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

DATA PACKAGE

METALS

PROJECT NAME : AE1-CTY 3.2.Z-PR-DOCK-DES-ODC - 60693795-1719206

AECOM

605 3rd Avenue

29th Floor

New York, NY - 10158

Phone No: 212-973-2900

ORDER ID : Q3434

ATTENTION : Rob Forstner

Laboratory Certification ID # 20012

Table Of Contents for Q3434

1) METALS DATA 2
2) Signature Page 4
3) Case Narrative 5
4) Qualifier Page 7
5) Conformance/Non Conformance 8
6) QA Checklist 10
7) Chronicle 11
8) Hit Summary 12
9) Sample Data 13
9.1) PR132-WC1-20251022 14
10) METALS CALIBRATION DATA 15
10.1) Initial and Continuing Calibration Verification 16
10.2) CRDL Standard For AA & ICP 23
10.3) Initial and Continuing Calibration Blank Summary 24
10.4) Preparation Blank Summary 30
10.5) Interference Check Sample 32
11) METALS QC DATA 34
11.1) Matrix Spike Summary 35
11.2) Post Digest Spike Summary 37
11.3) Duplicate Sample Summary 38
11.4) Laboratory Control Sample Summary 40
11.5) Internal Standard Relative Intensity Summary8A 42
11.6) Internal Standard Relative Intensity Summary8B 46
11.7) ICP Serial Dilutions 50
12) METALS PREPARATION & INSTRUMENT DATA 51
13) PREPARATION & ANALYTICAL SUMMARY 52
13.1) Sample Preparation Summary 53
13.2) Analysis Run Log 55
14) METALS RAW DATA 57
14.1) METALS RAW DATA - ANALYTICAL 58
14.2) LB137626 58
14.3) LB137649 60
14.4) METALS RAW DATA - PREP 405
14.4.1) PB170230 405
14.4.2) PB170226 408

15) Percent Solid 411
16) Analytical Runlogs 413
17) Standard Prep Logs 420
18) Shipping Document 578
18.1) Chain Of Custody 579
18.2) Lab Certificate 580
18.3) Internal COC 581

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

Cover Page

Order ID : Q3434

Project ID : AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206

Client : AECOM

Lab Sample Number	Client Sample Number
Q3434-01	PR132-WC1-20251022
Q3434-02	PR132-WC2-20251022
Q3434-03	TB

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: 11/4/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

CASE NARRATIVE

AECOM
Project Name: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206
Project # N/A
Order ID # Q3434
Test Name: Mercury,Metals ICP-TAL

A. Number of Samples and Date of Receipt:
1 Solid sample was received on 10/22/2025.
2 Water samples were received on 10/22/2025.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Mercury,Metals ICP-TAL. This data package contains results for Mercury,Metals ICP-TAL.

C. Analytical Techniques:
The analysis of Metals ICP-TAL was based on method 6020B, digestion based on method 3050 (soils). The analysis and digestion of Mercury was based on method 7471B.

D. QA/ QC Samples:

The Holding Times were met for all analysis.
Sample PR132-WC1-20251022 was diluted due to high concentrations for Chromium and Mercury.
The Blank Spike met requirements for all compounds.
The Duplicate (PR-132-S16-015094-20251021DUP) analysis met criteria for all compounds except for Mercury due to sample matrix interference.
The Matrix Spike (PR-132-S16-015094-20251021MS) analysis met criteria for all compounds except for Calcium, Chromium, Manganese, Potassium and Silver due to soil matrix highly contaminated with unknown interferences during digestion, possible due to some black brownish particles in the sample which are not consistent in every digested vial due to inconsistent homogeneity of the matrix.
The Matrix Spike Duplicate (PR-132-S16-015094-20251021MSD) analysis met criteria for all compounds except for Calcium, Chromium, Copper, Magnesium, Manganese, Nickel, Potassium, Silver, Sodium, Vanadium and Zinc due to soil matrix highly contaminated with unknown interferences during digestion, possible due to some black brownish particles in the sample which are not consistent in every digested vial due to inconsistent homogeneity of the matrix.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution met criteria for all compounds.

E. Additional Comments:

The Post Digest Spike (PR-132-S16-015094-20251021A) analysis met criteria for all compounds except for Calcium, Chromium, Manganese, Nickel, Potassium, Silver, Vanadium and Zinc due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

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

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q3434 MATRIX: Solid,

METHOD: 6020B,7471B

		NA	NO	YES
1.	Calibration Summary met criteria.			✓
2.	ICP Interference Check Sample Results Summary Submitted.			✓
3.	Serial Dilution Summary (if applicable) Submitted.			✓
	The Serial Dilution met criteria for all compounds.			
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 (PR-132-S16-015094-20251021MS) analysis met criteria for all compounds except for Calcium, Chromium, Manganese, Potassium and Silver due to soil matrix highly contaminated with unknown interferences during digestion, possible due to some black brownish particles in the sample which are not consistent in every digested vial due to inconsistent homogeneity of the matrix. The Matrix Spike Duplicate (PR-132-S16-015094-20251021MSD) analysis met criteria for all compounds except for Calcium, Chromium, Copper, Magnesium, Manganese, Nickel, Potassium, Silver, Sodium, Vanadium and Zinc due to soil matrix highly contaminated with unknown interferences during digestion, possible due to some black brownish particles in the sample which are not consistent in every digested vial due to inconsistent homogeneity of the matrix.			
7.	Sample Duplicate Analysis Met QC Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The Duplicate (PR-132-S16-015094-20251021DUP) analysis met criteria for all compounds except for Mercury due to sample matrix interference.			
8.	Digestion Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

		NA	NO	YES
9.	Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			

ADDITIONAL COMMENTS: The Post Digest Spike (PR-132-S16-015094-20251021A) analysis met criteria for all compounds except for Calcium, Chromium, Manganese, Nickel, Potassium, Silver, Vanadium and Zinc due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

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 #: Q3434

	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:** 11/04/2025

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

LAB CHRONICLE

OrderID:	Q3434	**OrderDate:**	10/22/2025 1:40:00 PM
Client:	AECOM	**Project:**	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206
Contact:	Rob Forstner	**Location:**	D41, VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3434-01	**PR132-WC1-20251022**	**SOIL**			**10/22/25**			**10/22/25**
			Mercury	7471B		10/23/25	10/23/25	
			Metals ICP-TAL	6020B		10/23/25	10/23/25	

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

Hit Summary Sheet
SW-846

SDG No.: Q3434 **Order ID:** Q3434

Client: AECOM **Project ID:** AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : PR132-WC1-20251022								
Q3434-01	PR132-WC1-20251022	SOIL	Aluminum	8870		0.56	3.08	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Antimony	0.34		0.069	0.31	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Arsenic	18.5		0.019	0.15	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Barium	238		0.051	1.54	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Beryllium	0.73		0.049	0.15	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Cadmium	10.7		0.028	0.15	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Calcium	4600		7.39	77.1	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Chromium	316	D	0.20	1.54	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Cobalt	9.07		0.014	0.15	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Copper	314		0.10	0.31	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Iron	23000		1.42	7.71	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Lead	296		0.049	0.15	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Magnesium	5210		2.98	77.1	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Manganese	244		0.052	0.15	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Nickel	55.6		0.066	0.15	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Mercury	7.56	D	0.12	0.22	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Potassium	2060		5.92	77.1	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Selenium	1.59		0.43	0.77	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Silver	7.92		0.040	0.15	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Sodium	4640		10.8	77.1	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Thallium	0.26		0.022	0.15	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Vanadium	44.9		0.017	0.77	mg/Kg
Q3434-01	PR132-WC1-20251022	SOIL	Zinc	501		0.14	0.77	mg/Kg

SAMPLE DATA

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

Report of Analysis

Client:	AECOM	Date Collected:	10/22/25
Project:	AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206	Date Received:	10/22/25
Client Sample ID:	PR132-WC1-20251022	SDG No.:	Q3434
Lab Sample ID:	Q3434-01	Matrix:	SOIL
Level (low/med):	low	% Solid:	57.9

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	8870		1	0.56	3.08	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-36-0	Antimony	0.34		1	0.069	0.31	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-38-2	Arsenic	18.5		1	0.019	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-39-3	Barium	238		1	0.051	1.54	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-41-7	Beryllium	0.73		1	0.049	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-43-9	Cadmium	10.7		1	0.028	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-70-2	Calcium	4600	N	1	7.39	77.1	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-47-3	Chromium	316	DN	5	0.20	1.54	mg/Kg	10/23/25 10:42	10/23/25 18:12	6020B	SW3050
7440-48-4	Cobalt	9.07		1	0.014	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-50-8	Copper	314	N	1	0.10	0.31	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7439-89-6	Iron	23000		1	1.42	7.71	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7439-92-1	Lead	296		1	0.049	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7439-95-4	Magnesium	5210	N	1	2.98	77.1	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7439-96-5	Manganese	244	N	1	0.052	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7439-97-6	Mercury	7.56	D*	10	0.12	0.22	mg/Kg	10/23/25 10:22	10/23/25 16:07	7471B	7471B
7440-02-0	Nickel	55.6	N	1	0.066	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-09-7	Potassium	2060	N	1	5.92	77.1	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7782-49-2	Selenium	1.59		1	0.43	0.77	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-22-4	Silver	7.92	N	1	0.040	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-23-5	Sodium	4640	N	1	10.8	77.1	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-28-0	Thallium	0.26		1	0.022	0.15	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-62-2	Vanadium	44.9	N	1	0.017	0.77	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050
7440-66-6	Zinc	501	N	1	0.14	0.77	mg/Kg	10/23/25 10:42	10/23/25 17:19	6020B	SW3050

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: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

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
ICV85	Mercury	4.26	4.0	106	90 - 110	CV	10/23/2025	13:51	LB137626

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

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
CCV79	Mercury	4.94	5.0	99	90 - 110	CV	10/23/2025	14:01	LB137626
CCV80	Mercury	4.97	5.0	99	90 - 110	CV	10/23/2025	14:35	LB137626
CCV81	Mercury	4.86	5.0	97	90 - 110	CV	10/23/2025	15:09	LB137626
CCV82	Mercury	5.04	5.0	101	90 - 110	CV	10/23/2025	15:29	LB137626
CCV83	Mercury	4.68	5.0	94	90 - 110	CV	10/23/2025	15:59	LB137626
CCV84	Mercury	4.71	5.0	94	90 - 110	CV	10/23/2025	16:14	LB137626

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

Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

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	1500	1600	94	90 - 110	P	10/23/2025	15:44	LB137649
	Antimony	439	400	110	90 - 110	P	10/23/2025	15:44	LB137649
	Arsenic	416	400	104	90 - 110	P	10/23/2025	15:44	LB137649
	Barium	1610	1600	100	90 - 110	P	10/23/2025	15:44	LB137649
	Beryllium	43.2	40.0	108	90 - 110	P	10/23/2025	15:44	LB137649
	Cadmium	217	200	109	90 - 110	P	10/23/2025	15:44	LB137649
	Calcium	4160	4000	104	90 - 110	P	10/23/2025	15:44	LB137649
	Chromium	160	160	100	90 - 110	P	10/23/2025	15:44	LB137649
	Cobalt	403	400	101	90 - 110	P	10/23/2025	15:44	LB137649
	Copper	187	200	94	90 - 110	P	10/23/2025	15:44	LB137649
	Iron	878	800	110	90 - 110	P	10/23/2025	15:44	LB137649
	Lead	387	400	97	90 - 110	P	10/23/2025	15:44	LB137649
	Magnesium	3670	4000	92	90 - 110	P	10/23/2025	15:44	LB137649
	Manganese	394	400	98	90 - 110	P	10/23/2025	15:44	LB137649
	Nickel	404	400	101	90 - 110	P	10/23/2025	15:44	LB137649
	Potassium	4210	4000	105	90 - 110	P	10/23/2025	15:44	LB137649
	Selenium	429	400	107	90 - 110	P	10/23/2025	15:44	LB137649
	Silver	213	200	106	90 - 110	P	10/23/2025	15:44	LB137649
	Sodium	3910	4000	98	90 - 110	P	10/23/2025	15:44	LB137649
	Thallium	391	400	98	90 - 110	P	10/23/2025	15:44	LB137649
	Vanadium	403	400	101	90 - 110	P	10/23/2025	15:44	LB137649
	Zinc	379	400	95	90 - 110	P	10/23/2025	15:44	LB137649

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

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
LLICV01	Aluminum	20.5	20.0	103	80 - 120	P	10/23/2025	15:53	LB137649
	Antimony	2.03	2.0	102	80 - 120	P	10/23/2025	15:53	LB137649
	Arsenic	1.16	1.0	116	80 - 120	P	10/23/2025	15:53	LB137649
	Barium	9.39	10.0	94	80 - 120	P	10/23/2025	15:53	LB137649
	Beryllium	1.07	1.0	107	80 - 120	P	10/23/2025	15:53	LB137649
	Cadmium	0.86	1.0	86	80 - 120	P	10/23/2025	15:53	LB137649
	Calcium	512	500	102	80 - 120	P	10/23/2025	15:53	LB137649
	Chromium	1.94	2.0	97	80 - 120	P	10/23/2025	15:53	LB137649
	Cobalt	1.05	1.0	105	80 - 120	P	10/23/2025	15:53	LB137649
	Copper	1.94	2.0	97	80 - 120	P	10/23/2025	15:53	LB137649
	Iron	52.8	50.0	106	80 - 120	P	10/23/2025	15:53	LB137649
	Lead	0.83	1.0	83	80 - 120	P	10/23/2025	15:53	LB137649
	Magnesium	479	500	96	80 - 120	P	10/23/2025	15:53	LB137649
	Manganese	0.94	1.0	94	80 - 120	P	10/23/2025	15:53	LB137649
	Nickel	1.00	1.0	100	80 - 120	P	10/23/2025	15:53	LB137649
	Potassium	506	500	101	80 - 120	P	10/23/2025	15:53	LB137649
	Selenium	4.77	5.0	95	80 - 120	P	10/23/2025	15:53	LB137649
	Silver	1.11	1.0	111	80 - 120	P	10/23/2025	15:53	LB137649
	Sodium	484	500	97	80 - 120	P	10/23/2025	15:53	LB137649
	Thallium	0.97	1.0	97	80 - 120	P	10/23/2025	15:53	LB137649
	Vanadium	4.89	5.0	98	80 - 120	P	10/23/2025	15:53	LB137649
	Zinc	5.02	5.0	100	80 - 120	P	10/23/2025	15:53	LB137649

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

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	48700	50000	98	90 - 110	P	10/23/2025	16:10	LB137649
	Antimony	524	500	105	90 - 110	P	10/23/2025	16:10	LB137649
	Arsenic	515	500	103	90 - 110	P	10/23/2025	16:10	LB137649
	Barium	2570	2500	103	90 - 110	P	10/23/2025	16:10	LB137649
	Beryllium	524	500	105	90 - 110	P	10/23/2025	16:10	LB137649
	Cadmium	503	500	101	90 - 110	P	10/23/2025	16:10	LB137649
	Calcium	251000	250000	100	90 - 110	P	10/23/2025	16:10	LB137649
	Chromium	508	500	102	90 - 110	P	10/23/2025	16:10	LB137649
	Cobalt	503	500	100	90 - 110	P	10/23/2025	16:10	LB137649
	Copper	4980	5000	100	90 - 110	P	10/23/2025	16:10	LB137649
	Iron	128000	125000	103	90 - 110	P	10/23/2025	16:10	LB137649
	Lead	2590	2500	104	90 - 110	P	10/23/2025	16:10	LB137649
	Magnesium	250000	250000	100	90 - 110	P	10/23/2025	16:10	LB137649
	Manganese	5020	5000	100	90 - 110	P	10/23/2025	16:10	LB137649
	Nickel	498	500	100	90 - 110	P	10/23/2025	16:10	LB137649
	Potassium	126000	125000	101	90 - 110	P	10/23/2025	16:10	LB137649
	Selenium	498	500	100	90 - 110	P	10/23/2025	16:10	LB137649
	Silver	510	500	102	90 - 110	P	10/23/2025	16:10	LB137649
	Sodium	247000	250000	99	90 - 110	P	10/23/2025	16:10	LB137649
	Thallium	514	500	103	90 - 110	P	10/23/2025	16:10	LB137649
	Vanadium	522	500	104	90 - 110	P	10/23/2025	16:10	LB137649
	Zinc	4790	5000	96	90 - 110	P	10/23/2025	16:10	LB137649
CCV02	Aluminum	51000	50000	102	90 - 110	P	10/23/2025	16:54	LB137649
	Antimony	536	500	107	90 - 110	P	10/23/2025	16:54	LB137649
	Arsenic	530	500	106	90 - 110	P	10/23/2025	16:54	LB137649
	Barium	2670	2500	107	90 - 110	P	10/23/2025	16:54	LB137649
	Beryllium	530	500	106	90 - 110	P	10/23/2025	16:54	LB137649
	Cadmium	521	500	104	90 - 110	P	10/23/2025	16:54	LB137649
	Calcium	259000	250000	104	90 - 110	P	10/23/2025	16:54	LB137649
	Chromium	538	500	108	90 - 110	P	10/23/2025	16:54	LB137649
	Cobalt	525	500	105	90 - 110	P	10/23/2025	16:54	LB137649
	Copper	5180	5000	104	90 - 110	P	10/23/2025	16:54	LB137649
	Iron	131000	125000	105	90 - 110	P	10/23/2025	16:54	LB137649
	Lead	2690	2500	108	90 - 110	P	10/23/2025	16:54	LB137649

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

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

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	260000	250000	104	90 - 110	P	10/23/2025	16:54	LB137649
	Manganese	5300	5000	106	90 - 110	P	10/23/2025	16:54	LB137649
	Nickel	520	500	104	90 - 110	P	10/23/2025	16:54	LB137649
	Potassium	130000	125000	104	90 - 110	P	10/23/2025	16:54	LB137649
	Selenium	511	500	102	90 - 110	P	10/23/2025	16:54	LB137649
	Silver	526	500	105	90 - 110	P	10/23/2025	16:54	LB137649
	Sodium	257000	250000	103	90 - 110	P	10/23/2025	16:54	LB137649
	Thallium	539	500	108	90 - 110	P	10/23/2025	16:54	LB137649
	Vanadium	540	500	108	90 - 110	P	10/23/2025	16:54	LB137649
	Zinc	4990	5000	100	90 - 110	P	10/23/2025	16:54	LB137649
CCV03	Aluminum	50800	50000	102	90 - 110	P	10/23/2025	17:35	LB137649
	Antimony	532	500	106	90 - 110	P	10/23/2025	17:35	LB137649
	Arsenic	531	500	106	90 - 110	P	10/23/2025	17:35	LB137649
	Barium	2650	2500	106	90 - 110	P	10/23/2025	17:35	LB137649
	Beryllium	528	500	106	90 - 110	P	10/23/2025	17:35	LB137649
	Cadmium	514	500	103	90 - 110	P	10/23/2025	17:35	LB137649
	Calcium	259000	250000	104	90 - 110	P	10/23/2025	17:35	LB137649
	Chromium	524	500	105	90 - 110	P	10/23/2025	17:35	LB137649
	Cobalt	536	500	107	90 - 110	P	10/23/2025	17:35	LB137649
	Copper	5230	5000	104	90 - 110	P	10/23/2025	17:35	LB137649
	Iron	133000	125000	106	90 - 110	P	10/23/2025	17:35	LB137649
	Lead	2690	2500	108	90 - 110	P	10/23/2025	17:35	LB137649
	Magnesium	264000	250000	106	90 - 110	P	10/23/2025	17:35	LB137649
	Manganese	5310	5000	106	90 - 110	P	10/23/2025	17:35	LB137649
	Nickel	517	500	104	90 - 110	P	10/23/2025	17:35	LB137649
	Potassium	129000	125000	104	90 - 110	P	10/23/2025	17:35	LB137649
	Selenium	508	500	102	90 - 110	P	10/23/2025	17:35	LB137649
	Silver	528	500	106	90 - 110	P	10/23/2025	17:35	LB137649
	Sodium	260000	250000	104	90 - 110	P	10/23/2025	17:35	LB137649
	Thallium	544	500	109	90 - 110	P	10/23/2025	17:35	LB137649
	Vanadium	540	500	108	90 - 110	P	10/23/2025	17:35	LB137649
	Zinc	5050	5000	101	90 - 110	P	10/23/2025	17:35	LB137649
CCV04	Aluminum	50900	50000	102	90 - 110	P	10/23/2025	18:19	LB137649
	Antimony	542	500	108	90 - 110	P	10/23/2025	18:19	LB137649

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

Metals

- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

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	528	500	106	90 - 110	P	10/23/2025	18:19	LB137649
	Barium	2660	2500	106	90 - 110	P	10/23/2025	18:19	LB137649
	Beryllium	529	500	106	90 - 110	P	10/23/2025	18:19	LB137649
	Cadmium	517	500	103	90 - 110	P	10/23/2025	18:19	LB137649
	Calcium	263000	250000	105	90 - 110	P	10/23/2025	18:19	LB137649
	Chromium	534	500	107	90 - 110	P	10/23/2025	18:19	LB137649
	Cobalt	533	500	107	90 - 110	P	10/23/2025	18:19	LB137649
	Copper	5160	5000	103	90 - 110	P	10/23/2025	18:19	LB137649
	Iron	133000	125000	106	90 - 110	P	10/23/2025	18:19	LB137649
	Lead	2670	2500	107	90 - 110	P	10/23/2025	18:19	LB137649
	Magnesium	262000	250000	105	90 - 110	P	10/23/2025	18:19	LB137649
	Manganese	5280	5000	106	90 - 110	P	10/23/2025	18:19	LB137649
	Nickel	516	500	103	90 - 110	P	10/23/2025	18:19	LB137649
	Potassium	131000	125000	104	90 - 110	P	10/23/2025	18:19	LB137649
	Selenium	510	500	102	90 - 110	P	10/23/2025	18:19	LB137649
	Silver	528	500	106	90 - 110	P	10/23/2025	18:19	LB137649
	Sodium	260000	250000	104	90 - 110	P	10/23/2025	18:19	LB137649
	Thallium	546	500	109	90 - 110	P	10/23/2025	18:19	LB137649
	Vanadium	542	500	108	90 - 110	P	10/23/2025	18:19	LB137649
	Zinc	5020	5000	100	90 - 110	P	10/23/2025	18:19	LB137649

