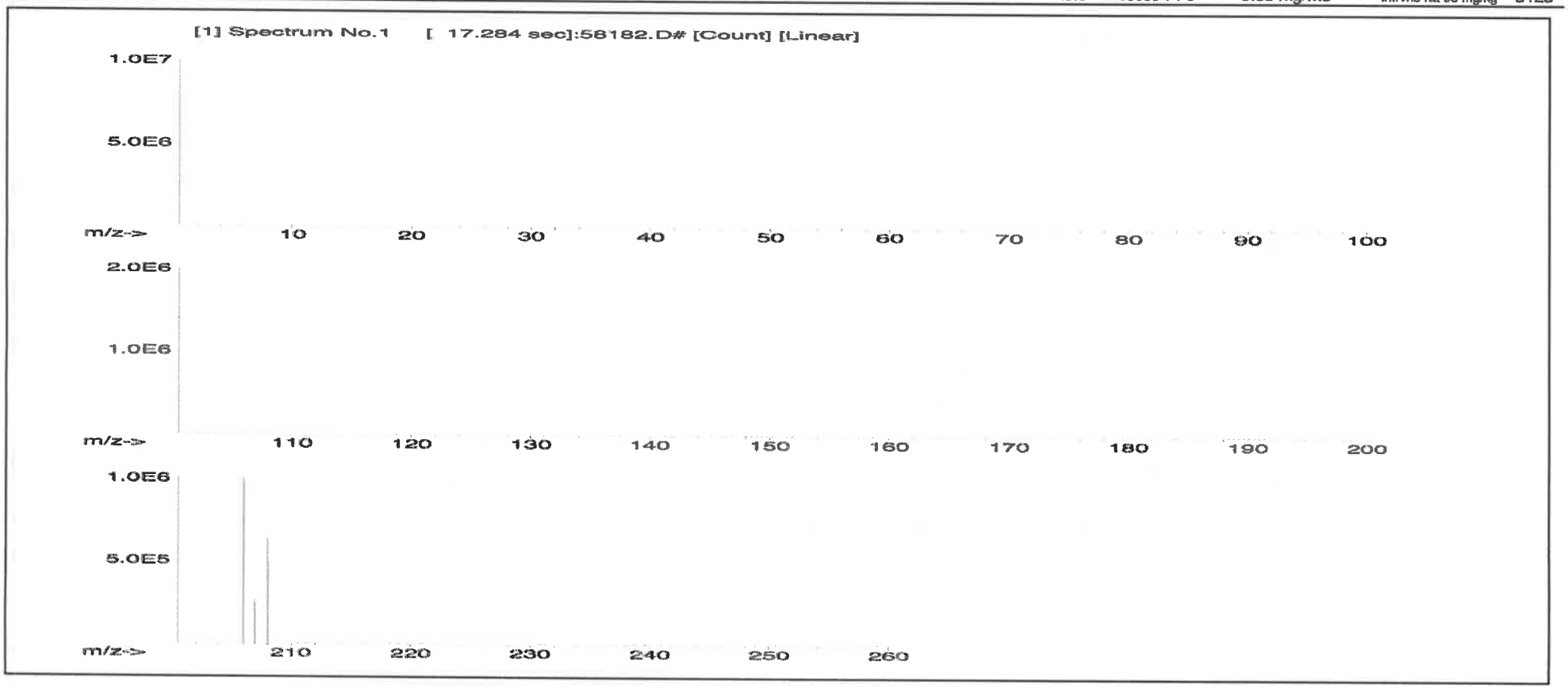
Weight shown below was diluted to (mL): 2000.02 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Lawence Barry	110923
Reviewed By:	Pedro L. Rentas	110923

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	10000	99.999	0.10	62.5	32.0006	32.0040	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



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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	<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	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

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.
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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).

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Certified Reference Material CRM

M6026

R: 8/5/24

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CERTIFIED WEIGHT REPORT:

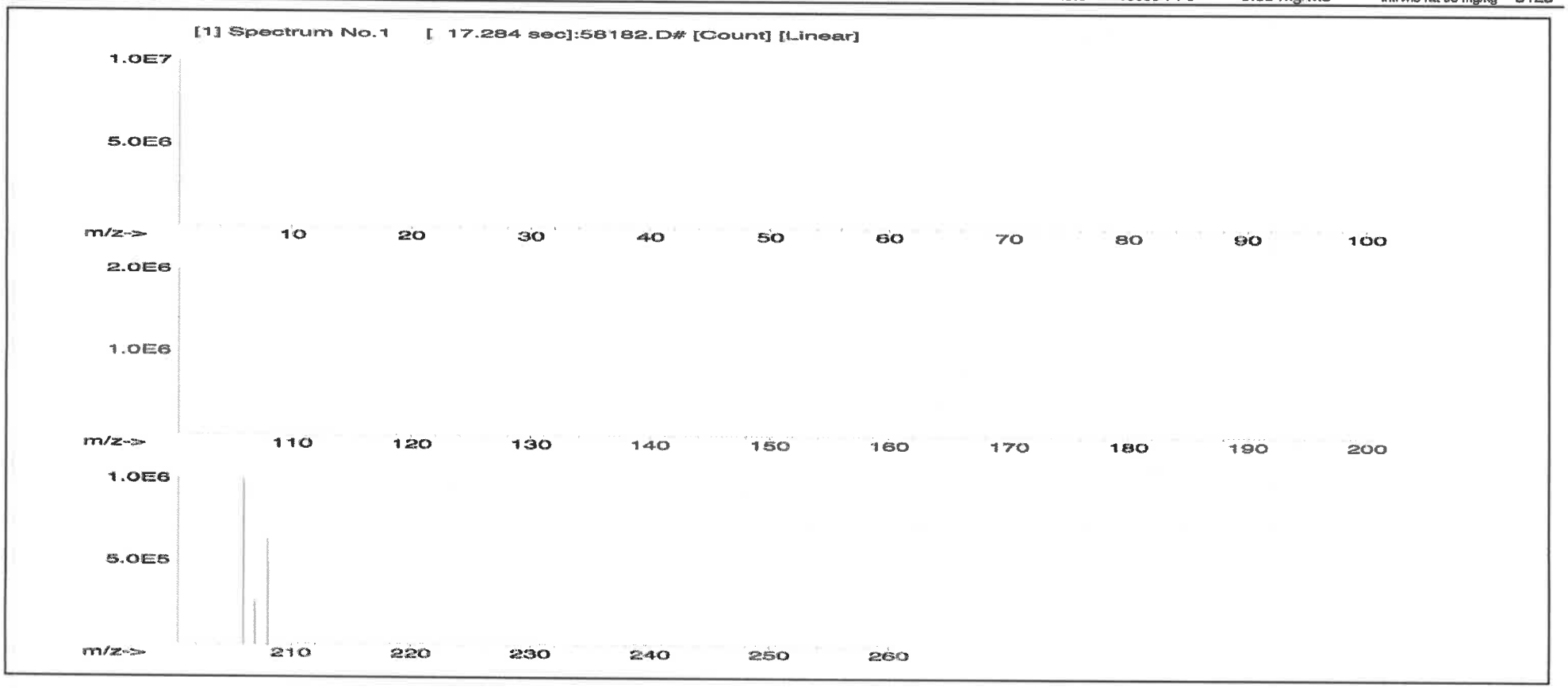
Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

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

		Lot #	
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By:	Lawence Barry	110923
Reviewed By:	Pedro L. Rentas	110923

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	10000	99.999	0.10	62.5	32.0006	32.0040	**10001.1**	**20.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



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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	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	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

Certified by:

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Hydroxylamine Hydrochloride, Crystal
BAKER ANALYZED® A.C.S. Reagent
Suitable for Mercury Determination
(hydroxylammonium chloride)

M4251
JB

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Material No.: 2196-01
Batch No.: 0000215387
Manufactured Date: 2018/06/27
Retest Date: 2025/06/25
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NH_2OH \cdot HCl$) (by $KMnO_4$ titrn)	>= 96.0 %	99.1
Clarity of Alcohol Solution	Passes Test	PT
Residue after Ignition	<= 0.050 %	0.017
Titrable Free Acid (meq/g)	<= 0.25	0.19
Ammonium (NH_4)	Passes Test	PT
Sulfur Compounds (as SO_4)	<= 0.005 %	< 0.003
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	4
Trace Impurities - Iron (Fe)	<= 5 ppm	< 3
Trace Impurities - Mercury (Hg)	<= 0.050 ppm	< 0.005

For Laboratory, Research or Manufacturing Use

Country of Origin: CN
Packaging Site: Paris Mfg Ctr & DC

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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Certified Reference Material CRM

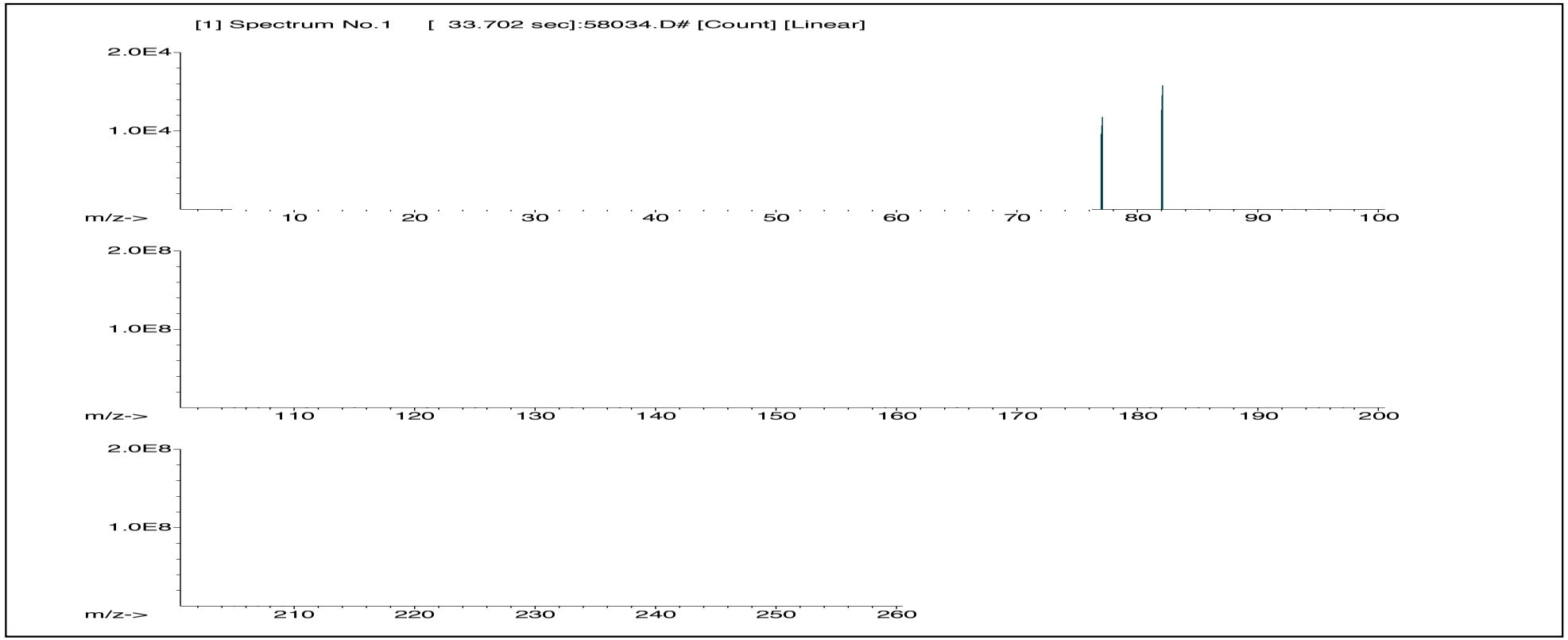
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	20370011	Nitric Acid	
Lot Number:	**070221**			
Description:	**Selenium (Se)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	070224			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Giovanni Esposito	
Formulated By:	Giovanni Esposito 070221
Pedro Rentas	
Reviewed By:	Pedro L. Rentas 070221

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Selenium(IV) oxide (Se)	58134	021621	0.1000	200.0	0.084	1000	10000.2	**1000.0**	**2.2**	7446-08-4	0.2 mg/m3	orl-rat 68 mg/kg	3149



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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	T	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

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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* 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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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58030**	20370011	Nitric Acid	
Lot Number:	**031921**			
Description:	**Zinc (Zn)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	031924			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

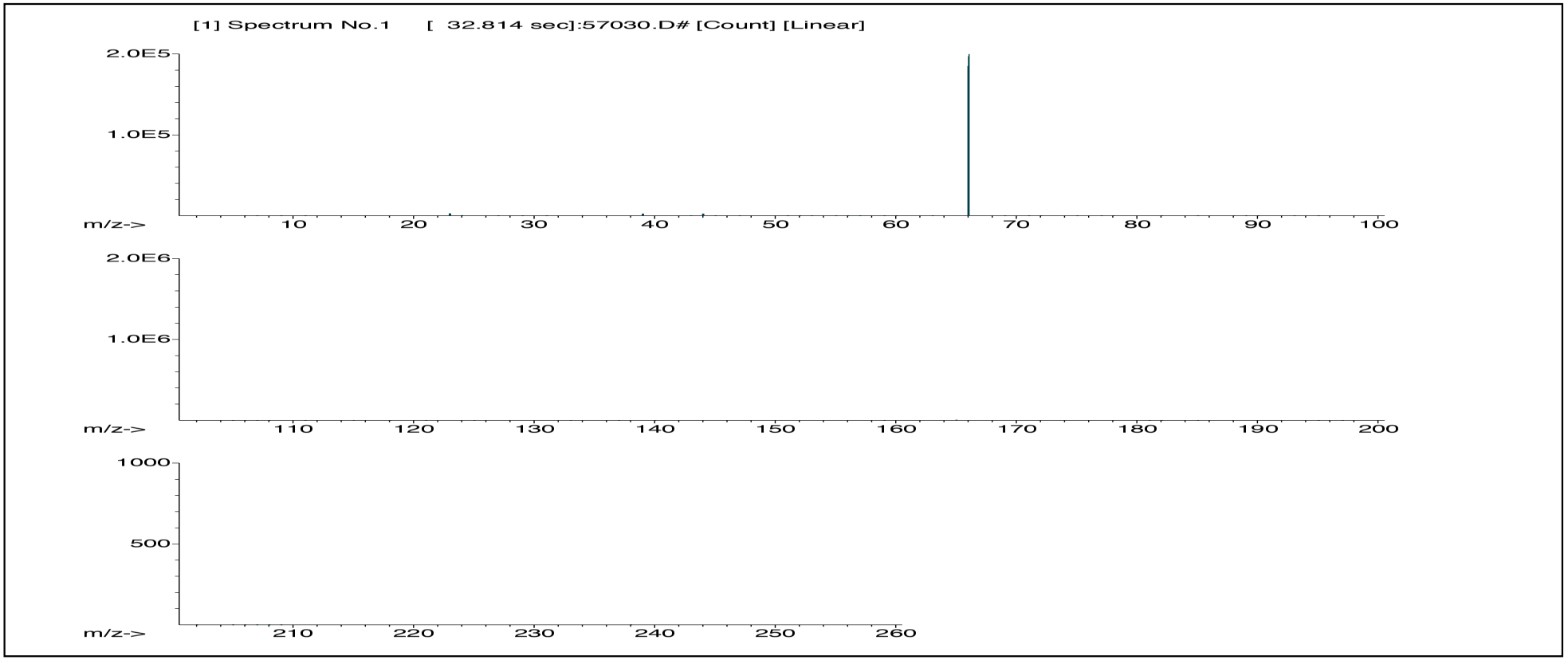
Giovanni Esposito

Formulated By:	Giovanni Esposito	031921

Pedro Rentas

Reviewed By:	Pedro L. Rentas	031921

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zinc nitrate hexahydrate (Zn)	58130	082020	0.1000	200.0	0.084	1000	10000.3	**1000.0**	**2.2**	10196-18-6	1 mg/m3	orl-rat 1190mg/kg	3168



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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	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	T
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:



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M4913-16
MB

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P279	Quality Test / Release Date	01/12/2021
Lot Number	210306		
Description	POTASSIUM PERMANGANATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Jan/2026

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Dark purple to purple green crystals
ASSAY	%	>= 99	99.3
CHLORIDE & CHLORATE	%	<= 0.005	<0.005
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test
INSOLUBLE MATTER	%	<= 0.2	<0.2
MERCURY (Hg)	ppm	<= 0.05	<0.004
SULFATE (SO4)	%	<= 0.02	<0.02

Julian Burton

Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

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Certified Reference Material CRM

BA M5020 R: 12/09/21

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CERTIFIED WEIGHT REPORT:

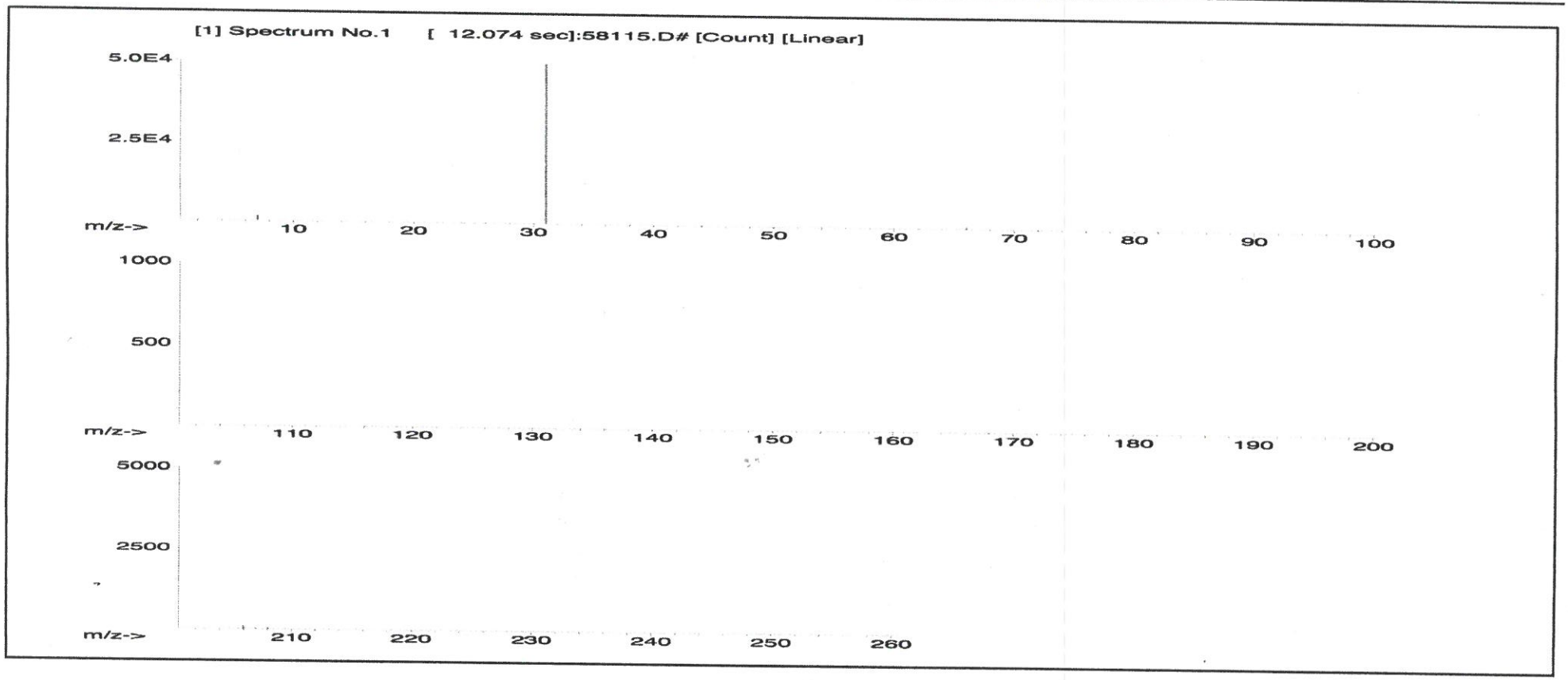
Part Number: 57115
Lot Number: 032921
Description: Phosphorous (P)

Expiration Date: 032924
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41

	Lot #		
Solvent:	20370011	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
5E-05	Balance Uncertainty		
0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	032921
Reviewed By:	Pedro L. Rentas	032921

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV052018A1	10000	99.999	0.10	27.3	109.9063	109.9093	**10000.3**	**20.0**	7722-76-1	5 mg/m3	NA	3186



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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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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Certificate of Analysis

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Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M5062
M5063
M3

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).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHG-10PPM
Lot Number:	S2-HG709270
Matrix:	10% (v/v) HCl
Value / Analyte(s):	10 µg/mL ea: Mercury
Starting Material:	Hg metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9994%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.001 ± 0.053 µg/mL

Density: 1.020 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
Hg	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:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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.

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

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.

O	Ag		0.000011	M	Eu	<	0.000201	O	Na		0.000004	M	Se	<	0.015915	O	Zn	<	0.001510
O	Al		0.000001	O	Fe		0.000001	M	Nb	<	0.000201	O	Si		0.000005	M	Zr	<	0.000201
M	As	<	0.000402	M	Ga	<	0.000201	M	Nd	<	0.000201	M	Sm	<	0.000201				
M	Au	<	0.003631	M	Gd	<	0.000201	M	Ni	<	0.000402	M	Sn	<	0.001007				
M	B	<	0.001208	M	Ge	<	0.000201	M	Os	<	0.000605	M	Sr	<	0.000201				
M	Ba	<	0.000201	M	Hf	<	0.000201	O	P	<	0.032370	M	Ta	<	0.000201				
M	Be	<	0.000201	s	Hg	<		M	Pb	<	0.000201	M	Tb	<	0.000201				
M	Bi	<	0.000201	M	Ho	<	0.000201	M	Pd	<	0.000403	M	Te	<	0.002216				
O	Ca		0.000007	M	In	<	0.000201	M	Pr	<	0.000201	M	Th	<	0.000201				
M	Cd	<	0.000201	M	Ir	<	0.000201	M	Pt	<	0.000402	M	Ti	<	0.000402				
M	Ce	<	0.000201	O	K		0.000020	M	Rb	<	0.000201	O	Tl	<	0.016508				
M	Co	<	0.000201	M	La	<	0.000201	M	Re	<	0.000201	M	Tm	<	0.000201				
O	Cr	<	0.003021	O	Li	<	0.000107	M	Rh	<	0.000201	M	U	<	0.008058				
M	Cs	<	0.001208	M	Lu	<	0.000201	M	Ru	<	0.000201	M	V	<	0.000201				
M	Cu	<	0.000402	O	Mg		0.000001	O	S	<	0.053950	M	W	<	0.000604				
M	Dy	<	0.000201	M	Mn	<	0.000604	M	Sb	<	0.001208	M	Y	<	0.000201				
M	Er	<	0.000201	M	Mo		0.000009	M	Sc	<	0.000201	M	Yb	<	0.000201				

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 - 200.59 +2 4 Hg(OH)(aq) 1+

Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

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 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

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 22, 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 22, 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 Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5288 R: 07/21/2022

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

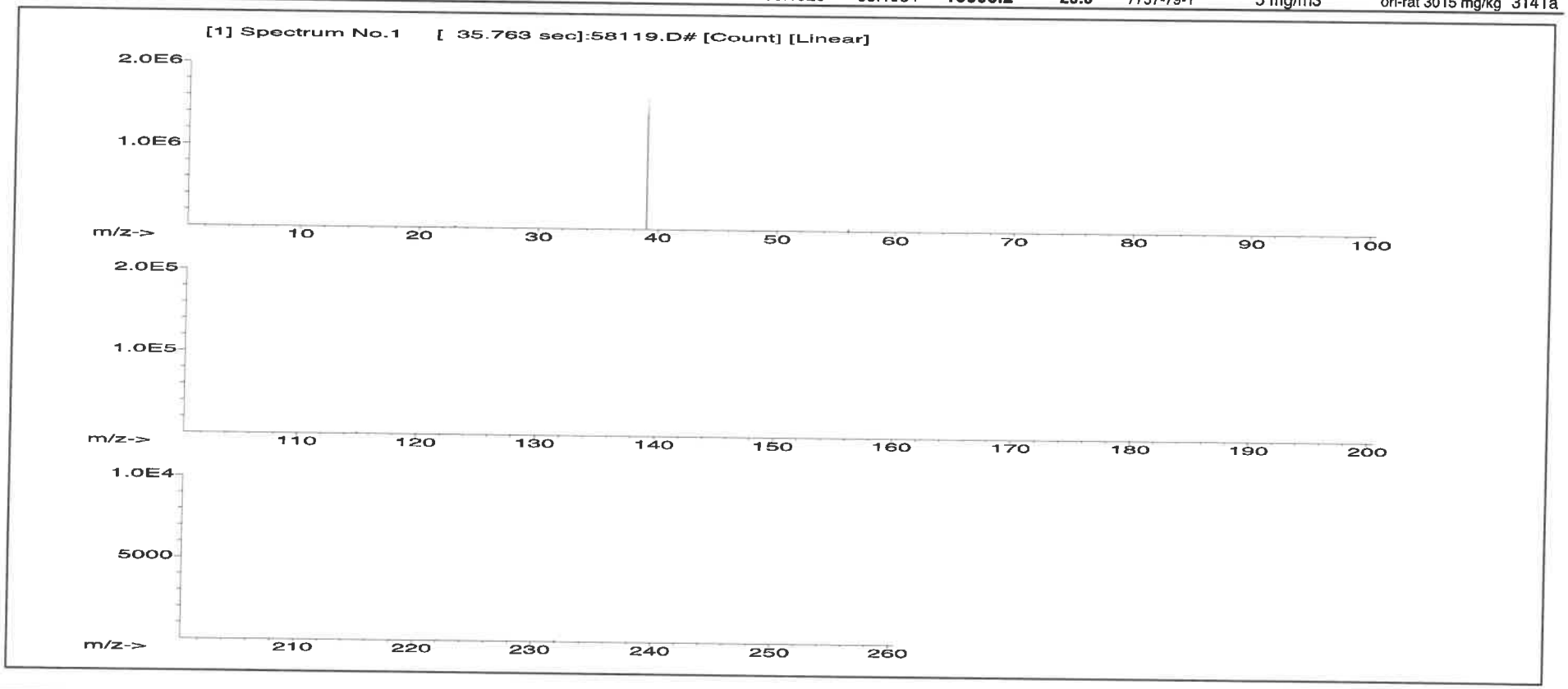
Part Number: 58119
Lot Number: 071122
Description: Potassium (K)

Expiration Date: 071125
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	071122
Reviewed By:	Pedro L. Rentas	071122

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium nitrate (K)	IN034	KD022021A1	10000	99.999	0.10	37.6	53.1925	53.1934	**10000.2**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3015 mg/kg	3141a



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
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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	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	T	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 certifed (+/-) 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).

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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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).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

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 ºC)

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, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ 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

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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)

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

R: 09/08/22 (BA)

Certified Reference Material CRM

M5387 . M5389 . M5390 . M5391 . M5392

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

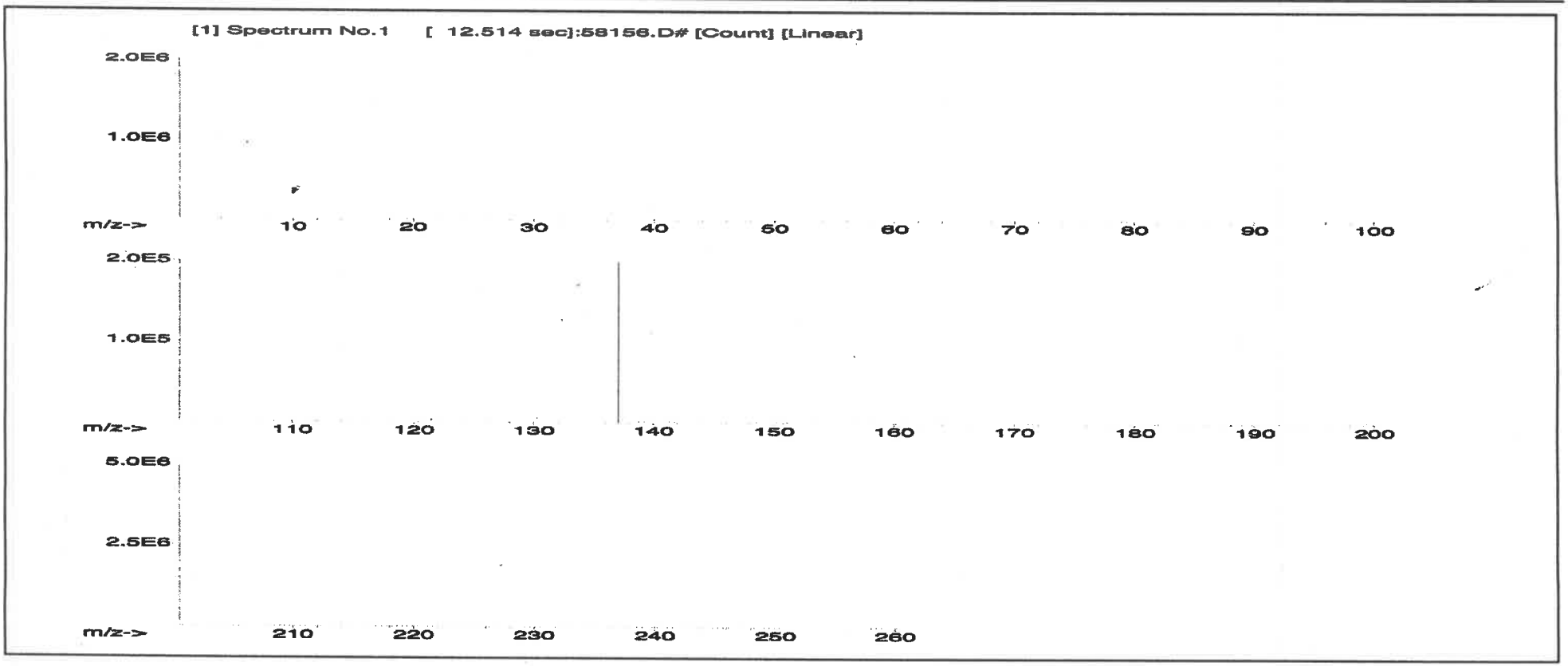
CERTIFIED WEIGHT REPORT:

Part Number:	**57056**		**Lot #**		
Lot Number:	**072122**	**Solvent:**	20510011	Nitric Acid	
Description:	**Barium (Ba)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	072125				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	072122
Reviewed By:	Pedro L. Rentas	072122

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Barium nitrate (Ba)	IN023	BAD022019A1	1000	99.999	0.10	52.3	3.82417	3.82426	**1000.0**	**2.0**	10022-31-8	0.5 mg/m3	orl-rat 355 mg/kg	3104a



21812-METALS

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:

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.
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* Standards are certifed (+/-) 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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M5429 R1 01/26/23 BH

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CERTIFIED WEIGHT REPORT:

Part Number: 57103
Lot Number: 070622
Description: Lithium (Li)

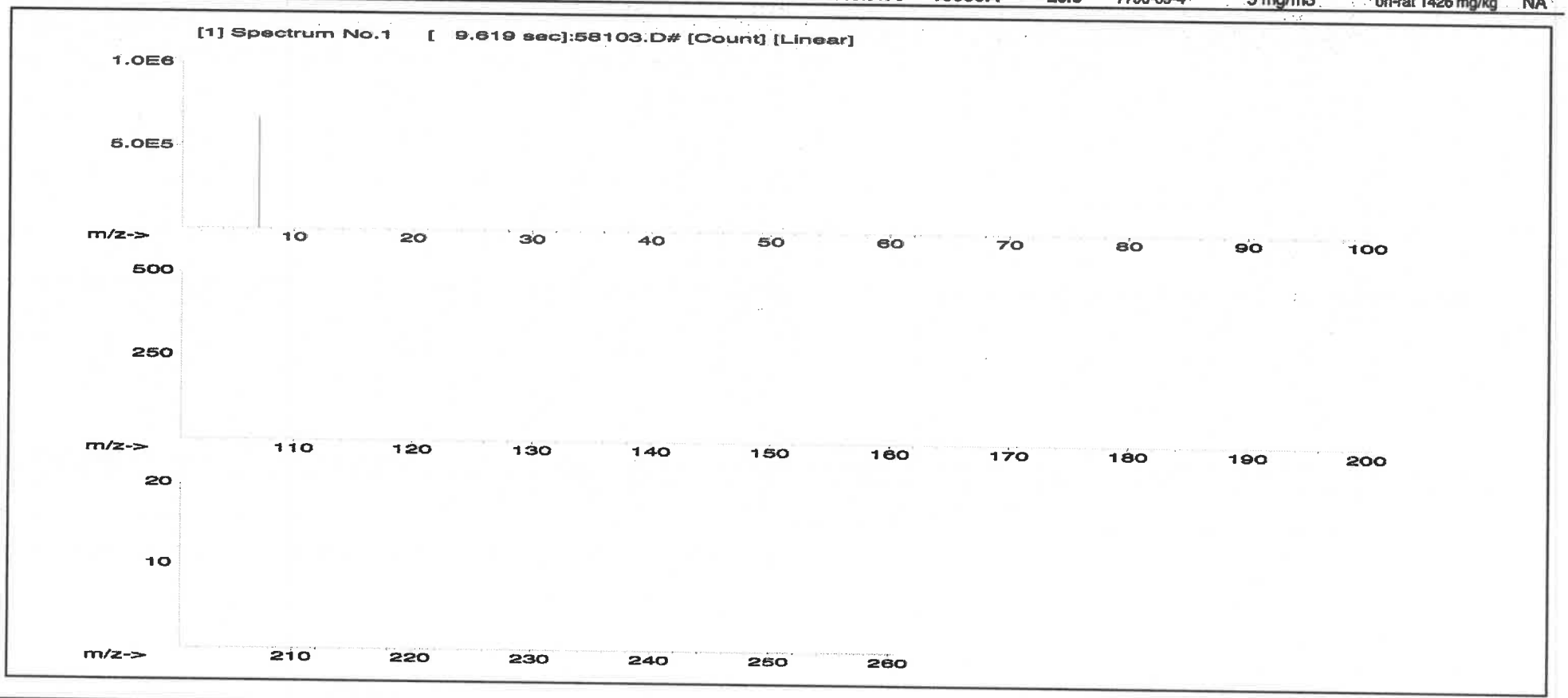
Expiration Date: 070625
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 1000.12

	Lot #		
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	070622
Reviewed By:	Pedro L. Rentas	070622

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	IN019	LIZ042018A1	10000	99.999	0.10	10.0	100.0134	100.0173	**10000.4**	**20.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/kg	NA



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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	T	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	<0.02

(T)= Target analyte

Physical Characterization:

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.
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* Standards are certifed (+/-) 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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M 5466

Certified Reference Material CRM

R: 03/01/23 BH

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CERTIFIED WEIGHT REPORT:

Part Number: 57058
Lot Number: 061322
Description: Cerium (Ce)

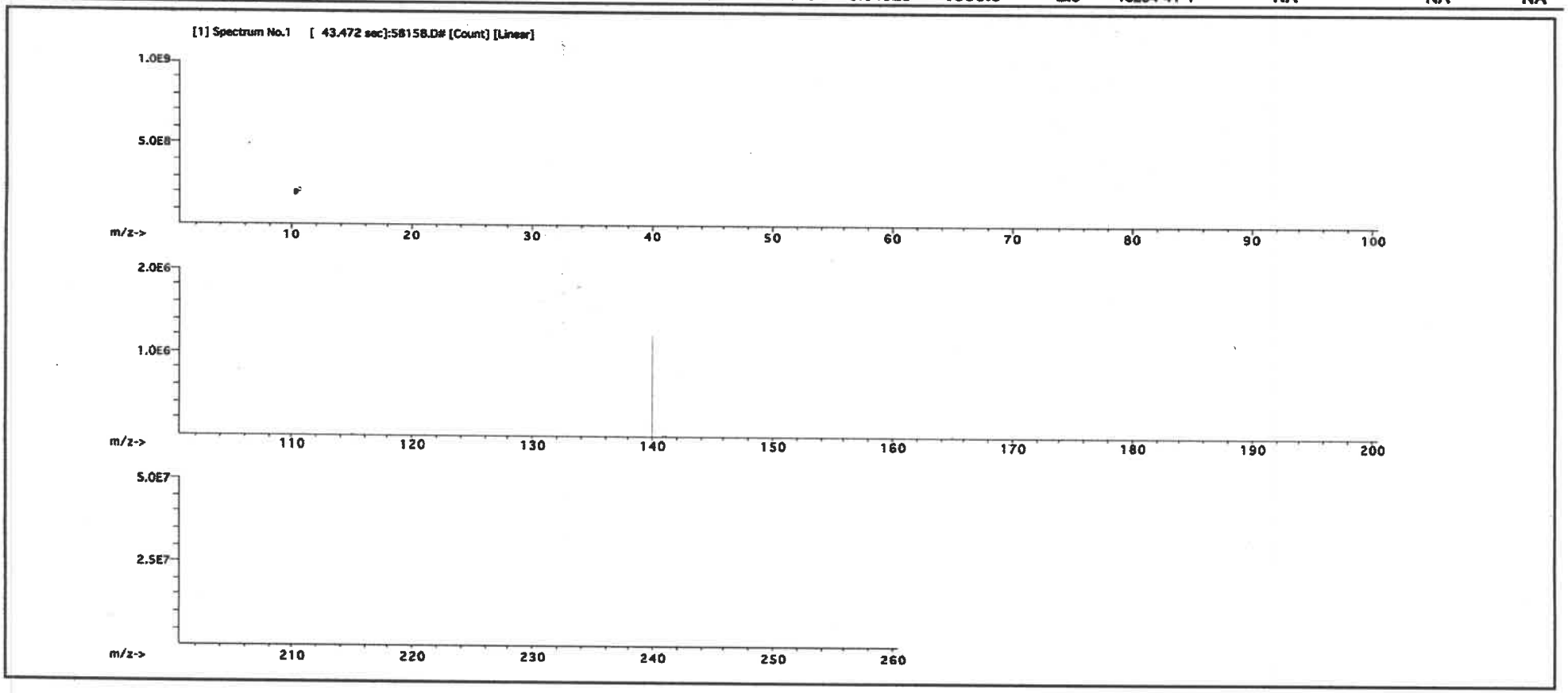
Expiration Date: 061325
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

Weight shown below was diluted to (mL): 1000.12 | 0.058 Flask Uncertainty | 5E-05 Balance Uncertainty

		Lot #	
Solvent:	20510011	Nitric Acid	
2%	20.0 (mL)	Nitric Acid	

Formulated By:	Lawrence Barry	061322
Reviewed By:	Pedro L. Rentas	061322

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Cerium nitrate hexahydrate (Ce)	IN146	Z512CEB1	1000	99.999	0.10	32.8	3.04919	3.04923	1000.0	2.0	10294-41-4	NA	NA	NA



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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	T	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

(T)= Target analyte

Physical Characterization:

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.
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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).

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M5496 R 7/20/23

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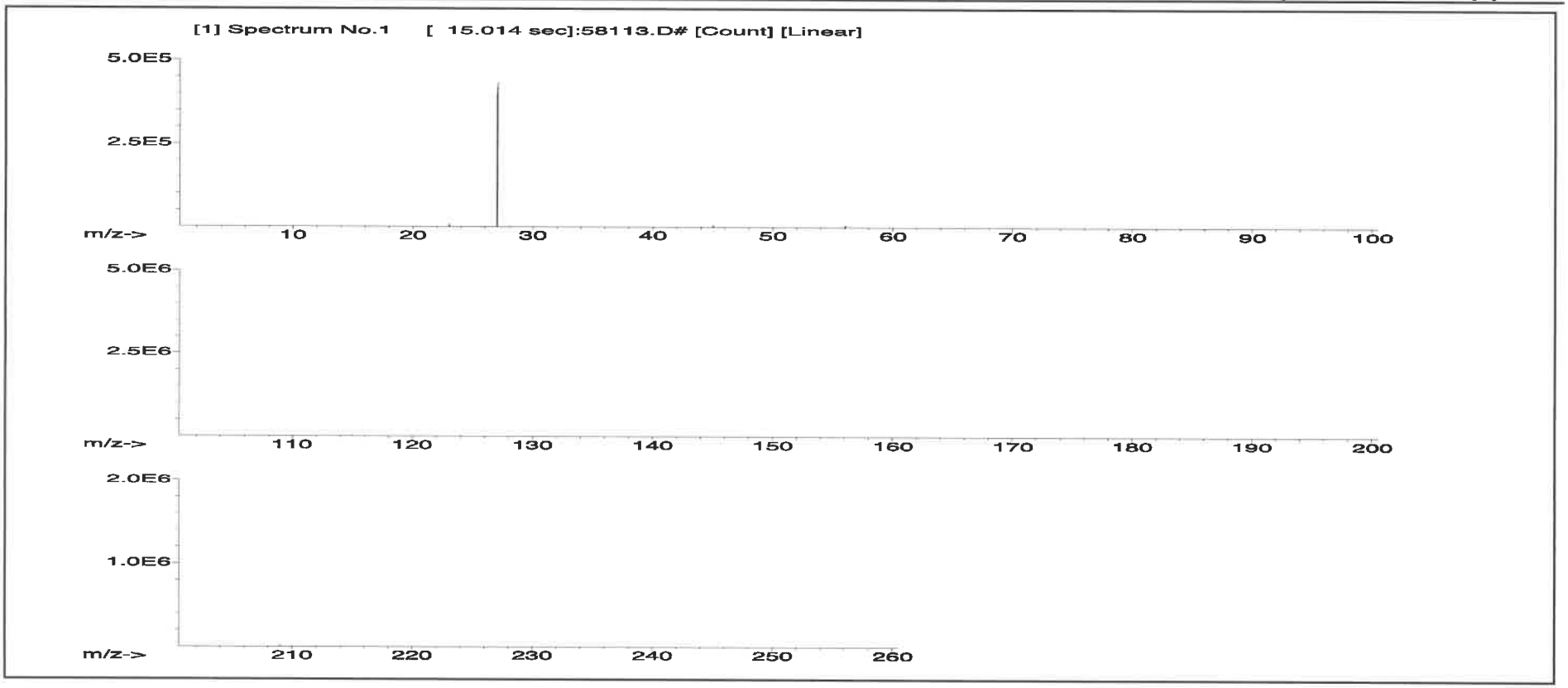
CERTIFIED WEIGHT REPORT:

Part Number:	**58113**		**Lot #**		
Lot Number:	**011623**	**Solvent:**	20510011	Nitric Acid	
Description:	**Aluminum (Al)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	011626				
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):	2000.02	0.058	Flask Uncertainty		

Giovanni Esposito

Formulated By:	Giovanni Esposito	011623
Reviewed By:	Pedro L. Rentas	011623

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Aluminum nitrate nonahydrate (Al)	IN022	ALM112021A1	10000	99.999	0.10	7.30	273.9779	274.0078	**10001.1**	**20.0**	7784-27-2	2 mg/m3	orl-rat 3671 mg/kg	3101a



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M5497 - M5498 R: 03/17/23 (BP)

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CERTIFIED WEIGHT REPORT:

Part Number: 58120
Lot Number: 031523
Description: Calcium (Ca)

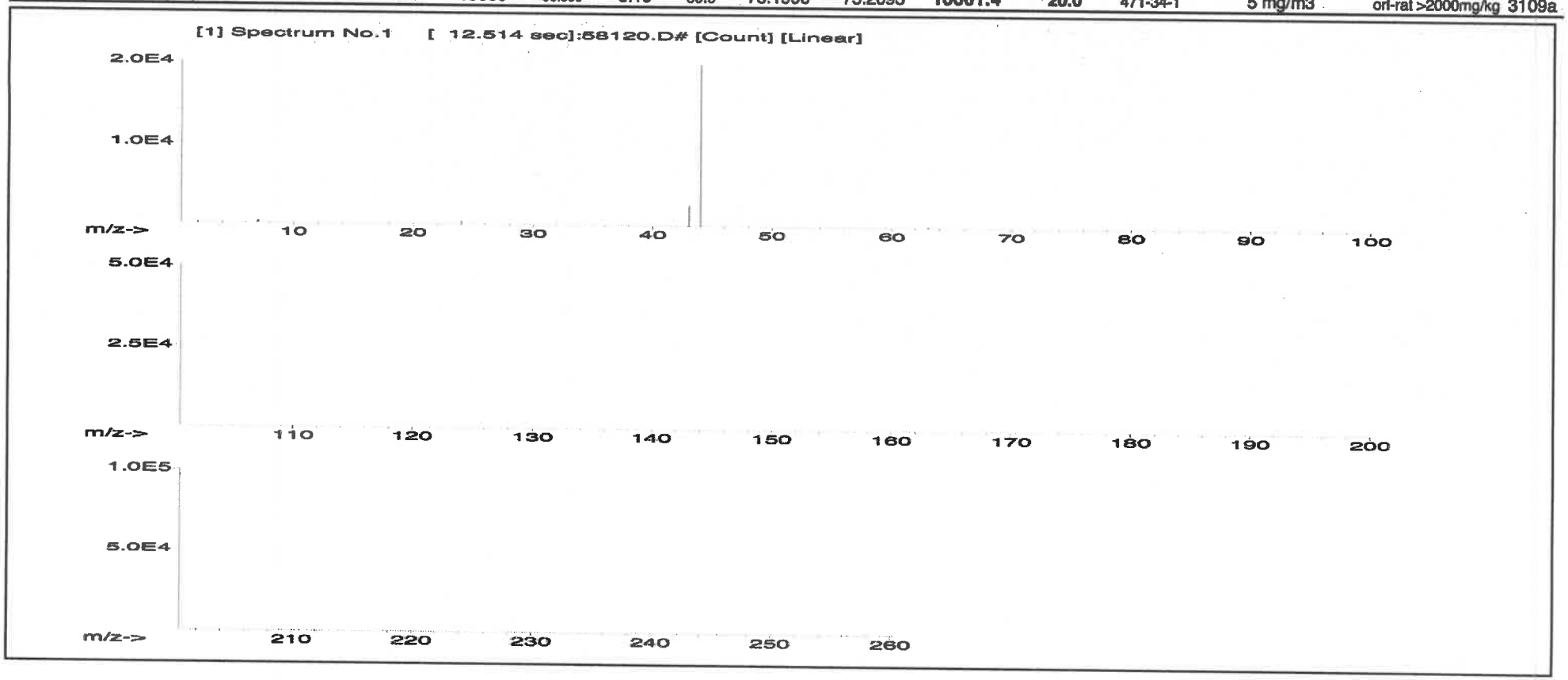
Expiration Date: 031526
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41

	Lot #		
Solvent:	21110221	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.058	Flask Uncertainty	

Giovanni Esposito
Formulated By: Giovanni Esposito 031523

Pedro Rentas
Reviewed By: Pedro L. Rentas 031523

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Calcium carbonate (Ca)	IN014	CAD072022A1	10000	99.999	0.10	39.9	75.1990	75.2093	**10001.4**	**20.0**	471-34-1	5 mg/m3	orl-rat >2000mg/kg	3109a



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	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	<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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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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).