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

Metals

- 2b -
CRDL STANDARD FOR AA & ICP

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

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	0.20	0.2	100	70 - 130	CV	10/23/2025	14:07	LB137626
CRI01	Aluminum	21.2	20.0	106	70 - 130	P	10/23/2025	16:18	LB137649
	Antimony	2.07	2.0	104	70 - 130	P	10/23/2025	16:18	LB137649
	Arsenic	1.29	1.0	129	70 - 130	P	10/23/2025	16:18	LB137649
	Barium	9.50	10.0	95	70 - 130	P	10/23/2025	16:18	LB137649
	Beryllium	1.08	1.0	108	70 - 130	P	10/23/2025	16:18	LB137649
	Cadmium	0.94	1.0	94	70 - 130	P	10/23/2025	16:18	LB137649
	Calcium	507	500	101	70 - 130	P	10/23/2025	16:18	LB137649
	Chromium	2.02	2.0	101	70 - 130	P	10/23/2025	16:18	LB137649
	Cobalt	1.05	1.0	105	50 - 150	P	10/23/2025	16:18	LB137649
	Copper	2.02	2.0	101	70 - 130	P	10/23/2025	16:18	LB137649
	Iron	57.7	50.0	115	70 - 130	P	10/23/2025	16:18	LB137649
	Lead	0.87	1.0	87	70 - 130	P	10/23/2025	16:18	LB137649
	Magnesium	476	500	95	70 - 130	P	10/23/2025	16:18	LB137649
	Manganese	1.01	1.0	101	50 - 150	P	10/23/2025	16:18	LB137649
	Nickel	0.86	1.0	86	70 - 130	P	10/23/2025	16:18	LB137649
	Potassium	519	500	104	70 - 130	P	10/23/2025	16:18	LB137649
	Selenium	4.86	5.0	97	70 - 130	P	10/23/2025	16:18	LB137649
	Silver	1.10	1.0	110	70 - 130	P	10/23/2025	16:18	LB137649
	Sodium	510	500	102	70 - 130	P	10/23/2025	16:18	LB137649
	Thallium	1.04	1.0	104	70 - 130	P	10/23/2025	16:18	LB137649
	Vanadium	4.89	5.0	98	70 - 130	P	10/23/2025	16:18	LB137649
	Zinc	5.22	5.0	104	50 - 150	P	10/23/2025	16:18	LB137649

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB85	Mercury	0.10	+/-0.2	J	0.20	CV	10/23/2025	13:57	LB137626

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB79	Mercury	0.076	+/-0.2	U	0.20	CV	10/23/2025	14:05	LB137626
CCB80	Mercury	0.076	+/-0.2	U	0.20	CV	10/23/2025	14:38	LB137626
CCB81	Mercury	0.076	+/-0.2	U	0.20	CV	10/23/2025	15:11	LB137626
CCB82	Mercury	0.076	+/-0.2	U	0.20	CV	10/23/2025	15:32	LB137626
CCB83	Mercury	0.076	+/-0.2	U	0.20	CV	10/23/2025	16:02	LB137626
CCB84	Mercury	0.076	+/-0.2	U	0.20	CV	10/23/2025	16:16	LB137626

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Aluminum	1.94	+/-10	U	20.0	P	10/23/2025	15:58	LB137649
	Antimony	0.11	+/-1	U	2.00	P	10/23/2025	15:58	LB137649
	Arsenic	0.089	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Barium	0.21	+/-5	U	10.0	P	10/23/2025	15:58	LB137649
	Beryllium	0.32	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Cadmium	0.34	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Calcium	45.7	+/-250	U	500	P	10/23/2025	15:58	LB137649
	Chromium	0.21	+/-1	U	2.00	P	10/23/2025	15:58	LB137649
	Cobalt	0.070	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Copper	0.30	+/-1	U	2.00	P	10/23/2025	15:58	LB137649
	Iron	12.2	+/-25	J	50.0	P	10/23/2025	15:58	LB137649
	Lead	0.21	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Magnesium	19.5	+/-250	U	500	P	10/23/2025	15:58	LB137649
	Manganese	0.43	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Nickel	0.27	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Potassium	36.4	+/-250	U	500	P	10/23/2025	15:58	LB137649
	Selenium	2.90	+/-2.5	U	5.00	P	10/23/2025	15:58	LB137649
	Silver	0.060	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Sodium	128	+/-250	U	500	P	10/23/2025	15:58	LB137649
	Thallium	0.060	+/-0.5	U	1.00	P	10/23/2025	15:58	LB137649
	Vanadium	0.077	+/-2.5	U	5.00	P	10/23/2025	15:58	LB137649
	Zinc	1.25	+/-2.5	U	5.00	P	10/23/2025	15:58	LB137649

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Aluminum	1.94	+/-10	U	20.0	P	10/23/2025	16:14	LB137649
	Antimony	0.17	+/-1	J	2.00	P	10/23/2025	16:14	LB137649
	Arsenic	0.089	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Barium	0.21	+/-5	U	10.0	P	10/23/2025	16:14	LB137649
	Beryllium	0.32	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Cadmium	0.34	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Calcium	45.7	+/-250	U	500	P	10/23/2025	16:14	LB137649
	Chromium	0.21	+/-1	U	2.00	P	10/23/2025	16:14	LB137649
	Cobalt	0.070	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Copper	0.30	+/-1	U	2.00	P	10/23/2025	16:14	LB137649
	Iron	15.4	+/-25	J	50.0	P	10/23/2025	16:14	LB137649
	Lead	0.21	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Magnesium	19.5	+/-250	U	500	P	10/23/2025	16:14	LB137649
	Manganese	0.43	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Nickel	0.27	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Potassium	36.4	+/-250	U	500	P	10/23/2025	16:14	LB137649
	Selenium	2.90	+/-2.5	U	5.00	P	10/23/2025	16:14	LB137649
	Silver	0.060	+/-0.5	U	1.00	P	10/23/2025	16:14	LB137649
	Sodium	128	+/-250	U	500	P	10/23/2025	16:14	LB137649
	Thallium	0.11	+/-0.5	J	1.00	P	10/23/2025	16:14	LB137649
	Vanadium	0.077	+/-2.5	U	5.00	P	10/23/2025	16:14	LB137649
	Zinc	1.25	+/-2.5	U	5.00	P	10/23/2025	16:14	LB137649
CCB02	Aluminum	1.94	+/-10	U	20.0	P	10/23/2025	17:00	LB137649
	Antimony	0.12	+/-1	J	2.00	P	10/23/2025	17:00	LB137649
	Arsenic	0.089	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Barium	0.21	+/-5	U	10.0	P	10/23/2025	17:00	LB137649
	Beryllium	0.32	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Cadmium	0.34	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Calcium	45.7	+/-250	U	500	P	10/23/2025	17:00	LB137649
	Chromium	0.21	+/-1	U	2.00	P	10/23/2025	17:00	LB137649
	Cobalt	0.070	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Copper	0.30	+/-1	U	2.00	P	10/23/2025	17:00	LB137649
	Iron	15.0	+/-25	J	50.0	P	10/23/2025	17:00	LB137649
	Lead	0.21	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Magnesium	19.5	+/-250	U	500	P	10/23/2025	17:00	LB137649
	Manganese	0.43	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Nickel	0.27	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Potassium	36.4	+/-250	U	500	P	10/23/2025	17:00	LB137649
	Selenium	2.90	+/-2.5	U	5.00	P	10/23/2025	17:00	LB137649

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB02	Silver	0.060	+/-0.5	U	1.00	P	10/23/2025	17:00	LB137649
	Sodium	128	+/-250	U	500	P	10/23/2025	17:00	LB137649
	Thallium	0.10	+/-0.5	J	1.00	P	10/23/2025	17:00	LB137649
	Vanadium	0.077	+/-2.5	U	5.00	P	10/23/2025	17:00	LB137649
	Zinc	1.25	+/-2.5	U	5.00	P	10/23/2025	17:00	LB137649
CCB03	Aluminum	1.94	+/-10	U	20.0	P	10/23/2025	17:43	LB137649
	Antimony	0.11	+/-1	U	2.00	P	10/23/2025	17:43	LB137649
	Arsenic	0.089	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Barium	0.21	+/-5	U	10.0	P	10/23/2025	17:43	LB137649
	Beryllium	0.32	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Cadmium	0.34	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Calcium	45.7	+/-250	U	500	P	10/23/2025	17:43	LB137649
	Chromium	0.21	+/-1	U	2.00	P	10/23/2025	17:43	LB137649
	Cobalt	0.070	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Copper	0.30	+/-1	U	2.00	P	10/23/2025	17:43	LB137649
	Iron	16.2	+/-25	J	50.0	P	10/23/2025	17:43	LB137649
	Lead	0.21	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Magnesium	19.5	+/-250	U	500	P	10/23/2025	17:43	LB137649
	Manganese	0.43	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Nickel	0.27	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Potassium	36.4	+/-250	U	500	P	10/23/2025	17:43	LB137649
	Selenium	2.90	+/-2.5	U	5.00	P	10/23/2025	17:43	LB137649
	Silver	0.060	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Sodium	128	+/-250	U	500	P	10/23/2025	17:43	LB137649
	Thallium	0.060	+/-0.5	U	1.00	P	10/23/2025	17:43	LB137649
	Vanadium	0.077	+/-2.5	U	5.00	P	10/23/2025	17:43	LB137649
	Zinc	1.25	+/-2.5	U	5.00	P	10/23/2025	17:43	LB137649
CCB04	Aluminum	1.94	+/-10	U	20.0	P	10/23/2025	18:28	LB137649
	Antimony	0.11	+/-1	U	2.00	P	10/23/2025	18:28	LB137649
	Arsenic	0.089	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Barium	0.21	+/-5	U	10.0	P	10/23/2025	18:28	LB137649
	Beryllium	0.32	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Cadmium	0.34	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Calcium	45.7	+/-250	U	500	P	10/23/2025	18:28	LB137649
	Chromium	0.21	+/-1	U	2.00	P	10/23/2025	18:28	LB137649
	Cobalt	0.070	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Copper	0.30	+/-1	U	2.00	P	10/23/2025	18:28	LB137649
	Iron	7.81	+/-25	U	50.0	P	10/23/2025	18:28	LB137649
	Lead	0.21	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649

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

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Magnesium	19.5	+/-250	U	500	P	10/23/2025	18:28	LB137649
	Manganese	0.43	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Nickel	0.27	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Potassium	36.4	+/-250	U	500	P	10/23/2025	18:28	LB137649
	Selenium	2.90	+/-2.5	U	5.00	P	10/23/2025	18:28	LB137649
	Silver	0.060	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Sodium	128	+/-250	U	500	P	10/23/2025	18:28	LB137649
	Thallium	0.060	+/-0.5	U	1.00	P	10/23/2025	18:28	LB137649
	Vanadium	0.077	+/-2.5	U	5.00	P	10/23/2025	18:28	LB137649
	Zinc	1.25	+/-2.5	U	5.00	P	10/23/2025	18:28	LB137649

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

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: AECOM **SDG No.:** Q3434

Instrument: CV1

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB170230BL		**SOLID**		**Batch Number:**	**PB170230**		**Prep Date:**	**10/23/2025**	
	Mercury	0.0080	<0.014	U	0.014	CV	10/23/2025	14:15	LB137626

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

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: AECOM **SDG No.:** Q3434

Instrument: P7

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB170226BL		**SOLID**		**Batch Number:**	**PB170226**		**Prep Date:**	**10/23/2025**	
	Aluminum	0.36	<1	U	2.00	P	10/23/2025	16:21	LB137649
	Antimony	0.045	<0.1	U	0.20	P	10/23/2025	16:21	LB137649
	Arsenic	0.012	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Barium	0.033	<0.5	U	1.00	P	10/23/2025	16:21	LB137649
	Beryllium	0.032	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Cadmium	0.018	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Calcium	4.79	<25	U	50.0	P	10/23/2025	16:21	LB137649
	Chromium	0.026	<0.1	U	0.20	P	10/23/2025	16:21	LB137649
	Cobalt	0.0090	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Copper	0.065	<0.1	U	0.20	P	10/23/2025	16:21	LB137649
	Iron	1.43	<2.5	J	5.00	P	10/23/2025	16:21	LB137649
	Lead	0.032	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Magnesium	1.93	<25	U	50.0	P	10/23/2025	16:21	LB137649
	Manganese	0.034	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Nickel	0.043	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Potassium	3.84	<25	U	50.0	P	10/23/2025	16:21	LB137649
	Selenium	0.28	<0.25	U	0.50	P	10/23/2025	16:21	LB137649
	Silver	0.026	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Sodium	7.02	<25	U	50.0	P	10/23/2025	16:21	LB137649
	Thallium	0.014	<0.05	U	0.10	P	10/23/2025	16:21	LB137649
	Vanadium	0.011	<0.25	U	0.50	P	10/23/2025	16:21	LB137649
	Zinc	0.090	<0.25	U	0.50	P	10/23/2025	16:21	LB137649

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

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

ICS Source: EPA **Instrument ID:** P7

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	86100	100000	86	0	0	10/23/2025	16:03	LB137649
	Antimony	1.07	1.5	71	-2.5	5.5	10/23/2025	16:03	LB137649
	Arsenic	0.71	0.1	710	-1.9	2.1	10/23/2025	16:03	LB137649
	Barium	1.35	1.2	112	-18.8	21.2	10/23/2025	16:03	LB137649
	Beryllium	0.27			-2	2	10/23/2025	16:03	LB137649
	Cadmium	0.21	0.7	30	-1.3	2.7	10/23/2025	16:03	LB137649
	Calcium	95800	100000	96	0	0	10/23/2025	16:03	LB137649
	Chromium	19.2	21.0	91	17	25	10/23/2025	16:03	LB137649
	Cobalt	1.25	1.0	125	-1	3	10/23/2025	16:03	LB137649
	Copper	6.85	8.0	86	4	12	10/23/2025	16:03	LB137649
	Iron	96200	100000	96	0	0	10/23/2025	16:03	LB137649
	Lead	4.15	4.0	104	2	6	10/23/2025	16:03	LB137649
	Magnesium	88100	100000	88	0	0	10/23/2025	16:03	LB137649
	Manganese	7.07	7.0	101	5	9	10/23/2025	16:03	LB137649
	Nickel	5.28	6.0	88	4	8	10/23/2025	16:03	LB137649
	Potassium	96200	100000	96	0	0	10/23/2025	16:03	LB137649
	Selenium	0.060	0.3	20	-9.7	10	10/23/2025	16:03	LB137649
	Silver	0.040			-2	2	10/23/2025	16:03	LB137649
	Sodium	93200	100000	93	0	0	10/23/2025	16:03	LB137649
	Thallium	0.070			-2	2	10/23/2025	16:03	LB137649
	Vanadium	0.21	0.5	42	-9.5	10.5	10/23/2025	16:03	LB137649
	Zinc	9.95	11.0	90	1	21	10/23/2025	16:03	LB137649
ICSAB01	Aluminum	86800	100000	87	0	0	10/23/2025	16:07	LB137649
	Antimony	20.1	22.0	91	18	26	10/23/2025	16:07	LB137649
	Arsenic	19.6	19.0	103	16.2	21.9	10/23/2025	16:07	LB137649
	Barium	20.1	22.0	91	2	42	10/23/2025	16:07	LB137649
	Beryllium	20.7	19.0	109	16.2	21.9	10/23/2025	16:07	LB137649
	Cadmium	19.2	20.0	96	17	23	10/23/2025	16:07	LB137649
	Calcium	96000	100000	96	0	0	10/23/2025	16:07	LB137649
	Chromium	38.3	40.0	96	34	46	10/23/2025	16:07	LB137649
	Cobalt	20.8	20.0	104	17	23	10/23/2025	16:07	LB137649
	Copper	24.7	25.0	99	21	29	10/23/2025	16:07	LB137649
	Iron	95200	100000	95	0	0	10/23/2025	16:07	LB137649
	Lead	22.1	25.0	88	21.3	28.8	10/23/2025	16:07	LB137649
	Magnesium	87800	100000	88	0	0	10/23/2025	16:07	LB137649
	Manganese	24.6	27.0	91	23	31.1	10/23/2025	16:07	LB137649
	Nickel	24.5	24.0	102	20.4	27.6	10/23/2025	16:07	LB137649
	Potassium	94300	100000	94	0	0	10/23/2025	16:07	LB137649
	Selenium	19.3	19.0	102	9	29	10/23/2025	16:07	LB137649
	Silver	18.7	18.0	104	15.3	20.7	10/23/2025	16:07	LB137649
	Sodium	94400	100000	94	0	0	10/23/2025	16:07	LB137649
	Thallium	18.8	21.0	90	17.9	24.2	10/23/2025	16:07	LB137649

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

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

ICS Source: EPA **Instrument ID:** P7

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	19.4	19.0	102	9	29	10/23/2025	16:07	LB137649
	Zinc	28.7	29.0	99	19	39	10/23/2025	16:07	LB137649

METAL QC DATA

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

metals
- 5a -
MATRIX SPIKE SUMMARY

client: AECOM **level:** low **sdg no.:** Q3434

contract: AECO02 **lab code:** ACE

matrix: Solid **sample id:** Q3419-01 **client id:** PR-132-S16-015094-20251021MS

Percent Solids for Sample: 54.4 **Spiked ID:** Q3419-02 **Percent Solids for Spike Sample:** 54.4

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	11500		11700		1600	-17		P
Antimony	mg/Kg	75 - 125	72.4		0.17	J	82.1	88		P
Arsenic	mg/Kg	75 - 125	93.2	D	19.3	D	82.1	90		P
Barium	mg/Kg	75 - 125	471		155		410	77		P
Beryllium	mg/Kg	75 - 125	72.0		0.97		82.1	87		P
Cadmium	mg/Kg	75 - 125	76.4		5.71		82.1	86		P
Calcium	mg/Kg	75 - 125	13600		8400		8200	63	N	P
Chromium	mg/Kg	75 - 125	274	D	221	D	82.1	65	N	P
Cobalt	mg/Kg	75 - 125	77.7		12.5		82.1	79		P
Copper	mg/Kg	75 - 125	854		226		820	76		P
Iron	mg/Kg	75 - 125	31400		32400		4100	-26		P
Lead	mg/Kg	75 - 125	627		291		410	82		P
Magnesium	mg/Kg	75 - 125	14300		8160		8200	75		P
Manganese	mg/Kg	75 - 125	988		425		820	69	N	P
Nickel	mg/Kg	75 - 125	126		63.5		82.1	76		P
Mercury	mg/Kg	80 - 120	2.53	D	2.62	D	0.43	-20		CV
Potassium	mg/Kg	75 - 125	5610		2840		4100	67	N	P
Selenium	mg/Kg	75 - 125	73.9	D	4.03	UD	82.1	88		P
Silver	mg/Kg	75 - 125	17.8		6.57		82.1	14	N	P
Sodium	mg/Kg	75 - 125	13300		6970		8200	77		P
Thallium	mg/Kg	75 - 125	69.2		0.30		82.1	84		P
Vanadium	mg/Kg	75 - 125	109		46.5		82.1	76		P
Zinc	mg/Kg	75 - 125	1030		395		820	77		P

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

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: AECOM **level:** low **sdg no.:** Q3434

contract: AECO02 **lab code:** ACE

matrix: Solid **sample id:** Q3419-01 **client id:** PR-132-S16-015094-20251021MSD

Percent Solids for Sample: 54.4 **Spiked ID:** Q3419-03 **Percent Solids for Spike Sample:** 54.4

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	11000		11700		1600	-47		P
Antimony	mg/Kg	75 - 125	68.6		0.17	J	77.9	88		P
Arsenic	mg/Kg	75 - 125	89.3	D	19.3	D	77.9	90		P
Barium	mg/Kg	75 - 125	449		155		390	75		P
Beryllium	mg/Kg	75 - 125	67.3		0.97		77.9	85		P
Cadmium	mg/Kg	75 - 125	72.6		5.71		77.9	86		P
Calcium	mg/Kg	75 - 125	13100		8400		7800	60	N	P
Chromium	mg/Kg	75 - 125	262	D	221	D	77.9	53	N	P
Cobalt	mg/Kg	75 - 125	73.1		12.5		77.9	78		P
Copper	mg/Kg	75 - 125	806		226		780	74	N	P
Iron	mg/Kg	75 - 125	29700		32400		3900	-71		P
Lead	mg/Kg	75 - 125	599		291		390	79		P
Magnesium	mg/Kg	75 - 125	13600		8160		7800	70	N	P
Manganese	mg/Kg	75 - 125	934		425		780	65	N	P
Nickel	mg/Kg	75 - 125	120		63.5		77.9	72	N	P
Mercury	mg/Kg	80 - 120	2.62	D	2.62	D	0.48	0		CV
Potassium	mg/Kg	75 - 125	5310		2840		3900	63	N	P
Selenium	mg/Kg	75 - 125	70.8	D	4.03	UD	77.9	89		P
Silver	mg/Kg	75 - 125	16.8		6.57		77.9	13	N	P
Sodium	mg/Kg	75 - 125	12400		6970		7800	70	N	P
Thallium	mg/Kg	75 - 125	64.0		0.30		77.9	82		P
Vanadium	mg/Kg	75 - 125	103		46.5		77.9	72	N	P
Zinc	mg/Kg	75 - 125	970		395		780	74	N	P