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M516 M517 R: 03/17/22 BH

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CERTIFIED WEIGHT REPORT:

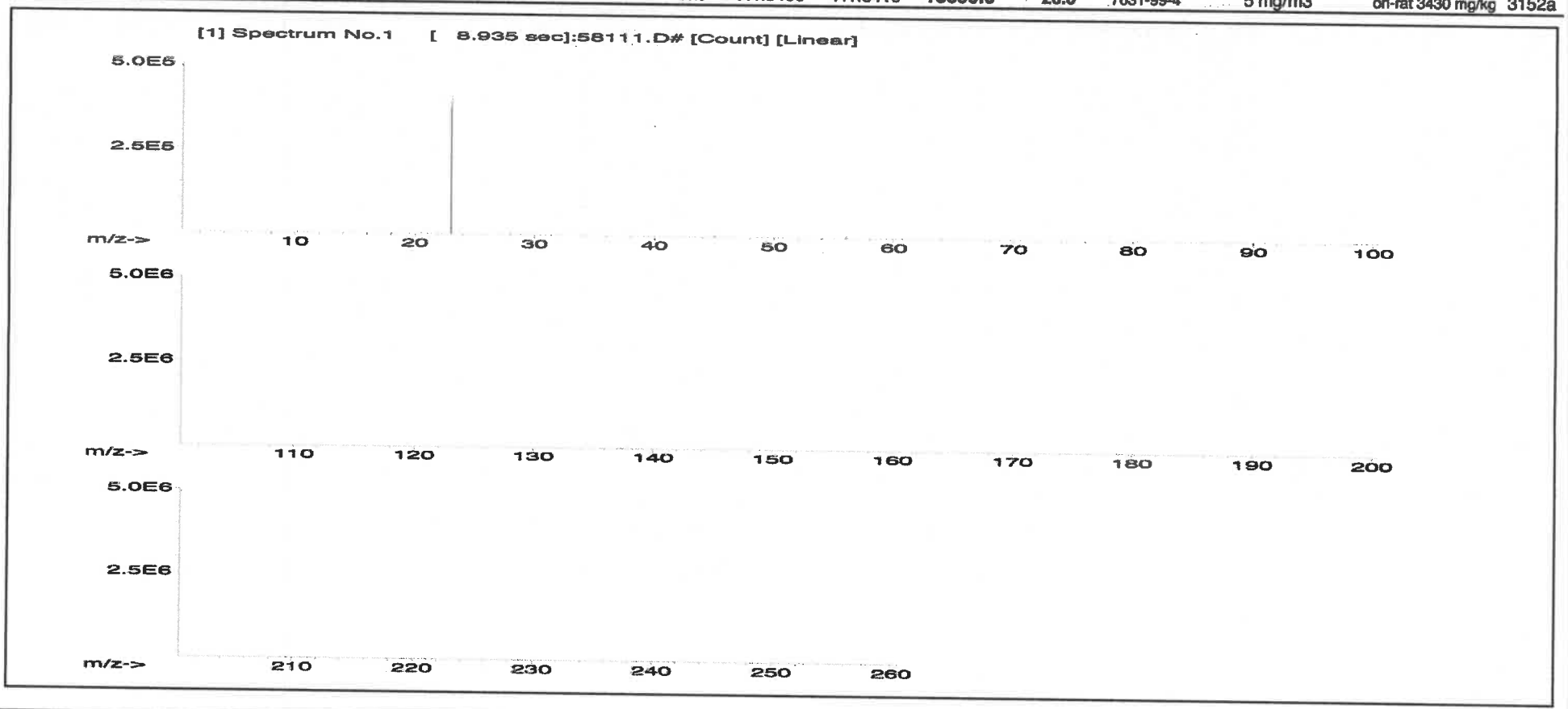
Part Number: 58111
Lot Number: 022123
Description: Sodium (Na)

Expiration Date: 022126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 5E-05 Balance Uncertainty 0.06 Flask Uncertainty

	Lot #	
Solvent:	21110221	Nitric Acid
2%	60.0 (mL)	Nitric Acid

Formulated By:	Lawrence Barry	022123
Reviewed By:	Pedro L. Rentas	022123

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	10000	99.999	0.10	26.9	111.5406	111.5410	**10000.0**	**20.0**	7631-99-4	5 mg/m3	orl-rat 3430 mg/kg	3152a



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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	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	T	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:

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.
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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).

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Certified Reference Material CRM

M519. M520 BH R:03/17/23

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CERTIFIED WEIGHT REPORT:

Part Number: 58119
Lot Number: 120822
Description: Potassium (K)

Expiration Date: 120825
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 Flask Uncertainty

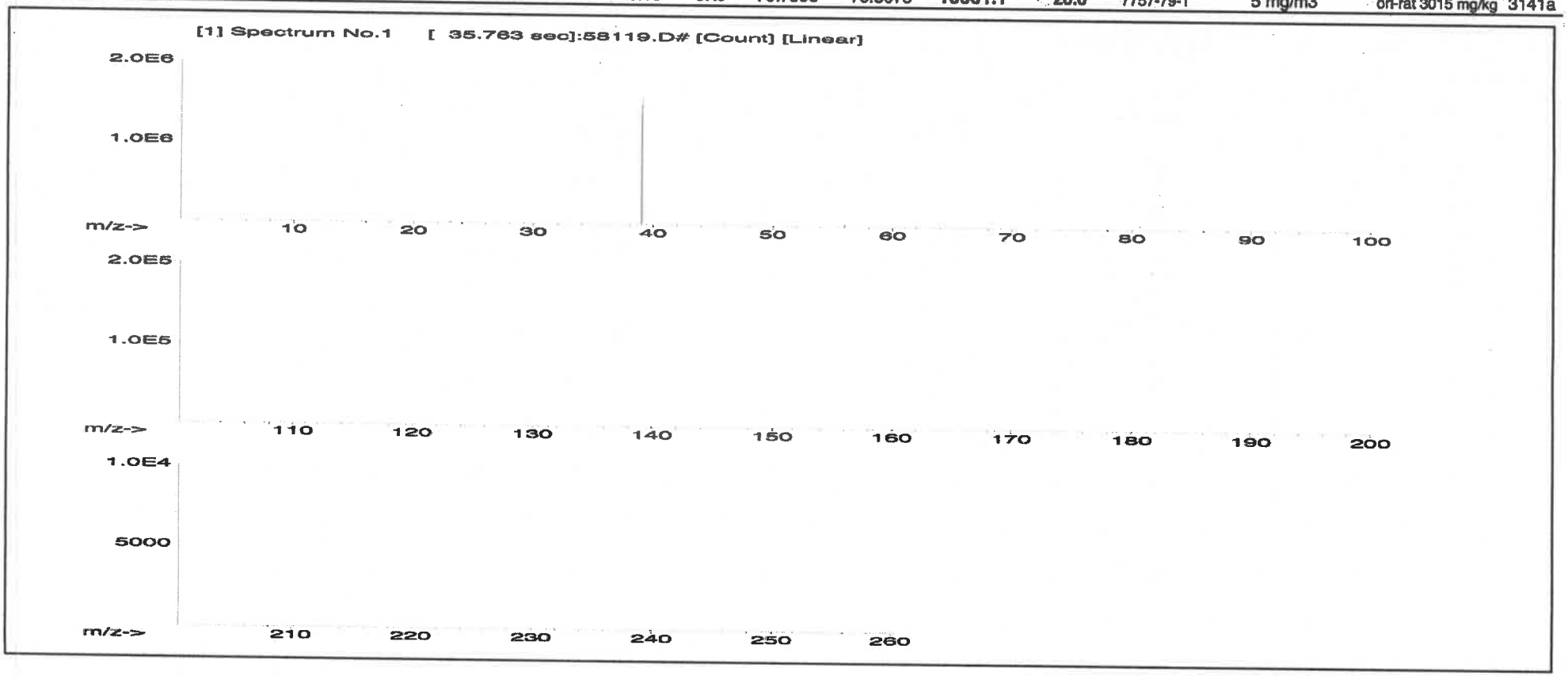
		Lot #	
Solvent:	20510011		Nitric Acid
	2%	60.0 (mL)	Nitric Acid

5E-05 Balance Uncertainty

Giovanni Esposito

Formulated By:	Giovanni Esposito	120822
Reviewed By:	Pedro L. Rentas	120822

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium nitrate (K)	IN034	KD022021A1	10000	99.999	0.10	37.6	79.7990	79.8075	**10001.1**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3015 mg/kg	3141a



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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	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	T	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 certifed (+/-) 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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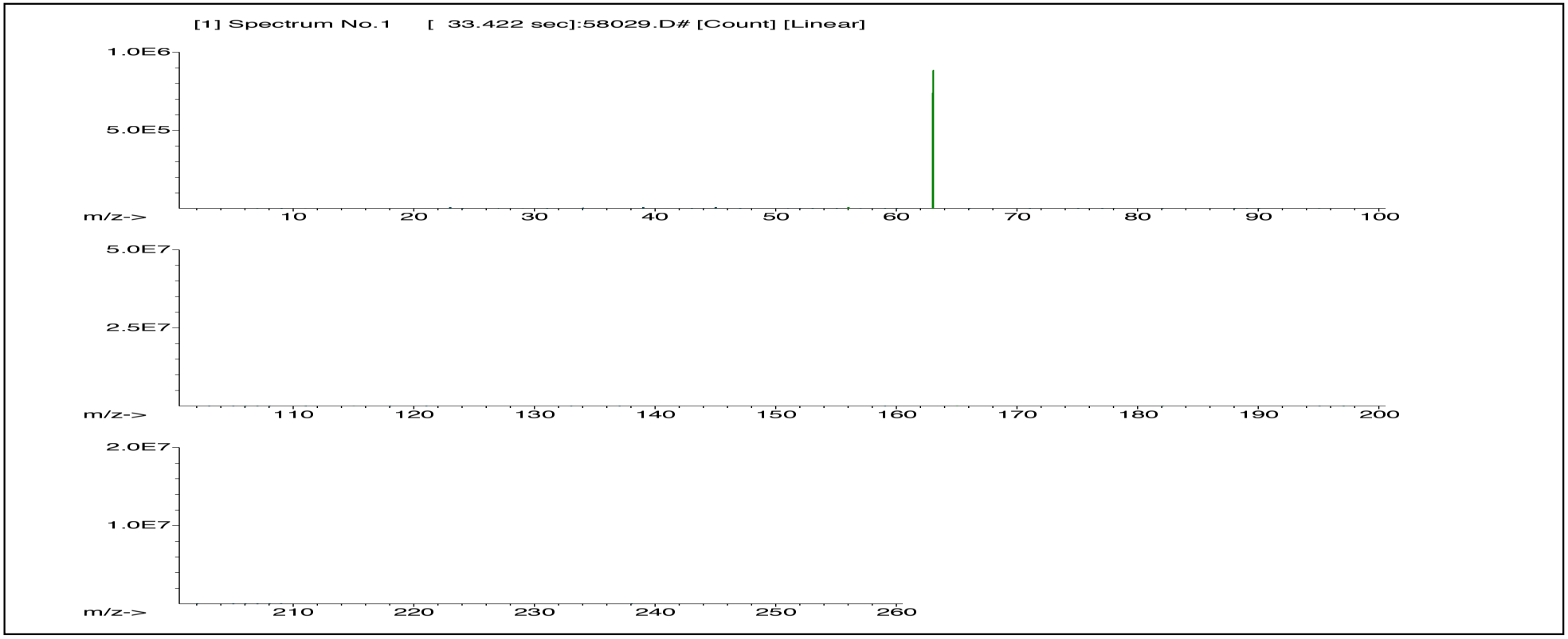
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	20510011	Nitric Acid	
Lot Number:	**102622**			
Description:	**Copper (Cu)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102625			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Eli Aliaga 102622
Reviewed By:	Pedro L. Rentas 102622

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	021422	0.1000	200.0	0.084	1000	10000.8	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



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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	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	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:

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.
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* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 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).

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

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.

MSS28-37
MB

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.

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) $K_2Cr_2O_7$ 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 $K_3Fe(CN)_6$, 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

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M5658 R ! 8/25/23

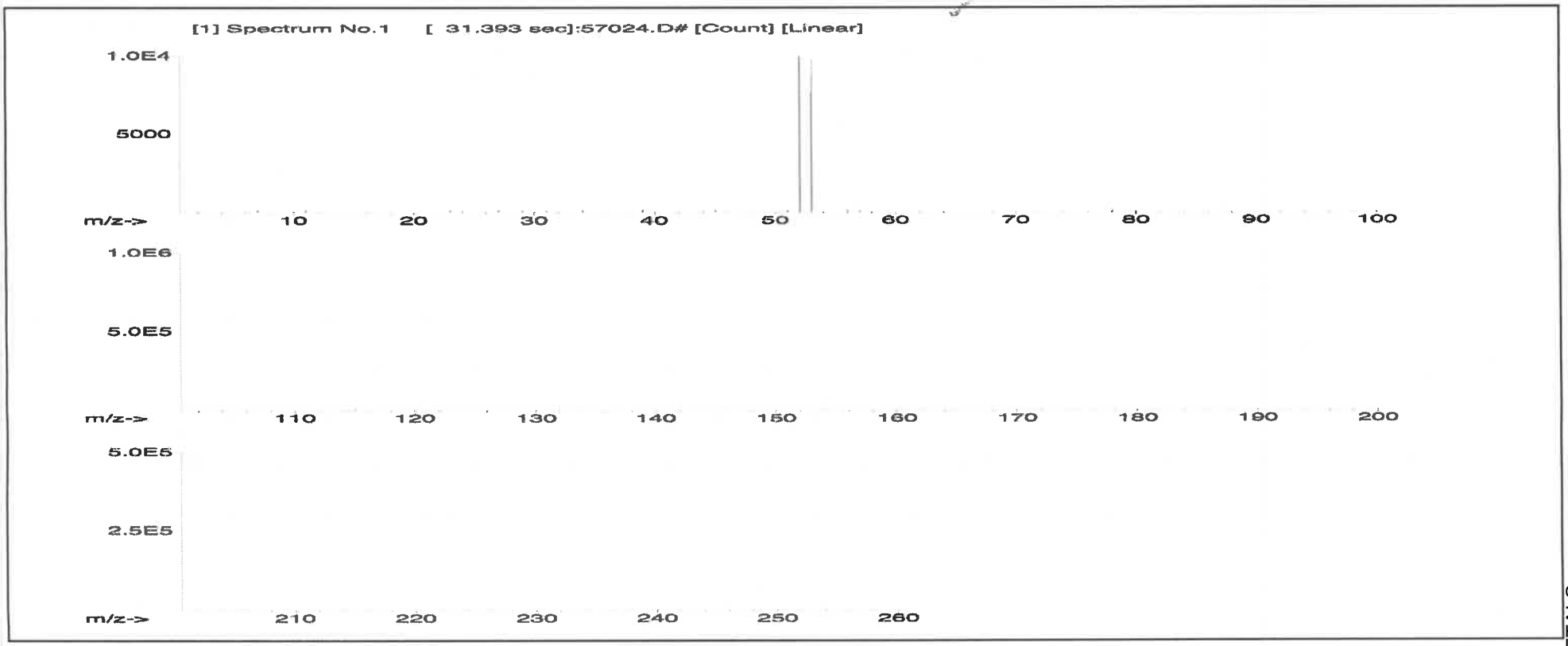
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58024**	21110221	Nitric Acid	
Lot Number:	**060523**			
Description:	**Chromium (Cr)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	060523
Reviewed By:	Pedro L. Rentas	060523

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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	orl-rat 3250 mg/kg	3112a



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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	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:

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.
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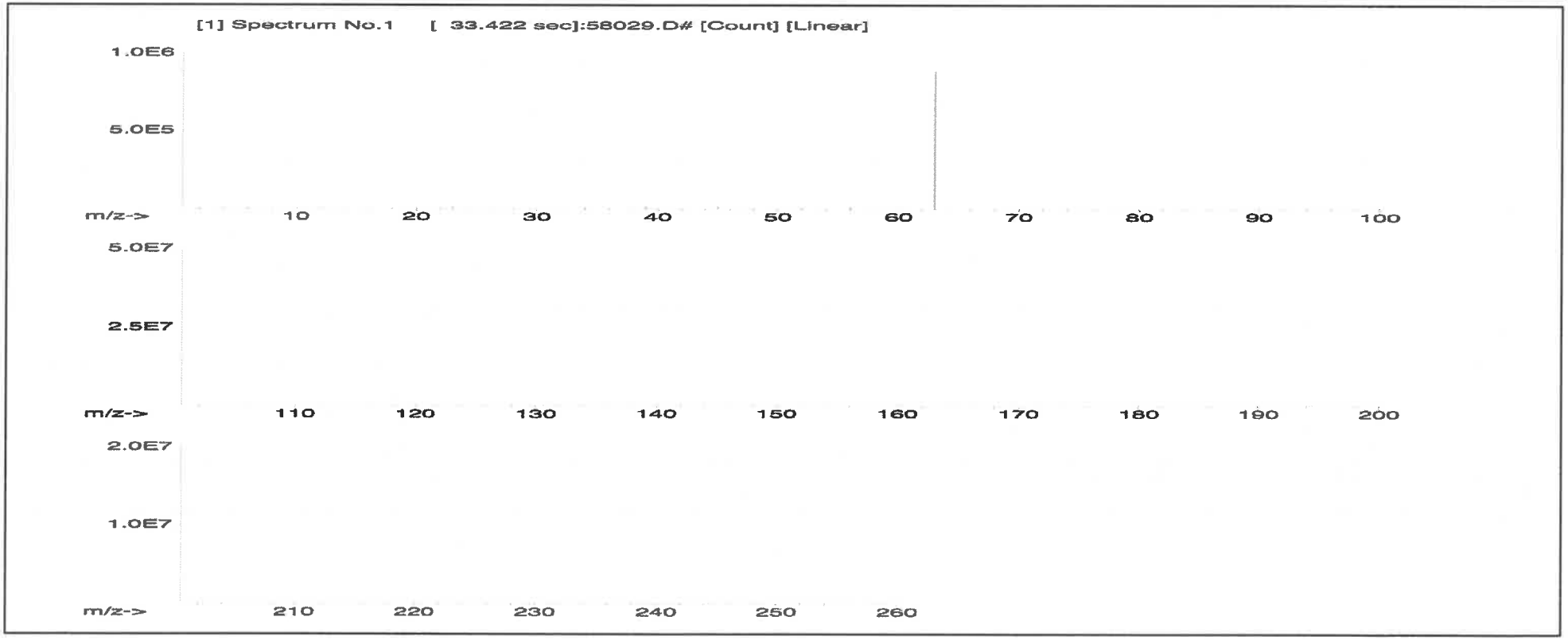
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	24002546	Nitric Acid	
Lot Number:	**102523**			
Description:	**Copper (Cu)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Copper(II) nitrate trihydrate (Cu)	58129	100223	0.1000	200.0	0.084	1000	10000.1	**1000.0**	**2.2**	10031-43-3	1 mg/m3	orl-rat 794 mg/kg	3114



797 of 931
Q1812-METALS

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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	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	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.
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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).

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R: 12/20/23 M5747

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CERTIFIED WEIGHT REPORT:

Part Number: 57082
Lot Number: 100923
Description: Lead (Pb)

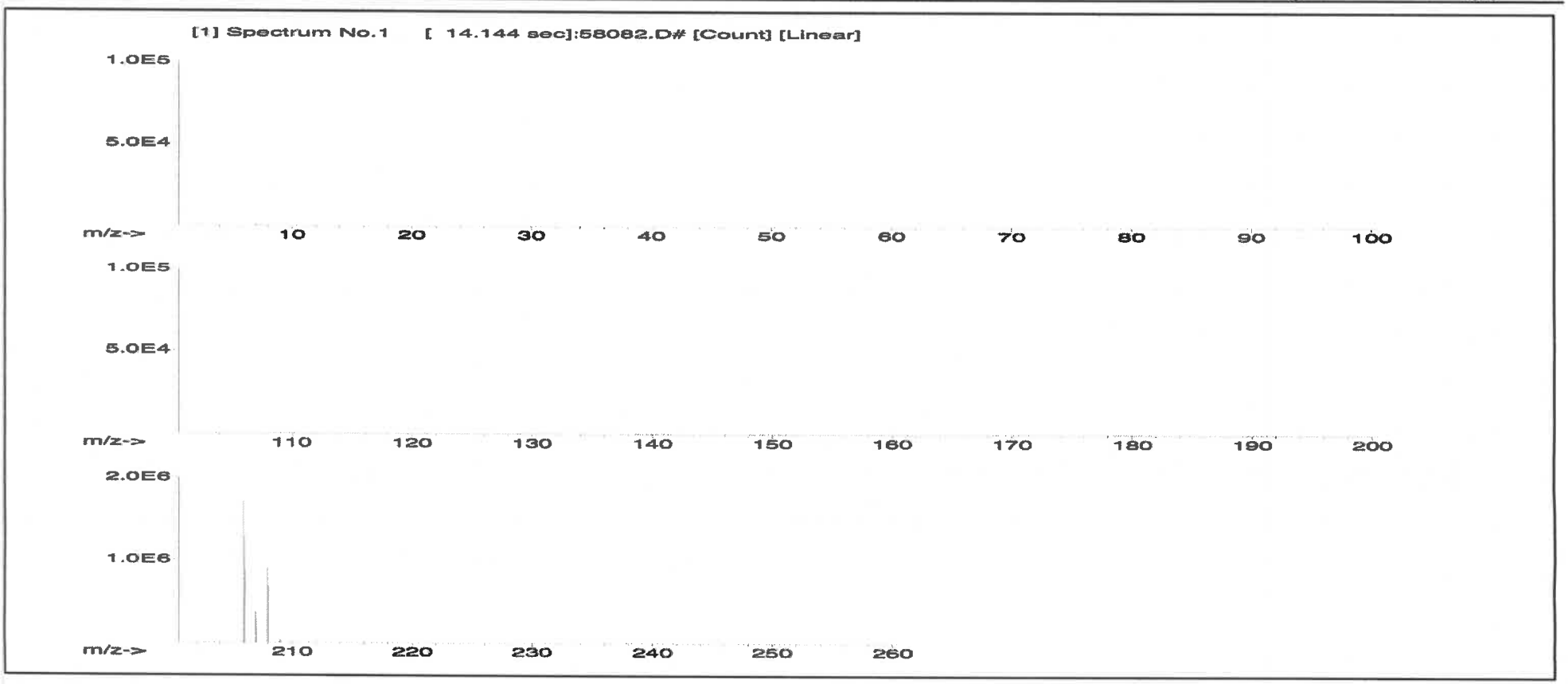
Expiration Date: 100926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 3000.41 0.06 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	60.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Lawrence Barry	100923
Reviewed By:	Pedro L. Rentas	100923

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lead(II) nitrate (Pb)	IN029	PBD122016A1	1000	99.999	0.10	62.5	4.80071	4.80077	**1000.0**	**2.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



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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	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	T	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T)= Target analyte

Physical Characterization:

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 certifed (+/-) 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: 12/20/23 M5748