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

Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

Matrix: Solid **Level:** LOW **Client ID:** PR-132-S16-015094-20251021A

Sample ID: Q3419-01 **Spiked ID:** Q3419-01A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Calcium	mg/Kg	75 - 125	14000		8400		8100	70	N	P
Chromium	mg/Kg	75 - 125	271	D	221	D	80.6	63	N	P
Copper	mg/Kg	75 - 125	831		226		810	75		P
Magnesium	mg/Kg	75 - 125	14400		8160		8100	77		P
Manganese	mg/Kg	75 - 125	986		425		810	69	N	P
Nickel	mg/Kg	75 - 125	123		63.5		80.6	74	N	P
Potassium	mg/Kg	75 - 125	5580		2840		4000	68	N	P
Silver	mg/Kg	75 - 125	17.3		6.57		80.6	13	N	P
Sodium	mg/Kg	75 - 125	13200		6970		8100	77		P
Vanadium	mg/Kg	75 - 125	106		46.5		80.6	74	N	P
Zinc	mg/Kg	75 - 125	987		395		810	73	N	P

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

Metals

- 6 -
DUPLICATE SAMPLE SUMMARY

Client: AECOM **Level:** LOW **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

Matrix: Solid **Sample ID:** Q3419-01 **Client ID:** ~~PR-132-S16-015094-~~20251021DUP

Percent Solids for Sample: 54.4 **Duplicate ID** Q3419-01DUP **Percent Solids for Spike Sample:** 54.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	11700		11800		1		P
Antimony	mg/Kg	20	0.17	J	0.17	J	0		P
Arsenic	mg/Kg	20	19.3	D	21.1	D	9		P
Barium	mg/Kg	20	155		157		1		P
Beryllium	mg/Kg	20	0.97		0.97		1		P
Cadmium	mg/Kg	20	5.71		5.76		1		P
Calcium	mg/Kg	20	8400		8430		0		P
Chromium	mg/Kg	20	221	D	238	D	7		P
Cobalt	mg/Kg	20	12.5		12.4		1		P
Copper	mg/Kg	20	226		223		1		P
Iron	mg/Kg	20	32400		32300		0		P
Lead	mg/Kg	20	291		284		2		P
Magnesium	mg/Kg	20	8160		8160		0		P
Manganese	mg/Kg	20	425		424		0		P
Nickel	mg/Kg	20	63.5		63.6		0		P
Mercury	mg/Kg	20	2.62	D	1.92	D	31	*	CV
Potassium	mg/Kg	20	2840		2810		1		P
Selenium	mg/Kg	20	4.03	UD	4.00	UD			P
Silver	mg/Kg	20	6.57		6.78		3		P
Sodium	mg/Kg	20	6970		7000		0		P
Thallium	mg/Kg	20	0.30		0.28		6		P
Vanadium	mg/Kg	20	46.5		46.3		0		P
Zinc	mg/Kg	20	395		392		1		P

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

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

Metals

- 6 -
DUPLICATE SAMPLE SUMMARY

Client: AECOM **Level:** LOW **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

Matrix: Solid **Sample ID:** Q3419-02 **Client ID:** PR-132-S16-015094-20251021MSD

Percent Solids for Sample: 54.4 **Duplicate ID** Q3419-03 **Percent Solids for Spike Sample:** 54.4

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	mg/Kg	20	11500		11000		4		P
Antimony	mg/Kg	20	72.4		68.6		5		P
Arsenic	mg/Kg	20	93.2	D	89.3	D	4		P
Barium	mg/Kg	20	471		449		5		P
Beryllium	mg/Kg	20	72.0		67.3		7		P
Cadmium	mg/Kg	20	76.4		72.6		5		P
Calcium	mg/Kg	20	13600		13100		4		P
Chromium	mg/Kg	20	274	D	262	D	4		P
Cobalt	mg/Kg	20	77.7		73.1		6		P
Copper	mg/Kg	20	854		806		6		P
Iron	mg/Kg	20	31400		29700		6		P
Lead	mg/Kg	20	627		599		5		P
Magnesium	mg/Kg	20	14300		13600		5		P
Manganese	mg/Kg	20	988		934		6		P
Nickel	mg/Kg	20	126		120		5		P
Mercury	mg/Kg	20	2.53	D	2.62	D	3		CV
Potassium	mg/Kg	20	5610		5310		5		P
Selenium	mg/Kg	20	73.9	D	70.8	D	4		P
Silver	mg/Kg	20	17.8		16.8		6		P
Sodium	mg/Kg	20	13300		12400		7		P
Thallium	mg/Kg	20	69.2		64.0		8		P
Vanadium	mg/Kg	20	109		103		6		P
Zinc	mg/Kg	20	1030		970		6		P

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

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

LABORATORY CONTROL SAMPLE SUMMARY

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB170226BS							
Aluminum	mg/Kg	1000	994		99	80 - 120	P
Antimony	mg/Kg	50.0	50.8		102	80 - 120	P
Arsenic	mg/Kg	50.0	50.4		101	80 - 120	P
Barium	mg/Kg	250	249		100	80 - 120	P
Beryllium	mg/Kg	50.0	49.8		100	80 - 120	P
Cadmium	mg/Kg	50.0	50.9		102	80 - 120	P
Calcium	mg/Kg	5000	5000		100	80 - 120	P
Chromium	mg/Kg	50.0	50.3		101	80 - 120	P
Cobalt	mg/Kg	50.0	50.4		101	80 - 120	P
Copper	mg/Kg	500	496		99	80 - 120	P
Iron	mg/Kg	2500	2620		105	80 - 120	P
Lead	mg/Kg	250	245		98	80 - 120	P
Magnesium	mg/Kg	5000	4850		97	80 - 120	P
Manganese	mg/Kg	500	497		99	80 - 120	P
Nickel	mg/Kg	50.0	50.4		101	80 - 120	P
Potassium	mg/Kg	2500	2480		99	80 - 120	P
Selenium	mg/Kg	50.0	49.6		99	80 - 120	P
Silver	mg/Kg	50.0	51.9		104	80 - 120	P
Sodium	mg/Kg	5000	4950		99	80 - 120	P
Thallium	mg/Kg	50.0	48.8		98	80 - 120	P
Vanadium	mg/Kg	50.0	50.0		100	80 - 120	P
Zinc	mg/Kg	500	503		101	80 - 120	P

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

LABORATORY CONTROL SAMPLE SUMMARY

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB170230BS							
Mercury	mg/Kg	0.28	0.26		91	80 - 120	CV

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

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM Contract: AECO02

Lab Code: ACE SDG No.: Q3434

Instrument ID: P7 Start Date : 10/23/2025

Run Number: LB137649 End Date : 10/23/2025

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	1500	100		100		100		100		100	
S2	S2	1503	101		99		99		99		99	
S3	S3	1507	101		98		100		100		99	
S4	S4	1510	104		99		99		98		101	
S5	S5	1513	106		98		99		98		102	
S6	S6	1516	106		98		98		98		102	
S7	S7	1519	105		95		97		95		103	
S8	S8	1522	103		99		99		92		103	
ICV01	ICV01	1544	97		100		101		99		100	
LLICV01	LLICV01	1553	99		100		102		99		101	
ICB01	ICB01	1558	99		100		100		100		99	
ICSA01	ICSA01	1603	97		99		100		97		103	
ICSAB01	ICSAB01	1607	96		100		103		97		106	
CCV01	CCV01	1610	98		102		104		99		108	
CCB01	CCB01	1614	98		100		104		102		104	
CRI01	CRI01	1618	97		101		103		102		104	
PB170226BL	PB170226BL	1621	96		98		102		102		102	
PB170226BS	PB170226BS	1625	97		99		102		99		103	
ZZZZZZ	ZZZZZZ	1633										
Q3419-01DUP	PR-132-S16-	1636	112		122		137	*	109		115	
Q3419-01L	PR-132-S16-	1639	101		106		110		105		108	
Q3419-02	PR-132-S16-	1643	106		119		131	*	106		115	
Q3419-03	PR-132-S16-	1646	107		115		130		105		114	
Q3419-01A	PR-132-S16-	1649	106		115		130		104		114	
ZZZZZZ	ZZZZZZ	1651										
CCV02	CCV02	1654	99		99		101		97		104	
CCB02	CCB02	1700	95		97		100		100		102	
ZZZZZZ	ZZZZZZ	1703										
ZZZZZZ	ZZZZZZ	1706										
ZZZZZZ	ZZZZZZ	1709										
ZZZZZZ	ZZZZZZ	1712										
ZZZZZZ	ZZZZZZ	1716										
Q3434-01	PR132-WC1-2	1719	106		113		127		106		111	
ZZZZZZ	ZZZZZZ	1722										
Q3419-01DUP	PR-132-S16-	1725	100		105		113		107		109	
Q3419-01L	PR-132-S16-	1729	97		100		104		103		105	

Internal Standard %RI Limit: 70 - 130

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

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM Contract: AECO02

Lab Code: ACE SDG No.: Q3434

Instrument ID: P7 Start Date : 10/23/2025

Run Number: LB137649 End Date : 10/23/2025

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
Q3419-02	PR-132-S16-	1732	102		106		110		104		109	
CCV03	CCV03	1735	99		98		101		96		105	
CCB03	CCB03	1743	95		95		100		97		103	
Q3419-03	PR-132-S16-	1747	100		101		107		101		107	
Q3419-01A	PR-132-S16-	1750	104		102		109		102		107	
ZZZZZZ	ZZZZZZ	1753										
ZZZZZZ	ZZZZZZ	1756										
ZZZZZZ	ZZZZZZ	1759										
ZZZZZZ	ZZZZZZ	1803										
ZZZZZZ	ZZZZZZ	1806										
ZZZZZZ	ZZZZZZ	1809										
Q3434-01	PR132-WC1-2	1812	99		103		110		106		108	
CCV04	CCV04	1819	99		99		103		98		107	
CCB04	CCB04	1828	96		101		105		104		106	

Internal Standard %RI Limit: 70 - 130

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

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM Contract: AECO02

Lab Code: ACE SDG No.: Q3434

Instrument ID: P7 Start Date : 10/23/2025

Run Number: LB137649 End Date : 10/23/2025

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	1500	100		100		100		100		100	
S2	S2	1503	100		99		99		99		99	
S3	S3	1507	101		100		101		100		101	
S4	S4	1510	98		98		97		102		100	
S5	S5	1513	96		96		96		101		101	
S6	S6	1516	95		96		95		101		103	
S7	S7	1519	96		97		95		100		101	
S8	S8	1522	104		102		94		104		104	
ICV01	ICV01	1544	100		101		100		100		102	
LLICV01	LLICV01	1553	101		101		101		102		103	
ICB01	ICB01	1558	99		100		98		102		100	
ICSA01	ICSA01	1603	101		100		98		104		103	
ICSAB01	ICSAB01	1607	104		105		101		105		105	
CCV01	CCV01	1610	106		105		100		106		108	
CCB01	CCB01	1614	101		104		103		104		104	
CRI01	CRI01	1618	101		101		101		103		102	
PB170226BL	PB170226BL	1621	101		103		101		100		104	
PB170226BS	PB170226BS	1625	99		100		98		102		103	
ZZZZZZ	ZZZZZZ	1633										
Q3419-01DUP	PR-132-S16-	1636	125		136	*	109		113		115	
Q3419-01L	PR-132-S16-	1639	108		112		106		108		108	
Q3419-02	PR-132-S16-	1643	119		126		104		112		112	
Q3419-03	PR-132-S16-	1646	117		128		106		111		112	
Q3419-01A	PR-132-S16-	1649	117		128		104		110		112	
ZZZZZZ	ZZZZZZ	1651										
CCV02	CCV02	1654	101		101		95		104		105	
CCB02	CCB02	1700	98		99		100		100		101	
ZZZZZZ	ZZZZZZ	1703										
ZZZZZZ	ZZZZZZ	1706										
ZZZZZZ	ZZZZZZ	1709										
ZZZZZZ	ZZZZZZ	1712										
ZZZZZZ	ZZZZZZ	1716										
Q3434-01	PR132-WC1-2	1719	116		125		105		110		112	
ZZZZZZ	ZZZZZZ	1722										
Q3419-01DUP	PR-132-S16-	1725	109		111		107		107		110	
Q3419-01L	PR-132-S16-	1729	103		103		104		104		106	

Internal Standard %RI Limit: 70 - 130

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

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM Contract: AECO02

Lab Code: ACE SDG No.: Q3434

Instrument ID: P7 Start Date : 10/23/2025

Run Number: LB137649 End Date : 10/23/2025

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
Q3419-02	PR-132-S16-	1732	107		110		105		107		109	
CCV03	CCV03	1735	100		100		95		103		104	
CCB03	CCB03	1743	97		99		100		100		101	
Q3419-03	PR-132-S16-	1747	104		107		102		104		107	
Q3419-01A	PR-132-S16-	1750	105		107		103		107		109	
ZZZZZZ	ZZZZZZ	1753										
ZZZZZZ	ZZZZZZ	1756										
ZZZZZZ	ZZZZZZ	1759										
ZZZZZZ	ZZZZZZ	1803										
ZZZZZZ	ZZZZZZ	1806										
ZZZZZZ	ZZZZZZ	1809										
Q3434-01	PR132-WC1-2	1812	107		111		105		106		108	
CCV04	CCV04	1819	103		104		98		106		107	
CCB04	CCB04	1828	101		105		104		106		107	

Internal Standard %RI Limit: 70 - 130

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

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM | Contract: AECO02

Lab Code: ACE | SDG No.: Q3434

Instrument ID: P7 | Start Date : 10/23/2025

Run Number: LB137649 | End Date : 10/23/2025

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	1500	100		100							
S2	S2	1503	102		99							
S3	S3	1507	101		101							
S4	S4	1510	103		103							
S5	S5	1513	103		101							
S6	S6	1516	105		105							
S7	S7	1519	105		102							
S8	S8	1522	105		97							
ICV01	ICV01	1544	102		102							
LLICV01	LLICV01	1553	102		102							
ICB01	ICB01	1558	102		101							
ICSA01	ICSA01	1603	106		99							
ICSAB01	ICSAB01	1607	108		102							
CCV01	CCV01	1610	110		104							
CCB01	CCB01	1614	106		106							
CRI01	CRI01	1618	107		104							
PB170226BL	PB170226BL	1621	104		102							
PB170226BS	PB170226BS	1625	105		103							
ZZZZZZ	ZZZZZZ	1633										
Q3419-01DUP	PR-132-S16-(	1636	118		117							
Q3419-01L	PR-132-S16-(	1639	110		110							
Q3419-02	PR-132-S16-(	1643	115		115							
Q3419-03	PR-132-S16-(	1646	116		115							
Q3419-01A	PR-132-S16-(	1649	116		114							
ZZZZZZ	ZZZZZZ	1651										
CCV02	CCV02	1654	109		101							
CCB02	CCB02	1700	105		103							
ZZZZZZ	ZZZZZZ	1703										
ZZZZZZ	ZZZZZZ	1706										
ZZZZZZ	ZZZZZZ	1709										
ZZZZZZ	ZZZZZZ	1712										
ZZZZZZ	ZZZZZZ	1716										
Q3434-01	PR132-WC1-2(	1719	115		116							
ZZZZZZ	ZZZZZZ	1722										

Internal Standard %RI Limit: 70 -130

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

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM Contract: AECO02

Lab Code: ACE SDG No.: Q3434

Instrument ID: P7 Start Date : 10/23/2025

Run Number: LB137649 End Date : 10/23/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Non-Collision Cell									
			Element 165Ho	Q	Element 209Bi	Q	Element	Q	Element	Q	Element	Q
Q3419-01DUP	PR-132-S16-(	1725	111		107							
Q3419-01L	PR-132-S16-(	1729	107		104							
Q3419-02	PR-132-S16-(	1732	110		106							
CCV03	CCV03	1735	109		100							
CCB03	CCB03	1743	104		102							
Q3419-03	PR-132-S16-(	1747	109		107							
Q3419-01A	PR-132-S16-(	1750	111		109							
ZZZZZZ	ZZZZZZ	1753										
ZZZZZZ	ZZZZZZ	1756										
ZZZZZZ	ZZZZZZ	1759										
ZZZZZZ	ZZZZZZ	1803										
ZZZZZZ	ZZZZZZ	1806										
ZZZZZZ	ZZZZZZ	1809										
Q3434-01	PR132-WC1-2(	1812	111		107							
CCV04	CCV04	1819	108		102							
CCB04	CCB04	1828	110		109							

Internal Standard %RI Limit: 70 -130

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

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM
Contract: AECO02
Lab Code: ACE
SDG No.: Q3434
Instrument ID: P7
Start Date : 10/23/2025
Run Number: LB137649
End Date : 10/23/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
S0	S0	1500	100									
S2	S2	1503	100									
S3	S3	1507	101									
S4	S4	1510	102									
S5	S5	1513	100									
S6	S6	1516	100									
S7	S7	1519	99									
S8	S8	1522	95									
ICV01	ICV01	1544	100									
LLICV01	LLICV01	1553	101									
ICB01	ICB01	1558	99									
ICSA01	ICSA01	1603	99									
ICSAB01	ICSAB01	1607	101									
CCV01	CCV01	1610	99									
CCB01	CCB01	1614	102									
CRI01	CRI01	1618	100									
PB170226BL	PB170226BL	1621	103									
PB170226BS	PB170226BS	1625	99									
ZZZZZZ	ZZZZZZ	1633										
Q3419-01DUP	PR-132-S16-(	1636	115									
Q3419-01L	PR-132-S16-(	1639	107									
Q3419-02	PR-132-S16-(	1643	111									
Q3419-03	PR-132-S16-(	1646	108									
Q3419-01A	PR-132-S16-(	1649	109									
ZZZZZZ	ZZZZZZ	1651										
CCV02	CCV02	1654	97									
CCB02	CCB02	1700	101									
ZZZZZZ	ZZZZZZ	1703										
ZZZZZZ	ZZZZZZ	1706										
ZZZZZZ	ZZZZZZ	1709										
ZZZZZZ	ZZZZZZ	1712										
ZZZZZZ	ZZZZZZ	1716										
Q3434-01	PR132-WC1-2(	1719	111									
ZZZZZZ	ZZZZZZ	1722										

Internal Standard %RI Limit: 70 -130

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

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: AECOM
Contract: AECO02
Lab Code: ACE
SDG No.: Q3434
Instrument ID: P7
Start Date : 10/23/2025
Run Number: LB137649
End Date : 10/23/2025

Lab SampleID	Client SampleID	Time	Internal Standard %RI For: Collision Cell									
			Element 209Bi	Q	Element	Q	Element	Q	Element	Q	Element	Q
Q3419-01DUP	PR-132-S16-(	1725	107									
Q3419-01L	PR-132-S16-(	1729	104									
Q3419-02	PR-132-S16-(	1732	105									
CCV03	CCV03	1735	96									
CCB03	CCB03	1743	100									
Q3419-03	PR-132-S16-(	1747	104									
Q3419-01A	PR-132-S16-(	1750	104									
ZZZZZZ	ZZZZZZ	1753										
ZZZZZZ	ZZZZZZ	1756										
ZZZZZZ	ZZZZZZ	1759										
ZZZZZZ	ZZZZZZ	1803										
ZZZZZZ	ZZZZZZ	1806										
ZZZZZZ	ZZZZZZ	1809										
Q3434-01	PR132-WC1-2(	1812	105									
CCV04	CCV04	1819	98									
CCB04	CCB04	1828	104									

Internal Standard %RI Limit: 70 -130

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

Metals

-9 -

ICP SERIAL DILUTIONS

SAMPLE NO.

PR-132-S16-015094-20251021L

Lab Name: Alliance **Contract:** AECO02

Lab Code: ACE **Lb No.:** lb137649 **Lab Sample ID :** Q3419-01L **SDG No.:** Q3434

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

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	11700		11700		1		P
Antimony	0.17	J	1.61	U	100.0		P
Arsenic	19.3	D	4.03	UD	100		P
Barium	155		136		12		P
Beryllium	0.97		0.90		7		P
Cadmium	5.71		5.30		7		P
Calcium	8400		8160		3		P
Chromium	199	OR	199		0		P
Cobalt	12.5		12.5		0		P
Copper	226		225		1		P
Iron	32400		32200		1		P
Lead	291		256		12		P
Magnesium	8160		8150		0		P
Manganese	425		418		2		P
Nickel	63.5		64.3		1		P
Mercury	2.13	OR	2.26		6		CV
Potassium	2840		2950		4		P
Selenium	4.03	UD	20.2	UD			P
Silver	6.57		6.03		8		P
Sodium	6970		6920		1		P
Thallium	0.30		0.28	J	5		P
Vanadium	46.5		45.3		2		P
Zinc	395		403		2		P

METAL PREPARATION & INSTRUMENT DATA

METAL PREPARATION & ANALYICAL SUMMARY

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

Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE **Method:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB170226**						
PB170226BL	PB170226BL	MB	SOLID	10/23/2025	1.00	100.0	100.00
PB170226BS	PB170226BS	LCS	SOLID	10/23/2025	1.00	100.0	100.00
Q3419-01DUP	PR-132-S16-015094-20251021DUP	DUP	SOLID	10/23/2025	1.15	100.0	54.40
Q3419-02	PR-132-S16-015094-20251021MS	MS	SOLID	10/23/2025	1.12	100.0	54.40
Q3419-03	PR-132-S16-015094-20251021MSD	MSD	SOLID	10/23/2025	1.18	100.0	54.40
Q3434-01	PR132-WC1-20251022	SAM	SOLID	10/23/2025	1.12	100.0	57.90

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

Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client: AECOM **SDG No.:** Q3434

Contract: AECO02 **Lab Code:** ACE **Method:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB170230**						
PB170230BL	PB170230BL	MB	SOLID	10/23/2025	0.50	35.0	100.00
PB170230BS	PB170230BS	LCS	SOLID	10/23/2025	0.50	35.0	100.00
Q3419-01DUP	PR-132-S16-015094-20251021DUP	DUP	SOLID	10/23/2025	0.55	35.0	54.40
Q3419-02	PR-132-S16-015094-20251021MS	MS	SOLID	10/23/2025	0.60	35.0	54.40
Q3419-03	PR-132-S16-015094-20251021MSD	MSD	SOLID	10/23/2025	0.54	35.0	54.40
Q3434-01	PR132-WC1-20251022	SAM	SOLID	10/23/2025	0.56	35.0	57.90

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

metals
- 14 -
ANALYSIS RUN LOG

Client: AECOM **Contract:** AECO02

Lab code: ACE **Sdg no.:** Q3434

Instrument id number: **Method:** **Run number:** LB137626

Start date: 10/23/2025 **End date:** 10/23/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1331	HG
S0.2	S0.2	1	1334	HG
S2.5	S2.5	1	1336	HG
S5	S5	1	1339	HG
S7.5	S7.5	1	1341	HG
S10	S10	1	1347	HG
ICV85	ICV85	1	1351	HG
ICB85	ICB85	1	1357	HG
CCV79	CCV79	1	1401	HG
CCB79	CCB79	1	1405	HG
CRA	CRA	1	1407	HG
PB170230BL	PB170230BL	1	1415	HG
PB170230BS	PB170230BS	1	1420	HG
CCV80	CCV80	1	1435	HG
CCB80	CCB80	1	1438	HG
CCV81	CCV81	1	1509	HG
CCB81	CCB81	1	1511	HG
Q3419-01L	PR-132-S16-015094-20251021L	5	1521	HG
CCV82	CCV82	1	1529	HG
CCB82	CCB82	1	1532	HG
Q3419-01DUP	PR-132-S16-015094-20251021D	10	1537	HG
Q3419-02	PR-132-S16-015094-20251021M	10	1539	HG
Q3419-03	PR-132-S16-015094-20251021M	10	1542	HG
CCV83	CCV83	1	1559	HG
CCB83	CCB83	1	1602	HG
Q3434-01	PR132-WC1-20251022	10	1607	HG
CCV84	CCV84	1	1614	HG
CCB84	CCB84	1	1616	HG

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

metals
- 14 -
ANALYSIS RUN LOG

Client: AECOM **Contract:** AECO02

Lab code: ACE **Sdg no.:** Q3434

Instrument id number: **Method:** **Run number:** LB137649

Start date: 10/23/2025 **End date:** 10/23/2025

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1500	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	1503	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	1507	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	1510	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	1513	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	1516	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	1519	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	1522	Al,Ca,Fe,K,Mg,Na
ICV01	ICV01	1	1544	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
LLICV01	LLICV01	1	1553	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	1558	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	1603	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	1607	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	1610	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	1614	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
CRI01	CRI01	1	1618	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB170226BL	PB170226BL	1	1621	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
PB170226BS	PB170226BS	1	1625	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3419-01DUP	PR-132-S16-015094-20251021D	1	1636	Ag,Al,Ba,Be,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Tl,V,Zn
Q3419-01L	PR-132-S16-015094-20251021L	5	1639	Ag,Al,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Tl,V,Zn
Q3419-02	PR-132-S16-015094-20251021M	1	1643	Ag,Al,Ba,Be,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Tl,V,Zn
Q3419-03	PR-132-S16-015094-20251021M	1	1646	Ag,Al,Ba,Be,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Tl,V,Zn
Q3419-01A	PR-132-S16-015094-20251021A	1	1649	Ag,Ca,Cu,K,Mg,Mn,Na,Ni,V,Zn
CCV02	CCV02	1	1654	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	1700	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3434-01	PR132-WC1-20251022	1	1719	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3419-01DUP	PR-132-S16-015094-20251021D	5	1725	As,Cr,Se
Q3419-01L	PR-132-S16-015094-20251021L	25	1729	As,Se
Q3419-02	PR-132-S16-015094-20251021M	5	1732	As,Cr,Se
CCV03	CCV03	1	1735	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	1743	Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn
Q3419-03	PR-132-S16-015094-20251021M	5	1747	As,Cr,Se
Q3419-01A	PR-132-S16-015094-20251021A	5	1750	Cr
Q3434-01	PR132-WC1-20251022	5	1812	Cr
CCV04	CCV04	1	1819	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	1828	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

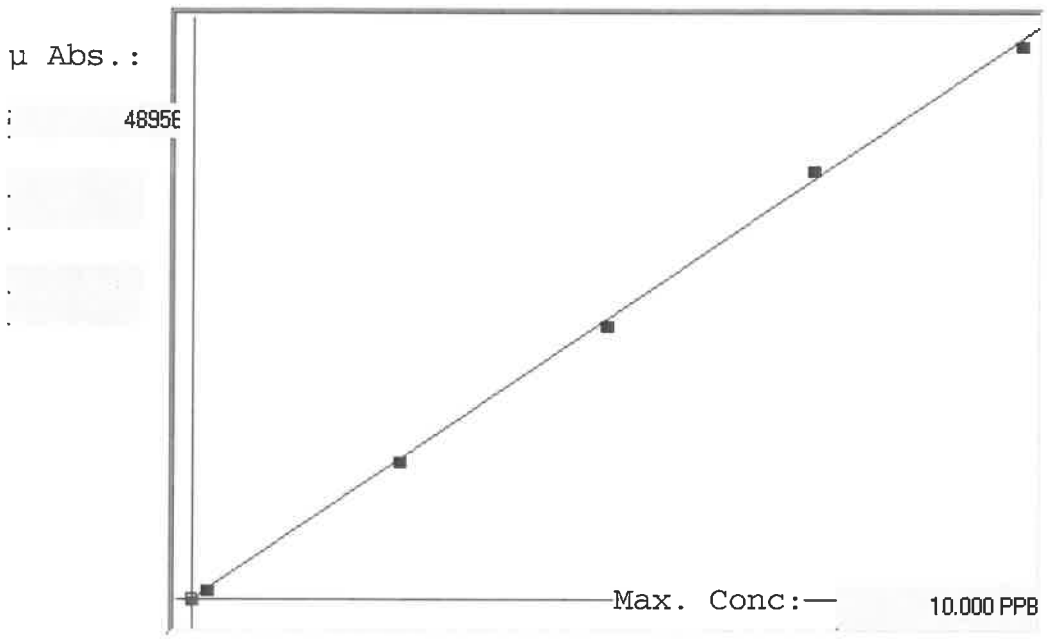
Reviewed By:mohan
On:10/27/2025 8:24:01 AM
Inst Id :CV1
LB :LB137626

LB137626

7471B

INSTRUMENT ID: CV1

Linear



A= 0.0000e+000

B= 2.0212e-004

C= 2.4743e-003

Rho= 0.9996944

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	41	0.000	41				
0.2	0.200	0.199	-0.001	973	0.0 %	973				
2.5	2.500	2.480	-0.020	12255	0.0 %	12255				
5.0	5.000	4.929	-0.071	24373	0.0 %	24373				
7.5	7.500	7.684	0.184	38004	0.0 %	38004				
10.0	10.000	9.898	-0.102	48956	0.0 %	48956				

Reviewed By:mohan
On:10/27/2025 8:24:01 AM
Inst Id :CV1
LB :LB137626

LB137626 INSTRUMENT ID : CV12

Method: 7471B Operator: Admin Date of Analysis: 23 Oct 2025 12:56:54

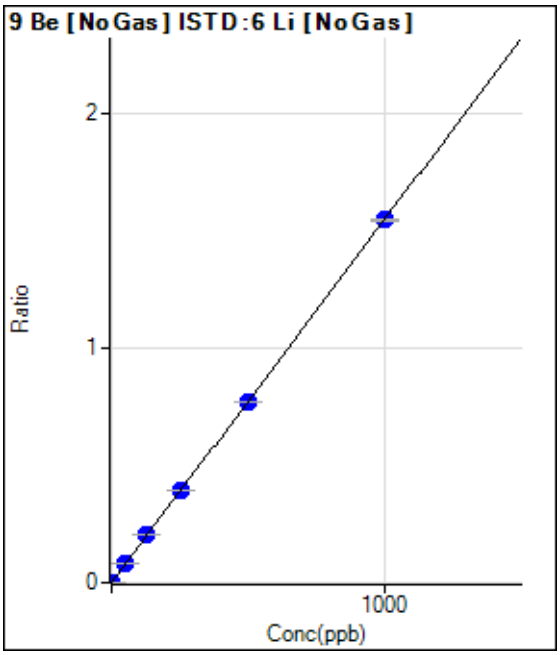
Type	Sample ID	Extended ID	Conc.	µ Abs.	Units	Type	Stnd Conc	Method	Date
S	0.0 - 1	S0	-	41	PPB	Std	0.0000	7471B	23 Oct 2025 13:31:53
S	0.2 - 1	S0-2	-	973	PPB	Std	0.2000	7471B	23 Oct 2025 13:34:21
S	2.5 - 1	S2-5	-	12255	PPB	Std	2.5000	7471B	23 Oct 2025 13:36:46
S	5.0 - 1	S5	-	24373	PPB	Std	5.0000	7471B	23 Oct 2025 13:39:04
S	7.5 - 1	S7-5	-	38004	PPB	Std	7.5000	7471B	23 Oct 2025 13:41:35
S	10.0 - 1	S10	-	48956	PPB	Std	10.0000	7471B	23 Oct 2025 13:47:44
U	ICV85 - 1	ICV85	4.2614	21071	PPB	SMPL		7471B	23 Oct 2025 13:51:32
U	ICB85 - 1	ICB85	0.1082	523	PPB	SMPL		7471B	23 Oct 2025 13:57:38
U	CCV79 - 1	CCV79	4.9378	24417	PPB	SMPL		7471B	23 Oct 2025 14:01:59
U	CCB79 - 1	CCB79	-0.0436	-228	PPB	SMPL		7471B	23 Oct 2025 14:05:17
U	CRA - 1	CRA	0.2000	977	PPB	SMPL		7471B	23 Oct 2025 14:07:54
U	HighStd - 1	HighStd	9.8611	48775	PPB	SMPL		7471B	23 Oct 2025 14:10:09
U	ChkStd - 1	ChkStd	6.9337	34292	PPB	SMPL		7471B	23 Oct 2025 14:12:24
U	PB170230BL - 1	PBS	-0.0565	-292	PPB	SMPL		7471B	23 Oct 2025 14:15:11
U	PB170230BS - 1	LCSS	3.6506	18049	PPB	SMPL		7471B	23 Oct 2025 14:20:34
U	Q3399-01 - 1	COMP-ROLLOFF	0.0546	258	PPB	SMPL		7471B	23 Oct 2025 14:22:53
U	Q3412-01 - 1	TP-6	0.9450	4663	PPB	SMPL		7471B	23 Oct 2025 14:25:29
U	Q3416-01 - 1	NB-08-10212025	0.0932	449	PPB	SMPL		7471B	23 Oct 2025 14:27:47
U	Q3419-01DUP - 1	PR-132-S16-015094-20251021DUP	19.7810	97853	PPB	SMPL		7471B	23 Oct 2025 14:32:22
U	CCV80 - 1	CCV80	4.9723	24588	PPB	SMPL		7471B	23 Oct 2025 14:35:08
U	CCB80 - 1	CCB80	-0.0507	-263	PPB	SMPL		7471B	23 Oct 2025 14:38:01
U	Q3419-02 - 1	Q3419-01MS	24.2730	120077	PPB	SMPL		7471B	23 Oct 2025 14:40:40
U	Q3419-03 - 1	Q3419-01MSD	26.0079	128660	PPB	SMPL		7471B	23 Oct 2025 14:42:56
U	Q3419-04 - 1	PR-132-S16-119133-20251021	37.6620	186318	PPB	SMPL		7471B	23 Oct 2025 14:45:51
U	Q3419-05 - 1	PR-132-S16-094119-20251021	57.1330	282650	PPB	SMPL		7471B	23 Oct 2025 14:48:47
U	Q3422-01 - 1	PR132-S15-000008-20251017	39.8696	197240	PPB	SMPL		7471B	23 Oct 2025 14:51:48
U	Q3424-01 - 1	PR132-DP3-20251021	62.2466	307949	PPB	SMPL		7471B	23 Oct 2025 14:54:53
U	Q3424-02 - 1	PR132-S11-010080-20251021	36.3475	179815	PPB	SMPL		7471B	23 Oct 2025 14:57:53
U	Q3424-03 - 1	PR132-S14-00094-20251021	42.7913	211695	PPB	SMPL		7471B	23 Oct 2025 15:01:02
U	Q3427-01 - 1	TP-8	0.0318	145	PPB	SMPL		7471B	23 Oct 2025 15:04:05
U	Q3431-01 - 1	EO-02-10222025	0.4918	2421	PPB	SMPL		7471B	23 Oct 2025 15:07:04
U	CCV81 - 1	CCV81	4.8646	24055	PPB	SMPL		7471B	23 Oct 2025 15:09:20
U	CCB81 - 1	CCB81	-0.0549	-284	PPB	SMPL		7471B	23 Oct 2025 15:11:35
U	Q3434-01 - 1	PR132-WC1-20251022	60.7390	300490	PPB	SMPL		7471B	23 Oct 2025 15:14:13
U	Q3439-01 - 1	TP-9	-0.0254	-138	PPB	SMPL		7471B	23 Oct 2025 15:16:28
U	Q3439-05 - 1	TP-10	0.0227	100	PPB	SMPL		7471B	23 Oct 2025 15:19:38
U	Q3419-01LX5 - 1		3.9397	19479	PPB	SMPL		7471B	23 Oct 2025 15:21:54
U	Q3419-01A - 1		23.1177	114361	PPB	SMPL		7471B	23 Oct 2025 15:24:10
U	Q3419-01 - 1	PR-132-S16-0150	18.5484	91755	PPB	SMPL		7471B	23 Oct 2025 15:26:45
U	CCV82 - 1	CCV82	5.0433	24939	PPB	SMPL		7471B	23 Oct 2025 15:29:41
U	CCB82 - 1	CCB82	-0.0533	-276	PPB	SMPL		7471B	23 Oct 2025 15:32:34
U	Q3419-01DUPDLX10 - 1		1.6379	8091	PPB	SMPL		7471B	23 Oct 2025 15:37:30
U	Q3419-02DLX10 - 1		2.3639	11683	PPB	SMPL		7471B	23 Oct 2025 15:39:48
U	Q3419-03DLX10 - 1		2.2006	10875	PPB	SMPL		7471B	23 Oct 2025 15:42:14
U	Q3419-04DLX10 - 1		4.0239	19896	PPB	SMPL		7471B	23 Oct 2025 15:44:38
U	Q3419-05DLX10 - 1		5.3806	26608	PPB	SMPL		7471B	23 Oct 2025 15:46:57
U	Q3422-01DLX10 - 1		4.0448	19999	PPB	SMPL		7471B	23 Oct 2025 15:49:19
U	Q3424-01DLX10 - 1		7.8874	39010	PPB	SMPL		7471B	23 Oct 2025 15:51:52
U	Q3424-02DLX10 - 1		8.9160	44099	PPB	SMPL		7471B	23 Oct 2025 15:54:18
U	Q3424-03DLX10 - 1		3.8752	19160	PPB	SMPL		7471B	23 Oct 2025 15:56:59
U	CCV83 - 1	CCV83	4.6813	23148	PPB	SMPL		7471B	23 Oct 2025 15:59:48
U	CCB83 - 1	CCB83	-0.0798	-407	PPB	SMPL		7471B	23 Oct 2025 16:02:25
U	Q3419-01DLX10 - 1		2.2824	11280	PPB	SMPL		7471B	23 Oct 2025 16:05:03
U	Q3434-01DLX10 - 1		7.0019	34629	PPB	SMPL		7471B	23 Oct 2025 16:07:19
U	Q3424-02DLX10 - 1		2.9701	14682	PPB	SMPL		7471B	23 Oct 2025 16:11:46
U	CCV84 - 1	CCV84	4.7136	23308	PPB	SMPL		7471B	23 Oct 2025 16:14:32
U	CCB84 - 1	CCB84	-0.0662	-340	PPB	SMPL		7471B	23 Oct 2025 16:16:52

Calibration for 003CALB.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P7102325 MS.b\
Analysis File: P7102325 MS.batch.bin
DA Date-Time: 2025-10-23 18:31:03
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2025-10-23 15:00:25
2	005CALS.d	S02	2025-10-23 15:03:58
3	006CALS.d	S03	2025-10-23 15:07:22
4	007CALS.d	S04	2025-10-23 15:10:38
5	008CALS.d	S05	2025-10-23 15:13:47
6	009CALS.d	S06	2025-10-23 15:16:48
7	010CALS.d	S07	2025-10-23 15:19:41
8	011CALS.d	S08	2025-10-23 15:22:29

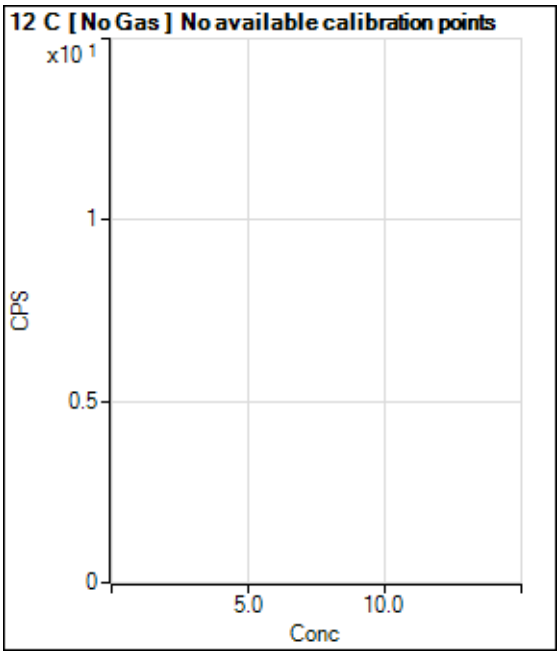
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	57.1
2	☐	1.000	1.037	857.81	0.0016	P	0.4
3	☐	50.000	52.214	42862.26	0.0810	P	1.1
4	☐	125.000	130.201	110255.56	0.2019	P	0.6
5	☐	250.000	252.501	216243.61	0.3915	P	0.3
6	☐	500.000	498.380	427349.35	0.7726	P	0.5
7	☐	1000.000	999.424	849936.13	1.5494	P	0.6
8	☐			312.23	0.0006	P	10.0

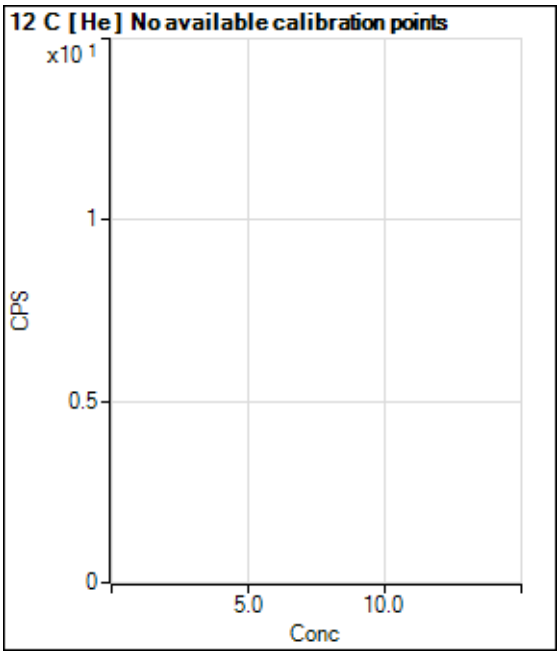
y = 0.0016 * x + 1.9073E-005
R = 1.0000
DL = 0.02109