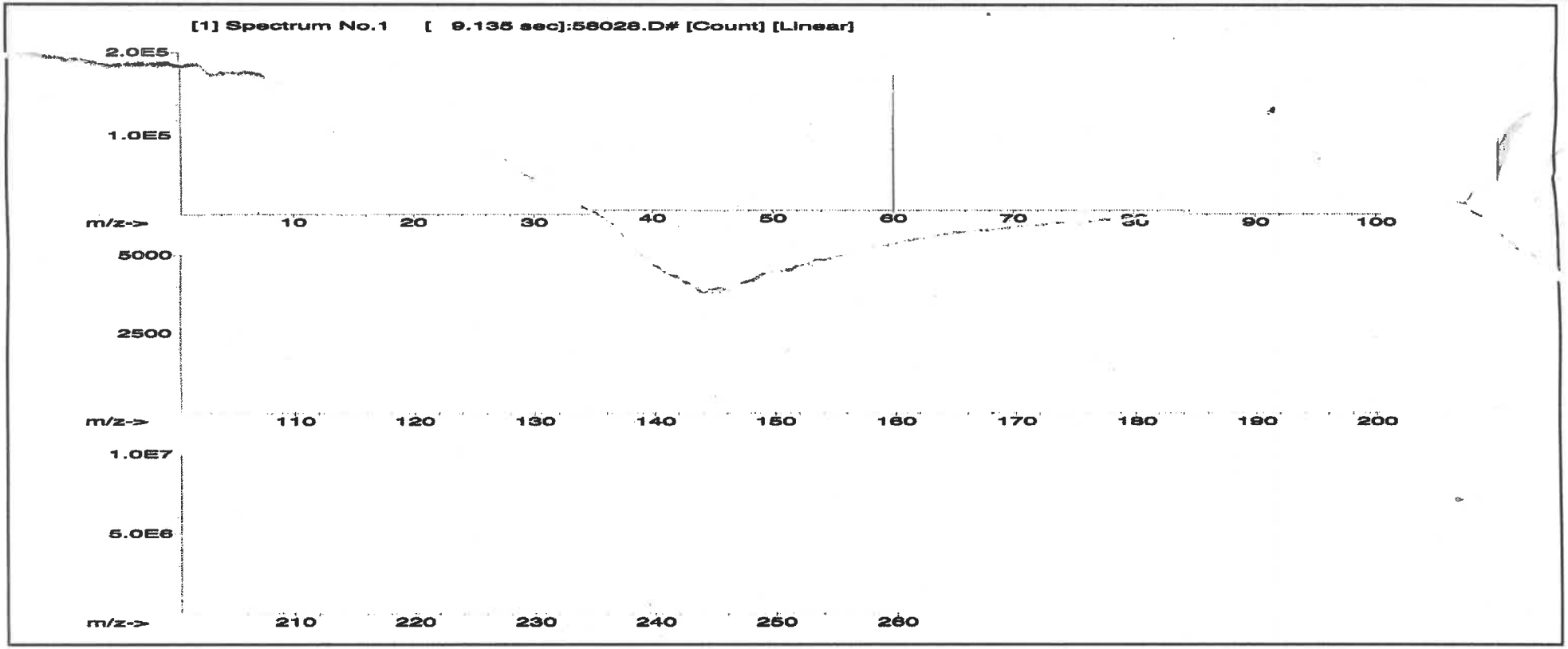
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57028**	24002546	Nitric Acid	
Lot Number:	**091223**			
Description:	**Nickel (Ni)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	091226			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	091223
Reviewed By:	Pedro L. Rentas	091223

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Nickel(II) nitrate hexahydrate (Ni)	58128	062023	0.1000	200.0	0.084	1000	10000.4	**1000.0**	2.2	13478-00-7	1 mg/m3	orl-rat 1620 mg/kg	3136



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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	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	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

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* 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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* 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: 8/25/23 M5751

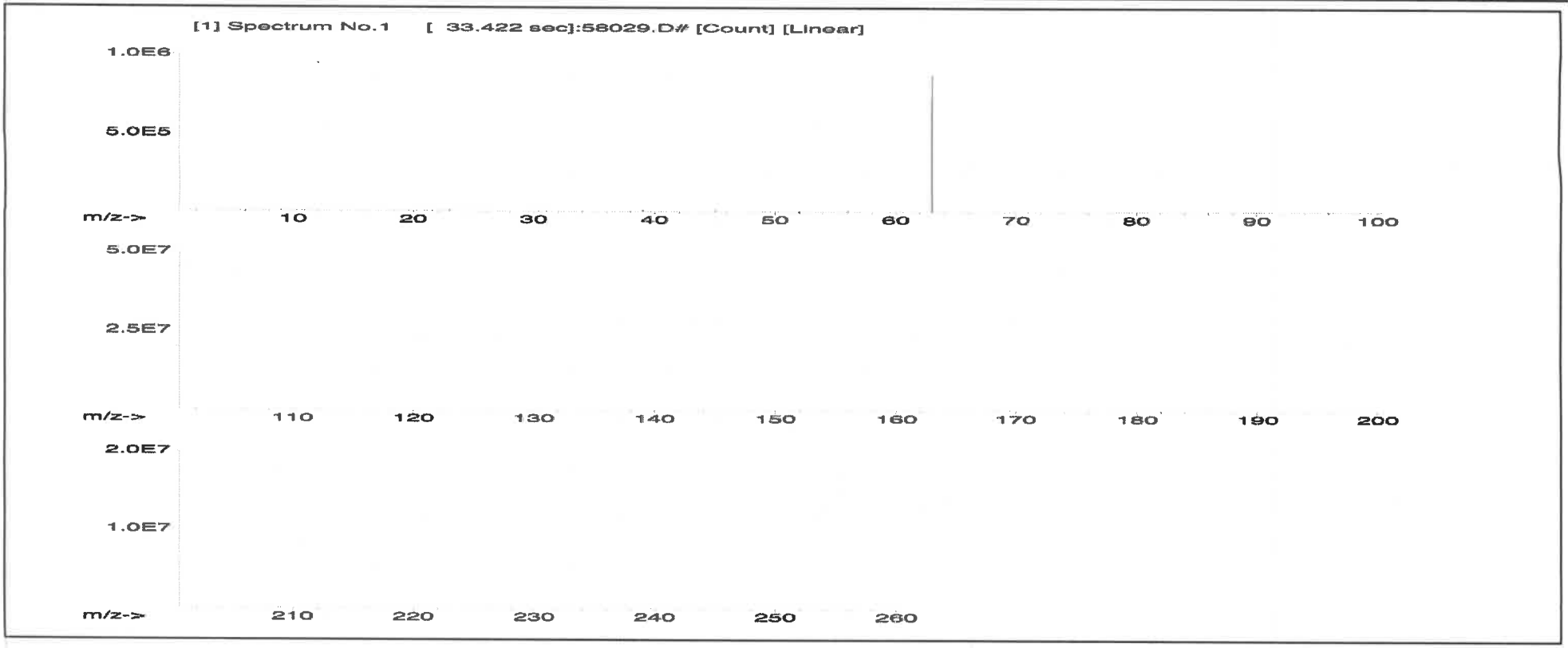
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**58029**	21110221	Nitric Acid	
Lot Number:	**071723**			
Description:	**Copper (Cu)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	071726			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	071723
Reviewed By:	Pedro L. Rentas	071723

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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	orl-rat 794 mg/kg	3114



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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	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	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:

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.
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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).

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M5768 M5769 (BP) R:1/3/24

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CERTIFIED WEIGHT REPORT:

Part Number: 58112
Lot Number: 091823
Description: Magnesium (Mg)

Expiration Date: 091826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB

M5768, M5769 (BP) R: 1/3/24

Weight shown below was diluted to (mL): 2000.02 ± 0.058 Flask Uncertainty

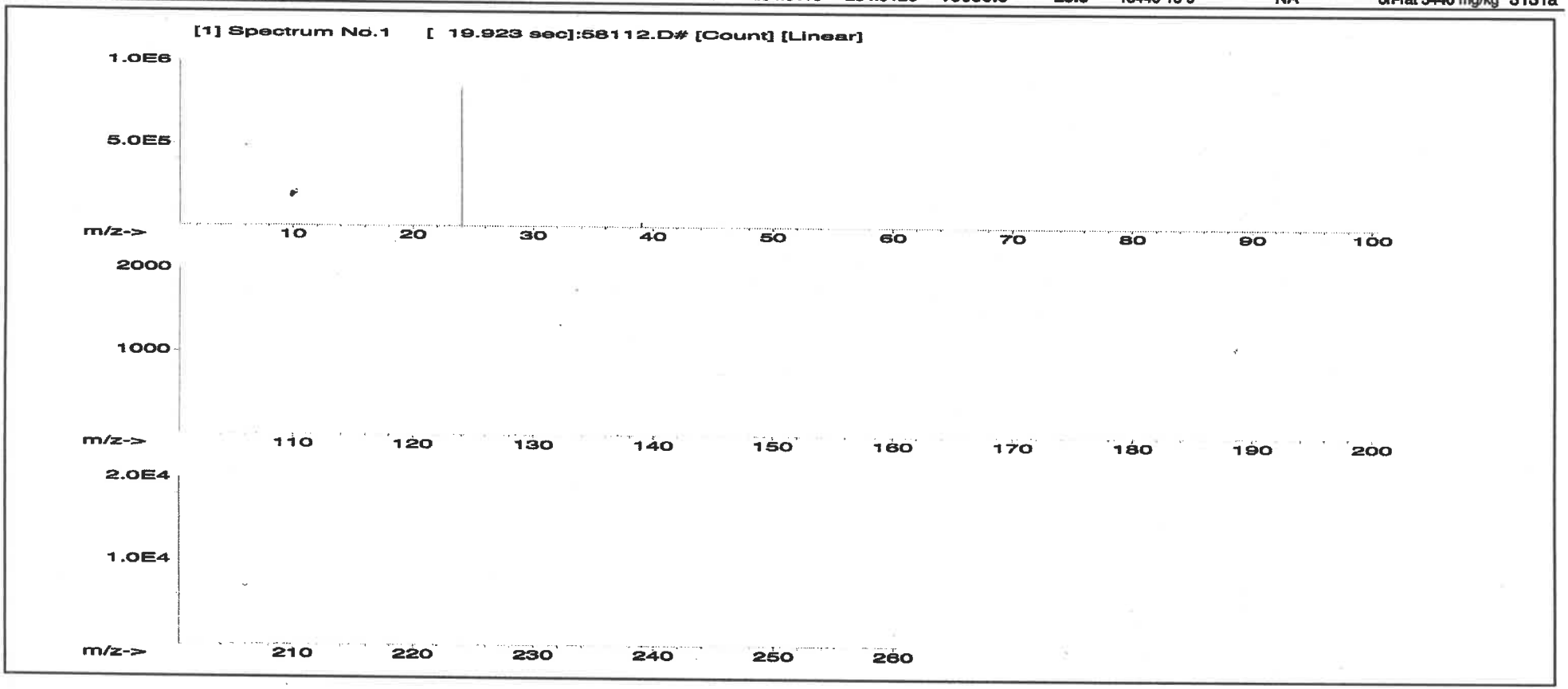
	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By: Lawrence Barry 091823

Reviewed By: Pedro L. Rentas 091823

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9118	234.9126	**10000.0**	**20.0**	13446-18-9	NA	ori-rat 5440 mg/kg	3131a



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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	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	T	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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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R: 02/09/24 M5798

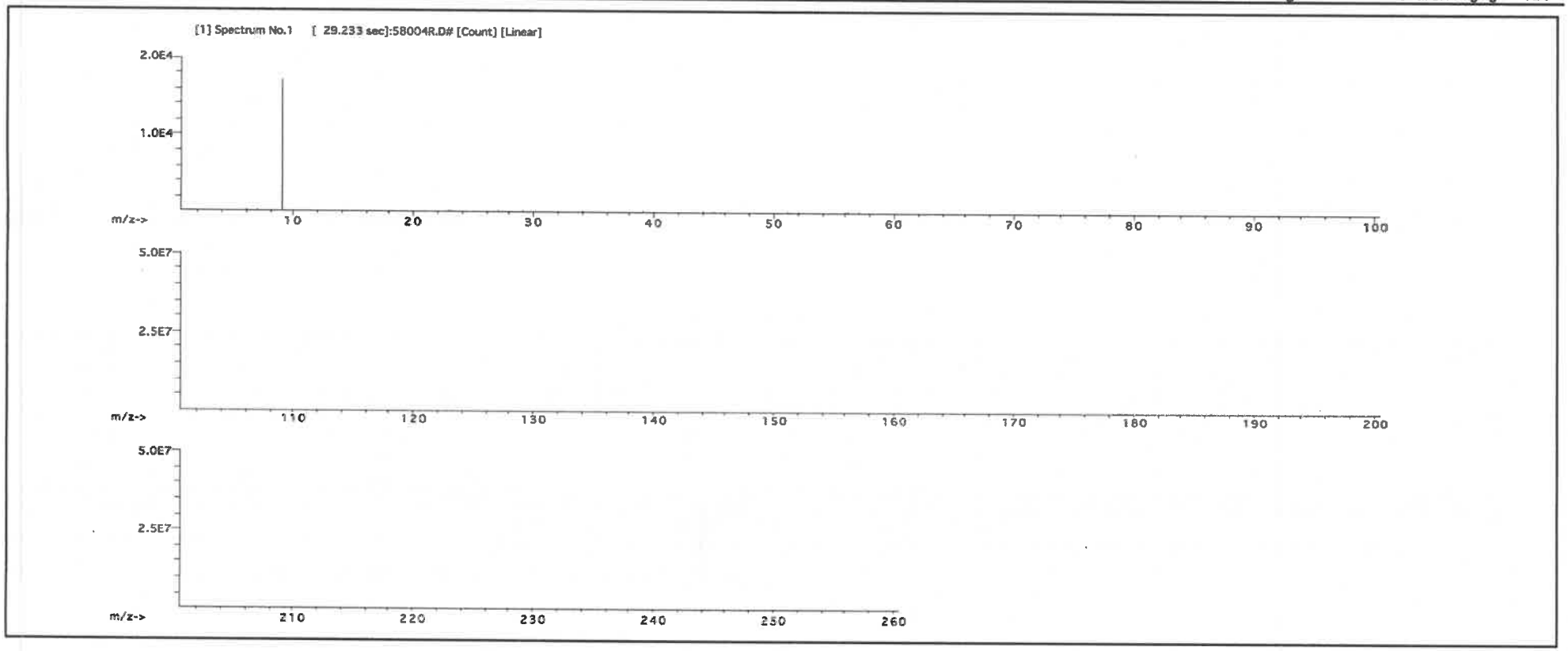
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57004**			
Lot Number:	**102523**	24002546	Nitric Acid	
Description:	**Beryllium (Be)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	102526			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty	

Formulated By:	Benson Chan	102523
Reviewed By:	Pedro L. Rentas	102523

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Beryllium nitrate (Be)	58104	091423	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13597-99-4	0.2ug/m3	intrvns-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	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	T	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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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BG

CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

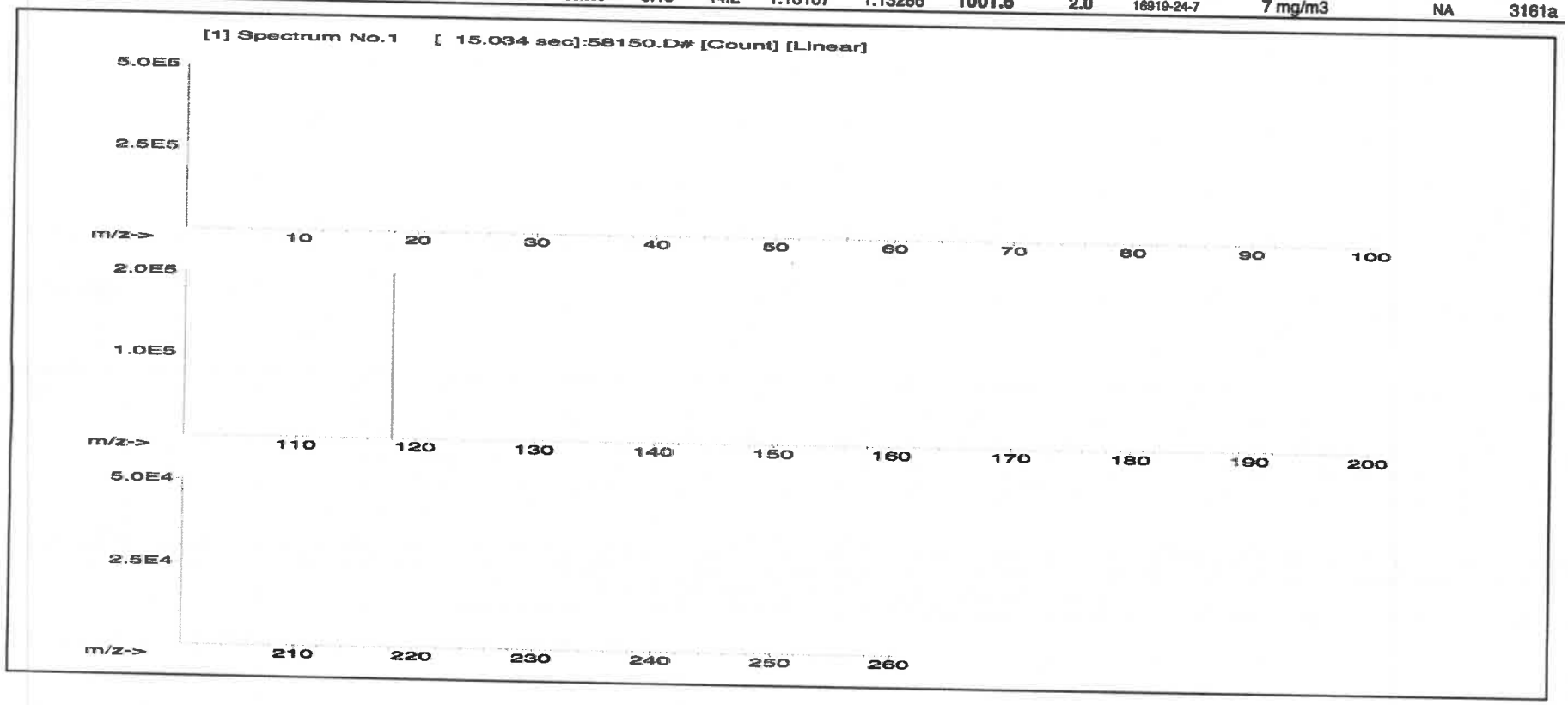
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	Lot #	
Solvents:	21110221	Nitric Acid
	22D0562008	Hydrochloric acid
2%	10.0	Nitric Acid
6%	30.0	Hydrochloric acid
	(mL)	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium hexafluorostannate(IV) (Sn)	IN010	SND042023A1	1000	99.999	0.10	44.2	1.13107	1.13286	**1001.6**	**2.0**	16919-24-7	7 mg/m3	NA	3161a



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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	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	Sn	T	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:

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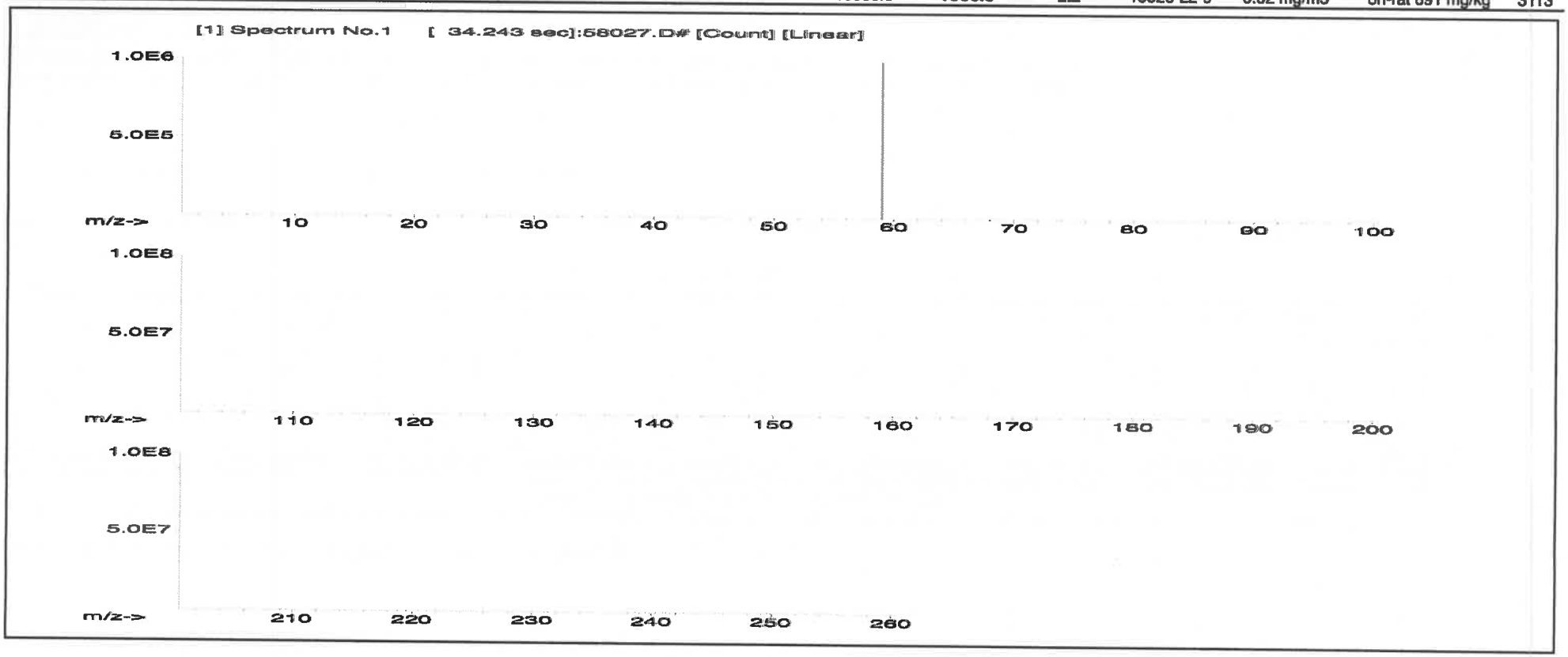
CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57027**	24002546	Nitric Acid		
Lot Number:	**091923**				
Description:	**Cobalt (Co)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	091926				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By: Lawrence Barry 091923

Reviewed By: Pedro L. Rentas 091923

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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



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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	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	Gé	<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:

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 certifed (+/-) 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: 02/09/24 M5801 BH

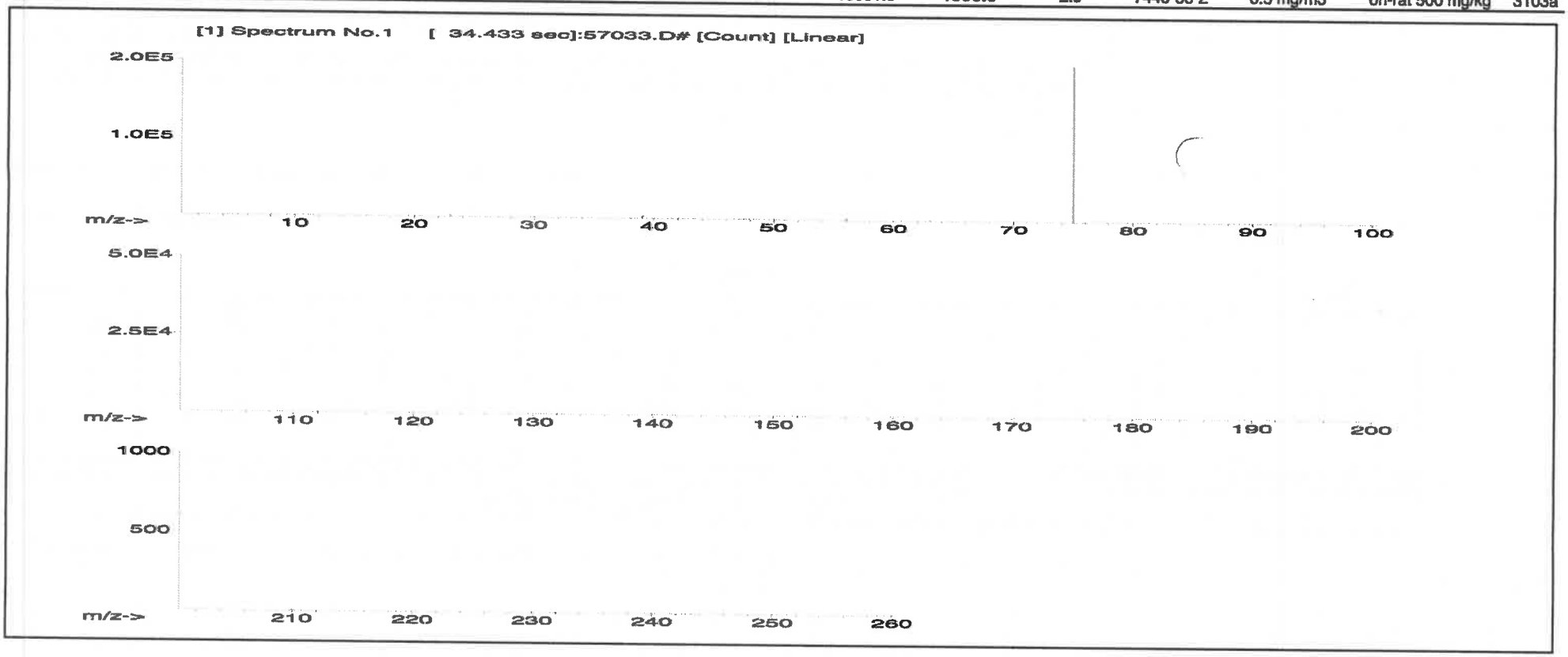
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CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**	24002546	Nitric Acid		
Lot Number:	**111323**				
Description:	**Arsenic (As)**	2.0%	80.0 (mL)	Nitric Acid	
Expiration Date:	111326				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	4000.0	0.06	Flask Uncertainty		