Weight: <None>
Min Conc: <None>

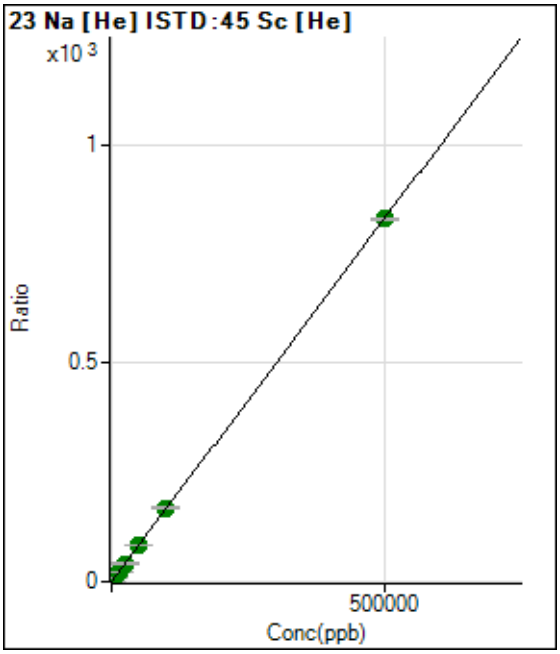


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

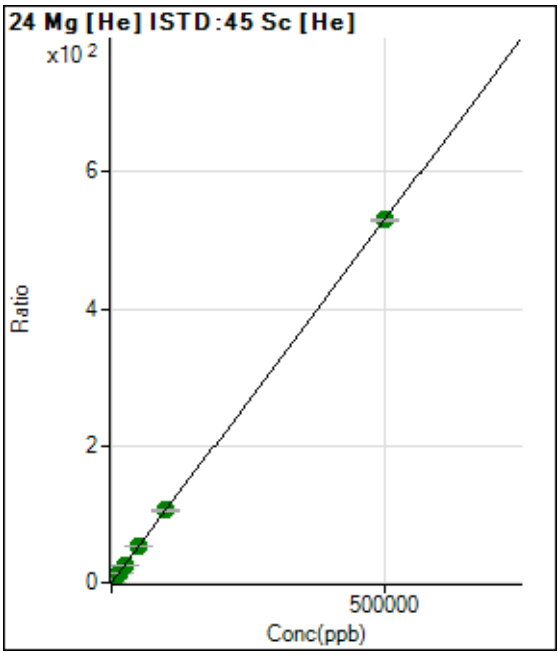


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18948.39	0.0781	P	1.1
2	☐	500.000	471.702	208289.33	0.8611	P	1.3
3	☐	5000.000	5169.228	2116550.58	8.6581	A	1.2
4	☐	12500.000	12774.182	5035721.38	21.2808	A	1.3
5	☐	25000.000	25032.422	9671683.40	41.6272	A	1.7
6	☐	50000.000	50094.706	19190611.24	83.2258	A	1.5
7	☐	100000.00	101549.17	39062284.14	168.6304	A	1.1
8	☐	500000.00	499670.55	208560130.2	829.4358	A	0.7

y = 0.0017 * x + 0.0781
R = 1.0000
DL = 1.538

Weight: <None>
Min Conc: <None>

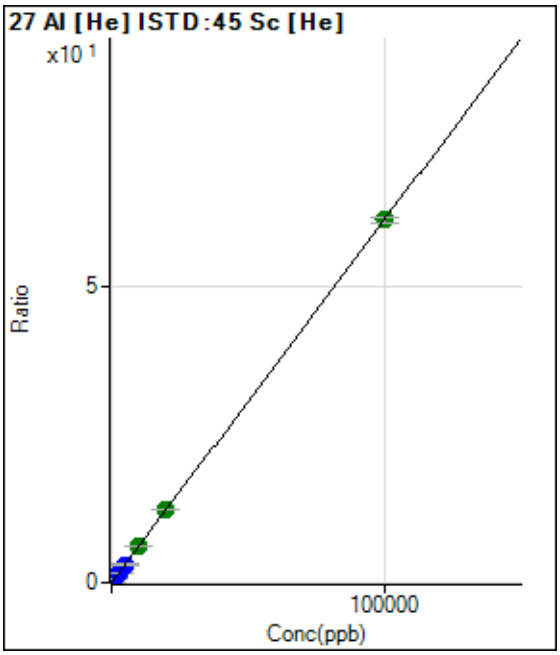
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	206.67	0.0009	P	9.2
2	☐	500.000	481.093	123557.03	0.5108	P	1.1
3	☐	5000.000	5032.591	1304128.82	5.3350	A	0.3
4	☐	12500.000	12910.734	3238692.69	13.6851	A	0.5
5	☐	25000.000	24939.129	6141827.96	26.4342	A	0.6
6	☐	50000.000	49439.304	12083103.85	52.4023	A	0.7
7	☐	100000.00	99508.104	24431508.52	105.4709	A	1.4
8	☐	500000.00	500146.91	133296522.4	530.1139	A	0.7

y = 0.0011 * x + 8.5262E-004
R = 1.0000
DL = 0.2222

Weight: <None>
Min Conc: <None>

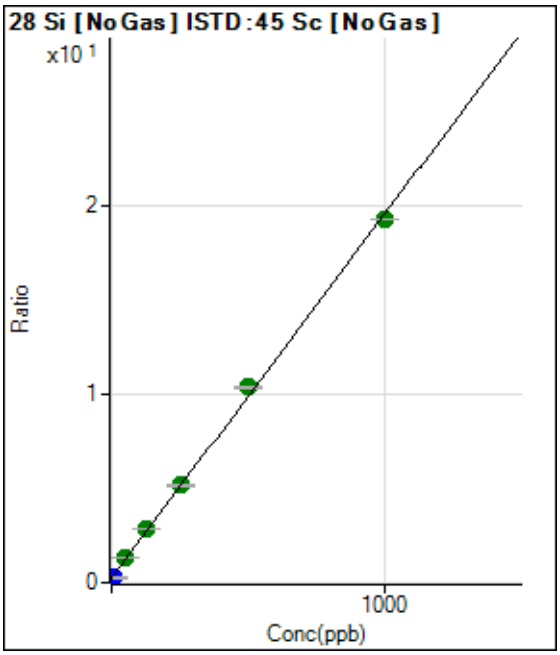


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	466.68	0.0019	P	2.0
2	☐	20.000	20.844	3554.89	0.0147	P	2.3
3	☐	1000.000	1018.534	152999.70	0.6259	P	0.7
4	☐	2500.000	2582.545	374863.26	1.5840	P	0.5
5	☐	5000.000	5020.814	715081.03	3.0777	P	0.7
6	☐	10000.000	10100.737	1427228.97	6.1897	A	1.0
7	☐	20000.000	20053.548	2846293.61	12.2869	A	0.4
8	☐	100000.00	99975.927	15400455.32	61.2482	A	1.3

y = 6.1261E-004 * x + 0.0019
R = 1.0000
DL = 0.1847

Weight: <None>
Min Conc: <None>

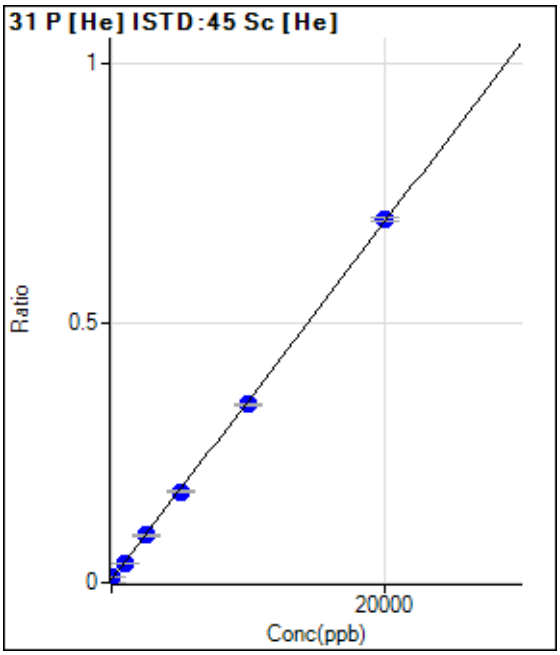
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	578239.37	0.2457	P	2.3
2	☐	10.000	0.500	597891.88	0.2554	P	2.3
3	☐	50.000	57.617	3134055.44	1.3587	A	0.6
4	☐	125.000	135.273	6640380.25	2.8589	A	1.8
5	☐	250.000	256.188	12016255.79	5.1947	A	1.7
6	☐	500.000	524.482	23828648.26	10.3775	A	1.6
7	☐	1000.000	984.642	43092974.91	19.2667	A	0.1
8	☐			633235.58	0.2707	P	1.9

y = 0.0193 * x + 0.2457
R = 0.9994
DL = 0.8695

Weight: <None>
Min Conc: <None>

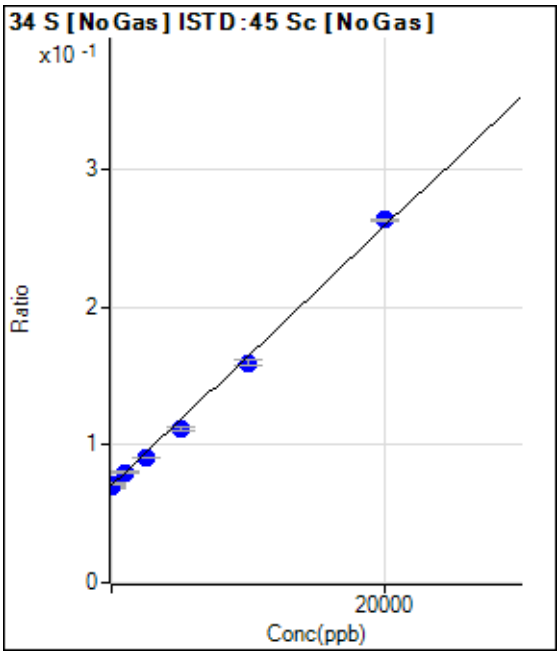


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-125.210	338.90	0.0014	P	3.5
2	☐	0.000	125.210	2426.88	0.0100	P	4.5
3	☐	1000.000	888.152	8885.99	0.0364	P	0.5
4	☐	2500.000	2486.930	21654.31	0.0915	P	1.5
5	☐	5000.000	4934.607	40873.33	0.1759	P	0.7
6	☐	10000.000	9810.226	79342.08	0.3441	P	1.2
7	☐	20000.000	20118.461	162069.17	0.6996	P	0.9
8	☐			366.67	0.0015	P	15.7

y = 3.4492E-005 * x + 0.0057
R = 0.9999
DL = 21.86

Weight: <None>
Min Conc: <None>

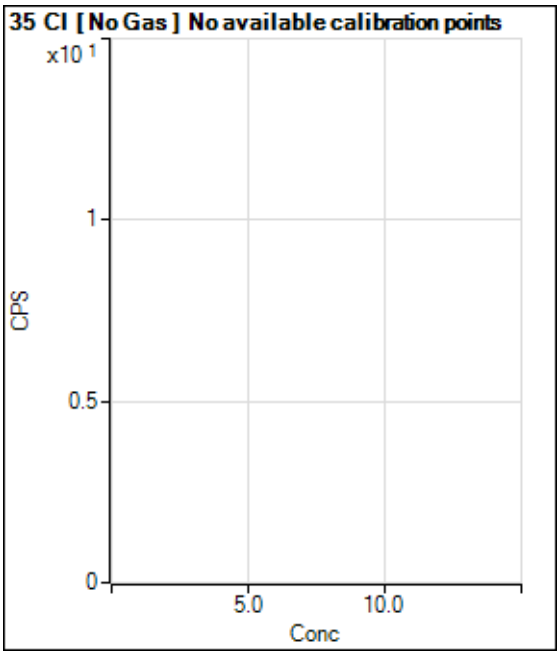
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-105.673	164367.05	0.0698	P	2.0
2	☐	0.000	105.673	168176.66	0.0718	P	1.9
3	☐	1000.000	983.358	184761.83	0.0801	P	0.9
4	☐	2500.000	2133.309	211234.50	0.0909	P	1.2
5	☐	5000.000	4373.524	259179.53	0.1121	P	2.6
6	☐	10000.000	9453.615	367200.15	0.1599	P	2.4
7	☐	20000.000	20476.480	590107.07	0.2638	P	0.6
8	☐			156536.86	0.0669	P	4.0

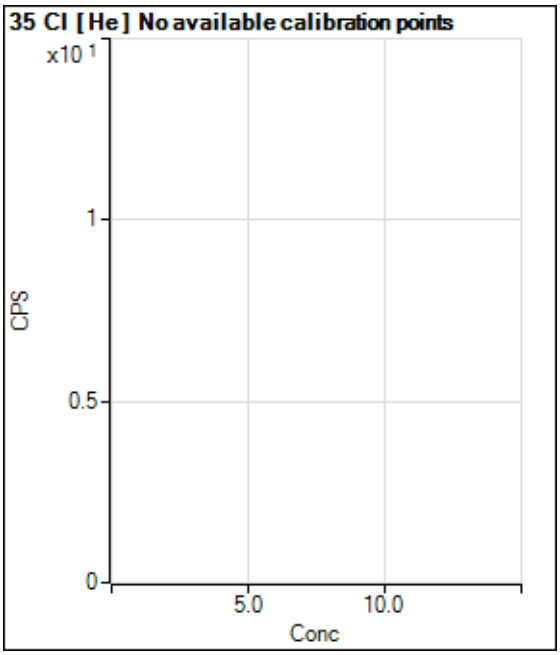
y = 9.4259E-006 * x + 0.0708
R = 0.9988
DL = 443.6

Weight: <None>
Min Conc: <None>

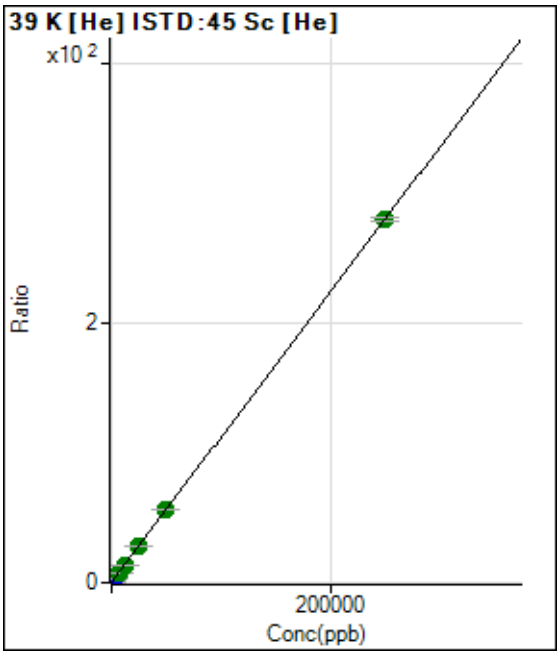


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

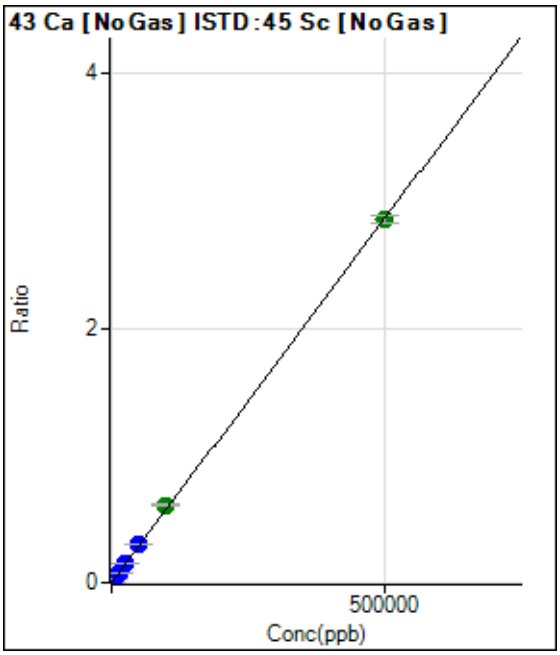


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52434.42	0.2162	P	1.9
2	☐	500.000	507.022	189144.13	0.7819	P	0.9
3	☐	2500.000	2657.682	777651.30	3.1812	P	0.4
4	☐	6250.000	6409.283	1743329.75	7.3667	A	0.4
5	☐	12500.000	12320.989	3243999.40	13.9620	A	0.2
6	☐	25000.000	24525.198	6359102.47	27.5775	A	0.1
7	☐	50000.000	49837.614	12929838.00	55.8170	A	0.9
8	☐	250000.00	250083.33	70209576.18	279.2191	A	0.9

y = 0.0011 * x + 0.2162
R = 1.0000
DL = 11.17

Weight: <None>
Min Conc: <None>

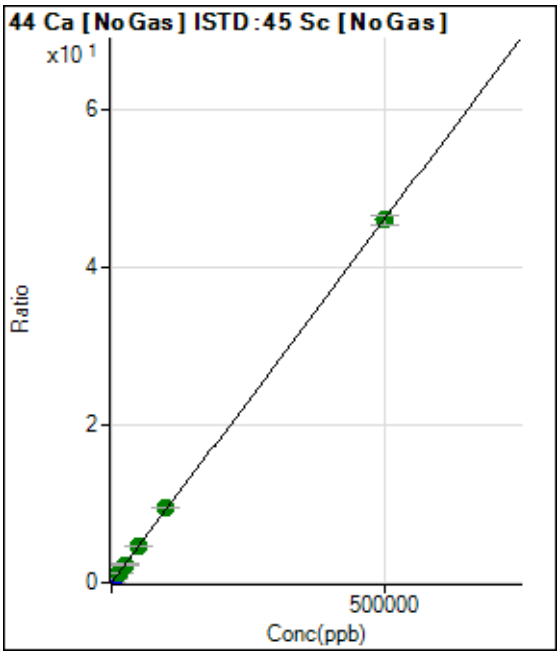
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	168.89	0.0001	P	22.5
2	☐	500.000	501.822	6884.96	0.0029	P	0.9
3	☐	5000.000	5378.835	71087.86	0.0308	P	1.6
4	☐	12500.000	13584.885	180529.27	0.0777	P	2.5
5	☐	25000.000	26315.418	348137.38	0.1505	P	1.8
6	☐	50000.000	52523.513	689629.28	0.3003	P	1.1
7	☐	100000.00	106050.79	1356233.36	0.6063	A	2.1
8	☐	500000.00	498440.80	6665306.43	2.8494	A	1.9

y = 5.7165E-006 * x + 7.1675E-005
R = 0.9999
DL = 8.451

Weight: <None>
Min Conc: <None>

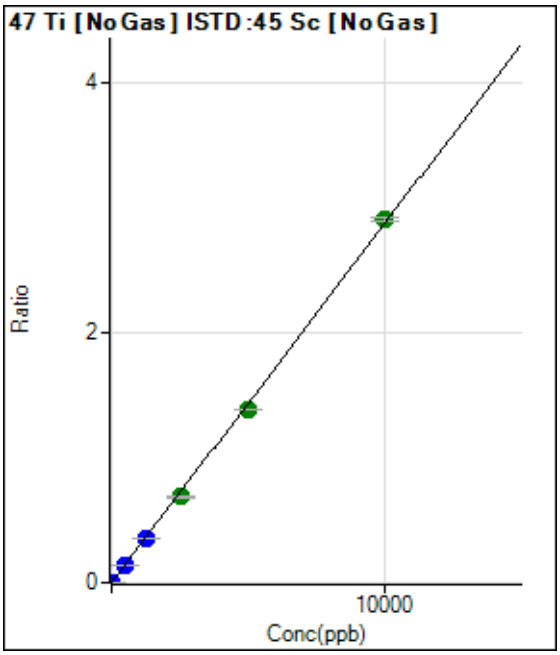


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14197.86	0.0060	P	3.3
2	☐	500.000	502.575	122542.52	0.0523	P	1.0
3	☐	5000.000	5376.997	1156549.84	0.5014	P	1.3
4	☐	12500.000	12982.884	2792391.66	1.2021	A	1.2
5	☐	25000.000	25003.159	5343395.44	2.3095	A	0.9
6	☐	50000.000	49698.516	10527450.82	4.5846	A	1.3
7	☐	100000.00	103835.78	21408666.49	9.5722	A	0.9
8	☐	500000.00	499246.98	107600435.0	46.0006	A	2.6

y = 9.2128E-005 * x + 0.0060
R = 1.0000
DL = 6.429

Weight: <None>
Min Conc: <None>

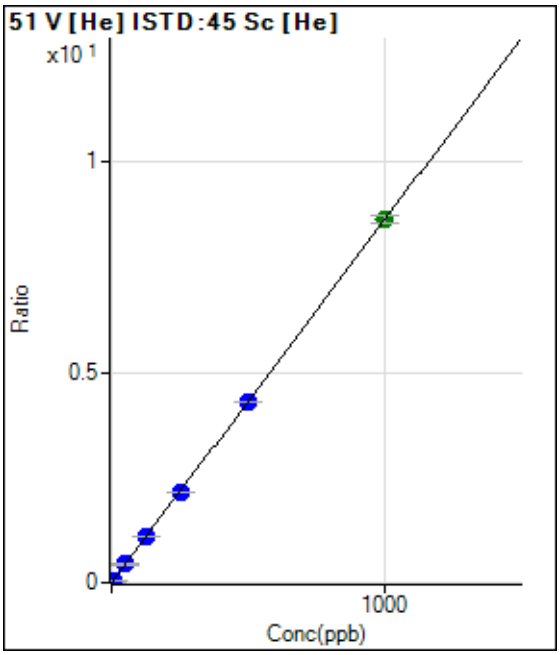
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64.44	0.0000	P	20.3
2	☐	5.000	4.863	3335.96	0.0014	P	6.4
3	☐	500.000	495.026	328293.28	0.1423	P	1.6
4	☐	1250.000	1244.871	831198.61	0.3579	P	1.8
5	☐	2500.000	2395.844	1592999.52	0.6887	A	2.3
6	☐	5000.000	4833.952	3191460.02	1.3896	A	0.6
7	☐	10000.000	10109.953	6499763.58	2.9062	A	1.0
8	☐			1013.38	0.0004	P	3.2