Formulated By:	Lawrence Barry	111323
Reviewed By:	Pedro L. Rentas	111323

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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	orl-rat 500 mg/kg	3103a



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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	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	T	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

(T) = Target analyte

Physical Characterization:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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* 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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* 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 WEIGHT REPORT:

Part Number: 57005
Lot Number: 071123
Description: Boron (B)

Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

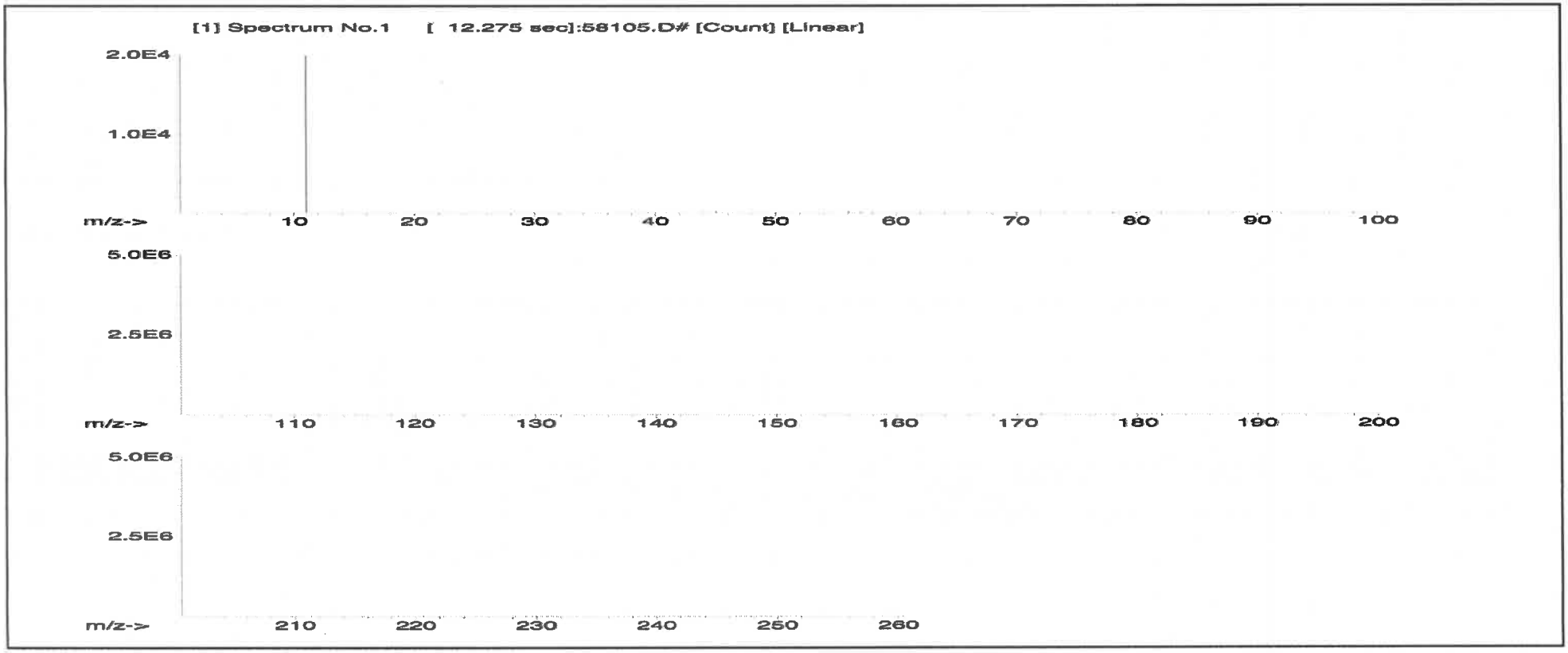
Weight shown below was diluted to (mL): 1999.48 0.058 Flask Uncertainty

	Lot #			
Solvent:	MKBQ8597V	Ammonium hydroxide		
	2.0%	40.0 (mL)	Ammonium hydroxide	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	071123
Reviewed By:	Pedro L. Rentas	071123

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Boric acid (B)	IN018	BV092016A1	1000	99.9999	0.10	17.3	11.55772	11.56201	**1000.4**	**2.0**	10043-35-3	2 mg/m3	orl-rat 2660 mg/kg	3107



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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	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	T	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:

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* 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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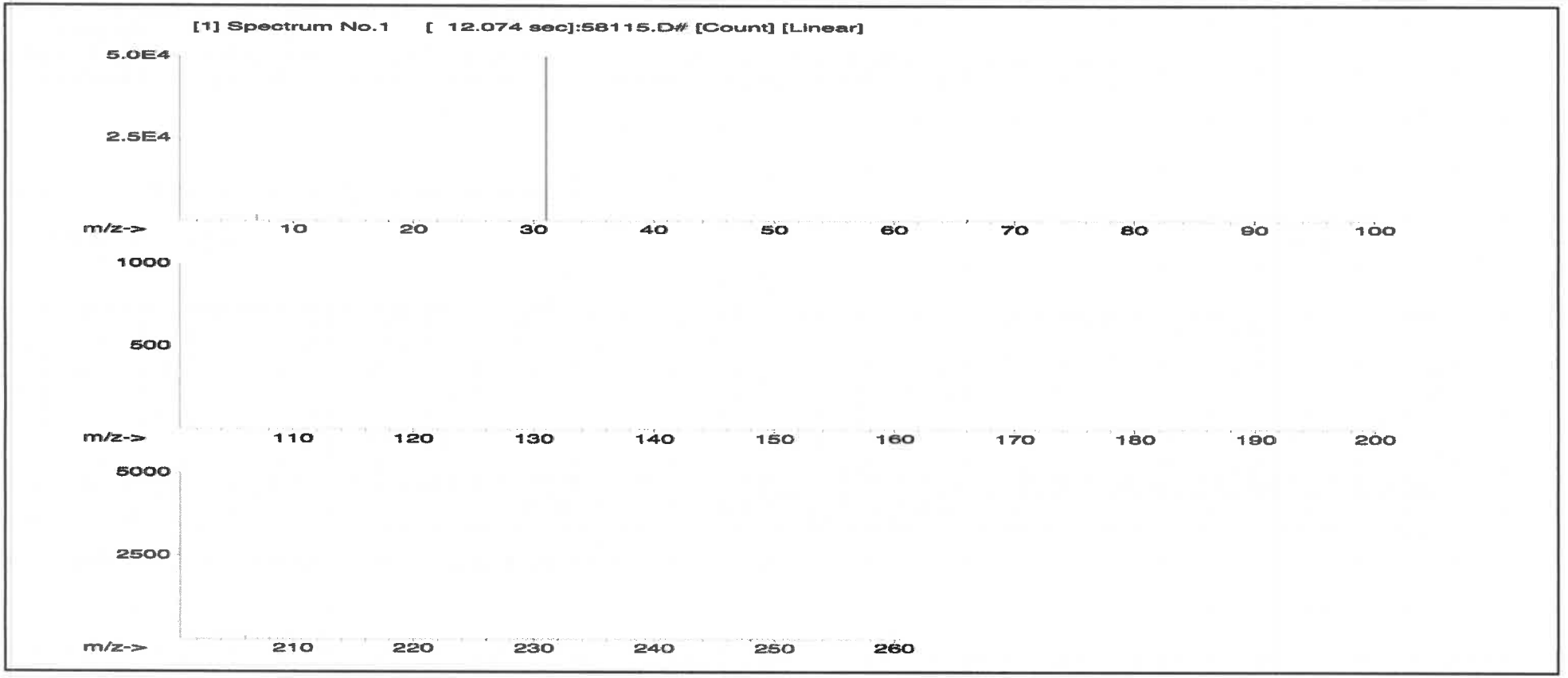
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CERTIFIED WEIGHT REPORT:

Part Number:	**57115**			**Lot #**	
Lot Number:	**041723**		**Solvent:**	21110221	Nitric Acid
Description:	**Phosphorous (P)**				
			2%	40.0 (mL)	Nitric Acid
Expiration Date:	041726				
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):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry	041723
Reviewed By:	Pedro L. Rentas	041723

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	10000	99.999	0.10	27.5	72.7287	72.7289	**10000.0**	**20.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/kg	3186



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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	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:

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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CERTIFIED WEIGHT REPORT:

Part Number: 57016
Lot Number: 122923
Description: Sulfur (S)

Expiration Date: 122926
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

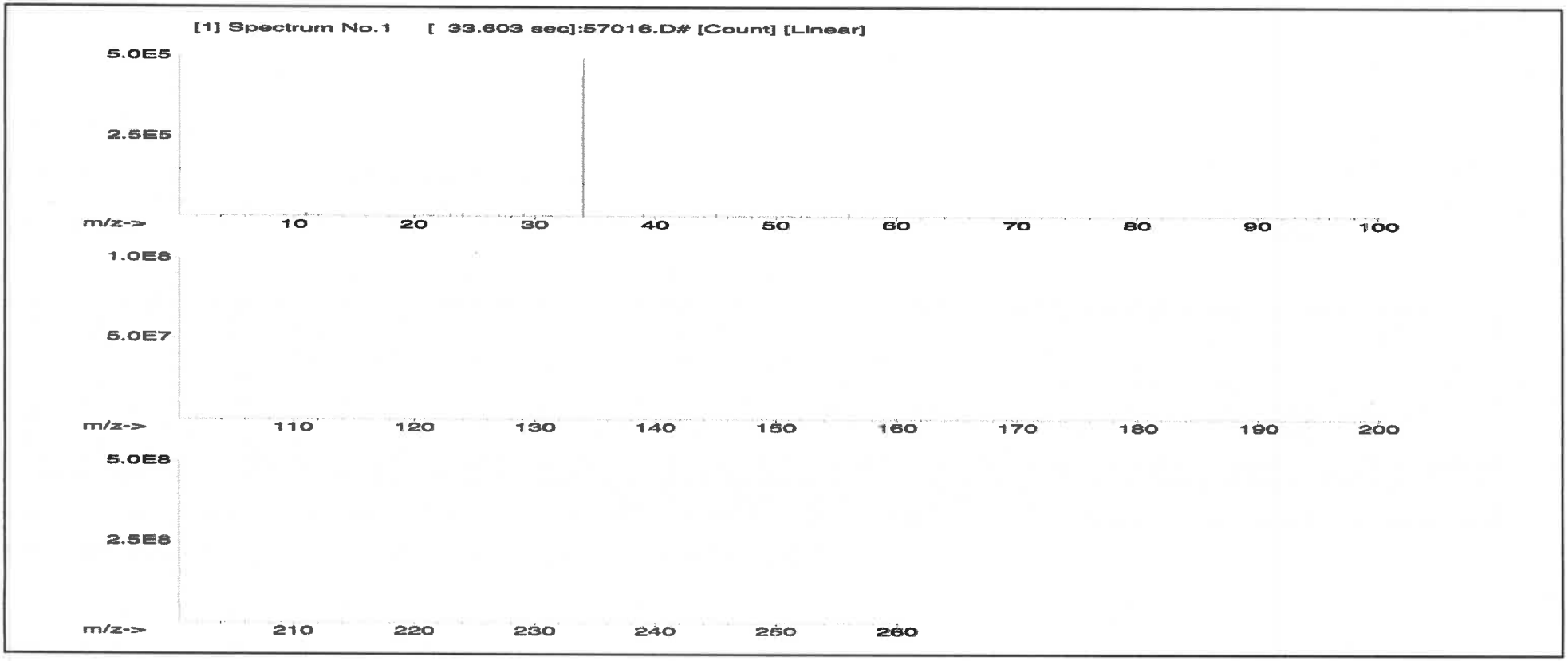
Weight shown below was diluted to (mL): 4000.0 0.06 Flask Uncertainty

Solvent: Lot # 122923 ASTM Type 1 Water

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	122923
Reviewed By:	Pedro L. Rentas	122923

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	1000	99.9	0.10	24.3	16.4979	16.4980	**1000.0**	**2.0**	7783-20-2	NA	orl-rat 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	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	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

(T) = Target analyte

Physical Characterization:

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.
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R: 02/09/24 M5817

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CERTIFIED WEIGHT REPORT:

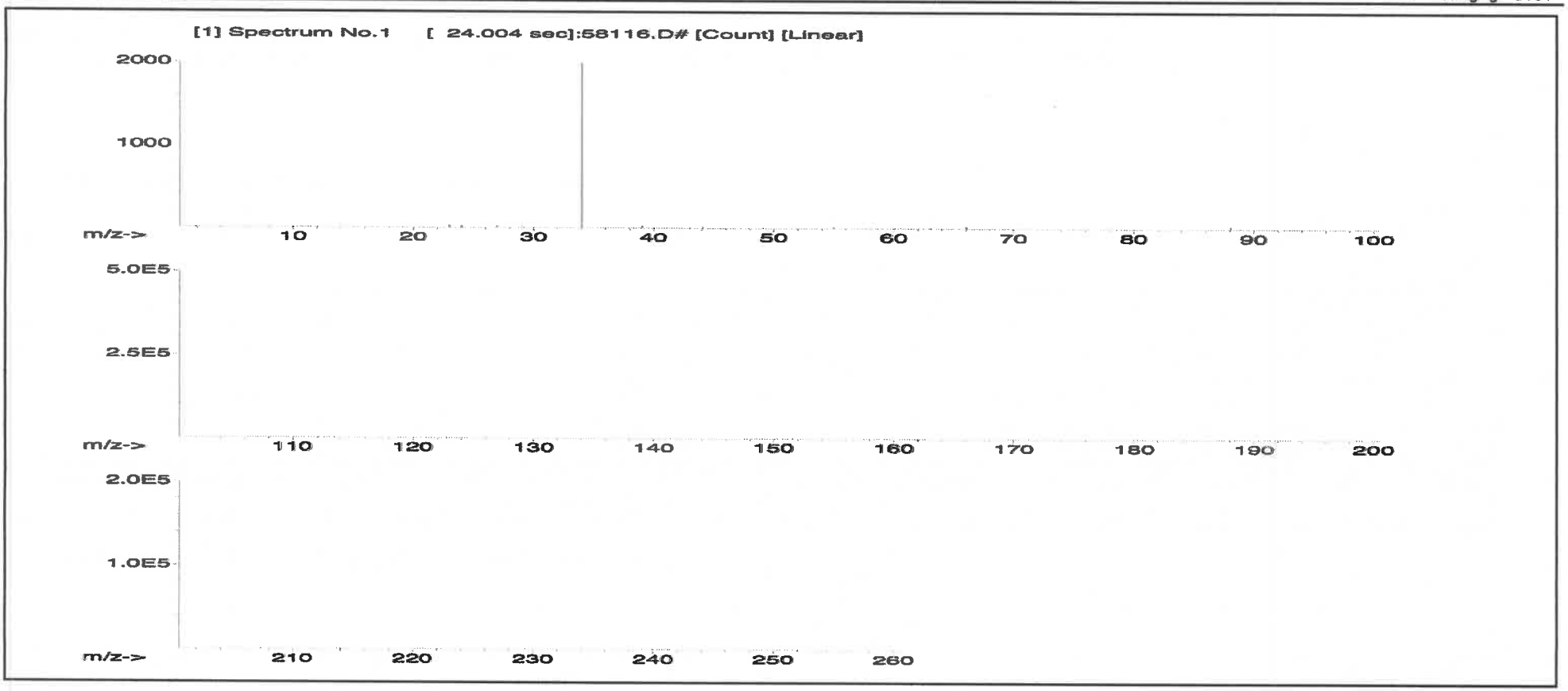
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

Lot #
Solvent: 071123 ASTM Type 1 Water

Expiration Date: 071126
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): 1999.48 0.058 Flask Uncertainty

Formulated By:	Lawrence Barry	071123
Reviewed By:	Pedro L. Rentas	071123

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium sulfate (S)	IN117	SLBR7225V	10000	99.9	0.10	24.3	82.4675	82.4682	**10000.1**	**20.0**	7783-20-2	NA	orl-rat 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	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	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

(T)= Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

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R: 02/09/24 M5820

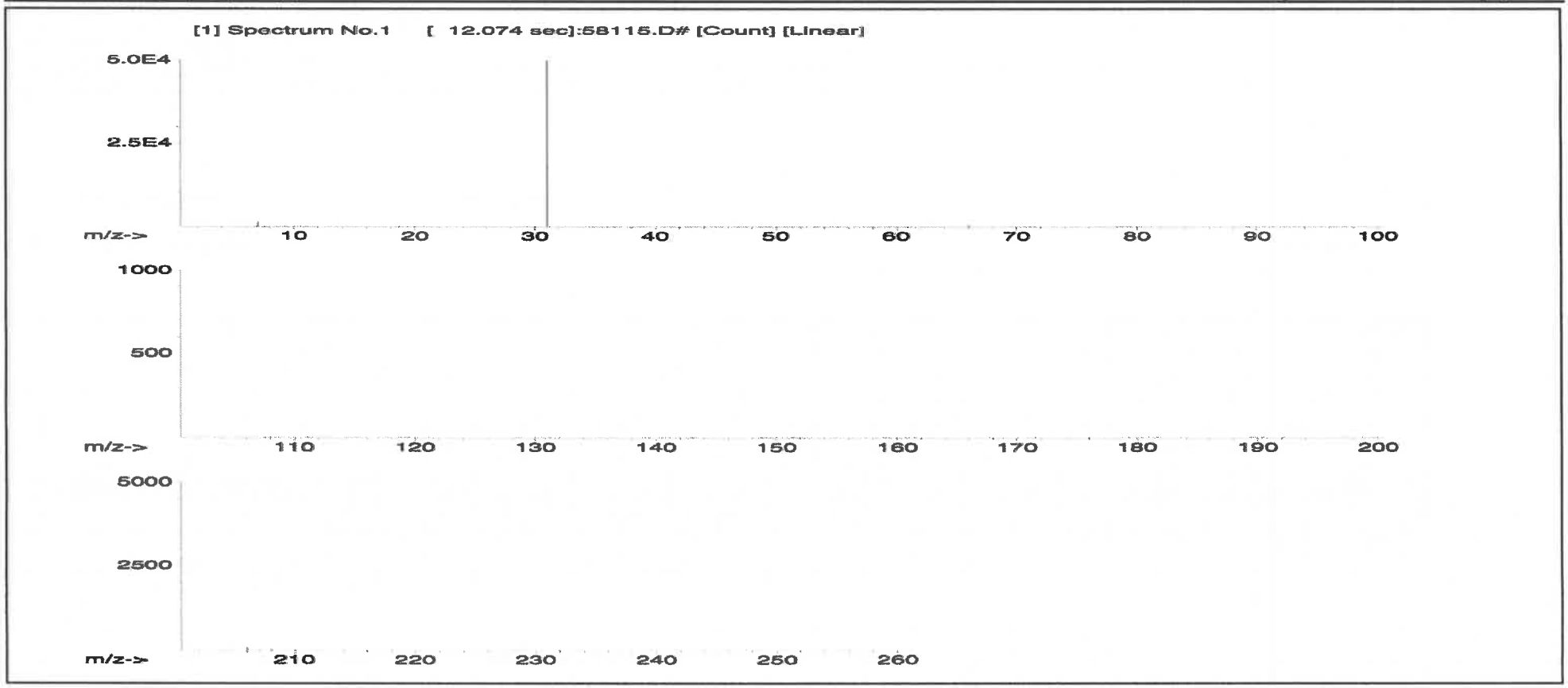
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CERTIFIED WEIGHT REPORT:

Part Number:	**57015**		**Lot #**		
Lot Number:	**091123**	**Solvent:**	24002546	Nitric Acid	
Description:	**Phosphorous (P)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	091126				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Lawrence Barry 091123
Reviewed By:	Pedro L. Rentas 091123

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Ammonium dihydrogen phosphate (P)	IN008	PV082019A1	1000	99.999	0.10	27.5	7.2729	7.2730	**1000.0**	**2.0**	7722-76-1	5 mg/m3	orl-rat >2000mg/k	3186



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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	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	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:

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 certifed (+/-) 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).

Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent

MF884
MB

avantor™ | J.T.Baker®

Material No.: 3624-01
Batch No.: 0000281938
Manufactured Date: 2021-06-07
Retest Date: 2026-06-07
Revision No.: 1

Certificate of Analysis

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	≥ 99.0 %	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
Insoluble Matter	≤ 0.005 %	0.003 %
Iodide (I)	≤ 0.002 %	< 0.002 %
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO_3)	≤ 0.003 %	< 0.001 %
ACS - Phosphate (PO_4)	≤ 5 ppm	< 5 ppm
Sulfate (SO_4)	≤ 0.004 %	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 2 ppm	< 1 ppm
Calcium (Ca)	≤ 0.002 %	< 0.001 %
Magnesium (Mg)	≤ 0.001 %	< 0.001 %
Potassium (K)	≤ 0.005 %	0.001 %

For Laboratory,Research,or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Mansford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

INORGANIC VENTURES™
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Certificate of Analysis

R: 02/22/24 M5942

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Christiansburg, VA 24073 USA
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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).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
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:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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



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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 863.01 ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGY10
Lot Number:	V2-Y740548
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Yttrium
Starting Material:	Yttrium Oxide
Starting Material Lot#:	2661 and 06230520YL
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10000 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10011 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	**9997 ± 50 µg/mL** ICP Assay NIST SRM 3167a Lot Number: 190730
Assay Method #3	**9984 ± 31 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:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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	<	0.004600	M	Eu		0.009037	M	Na		0.086360	M	Se	<	0.005200	M	Zn		0.030125
M	Al		0.014862	O	Fe		0.002410	M	Nb	<	0.000570	O	Si		0.024100	O	Zr	<	0.002600
M	As	<	0.003500	M	Ga	<	0.000570	M	Nd		0.000923	M	Sm		0.000461				
M	Au	<	0.001700	M	Gd	<	0.003500	M	Ni	<	0.005700	M	Sn	<	0.002300				
O	B		0.002209	M	Ge	<	0.005200	M	Os	<	0.001200	M	Sr	<	0.004600				
O	Ba	<	0.002500	M	Hf	<	0.000570	n	P	<		M	Ta	<	0.000570				
O	Be	<	0.001400	M	Hg	<	0.000570	M	Pb		0.005020	M	Tb		0.001044				
M	Bi	<	0.003500	M	Ho		0.009037	M	Pd	<	0.005100	M	Te	<	0.002300				
O	Ca		0.009841	M	In	<	0.002300	M	Pr	<	0.002300	M	Th	<	0.000570				
M	Cd	<	0.000570	M	Ir	<	0.000570	M	Pt	<	0.000570	M	Ti	<	0.003500				
M	Ce	<	0.002300	O	K		0.018677	M	Rb	<	0.000570	M	Tl	<	0.000570				
M	Co	<	0.000570	M	La		0.000461	M	Re	<	0.000570	M	Tm	<	0.003500				
M	Cr	<	0.004000	O	Li	<	0.009300	M	Rh	<	0.008000	M	U	<	0.000570				
M	Cs	<	0.000570	M	Lu		0.000582	M	Ru	<	0.000570	M	V		0.001265				
M	Cu		0.002610	O	Mg		0.001486	n	S	<		M	W	<	0.002300				
M	Dy		0.003815	M	Mn		0.000582	M	Sb		0.005422	s	Y	<					
M	Er		0.003615	M	Mo	<	0.005700	M	Sc	<	0.001200	M	Yb		0.001827				

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 - 88.91 +3 6 Y(OH)(H2O)x+2

Chemical Compatibility -Soluble in HCl, H2SO4 and HNO3. Avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming an insoluble carbonate, oxide, oxalate, and fluoride. Avoid mixing with elements / solutions containing moderate amounts of fluoride.

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.

Y Containing Samples (Preparation and Solution) - Metal (Soluble in acids); Oxide (Dissolve by heating in H2O/ HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolve in 1:1 H2O / HCl or HNO3).

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 89 amu	0.8 ppt	N/A	73Ge16O, 178Hf+2
ICP-OES 360.073 nm	0.005 / 0.000036 µg/mL	1	Ce, Th
ICP-OES 371.030 nm	0.004 / 0.00007 µg/mL	1	Ce
ICP-OES 377.433 nm	0.005 / 0.0009 µg/mL	1	Ta, Th

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

February 20, 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

- February 20, 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



Absolute Standards, Inc.
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www.absolutestandards.com

Certified Reference Material CRM

M5961 R: 6/11/24

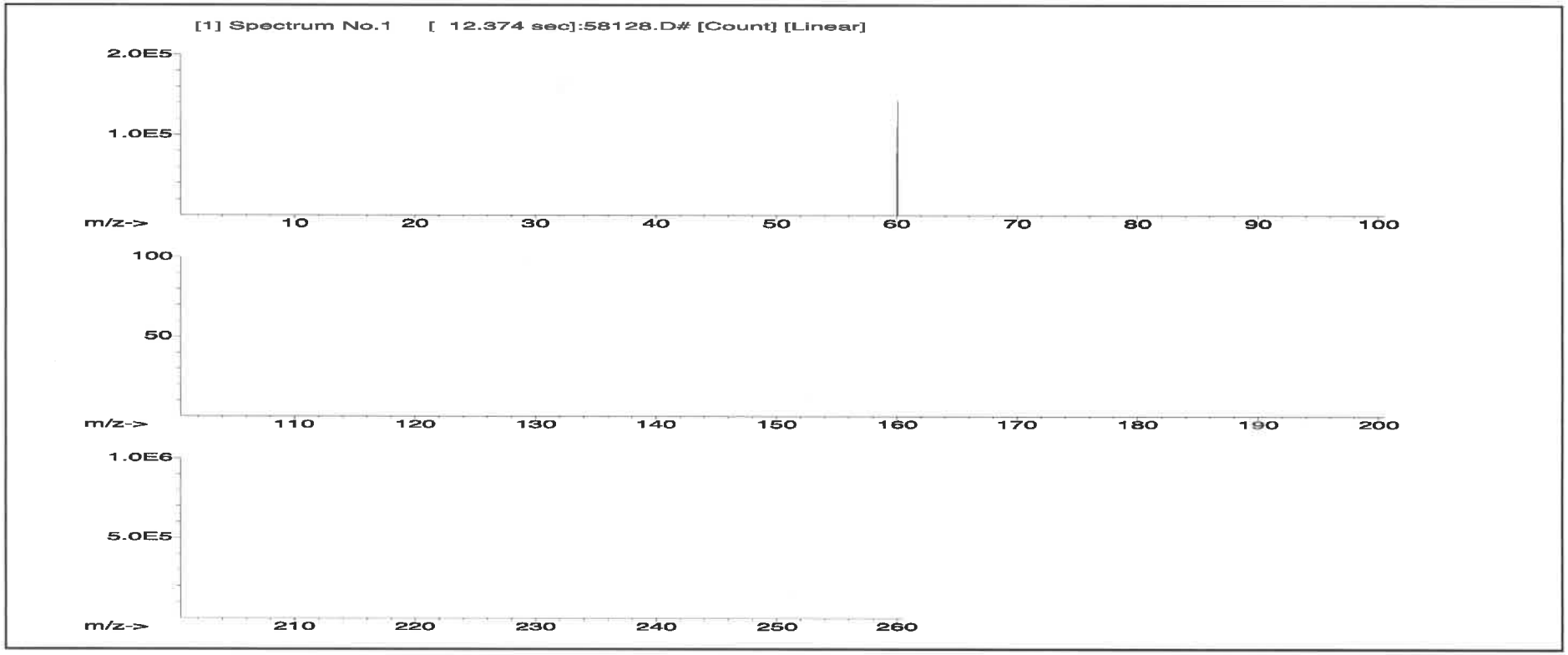
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CERTIFIED WEIGHT REPORT:

Part Number:	**57028**		**Lot #**		
Lot Number:	**041124**	**Solvent:**	24002546	Nitric Acid	
Description:	**Nickel (Ni)**		2%	5.0 (mL)	Nitric Acid
Expiration Date:	041127				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	249.85	0.002	Flask Uncertainty		

Formulated By:	Brian Geddes	041124
Reviewed By:	Pedro L. Rentas	041124

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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	orl-rat 1620 mg/kg	3136



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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	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	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

(T) = Target analyte

Physical Characterization:

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 certifed (+/-) 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

M5962 R! 06/14/24.

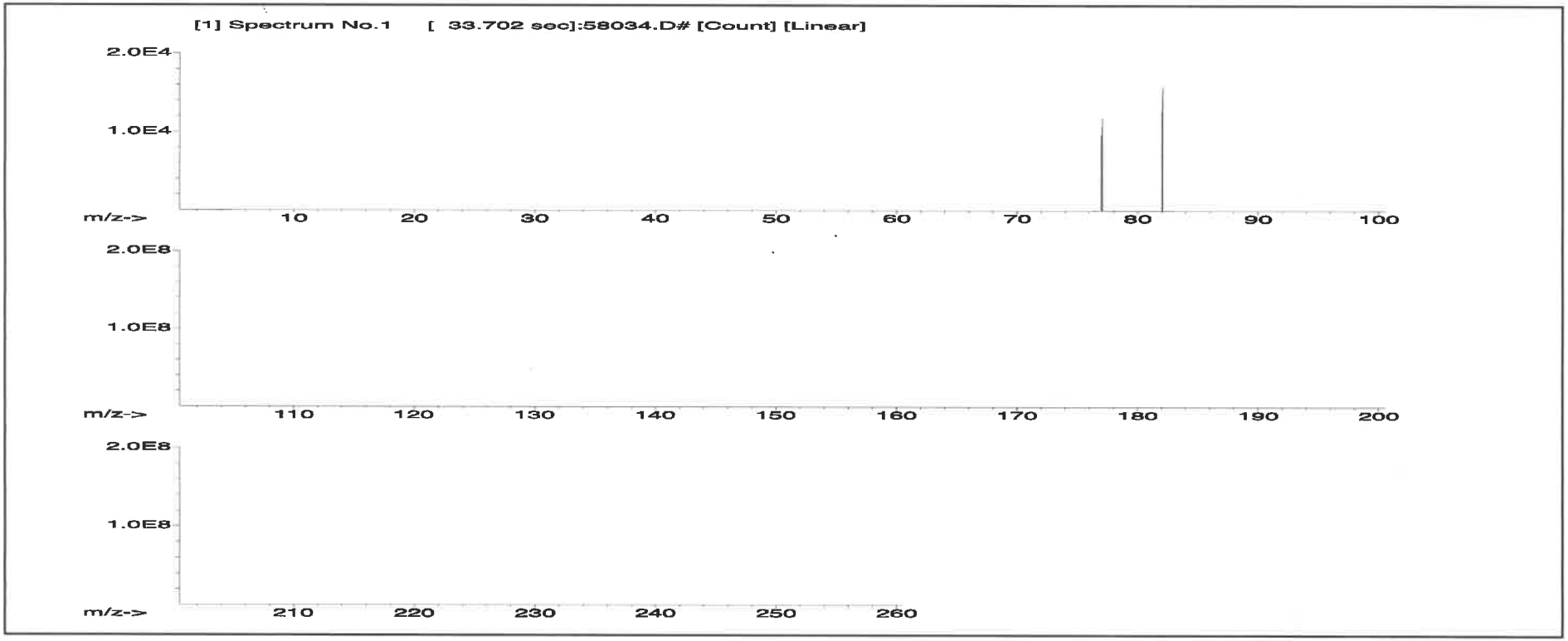
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AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57034**	24002546	Nitric Acid	
Lot Number:	**060624**			
Description:	**Selenium (Se)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	060627			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty	

Formulated By:	Benson Chan	060624
Reviewed By:	Pedro L. Rentas	060624

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	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	orl-rat 6700 mg/kg	3149



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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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	Pr	<0.02	Se	T	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

(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 certifed (+/-) 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

M5970, M5971 R: 7/01/24

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AR-1539 Certificate Number
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CERTIFIED WEIGHT REPORT:

Part Number: 57003
Lot Number: 062124
Description: Lithium (Li)
Expiration Date: 062127
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 250.11

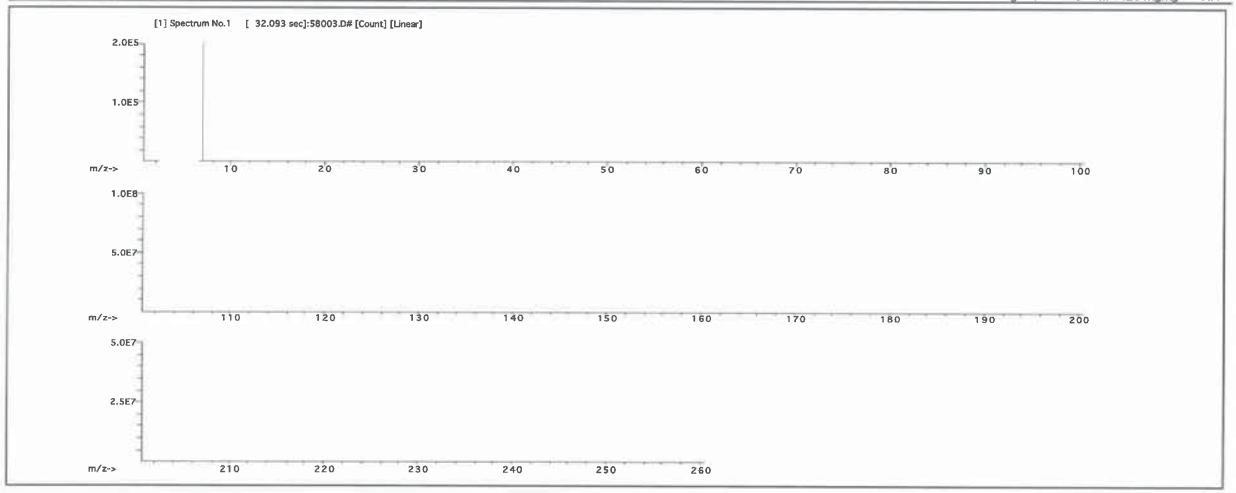
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	5.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.016 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 062124

Pedro Rentas
Reviewed By: Pedro L. Rentas 062124

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Lithium nitrate (Li)	58103	070622	0.1000	25.0	0.004	1000	10000.4	**1000.0**	**2.0**	7790-69-4	5 mg/m3	orl-rat 1426 mg/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	T	Ni	<0.02	Pr	<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	<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 certifed (+/-) 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).

INORGANIC VENTURES
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Certificate of Analysis

M5976, M5977
R: 02/22/24

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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).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

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:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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.

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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,79Br1 6O,190Os2+,190Pt 2+
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: 800.669.6799; 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 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



Certificate of Analysis

Refine your results. Redefine your industry.

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inorganicventures.com

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info@inorganicventures.com

R: 2/22/24

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).

1.0 ACCREDITATION / REGISTRATION

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTI1
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, $X_{CRM/MM}$, where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \Sigma(w_i)\,(x_i)$$

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

$$w_i = (1/u_{Char\ i})^2 \,/\, (\Sigma(1/u_{Char\ i})^2)$$

CRM/RM Expanded Uncertainty ($\pm$) = $u_{CRM/RM} = k\,(u^2_{Char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{Char} = [\Sigma((w_i)^2\,(u_{Char\ i})^2)]^{½}$ 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:

$$X_{CRM/RM} = (\Sigma x_a)\,(v_{Char\ a})$$

X_a = mean of Assay Method A with

$u_{Char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty ($\pm$) = $u_{CRM/RM} = k\,(u^2_{Char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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

MS978, MS979

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 for months in 1% 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: 800.669.5798; 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 property 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 Kozlkowski
Manager, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5981 R:6/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57092**	24002546	Nitric Acid		
Lot Number:	**060724**				
Description:	**Uranium (U)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	060727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.07	0.100	Flask Uncertainty		

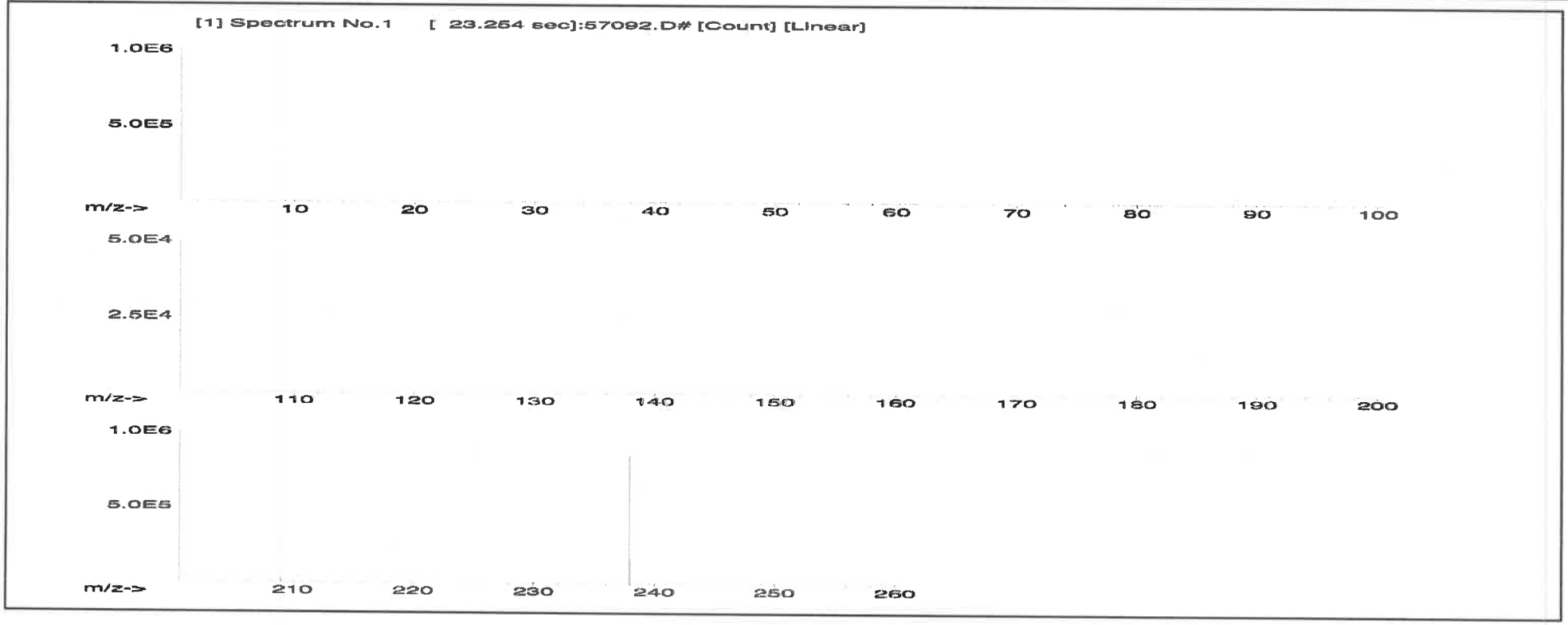
Giovanni Esposito

Formulated By:	Giovanni Esposito	060724

Pedro Rentas

Reviewed By:	Pedro L. Rentas	060724

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Uranyl nitrate hexahydrate (U)	58192	041524	0.1000	200.0	0.084	1000	10001.5	**1000.0**	**2.2**	13520-83-7	0.05 mg/m3	orl-rat 1040 mg/kg	3164



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Certified Reference Material CRM

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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	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	T
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

(T) = Target analyte

Physical Characterization:

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 certifed (+/-) 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).

Part # **57092** Lot # **060724**

Printed: 6/7/2024, 3:58:45 PM

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info@inorganicventures.com

MS985
R: 6/14/24

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).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGIN10
Lot Number:	U2-IN729349
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Indium
Starting Material:	Indium Metal
Starting Material Lot#:	2511
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.044 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10021 ± 56 µg/mL** ICP Assay NIST SRM 3124a Lot Number: 110516
Assay Method #2	**10035 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10001 ± 33 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:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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	<	0.000760	M	Eu	<	0.000760	O	Na		0.012771	M	Se	<	0.023000	M	Zn	<	0.006100
M	Al		0.003385	O	Fe		0.004462	M	Nb	<	0.000760	O	Si		0.024619	M	Zr	<	0.000760
M	As	<	0.004600	M	Ga	<	0.000760	M	Nd	<	0.000760	M	Sm	<	0.000760				
M	Au	<	0.002300	M	Gd	<	0.000760	O	Ni	<	0.005100	M	Sn	<	0.000760				
O	B		0.003692	M	Ge	<	0.001600	M	Os	<	0.000760	O	Sr	<	0.000610				
M	Ba	<	0.001600	M	Hf	<	0.000760	n	P	<		M	Ta	<	0.000760				
O	Be	<	0.000130	M	Hg	<	0.003100	M	Pb		0.001400	M	Tb	<	0.000760				
M	Bi	<	0.000760	M	Ho	<	0.000760	M	Pd	<	0.001600	M	Te	<	0.000760				
O	Ca		0.004616	s	In	<		M	Pr	<	0.000760	M	Th	<	0.000760				
M	Cd	<	0.000760	M	Ir	<	0.000760	M	Pt	<	0.000760	O	Ti	<	0.001100				
M	Ce	<	0.000760	O	K		0.007078	M	Rb	<	0.000760	M	Tl	<	0.000760				
M	Co	<	0.000760	M	La	<	0.000760	M	Re	<	0.000760	M	Tm	<	0.000760				
O	Cr	<	0.001300	O	Li	<	0.000130	M	Rh	<	0.000760	M	U	<	0.000760				
M	Cs	<	0.000760	M	Lu	<	0.000760	M	Ru	<	0.000760	M	V	<	0.001600				
M	Cu	<	0.003800	O	Mg		0.000707	n	S	<		M	W	<	0.001600				
M	Dy	<	0.000760	O	Mn		0.000149	M	Sb	<	0.000760	M	Y	<	0.000760				
M	Er	<	0.000760	M	Mo	<	0.002300	M	Sc	<	0.000760	M	Yb	<	0.000760				

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 - 114.82 +3 6 In(H2O)6+3

Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

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.

In Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or 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 115 amu	1 ppt	n/a	115Sn, 99Ru16O
ICP-OES 158.583 nm	0.05 / 0.002 µg/mL	1	
ICP-OES 230.606 nm	0.1 / 0.03 µg/mL	1	Ni, Os
ICP-OES 325.609 nm	0.2 / 0.05 µg/mL	1	Mn, Mo, Th

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

February 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

- February 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



Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

M 6041-46
MS

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H_2SO_4)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH_4)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO_3)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO_4)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities - Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities - Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory,Research,or Manufacturing Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier
Jamie Ethier
Vice President Global Quality

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

R 18/19/24, M60055

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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).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

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, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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 %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

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



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R! 08/22/24 M6058, M6059

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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).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

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, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

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)

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**

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

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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



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EXP.: 9/6/2029

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).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CHEM-CLP-4
Lot Number:	V2-MEB746762
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: 1.033 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, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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)

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**

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

September 06, 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

- September 06, 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



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www.absolutestandards.com

Certified Reference Material CRM

M6079 R: 9/30/24

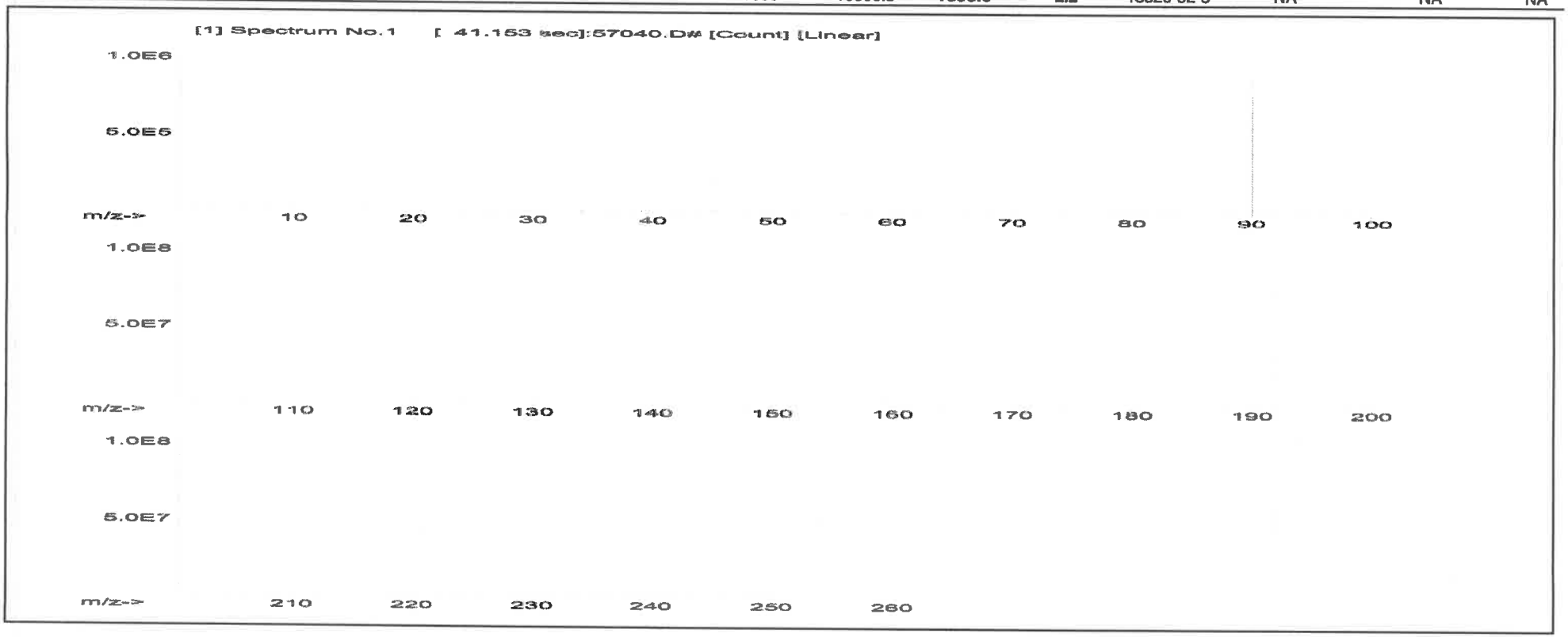
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CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57040**	21110221	Nitric Acid		
Lot Number:	**071423**				
Description:	**Zirconium (Zr)**	2.0%	40.0 (mL)	Nitric Acid	
Expiration Date:	071426				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Volume shown below was diluted to (mL):	2000.02	0.058	Flask Uncertainty		