y = 2.8745E-004 * x + 2.7405E-005
R = 0.9997
DL = 0.05815

Weight: <None>
Min Conc: <None>

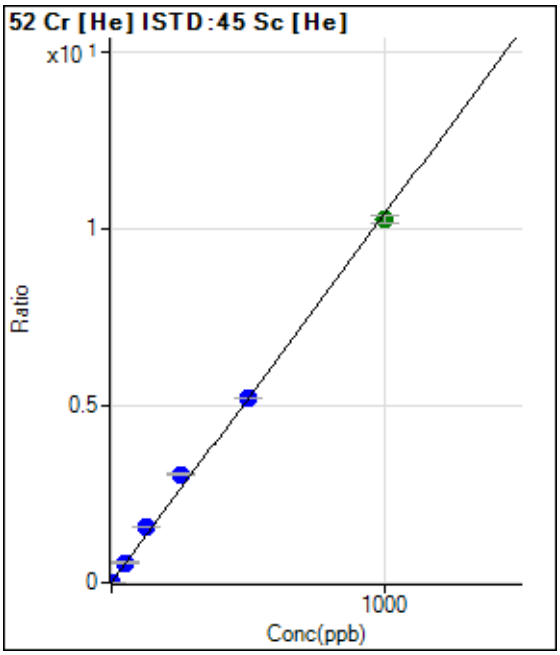


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15.56	0.0001	P	13.4
2	☐	5.000	4.901	10250.22	0.0424	P	1.3
3	☐	50.000	50.395	106350.33	0.4351	P	1.4
4	☐	125.000	128.692	262883.19	1.1109	P	0.7
5	☐	250.000	250.108	501597.69	2.1589	P	1.1
6	☐	500.000	498.704	992598.49	4.3047	P	0.5
7	☐	1000.000	1000.140	1999690.28	8.6329	A	2.2
8	☐			3742.73	0.0149	P	1.5

y = 0.0086 * x + 6.4213E-005
R = 1.0000
DL = 0.002988

Weight: <None>
Min Conc: <None>

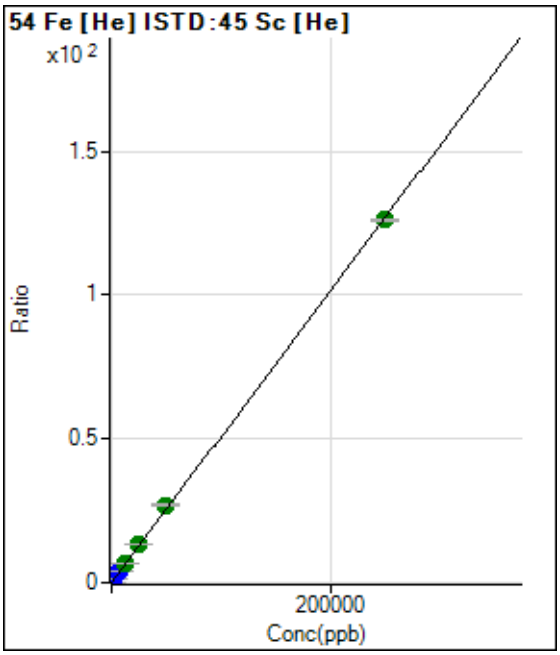
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1452.31	0.0060	P	6.5
2	☐	2.000	1.966	6405.86	0.0265	P	3.2
3	☐	50.000	54.170	139510.91	0.5707	P	0.3
4	☐	125.000	150.832	373509.76	1.5784	P	0.9
5	☐	250.000	294.342	714326.21	3.0745	P	1.0
6	☐	500.000	501.932	1207956.41	5.2386	P	0.4
7	☐	1000.000	984.511	2378894.82	10.2695	A	2.1
8	☐			40621.26	0.1615	P	0.1

y = 0.0104 * x + 0.0060
R = 0.9987
DL = 0.1116

Weight: <None>
Min Conc: <None>

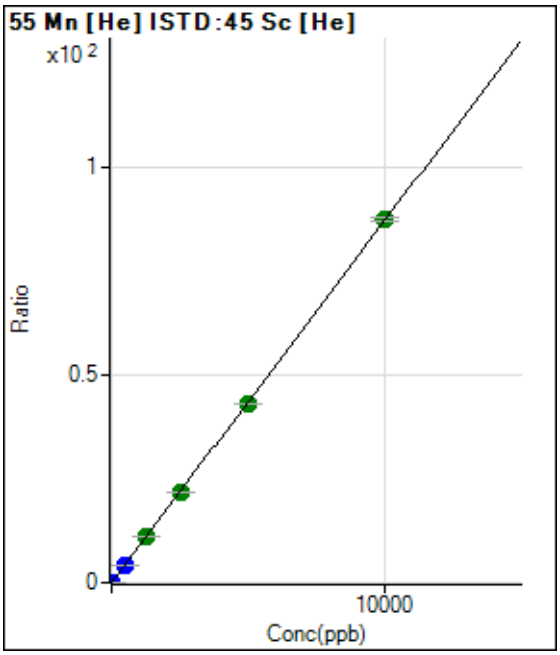


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2383.54	0.0098	P	8.1
2	☐	50.000	53.281	8903.81	0.0368	P	1.0
3	☐	2500.000	2840.829	354005.73	1.4482	P	0.3
4	☐	6250.000	7304.302	877515.89	3.7081	P	0.3
5	☐	12500.000	13425.165	1581531.14	6.8072	A	2.4
6	☐	25000.000	26764.781	3127027.00	13.5612	A	0.4
7	☐	50000.000	53108.323	6230981.02	26.8993	A	1.6
8	☐	250000.00	249125.83	31720035.36	126.1457	A	0.4

y = 5.0631E-004 * x + 0.0098
R = 0.9999
DL = 4.72

Weight: <None>
Min Conc: <None>

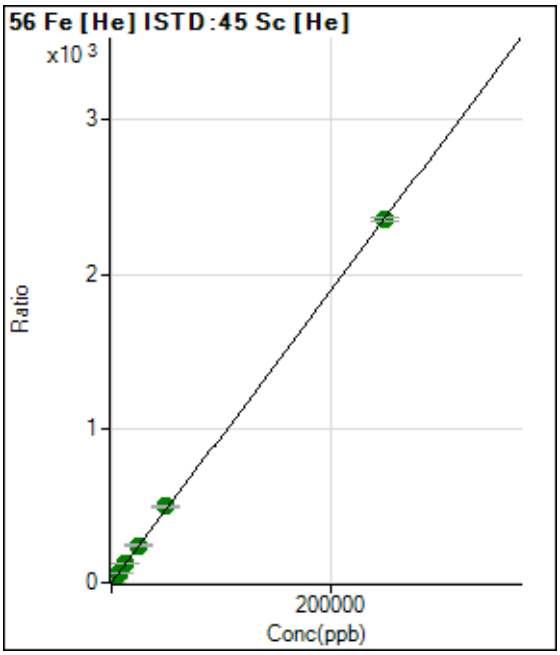
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	743.36	0.0031	P	9.3
2	☐	1.000	0.974	2796.96	0.0116	P	7.1
3	☐	500.000	502.668	1073019.72	4.3896	P	0.8
4	☐	1250.000	1277.499	2638730.46	11.1511	A	1.2
5	☐	2500.000	2481.527	5032011.14	21.6579	A	0.7
6	☐	5000.000	4941.772	9944576.03	43.1270	A	0.6
7	☐	10000.000	10030.161	20276871.36	87.5305	A	1.1
8	☐			19431.51	0.0773	P	0.8

y = 0.0087 * x + 0.0031
R = 1.0000
DL = 0.09818

Weight: <None>
Min Conc: <None>

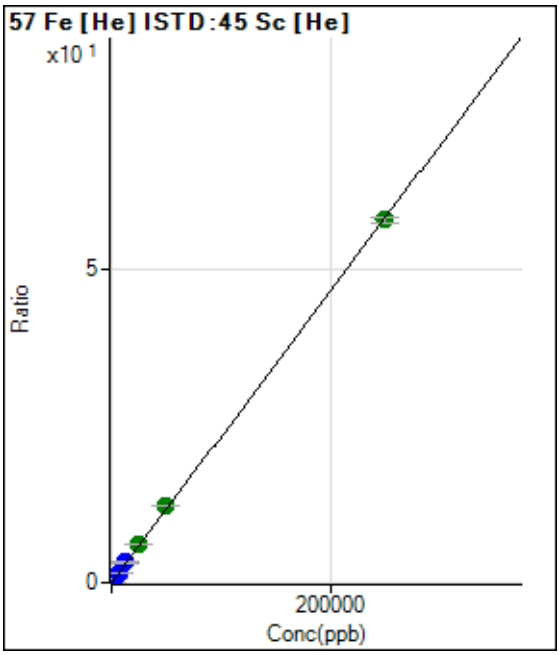


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24922.92	0.1028	P	0.5
2	☐	50.000	51.924	143325.51	0.5925	P	1.5
3	☐	2500.000	2613.568	6051031.51	24.7535	A	0.8
4	☐	6250.000	6770.017	15134054.64	63.9564	A	1.6
5	☐	12500.000	13185.108	28918226.51	124.4624	A	0.2
6	☐	25000.000	25733.067	55989924.17	242.8126	A	0.9
7	☐	50000.000	52328.129	114353849.4	493.6527	A	0.7
8	☐	250000.00	249412.67	591566404.5	2,352.520	A	1.2

y = 0.0094 * x + 0.1028
R = 1.0000
DL = 0.1502

Weight: <None>
Min Conc: <None>

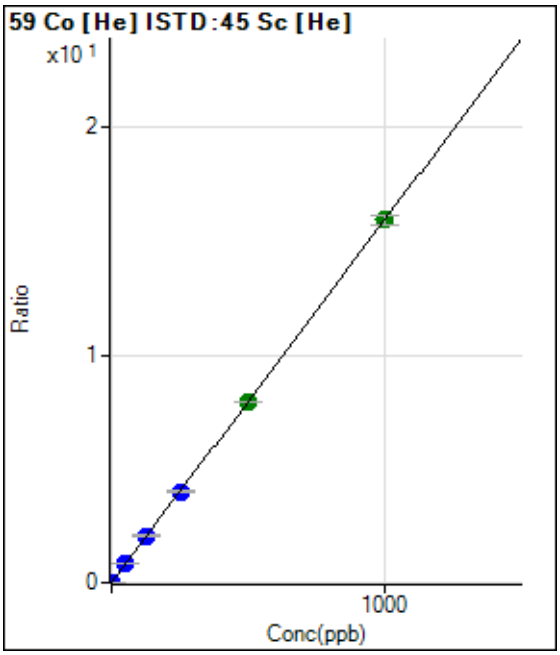
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1431.19	0.0059	P	1.2
2	☐	50.000	54.939	4517.39	0.0187	P	1.3
3	☐	2500.000	2791.446	160086.58	0.6549	P	1.0
4	☐	6250.000	7164.717	395608.99	1.6717	P	0.7
5	☐	12500.000	13934.733	754088.43	3.2457	P	1.5
6	☐	25000.000	26176.056	1404700.95	6.0918	A	2.3
7	☐	50000.000	52647.480	2836871.73	12.2463	A	1.3
8	☐	250000.00	249255.37	14572636.03	57.9571	A	1.7

y = 2.3250E-004 * x + 0.0059
R = 0.9999
DL = 0.9411

Weight: <None>
Min Conc: <None>

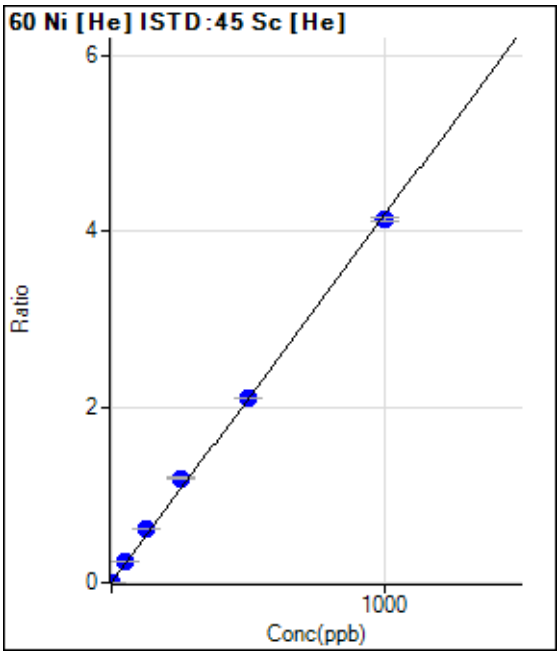


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	134.45	0.0006	P	7.1
2	☐	1.000	1.029	4098.37	0.0169	P	0.9
3	☐	50.000	50.604	197074.74	0.8062	P	0.6
4	☐	125.000	129.235	487006.49	2.0580	P	1.1
5	☐	250.000	251.343	929818.50	4.0021	P	1.3
6	☐	500.000	496.807	1823948.64	7.9100	A	0.2
7	☐	1000.000	1000.701	3690422.51	15.9322	A	2.8
8	☐			13469.48	0.0536	P	1.9

y = 0.0159 * x + 5.5466E-004
R = 1.0000
DL = 0.007387

Weight: <None>
Min Conc: <None>

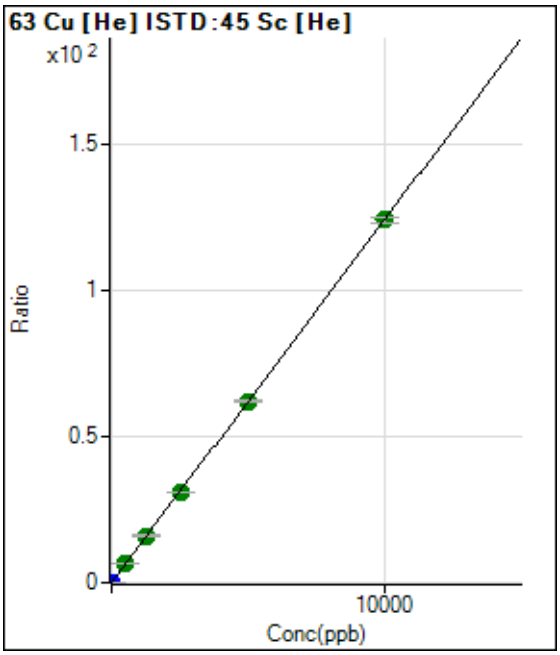
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	388.90	0.0016	P	4.4
2	☐	1.000	0.832	1230.06	0.0051	P	5.0
3	☐	50.000	58.822	60557.18	0.2477	P	0.5
4	☐	125.000	147.570	146505.80	0.6191	P	0.2
5	☐	250.000	283.414	275897.81	1.1875	P	1.1
6	☐	500.000	503.128	485808.94	2.1068	P	0.3
7	☐	1000.000	986.820	956879.07	4.1307	P	1.0
8	☐			12414.12	0.0494	P	1.9

y = 0.0042 * x + 0.0016
R = 0.9992
DL = 0.05066

Weight: <None>
Min Conc: <None>

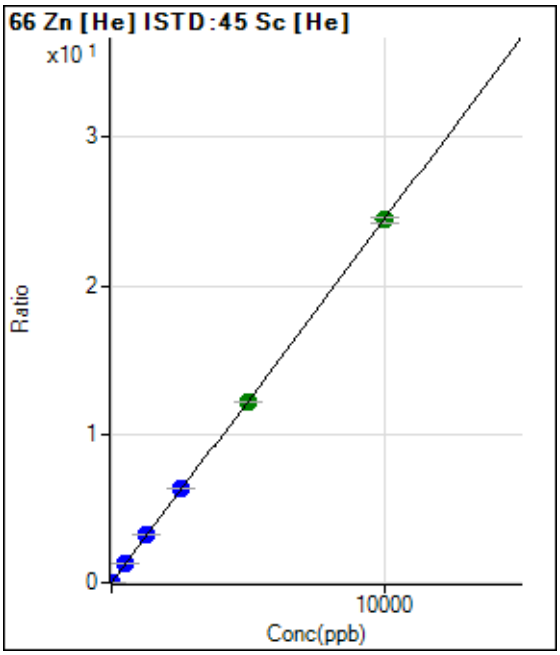


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	778.92	0.0032	P	7.4
2	☐	2.000	1.892	6450.34	0.0267	P	2.1
3	☐	500.000	507.859	1539802.53	6.2991	A	0.3
4	☐	1250.000	1295.271	3800923.56	16.0605	A	0.6
5	☐	2500.000	2504.049	7213303.50	31.0456	A	0.1
6	☐	5000.000	4985.610	14253174.51	61.8092	A	1.1
7	☐	10000.000	10000.131	28719119.29	123.9736	A	1.3
8	☐			9068.37	0.0361	P	1.4

y = 0.0124 * x + 0.0032
R = 1.0000
DL = 0.05735

Weight: <None>
Min Conc: <None>

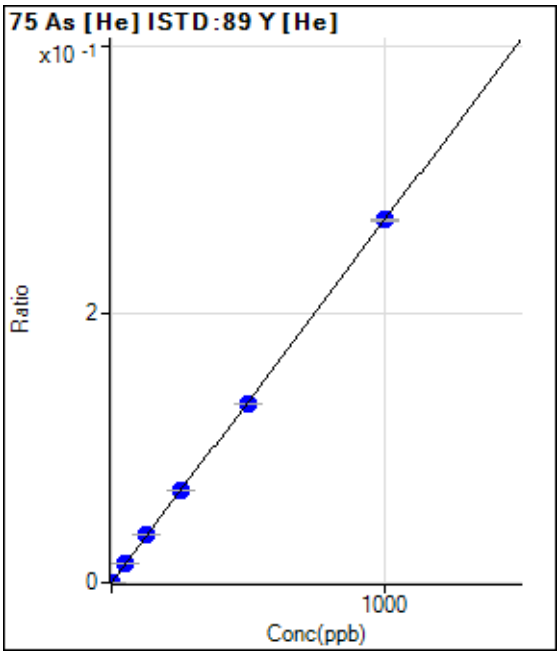
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1427.86	0.0059	P	8.3
2	☐	5.000	5.140	4469.60	0.0185	P	1.4
3	☐	500.000	516.413	310550.52	1.2704	P	0.6
4	☐	1250.000	1324.036	768629.33	3.2480	P	0.5
5	☐	2500.000	2572.713	1465073.68	6.3056	P	0.3
6	☐	5000.000	4981.120	2813903.39	12.2030	A	0.3
7	☐	10000.000	9981.186	5662857.07	24.4465	A	1.8
8	☐			10336.99	0.0411	P	1.6

y = 0.0024 * x + 0.0059
R = 0.9999
DL = 0.6024

Weight: <None>
Min Conc: <None>

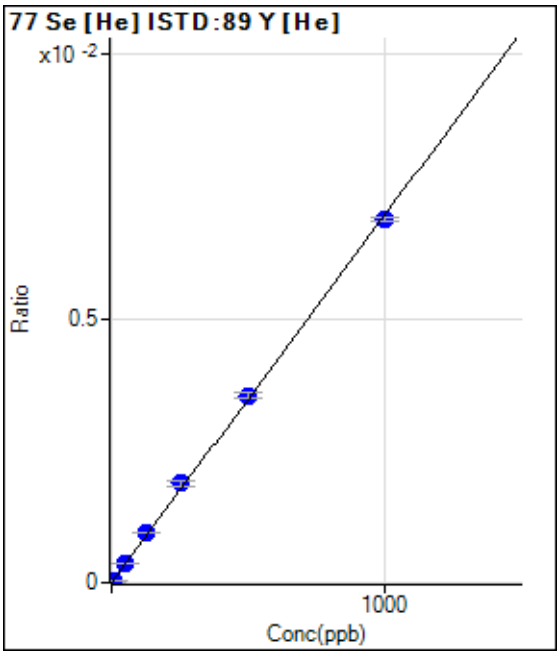


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.17	0.0000	P	16.9
2	☐	1.000	1.278	672.71	0.0004	P	5.6
3	☐	50.000	51.097	26671.15	0.0138	P	1.7
4	☐	125.000	130.335	66873.38	0.0352	P	0.2
5	☐	250.000	253.899	127604.28	0.0685	P	1.4
6	☐	500.000	494.584	248640.68	0.1335	P	0.6
7	☐	1000.000	1001.011	504735.03	0.2702	P	0.6
8	☐			1185.71	0.0006	P	2.8

y = 2.6996E-004 * x + 5.7810E-006
R = 1.0000
DL = 0.01085

Weight: <None>
Min Conc: <None>

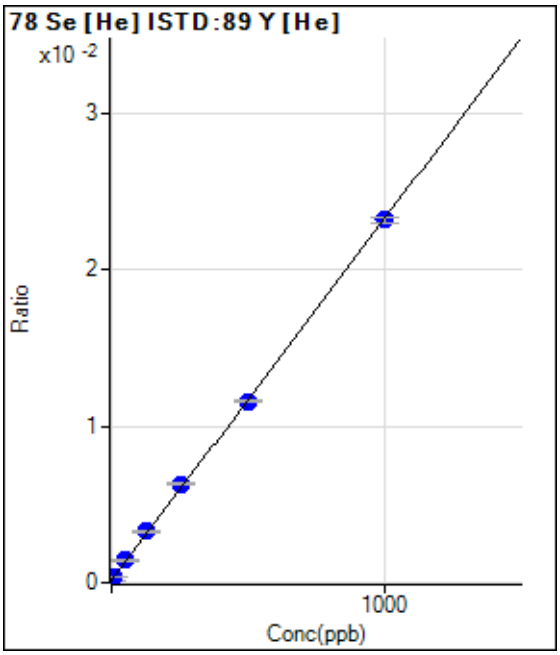
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.33	0.0000	P	1.5
2	☐	5.000	5.166	72.22	0.0000	P	5.4
3	☐	50.000	53.479	722.25	0.0004	P	2.2
4	☐	125.000	136.717	1810.13	0.0010	P	2.0
5	☐	250.000	270.859	3508.24	0.0019	P	5.0
6	☐	500.000	510.364	6612.64	0.0036	P	2.3
7	☐	1000.000	987.964	12833.42	0.0069	P	1.1
8	☐			6.67	0.0000	P	100.