Formulated By:	Benson Chan	071423
Reviewed By:	Pedro L. Rentas	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 +/- (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	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



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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	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:

* 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 certifed (+/-) 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 WEIGHT REPORT:

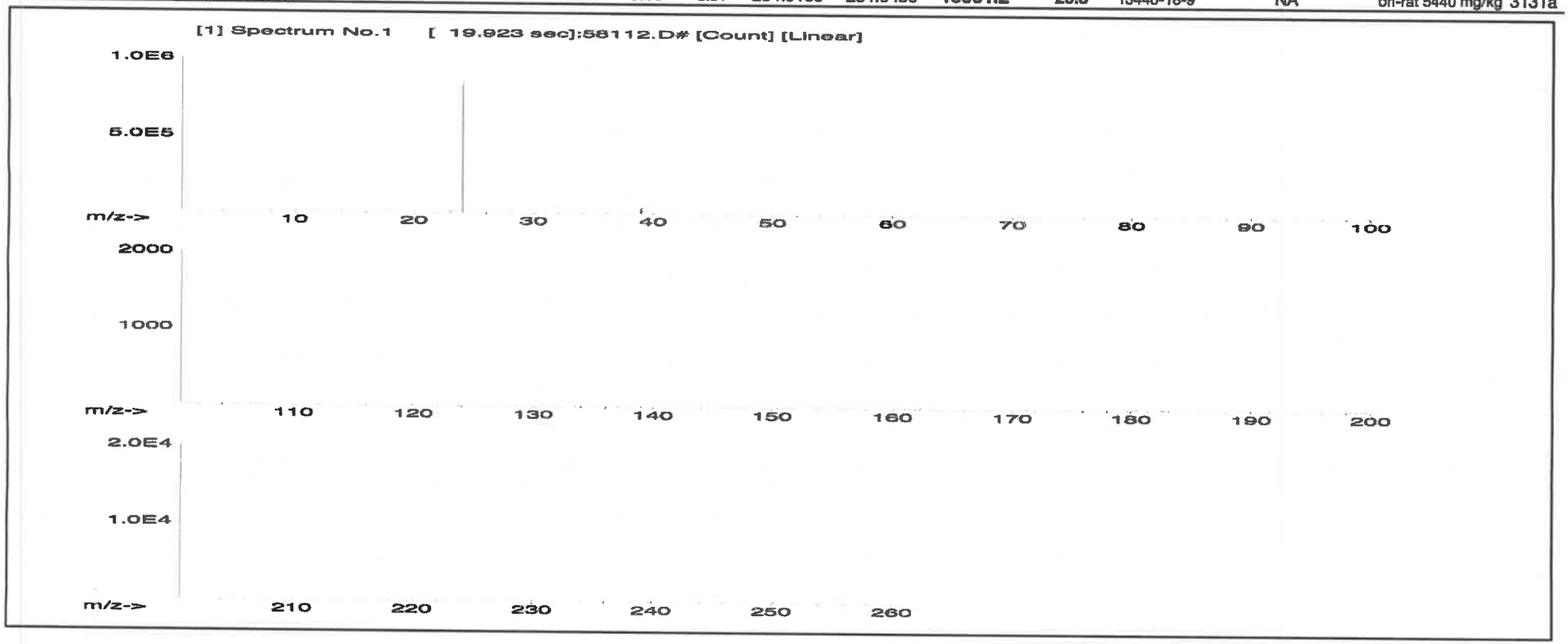
R -> 1/13/25
M 6127

			Lot #	
Part Number:	**58112**	**Solvent:**	24012496	Nitric Acid
Lot Number:	**112124**			
Description:	**Magnesium (Mg)**	2%	40.0 (mL)	Nitric Acid
Expiration Date:	112127			
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):	2000.07	0.100	Flask Uncertainty	

Giovanni Esposito

Formulated By:	Giovanni Esposito	112124
Reviewed By:	Pedro L. Rentas	112124

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Magnesium nitrate hexahydrate (Mg)	IN030	MGD052023A1	10000	99.999	0.10	8.51	234.9183	234.9459	**10001.2**	**20.0**	13446-18-9	NA	orl-rat 5440 mg/kg	3131a



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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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	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	T	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:

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 certifed (+/-) 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 WEIGHT REPORT:

R->1/13/25
M6128

			Lot #	
Part Number:	**58025**	**Solvent:**	24002546	Nitric Acid
Lot Number:	**101124**			
Description:	**Manganese (Mn)**	2%	80.0 (mL)	Nitric Acid
Expiration Date:	101127			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Weight shown below was diluted to (mL):	4000.2	0.10	Flask Uncertainty	

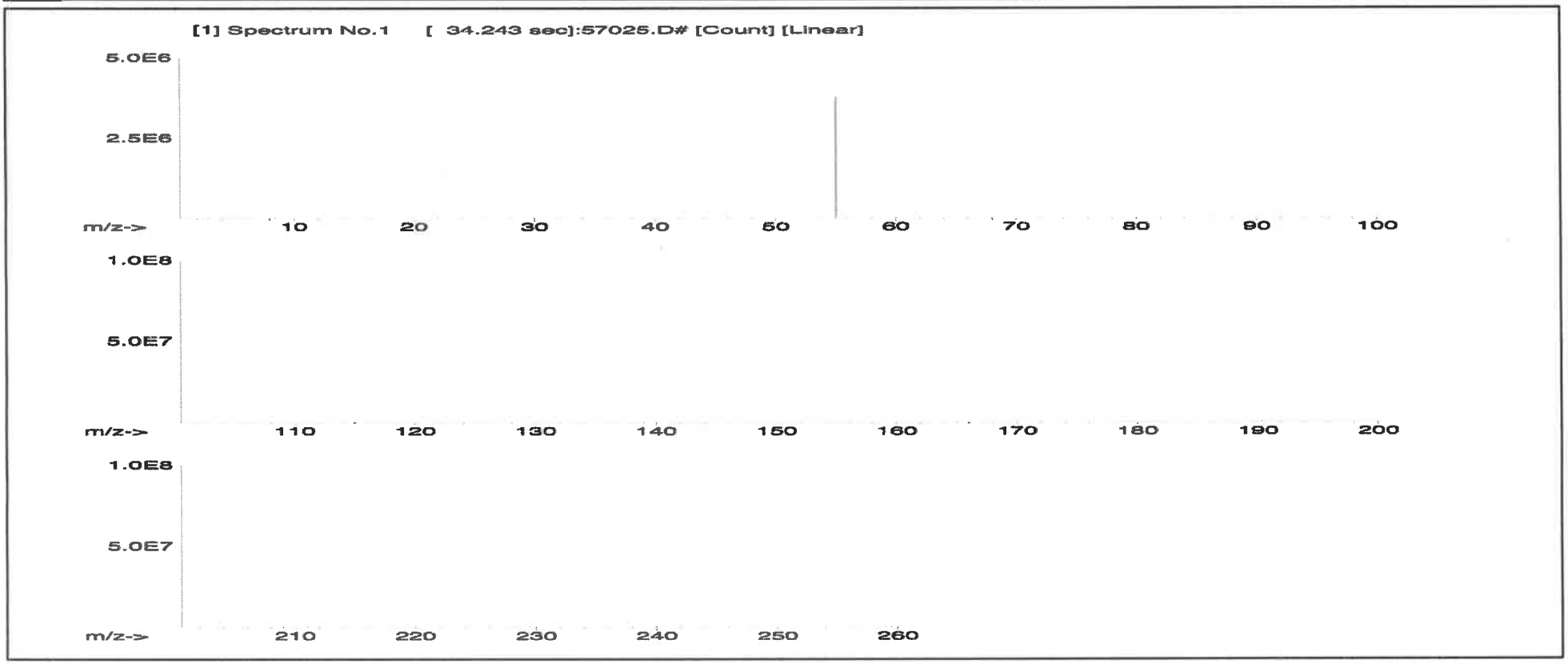
Giovanni Esposito

Formulated By:	Giovanni Esposito	101124

Pedro Rentas

Reviewed By:	Pedro L. Rentas	101124

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Manganese(II) nitrate hydrate (Mn)	IN031	MNM092020A1	1000	99.999	0.10	20.8	19.2322	19.2344	**1000.1**	**2.0**	15710-66-4	5 mg/m3	orl-rat >300mg/kg	3132



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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	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:

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 certifed (+/-) 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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Certificate of Analysis

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info@inorganicventures.com

M6137 R→10/3/24

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).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

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:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2 (u_{char\ i})^2)]^{½}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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, amorphic (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

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:

R->1/13/25

Part Number: 58111
Lot Number: 072424
Description: Sodium (Na)

MG144

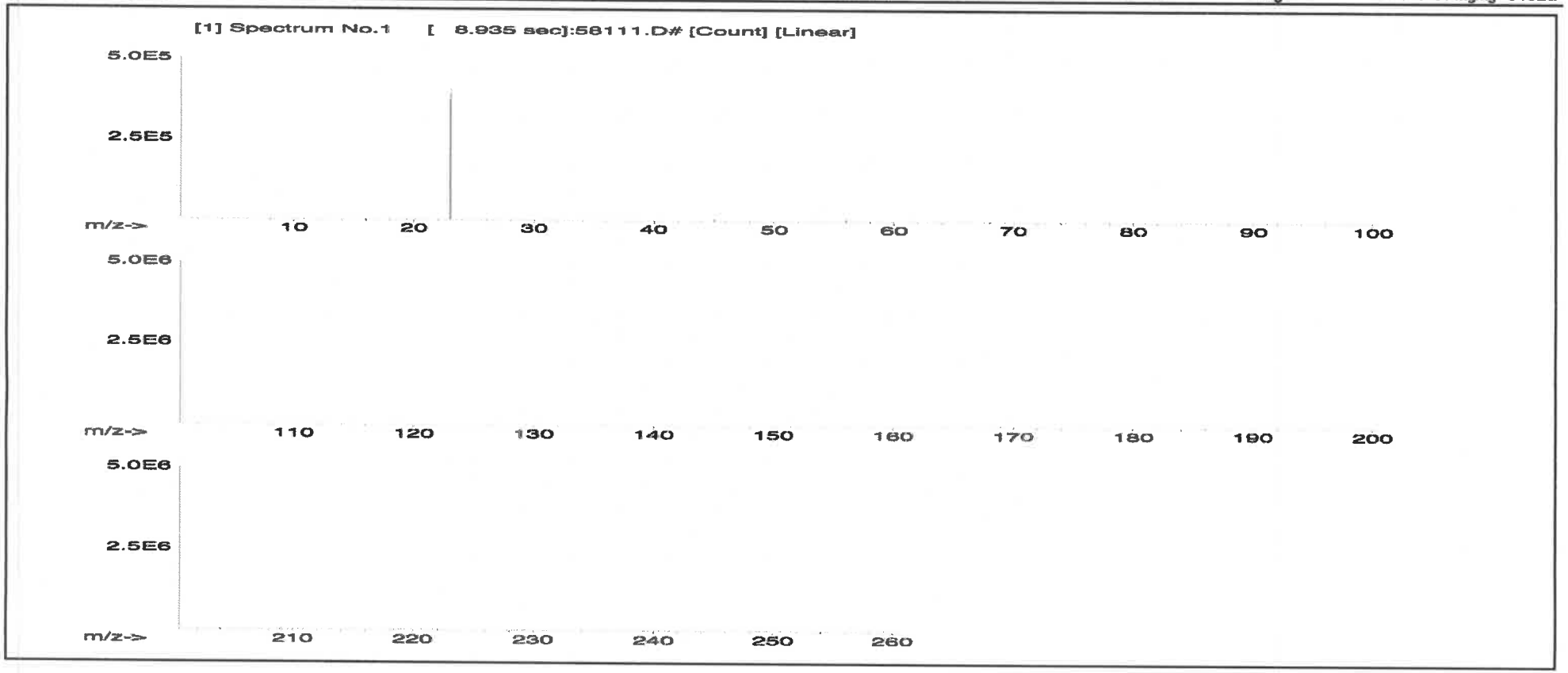
Expiration Date: 072427
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.2

	Lot #	
Solvent:	24002546	Nitric Acid
2%	80.0 (mL)	Nitric Acid
5E-05	Balance Uncertainty	
0.10	Flask Uncertainty	

Formulated By: Benson Chan 072424

Reviewed By: Pedro L. Rentas 072424

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium nitrate (Na)	IN036	NAV012015I1	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



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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	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	<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	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:

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 certifed (+/-) 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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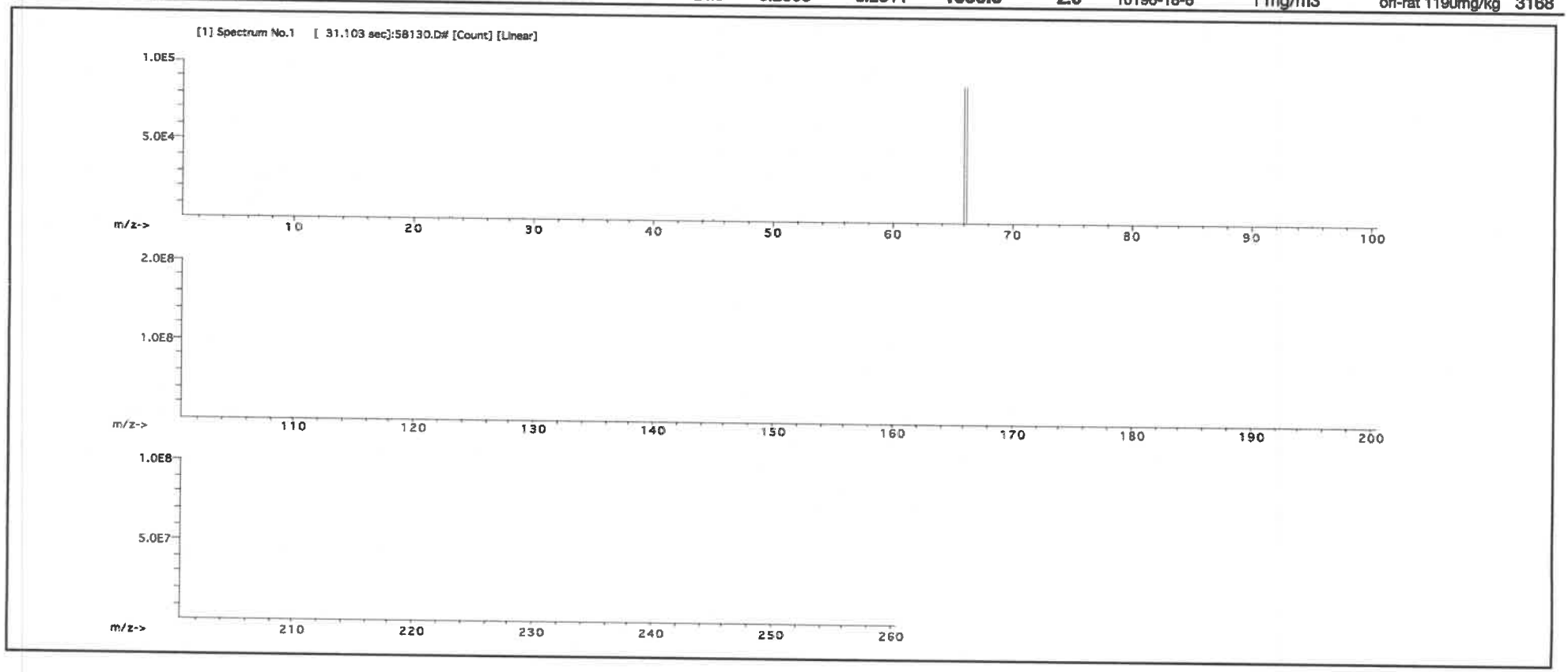
CERTIFIED WEIGHT REPORT:

Part Number:	**58030**	R→1/13/25	**Solvent:**	**Lot #** 24012496	Nitric Acid
Lot Number:	**121724**				
Description:	**Zinc (Zn)**	M6145	2%	40.0 (mL)	Nitric Acid
Expiration Date:	121727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.1	0.10	Flask Uncertainty		

Aleah O'Brady

Formulated By:	Aleah O'Brady	121724
Reviewed By:	Pedro L. Rentas	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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Zinc nitrate hexahydrate (Zn)	IN016	ZNE032021A1	1000	99.999	0.10	24.3	8.2308	8.2311	**1000.0**	**2.0**	10196-18-6	1 mg/m3	ori-rat 1190mg/kg	3168



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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	<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	T
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:

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 certifed (+/-) 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 : 4/20/21

QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

M6150

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.

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) $K_2Cr_2O_7$ 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 $K_3Fe(CN)_6$, 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™ | J.T.Baker®

M6151

R→ 1/15/25

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

avantor™ | J.T.Baker®

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™ | J.T.Baker®

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

James T Ethier

Jamie Ethier
Vice President Global Quality

INORGANIC VENTURES
Refine your results. Redefine your industry.

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).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

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:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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. 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 $Sr(H_2O)_{6}^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, 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% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO_3 / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Ores (Carbonate fusion in Pt0 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

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

M6156

Certified Reference Material CRM

R→ 6/12/24

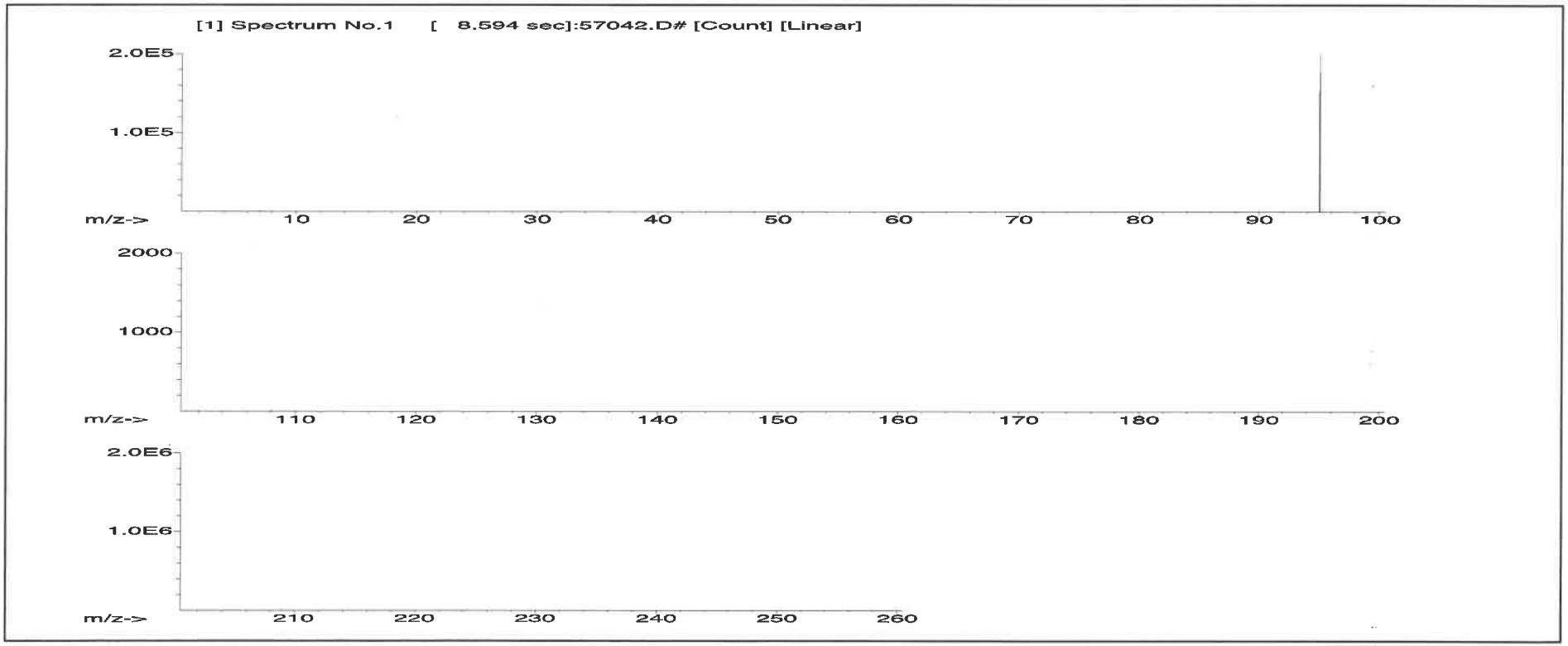
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number:	**57042**			
Lot Number:	**032123**			
Description:	**Molybdenum (Mo)**			
		Lot #	**Solvent:**	
		MKBQ8597V	Ammonium hydroxide	
		0.5%	15.0 (mL)	Ammonium hydroxide
Expiration Date:	032126			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	3000.41	0.058	Flask Uncertainty	

Formulated By:	Lawrence Barry	032123
Reviewed By:	Pedro L. Rentas	032123

	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)	**SDS Information** (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1.	Ammonium molybdate (Mo)	58142	112322	0.1000	300.0	0.084	1000	10001.4	**1000.0**	**2.1**	13106-76-8	5 mg(Mo)/m3	orl-rat 333 mg/kg	3134



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Certified Reference Material CRM

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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	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	T	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:

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 certifed (+/-) 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™ | J.T.Baker®

R-02102/2025

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™ | J.T.Baker®

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™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

INORGANIC VENTURES™

Refine your results. Redefine your industry.

A: 4/11/22

Certificate of Analysis

M5738, M5739, M5740, M5741, M5742, M5743

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
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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).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

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:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

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, Inferferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. 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 HNO_3. 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

ICSA: M5873

ICSB: M5874

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 ± 2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

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, Inferferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. 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 HNO_3. 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

ICSA: M5873

ICSB: M5874

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 ± 2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

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Certified Reference Material CRM

M6030

R: 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57047
Lot Number: 122823
Description: Silver (Ag)

Expiration Date: 122826
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

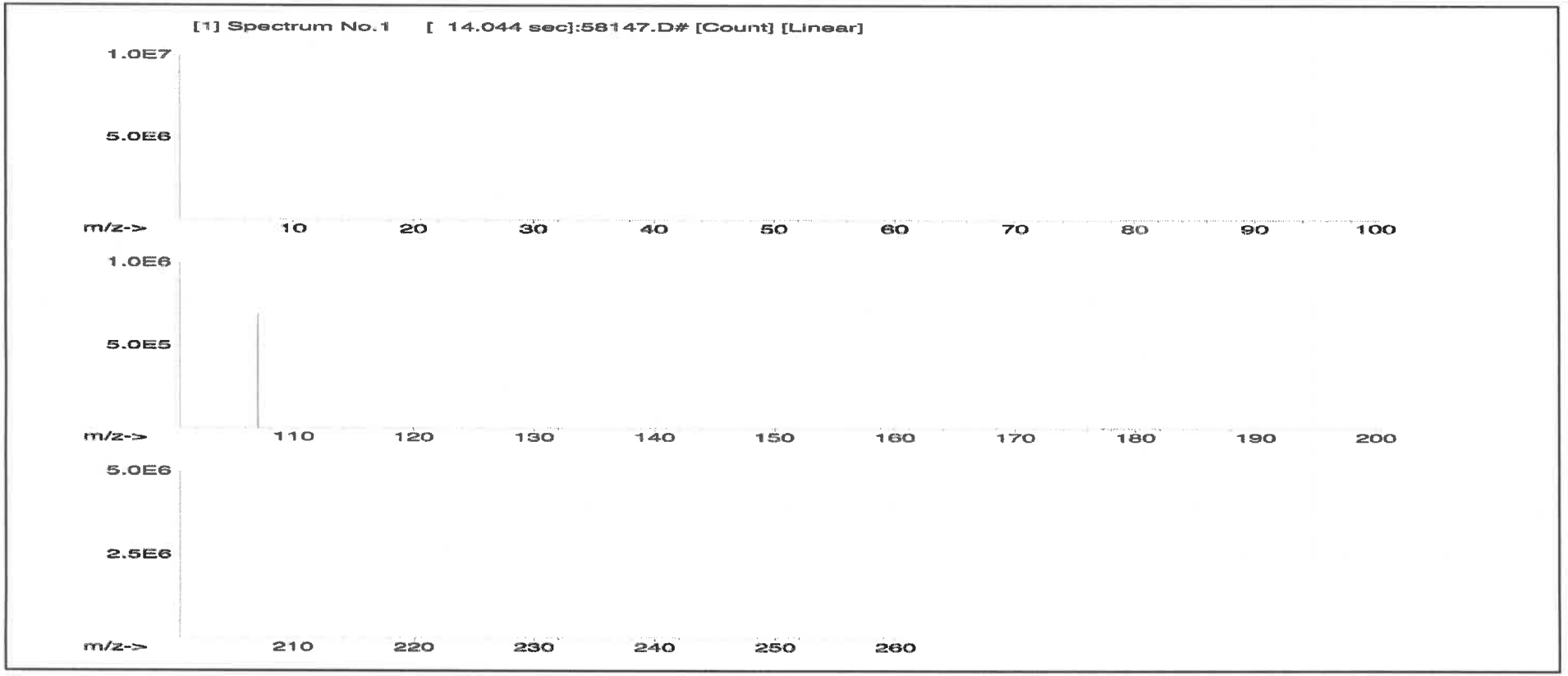
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	80.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty

Formulated By:	Benson Chan	122823
Reviewed By:	Pedro L. Rentas	122823

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Silver nitrate (Ag)	IN035	J0612AGA1	1000.0	99.9999	0.10	63.7	6.27992	6.27998	**1000.0**	**2.0**	7761-88-8	10 ug/m3	NA	3151



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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	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:

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 certifed (+/-) 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

R: 10/18/24

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AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

MG146

		Lot #	Solvent:	
Part Number:	**57051**	24002546	Nitric Acid	
Lot Number:	**071724**			
Description:	**Antimony (Sb)**	2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	071727			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.26	0.058	Flask Uncertainty	

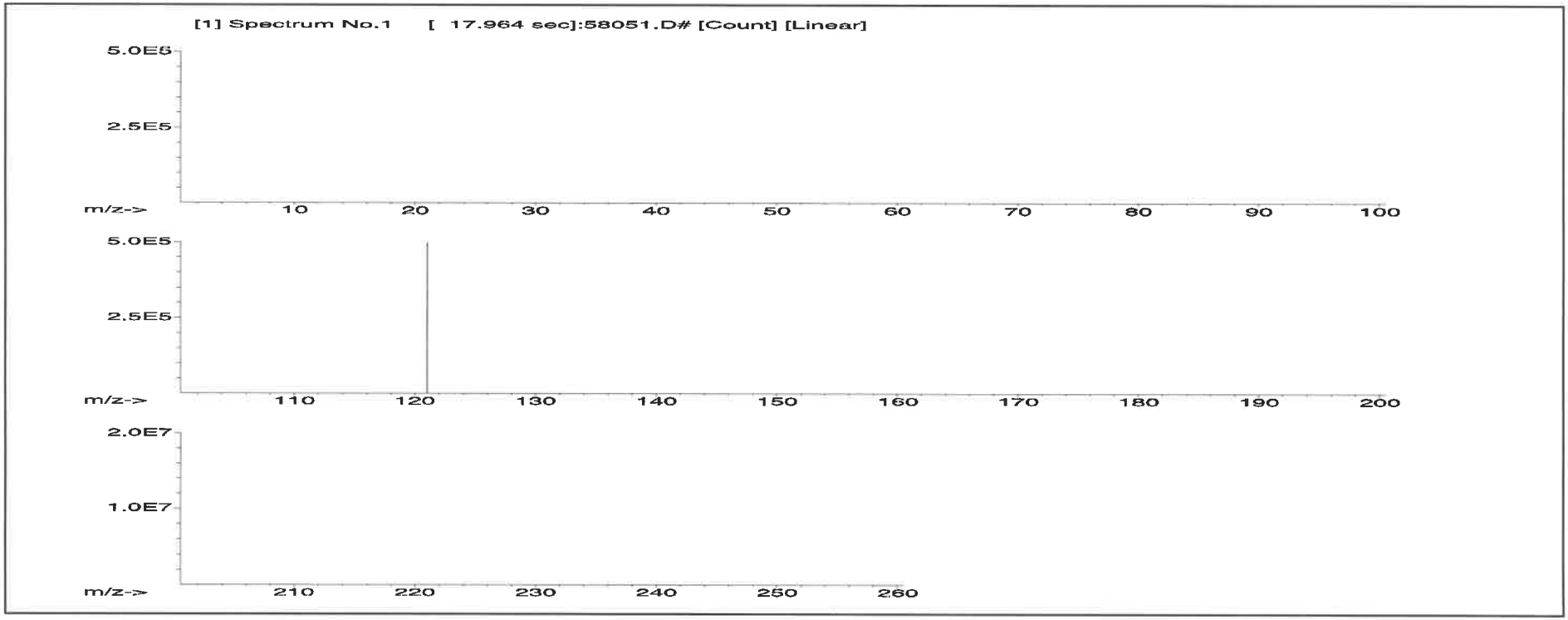
Giovanni Esposito

Formulated By:	Giovanni Esposito	071724

Pedro Rentas

Reviewed By:	Pedro L. Rentas	071724

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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	orl-rat 7000 mg/kg	3102a



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Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
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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	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	T	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

(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 certifed (+/-) 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 : 04/20/21

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

APTIM

Instructions for QATS Reference Material: *ICP-AES ICS*

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (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.

M6152

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 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-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

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 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 interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES 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-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, 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 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES 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-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.



QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
"An ISO 9001:2015 Certified Program"

APTIM

Instructions for QATS Reference Material: *ICP-AES ICS*

QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (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.

M6155

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 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-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

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 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 interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. 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 ICP-AES 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-1211, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.

ICSB-0710, Analytes, mixed with ICSA-1211, 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 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES.

(D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES 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-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710

Element	CRQL	Part A (µg/L)	Low Limit (µg/L)	High Limit (µg/L)	Part A +Part B (µg/L)	Low Limit (µg/L)	High Limit (µg/L)
Al	200	255000	216000	294000	247000	209000	285000
Sb	60	(0.0)	-60.0	60.0	618	525	711
As	10	(0.0)	-10.0	10.0	104	88.4	120
Ba	200	(6.0)	-194	206	(537)	337	737
Be	5.0	(0.0)	-5.0	5.0	495	420	570
Cd	5.0	(1.0)	-4.0	6.0	972	826	1120
Ca	5000	245000	208000	282000	235000	199000	271000
Cr	10	(52.0)	42.0	62.0	542	460	624
Co	50	(0.0)	-50.0	50.0	476	404	548
Cu	25	(2.0)	-23.0	27.0	511	434	588
Fe	100	101000	85600	116500	99300	84400	114500
Pb	10	(0.0)	-10.0	10.0	(49.0)	39.0	59.0
Mg	5000	255000	216000	294000	248000	210000	286000
Mn	15	(7.0)	-8.0	22.0	507	430	584
Ni	40	(2.0)	-38.0	42.0	954	810	1100
Se	35	(0.0)	-35.0	35.0	(46.0)	11.0	81.0
Ag	10	(0.0)	-10.0	10.0	201	170	232
Tl	25	(0.0)	-25.0	25.0	(108)	83.0	133
V	50	(0.0)	-50.0	50.0	491	417	565
Zn	60	(0.0)	-60.0	60.0	952	809	1095

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

opened : 3/24/25

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:

M6160

Part Number: 57051
Lot Number: 071724
Description: Antimony (Sb)

Expiration Date: 071727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Volume shown below was diluted to (mL): 2000.26

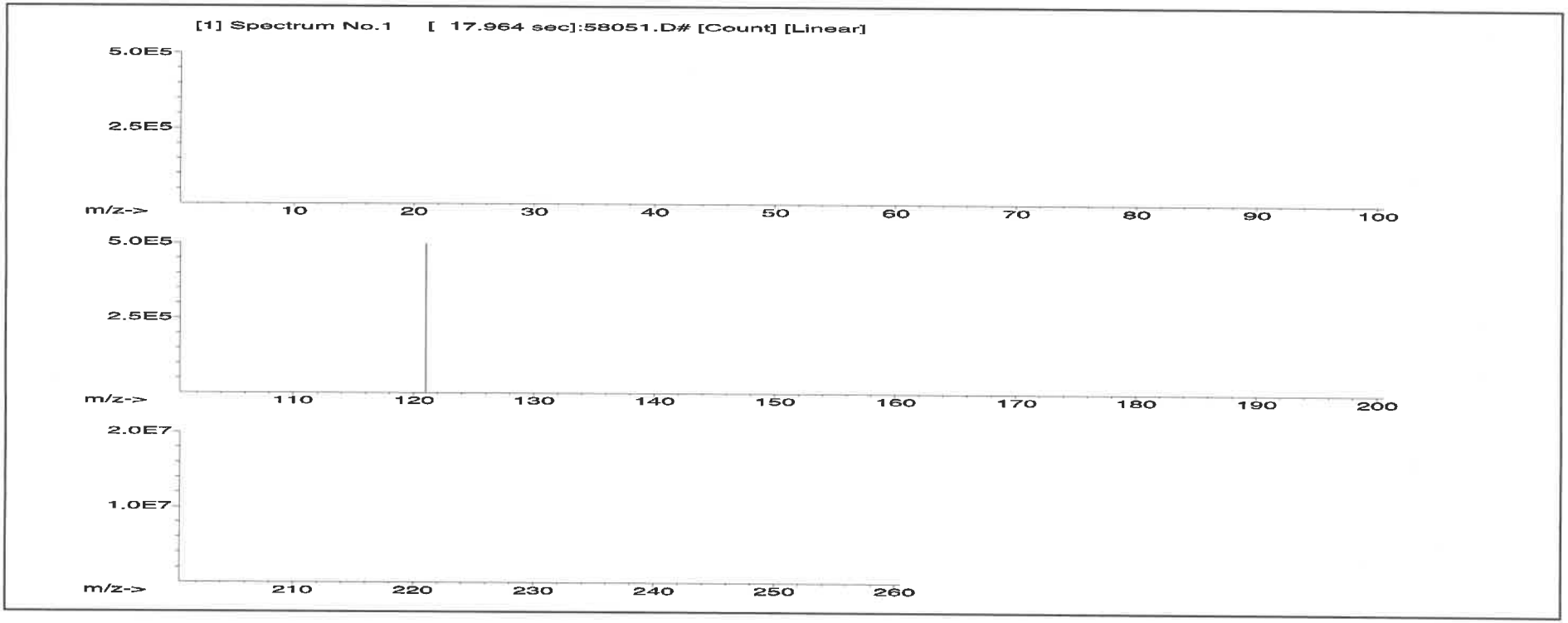
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

Giovanni Esposito
Formulated By: Giovanni Esposito 071724

Pedro Rentas
Reviewed By: Pedro L. Rentas 071724

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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	orl-rat 7000 mg/kg	3102a



Absolute Standards, Inc.
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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	T	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

(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 certifed (+/-) 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: 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).

ACCREDITED Testing Laboratory Certificate 888.01
ACCREDITED Reference Material Producer Certificate 888.02

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:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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	<	0.001980	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 $Sr(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, 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% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO_3 / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Ores (Carbonate fusion in Pt0 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

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



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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).

ACCREDITED Testing Laboratory Certificate 888.01
ACCREDITED Reference Material Producer Certificate 888.02

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:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

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:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ 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 Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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	<	0.001980	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 $Sr(H_2O)_{6}^{+2}$

Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, 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% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO_3 / LDPE container.

Sr Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO_3); Ores (Carbonate fusion in Pt0 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

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6023

R ! 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

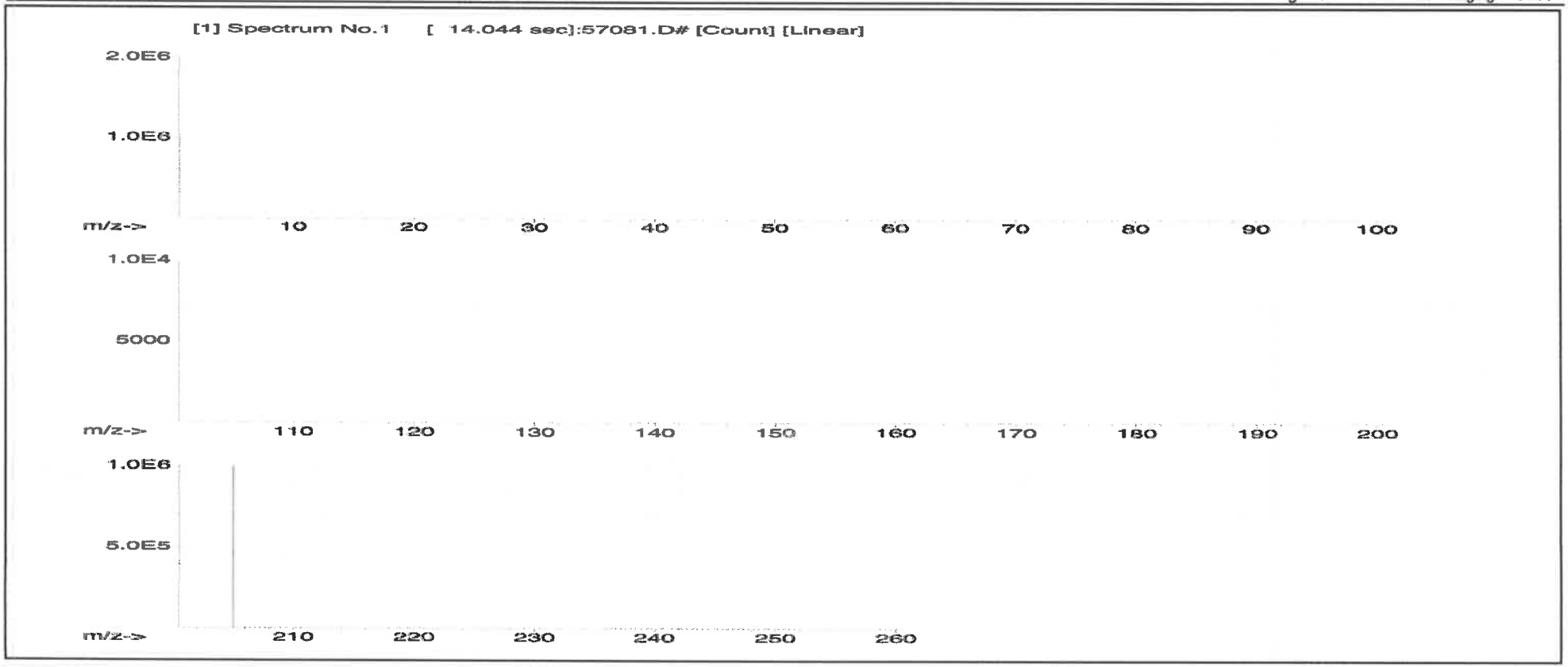
CERTIFIED WEIGHT REPORT:

Part Number:	**57081**		**Lot #**		
Lot Number:	**062724**	**Solvent:**	24002546	Nitric Acid	
Description:	**Thallium (Tl)**				
		2%	40.0 (mL)	Nitric Acid	
Expiration Date:	062727				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**1000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	2000.1	0.10	Flask Uncertainty		

Aleah O'Brady

Formulated By:	Aleah O'Brady	062724
Reviewed By:	Pedro L. Rentas	062724

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Thallium nitrate (Tl)	IN037	BCCF4399	1000	99.999	0.10	77.0	2.5975	2.5977	**1000.1**	**2.0**	10102-45-1	0.1 mg/m3	orl-mus 15mg/kg	3158



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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	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	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	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 certifed (+/-) 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

M6021

Rc. 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:	
Part Number:	**57023**			
Lot Number:	**062424**	24002546	Nitric Acid	
Description:	**Vanadium (V)**			
		2.0%	40.0 (mL)	Nitric Acid
Expiration Date:	062427			
Recommended Storage:	Ambient (20 °C)			
Nominal Concentration (µg/mL):	**1000**			
NIST Test Number:	6UTB	5E-05	Balance Uncertainty	
Volume shown below was diluted to (mL):	2000.3	0.06	Flask Uncertainty	

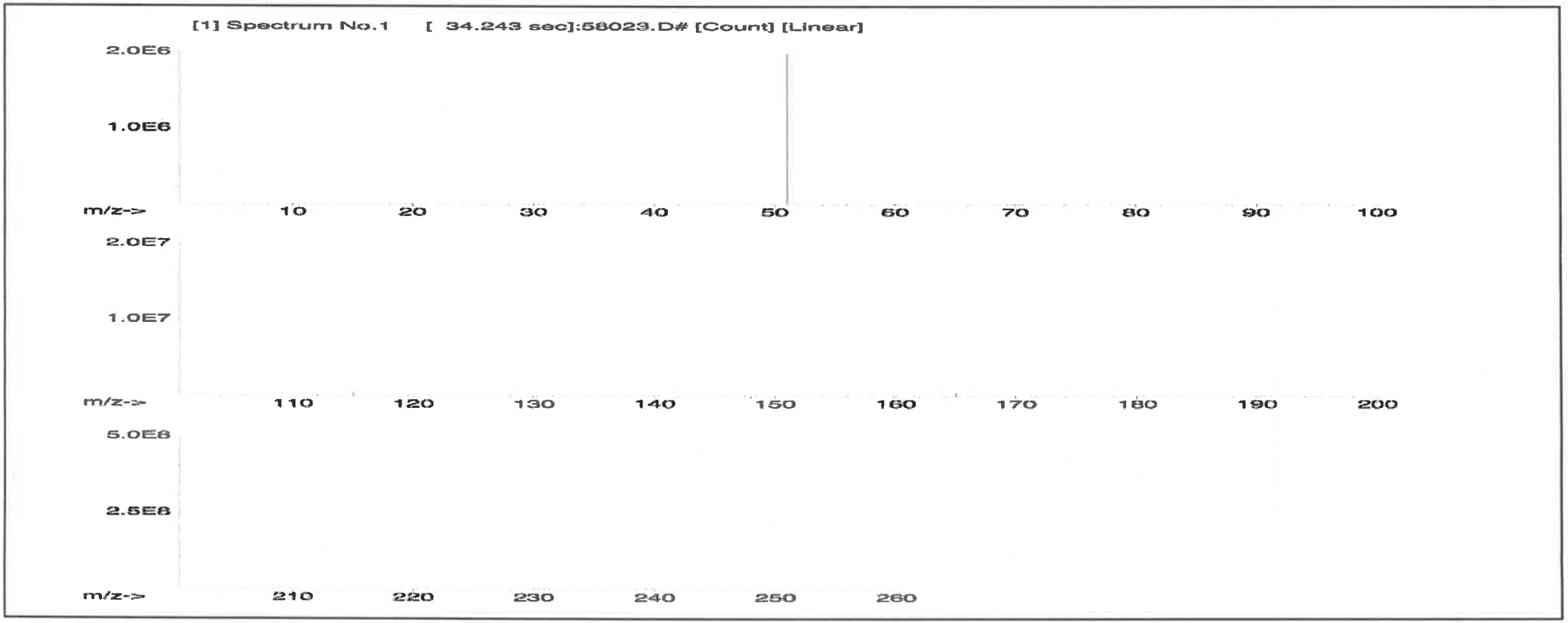
Aleah O'Brady

Formulated By:	Aleah O'Brady	062424

Pedro Rentas

Reviewed By:	Pedro L. Rentas	062424

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)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
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	orl-rat 58.1mg/kg	3165



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AR-1539 Certificate Number
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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	T
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.
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* Standards are certifed (+/-) 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

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 · Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO.
QUOTE NO. Q1812
COC Number 2046603

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: Jacobs
ADDRESS: 412 Mt Kemble Ave Suite #100
CITY Morristown STATE: NJ ZIP: 07960
ATTENTION: John Yurkanin John.Yurkanin@Jacobs.com
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: STC PTC
PROJECT NO.: D3865221 LOCATION: Princeton Junction
PROJECT MANAGER: Mary Murphy
e-mail: Mary.Murphy@Jacobs.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Mary Murphy PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) Rush TAT (48hr) DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☒ Level 3 (Results + QC + Raw Data) ☐ NYS ASP A ☐ NYS ASP B
☐ Other
☐ EDD FORMAT

ANALYSIS

1 TCL VOCs (8260D) 2 TCL SVOCs (8270E) 3. TAL Metals (6020B/7470A) 4 TPH - GRO (8015M) 5 TPH - DRO/ORO (8015M) 6 TPH Ext. TAL 7 8 9

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1 A/E	2 E	3 B/E	4 A/E	5 E	6 E	7	8	9	COMMENTS
1.	TB01-041525	DI		X	4/15/25	1100	2	✓									
2.	RINSE-EB-TANK-041525	W		X	4/15/25	1120	8	✓	✓	✓	✓	✓	✓				
3.	RINSE-EB-PUMP-041525	W		X	4/15/25	1135	8	✓	✓	✓	✓	✓	✓				
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

Specify Preservatives: A-HCl D-NaOH B-HN03 E-ICE C-H2SO4 F-OTHER

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	4/15/25 1640	1. 4/15/25 16:10
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 5.5 °C
Comments:

Page ____ of
CLIENT: ☐ Hand Delivered ☐ Other
Shipment Complete ☐ YES ☐ NO

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WHITE - ALLIANCE COPY FOR RETURN TO CLIENT YELLOW - ALLIANCE COPY PINK - SAMPLER COPY

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

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

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1812 JACO05
Client Name : JACOBS Engineering Grou
Client Contact : John Ynfante
Invoice Name : JACOBS Engineering Grou
Invoice Contact : John Ynfante

Order Date : 4/15/2025 4:26:00 PM
Project Name : Former Schlumberger STC
Receive DateTime : 4/15/2025 4:10:00 PM
Purchase Order :

Project Mgr : Yazmeen
Report Type : Level 4
EDD Type : CH2MHILL
Hard Copy Date :
Date Signoff : 4/16/2025 9:55:15 AM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD		FAX DATE	DUE DATES
Q1812-01	TB01-041525	Water	04/15/2025	11:00						
					VOC-TCLVOA-10		8260-Low	1 Bus. Day	04/17/2025	
Q1812-02	RINSE-EB-TANK-041525	Water	04/15/2025	11:20						
					VOC-TCLVOA-10		8260-Low	1 Bus. Day	04/17/2025	
Q1812-03	RINSE-EB-PUMP-041525	Water	04/15/2025	11:35						
					VOC-TCLVOA-10		8260-Low	1 Bus. Day	04/17/2025	

Relinquished By :
Date / Time : 4 15 25 16:30

Received By :
Date / Time : 4.15.25 16:30

Storage Area : VOA Refridgerator Room