y = 6.9536E-006 * x + 1.7246E-006
R = 0.9996
DL = 0.01109

Weight: <None>
Min Conc: <None>

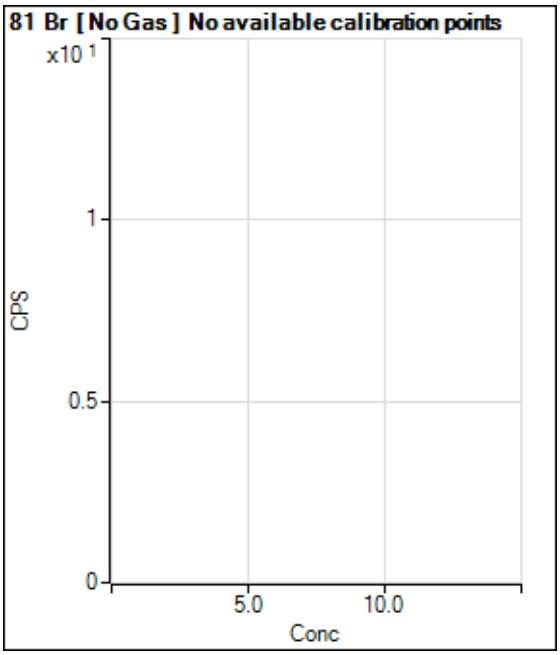


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	310.01	0.0002	P	3.2
2	☐	5.000	6.662	603.35	0.0003	P	2.7
3	☐	50.000	55.174	2774.73	0.0014	P	5.1
4	☐	125.000	134.053	6194.69	0.0033	P	4.3
5	☐	250.000	266.787	11779.23	0.0063	P	3.2
6	☐	500.000	495.317	21623.67	0.0116	P	1.0
7	☐	1000.000	996.746	43336.64	0.0232	P	1.7
8	☐			383.34	0.0002	P	4.7

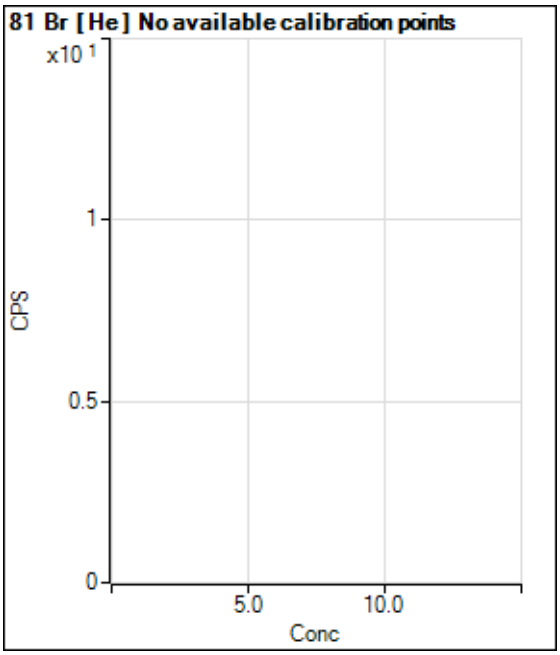
y = 2.3120E-005 * x + 1.6050E-004
R = 0.9998
DL = 0.667

Weight: <None>
Min Conc: <None>

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

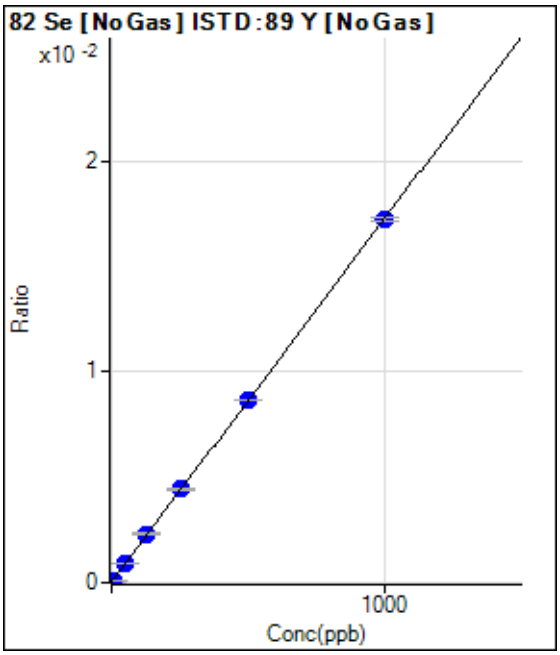


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			7975.57		P	1.6
2	☐			7873.30		P	0.5
3	☐			8100.07		P	1.3
4	☐			7817.70		P	0.8
5	☐			7568.67		P	2.7
6	☐			7500.87		P	1.5
7	☐			7348.57		P	1.5
8	☐			7957.77		P	4.3



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			152.23		P	8.3
2	☐			127.78		P	14.4
3	☐			140.00		P	12.6
4	☐			126.67		P	7.0
5	☐			113.34		P	15.6
6	☐			147.78		P	19.4
7	☐			140.00		P	4.8
8	☐			144.45		P	2.7

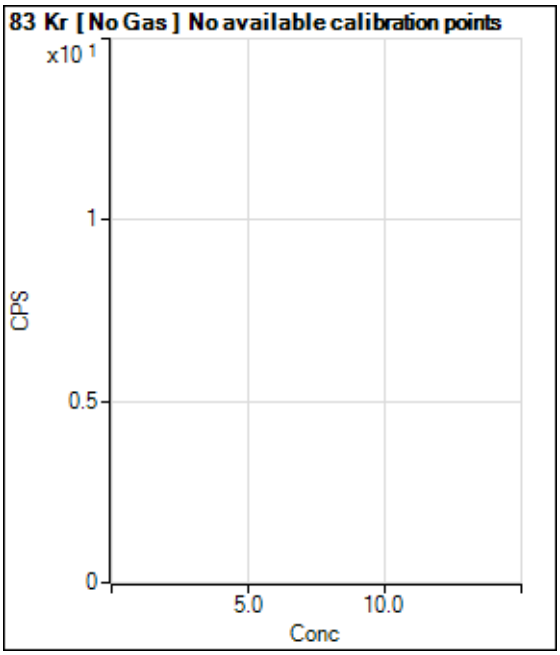
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	134.37	0.0000	P	8.3
2	☐	5.000	4.695	676.25	0.0001	P	11.7
3	☐	50.000	51.687	6141.76	0.0009	P	2.4
4	☐	125.000	132.852	15375.78	0.0023	P	3.4
5	☐	250.000	255.837	29456.40	0.0044	P	2.5
6	☐	500.000	501.221	57501.94	0.0087	P	0.9
7	☐	1000.000	996.866	112665.08	0.0172	P	1.0
8	☐			240.58	0.0000	P	14.6

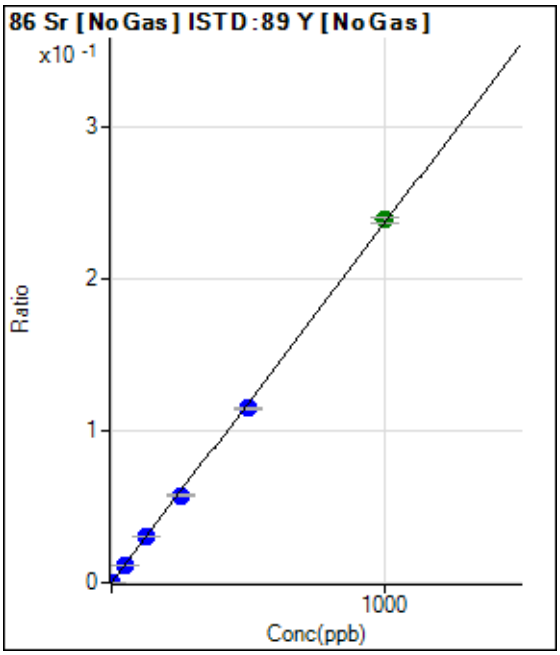
y = 1.7240E-005 * x + 1.9921E-005
R = 1.0000
DL = 0.2873

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			372.23		P	3.1
2	☐			426.68		P	15.1
3	☐			344.45		P	3.0
4	☐			384.45		P	1.3
5	☐			404.45		P	7.1
6	☐			336.67		P	6.5
7	☐			378.90		P	13.2
8	☐			391.12		P	7.1

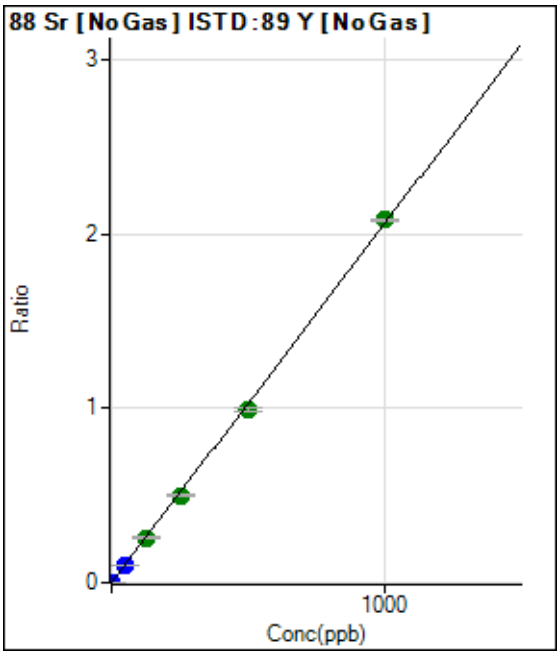
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	621.13	0.0001	P	3.1
2	☐	1.000	0.934	2097.95	0.0003	P	9.7
3	☐	50.000	48.823	78376.25	0.0116	P	1.4
4	☐	125.000	127.070	200413.40	0.0301	P	1.4
5	☐	250.000	242.841	381959.10	0.0575	P	2.6
6	☐	500.000	484.593	760591.34	0.1146	P	0.7
7	☐	1000.000	1009.294	1561589.64	0.2385	A	1.3
8	☐			20759.17	0.0031	P	3.7

y = 2.3620E-004 * x + 9.2129E-005
R = 0.9998
DL = 0.03616

Weight: <None>
Min Conc: <None>

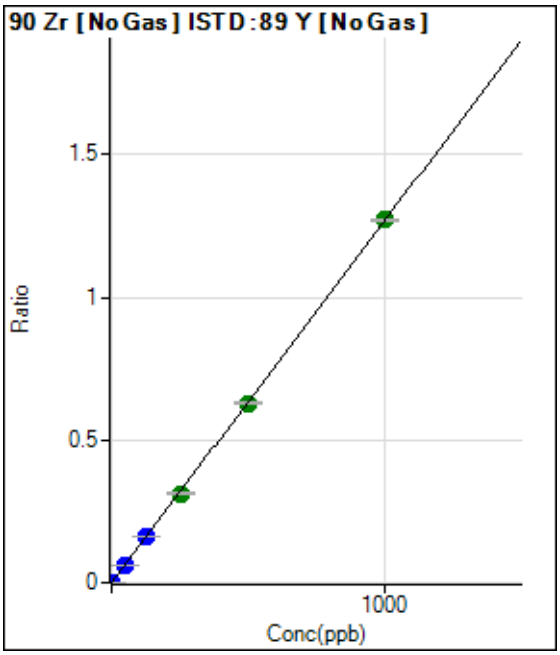


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.56	0.0000	P	13.9
2	☐	1.000	0.935	13044.78	0.0019	P	0.6
3	☐	50.000	49.157	683263.54	0.1013	P	1.4
4	☐	125.000	125.820	1726647.32	0.2594	A	1.3
5	☐	250.000	243.481	3335854.08	0.5019	A	4.1
6	☐	500.000	480.971	6582672.12	0.9914	A	1.9
7	☐	1000.000	1011.084	13647592.02	2.0841	A	0.4
8	☐			180037.48	0.0269	P	2.4

y = 0.0021 * x + 1.8610E-005
R = 0.9997
DL = 0.003777

Weight: <None>
Min Conc: <None>

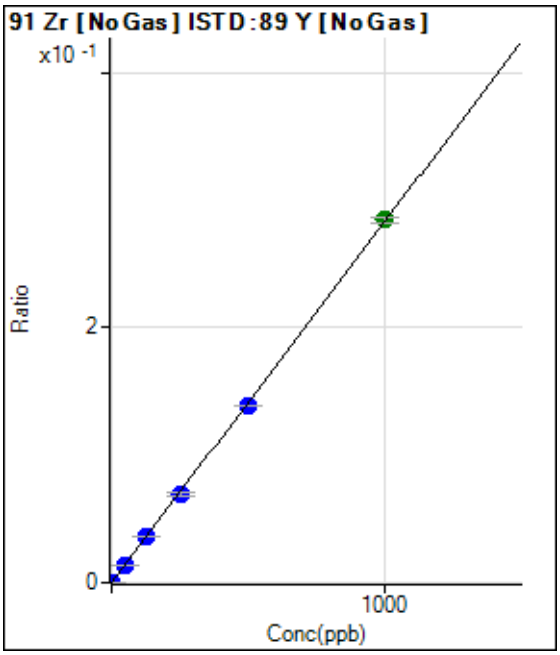
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	276.67	0.0000	P	12.9
2	☐	1.000	0.981	8610.39	0.0013	P	2.3
3	☐	50.000	49.368	422070.45	0.0626	P	1.1
4	☐	125.000	126.793	1069757.15	0.1607	P	2.3
5	☐	250.000	245.892	2071648.30	0.3116	A	3.0
6	☐	500.000	495.024	4165174.59	0.6273	A	0.9
7	☐	1000.000	1003.323	8325667.03	1.2715	A	0.9
8	☐			7978.91	0.0012	P	3.3

y = 0.0013 * x + 4.0997E-005
R = 1.0000
DL = 0.0125

Weight: <None>
Min Conc: <None>

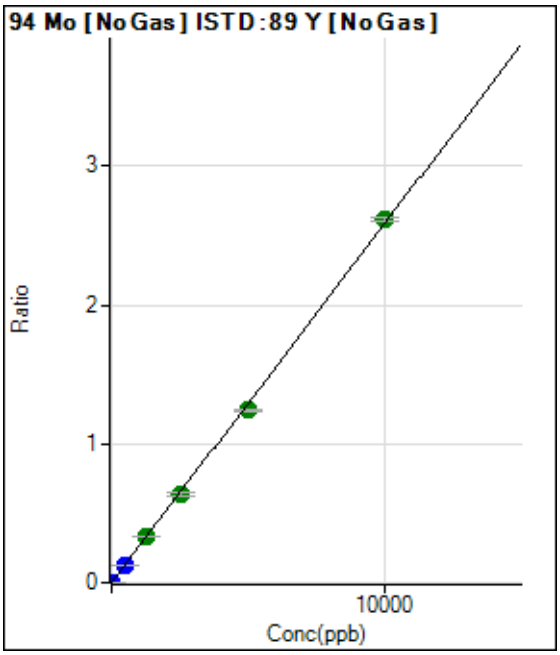


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0000	P	24.8
2	☐	1.000	1.006	1975.71	0.0003	P	4.9
3	☐	50.000	49.251	94029.98	0.0139	P	0.3
4	☐	125.000	127.592	240398.51	0.0361	P	1.8
5	☐	250.000	246.130	462980.77	0.0697	P	3.8
6	☐	500.000	488.810	918458.49	0.1383	P	0.3
7	☐	1000.000	1006.276	1864491.50	0.2848	A	1.7
8	☐			1775.68	0.0003	P	7.1

y = 2.8297E-004 * x + 9.8694E-006
R = 0.9999
DL = 0.02595

Weight: <None>
Min Conc: <None>

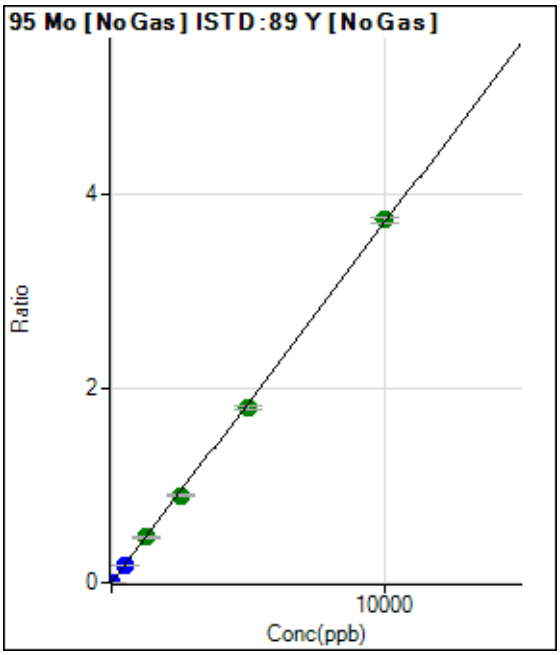
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	182.23	0.0000	P	20.3
2	☐	5.000	5.624	9927.89	0.0015	P	1.0
3	☐	500.000	490.963	855870.08	0.1269	P	0.7
4	☐	1250.000	1273.824	2192152.24	0.3293	A	1.8
5	☐	2500.000	2451.485	4211940.15	0.6337	A	4.2
6	☐	5000.000	4800.805	8239821.82	1.2410	A	1.3
7	☐	10000.000	10109.200	17111785.02	2.6133	A	1.1
8	☐			8709.33	0.0013	P	3.4

y = 2.5850E-004 * x + 2.6999E-005
R = 0.9997
DL = 0.06354

Weight: <None>
Min Conc: <None>

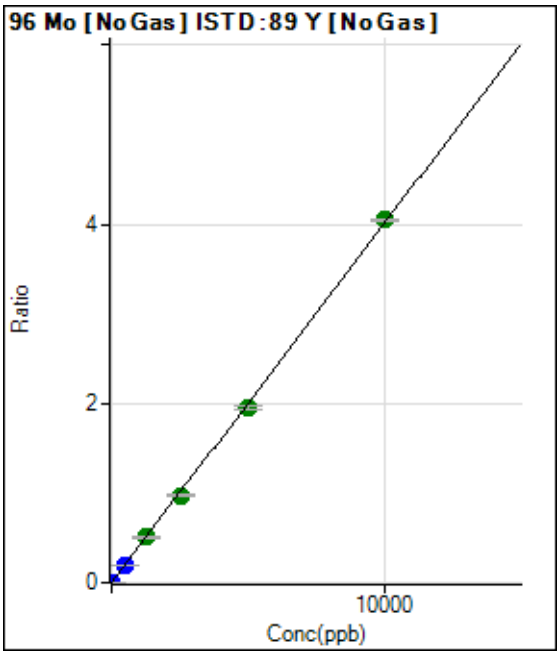


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	145.56	0.0000	P	7.7
2	☐	5.000	4.890	12319.70	0.0018	P	0.9
3	☐	500.000	489.427	1225543.54	0.1818	P	0.7
4	☐	1250.000	1266.053	3129643.11	0.4702	A	2.0
5	☐	2500.000	2429.480	5997286.79	0.9022	A	3.6
6	☐	5000.000	4865.195	11996960.79	1.8067	A	2.2
7	☐	10000.000	10083.554	24518269.64	3.7445	A	1.4
8	☐			9391.97	0.0014	P	1.0

y = 3.7134E-004 * x + 2.1594E-005
R = 0.9998
DL = 0.01351

Weight: <None>
Min Conc: <None>

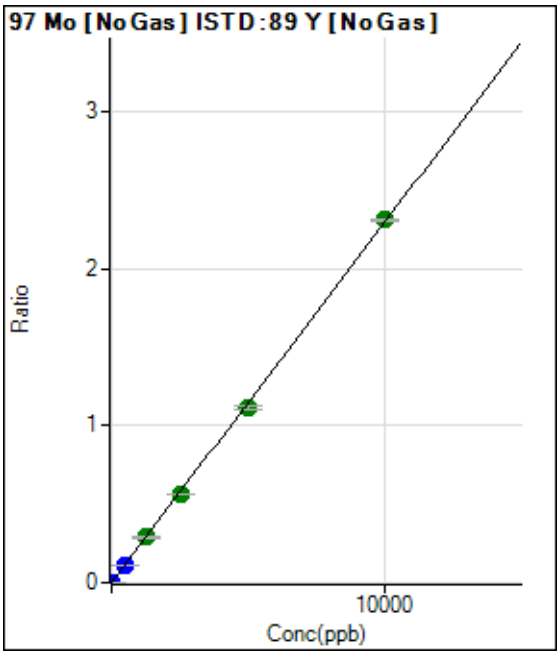
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	205.56	0.0000	P	1.4
2	☐	5.000	5.034	13737.65	0.0020	P	1.6
3	☐	500.000	494.295	1336485.76	0.1982	P	1.1
4	☐	1250.000	1269.857	3389362.38	0.5092	A	2.2
5	☐	2500.000	2427.752	6472203.45	0.9735	A	2.3
6	☐	5000.000	4847.242	12904317.72	1.9436	A	2.0
7	☐	10000.000	10092.244	26498967.94	4.0466	A	0.5
8	☐			13447.38	0.0020	P	5.3

y = 4.0096E-004 * x + 3.0480E-005
R = 0.9998
DL = 0.003259

Weight: <None>
Min Conc: <None>

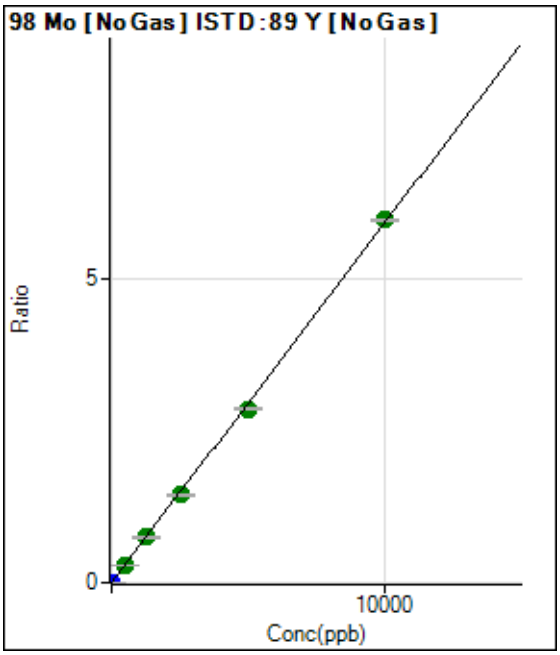


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	114.45	0.0000	P	18.4
2	☐	5.000	4.916	7672.09	0.0011	P	5.0
3	☐	500.000	494.618	765030.00	0.1135	P	0.9
4	☐	1250.000	1263.788	1929452.87	0.2899	A	3.1
5	☐	2500.000	2455.182	3744567.34	0.5632	A	2.0
6	☐	5000.000	4871.813	7420379.27	1.1175	A	2.5
7	☐	10000.000	10073.844	15131748.94	2.3107	A	0.4
8	☐			6040.19	0.0009	P	2.2

y = 2.2937E-004 * x + 1.6967E-005
R = 0.9999
DL = 0.0409

Weight: <None>
Min Conc: <None>

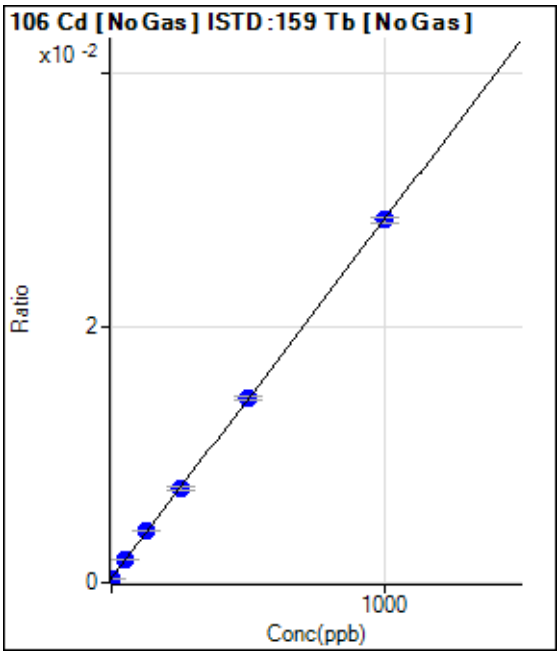
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	245.56	0.0000	P	10.1
2	☐	5.000	4.840	19406.32	0.0029	P	1.4
3	☐	500.000	494.203	1967617.23	0.2918	A	1.3
4	☐	1250.000	1268.523	4984875.83	0.7490	A	3.9
5	☐	2500.000	2444.513	9599274.51	1.4434	A	1.5
6	☐	5000.000	4838.108	18966955.83	2.8567	A	1.3
7	☐	10000.000	10092.792	39026835.53	5.9594	A	0.7
8	☐			15097.87	0.0023	P	2.1

y = 5.9046E-004 * x + 3.6407E-005
R = 0.9998
DL = 0.01877

Weight: <None>
Min Conc: <None>

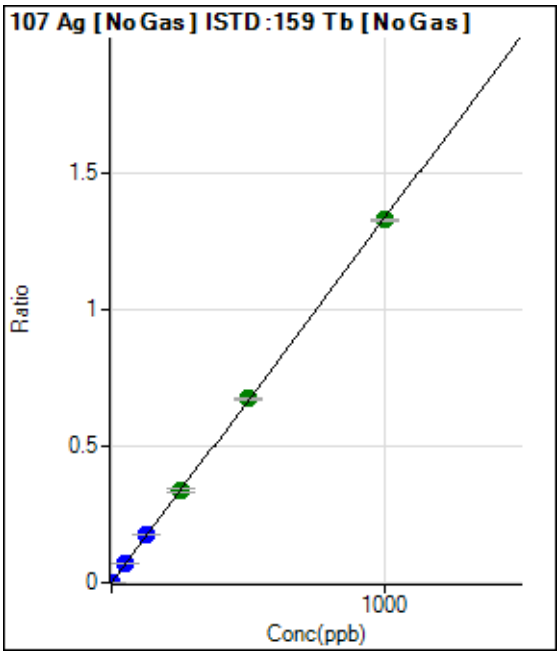


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1610.10	0.0003	P	6.1
2	☐	1.000	1.244	1760.12	0.0004	P	1.6
3	☐	50.000	53.287	8708.24	0.0018	P	3.7
4	☐	125.000	133.271	19690.13	0.0041	P	1.4
5	☐	250.000	250.479	35956.77	0.0074	P	3.2
6	☐	500.000	501.112	70088.16	0.0145	P	1.7
7	☐	1000.000	998.126	139163.47	0.0285	P	1.6
8	☐			1717.90	0.0004	P	4.5

y = 2.8177E-005 * x + 3.3829E-004
R = 1.0000
DL = 2.191

Weight: <None>
Min Conc: <None>

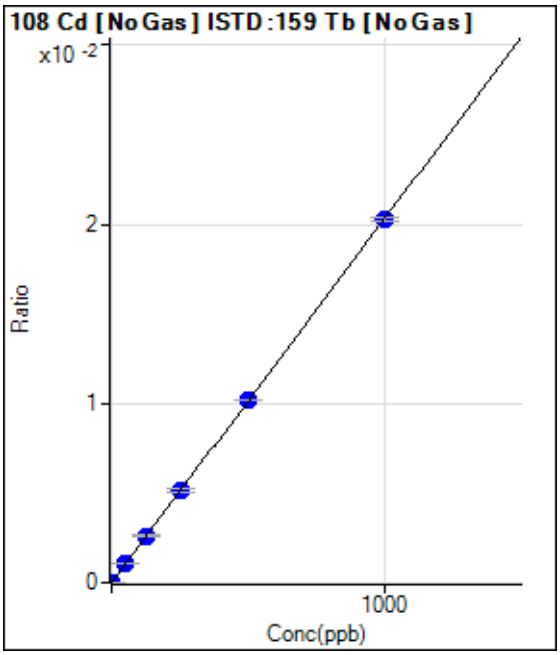
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.00	0.0000	P	22.4
2	☐	1.000	1.074	6801.66	0.0014	P	2.8
3	☐	50.000	53.957	341444.67	0.0721	P	2.1
4	☐	125.000	133.060	855665.49	0.1779	P	1.1
5	☐	250.000	252.795	1643026.82	0.3380	A	3.1
6	☐	500.000	504.600	3270339.19	0.6746	A	1.2
7	☐	1000.000	995.796	6509699.76	1.3313	A	0.7
8	☐			5266.56	0.0011	P	1.9

y = 0.0013 * x + 6.3030E-006
R = 1.0000
DL = 0.003165

Weight: <None>
Min Conc: <None>

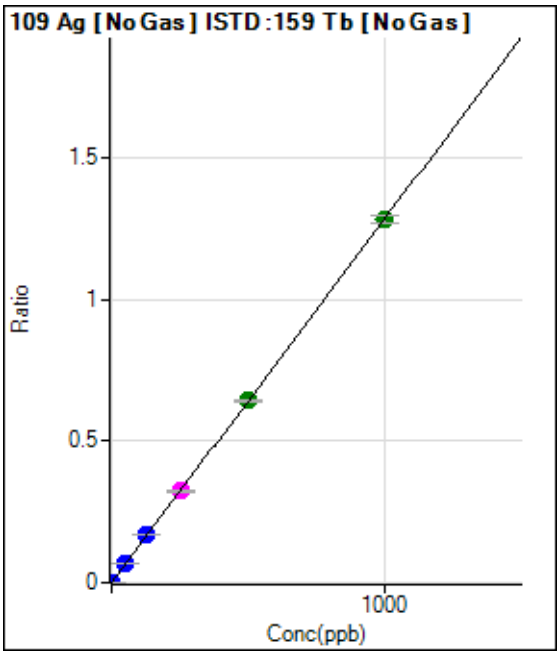


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.22	0.0000	P	173.
2	☐	1.000	0.812	80.00	0.0000	P	32.5
3	☐	50.000	52.705	5064.27	0.0011	P	3.1
4	☐	125.000	129.053	12596.67	0.0026	P	1.5
5	☐	250.000	254.345	25082.93	0.0052	P	4.5
6	☐	500.000	501.860	49367.18	0.0102	P	0.1
7	☐	1000.000	997.342	98944.84	0.0202	P	1.1
8	☐			77.78	0.0000	P	12.8

y = 2.0289E-005 * x + 4.6919E-007
R = 1.0000
DL = 0.1202

Weight: <None>
Min Conc: <None>

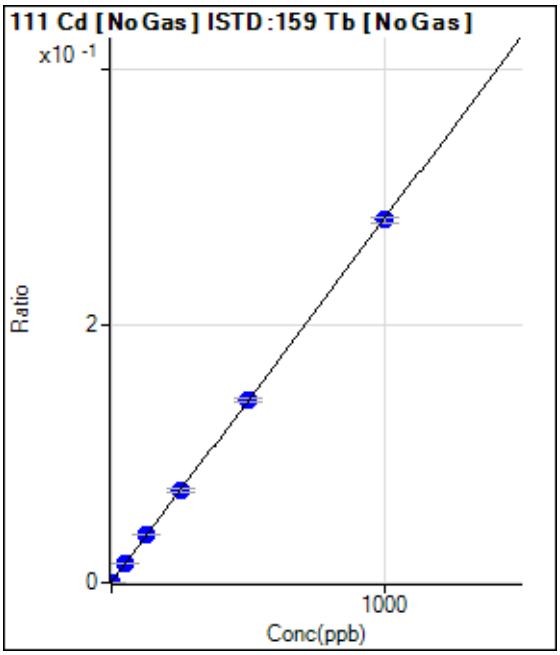
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	22.4
2	☐	1.000	1.054	6397.02	0.0014	P	3.2
3	☐	50.000	53.211	323280.84	0.0683	P	2.2
4	☐	125.000	131.638	812672.53	0.1690	P	1.5
5	☐	250.000	252.666	1576891.70	0.3243	M	2.3
6	☐	500.000	500.667	3115315.27	0.6426	A	1.5
7	☐	1000.000	998.010	6263099.84	1.2810	A	2.2
8	☐			5144.29	0.0011	P	1.7

y = 0.0013 * x + 4.6648E-006
R = 1.0000
DL = 0.002439

Weight: <None>
Min Conc: <None>

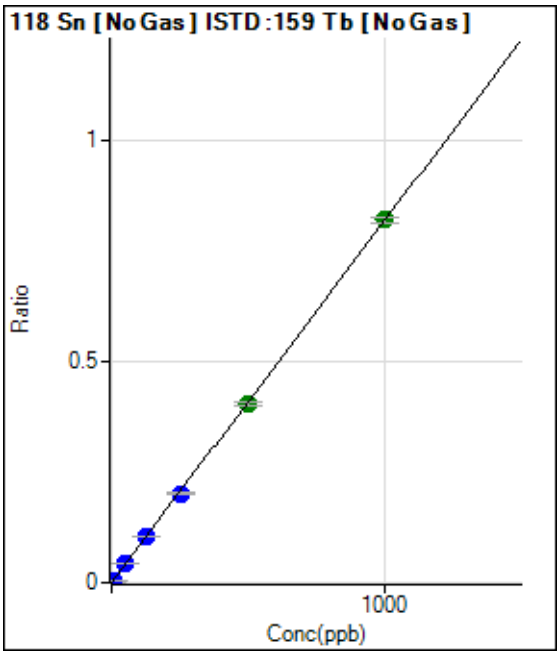


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1136.63	0.0002	P	6.6
2	☐	1.000	1.018	2483.94	0.0005	P	2.6
3	☐	50.000	52.755	71803.35	0.0152	P	1.2
4	☐	125.000	132.470	181496.35	0.0377	P	0.2
5	☐	250.000	254.172	350879.15	0.0722	P	3.3
6	☐	500.000	502.760	690958.16	0.1425	P	2.0
7	☐	1000.000	996.505	1380254.24	0.2823	P	1.7
8	☐			1756.99	0.0004	P	5.3

y = 2.8303E-004 * x + 2.3881E-004
R = 1.0000
DL = 0.1671

Weight: <None>
Min Conc: <None>

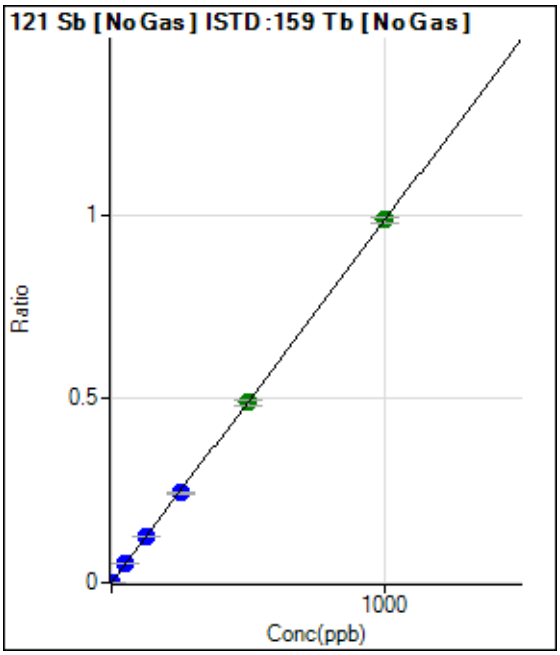
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1443.42	0.0003	P	3.2
2	☐	5.000	4.914	20362.25	0.0043	P	0.3
3	☐	50.000	51.440	200412.68	0.0423	P	1.9
4	☐	125.000	128.478	506507.25	0.1053	P	0.4
5	☐	250.000	246.118	979167.14	0.2014	P	3.6
6	☐	500.000	495.583	1964760.11	0.4053	A	2.1
7	☐	1000.000	1002.673	4008143.00	0.8197	A	1.2
8	☐			6005.77	0.0012	P	3.0

y = 8.1722E-004 * x + 3.0324E-004
R = 1.0000
DL = 0.03539

Weight: <None>
Min Conc: <None>

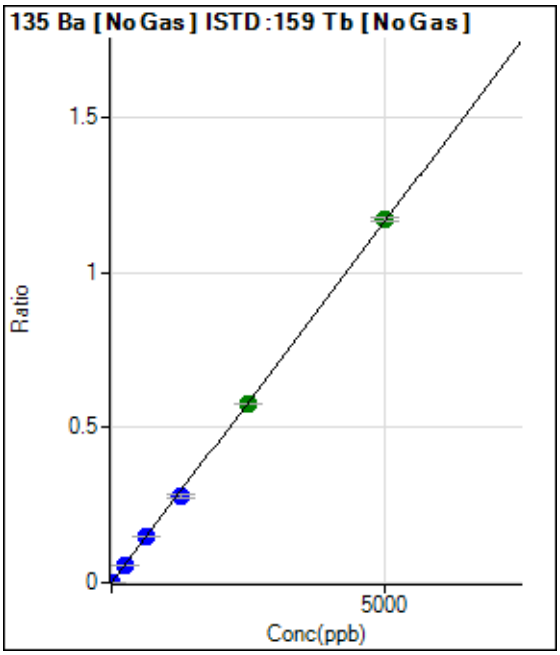


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.23	0.0000	P	23.5
2	☐	2.000	2.043	9506.99	0.0020	P	4.9
3	☐	50.000	51.294	239219.27	0.0505	P	1.9
4	☐	125.000	129.420	613348.30	0.1275	P	0.8
5	☐	250.000	247.722	1186596.97	0.2441	P	2.9
6	☐	500.000	496.564	2371616.41	0.4892	A	2.3
7	☐	1000.000	1001.670	4825510.66	0.9869	A	1.3
8	☐			10178.91	0.0021	P	4.6

y = 9.8524E-004 * x + 4.6750E-006
R = 1.0000
DL = 0.00334

Weight: <None>
Min Conc: <None>

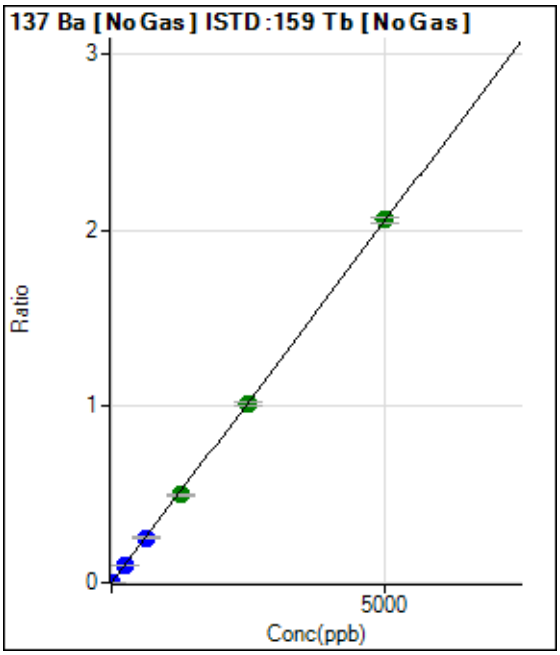
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	35.55	0.0000	P	20.0
2	☐	10.000	9.574	10540.63	0.0022	P	2.3
3	☐	250.000	247.910	273228.35	0.0577	P	1.4
4	☐	625.000	629.579	705090.22	0.1466	P	0.7
5	☐	1250.000	1199.004	1357253.38	0.2792	P	2.6
6	☐	2500.000	2473.195	2791577.84	0.5758	A	0.3
7	☐	5000.000	5025.684	5721717.97	1.1701	A	0.9
8	☐			9312.01	0.0019	P	3.0

y = 2.3282E-004 * x + 7.4743E-006
R = 0.9999
DL = 0.01929

Weight: <None>
Min Conc: <None>

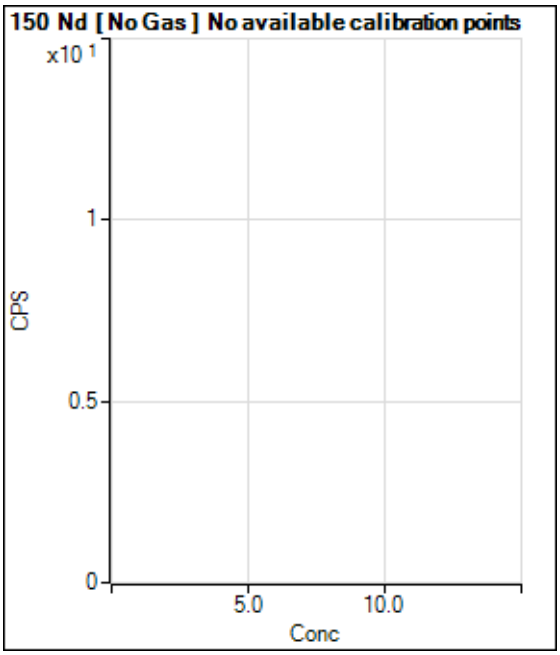


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0000	P	18.0
2	☐	10.000	9.511	18427.57	0.0039	P	3.9
3	☐	250.000	247.016	479483.00	0.1013	P	1.3
4	☐	625.000	624.464	1231730.65	0.2561	P	0.9
5	☐	1250.000	1214.336	2421628.42	0.4980	A	1.4
6	☐	2500.000	2471.075	4912387.39	1.0133	A	2.5
7	☐	5000.000	5023.596	10072443.67	2.0600	A	1.3
8	☐			16258.29	0.0033	P	0.6

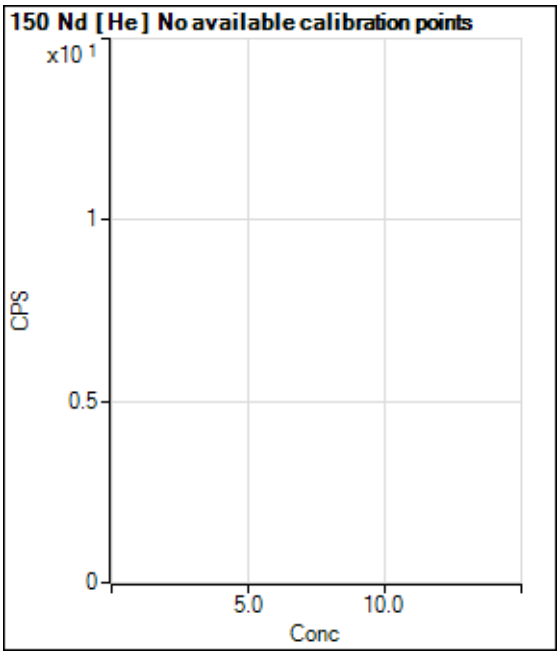
y = 4.1006E-004 * x + 1.0508E-005
R = 0.9999
DL = 0.01382

Weight: <None>
Min Conc: <None>

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

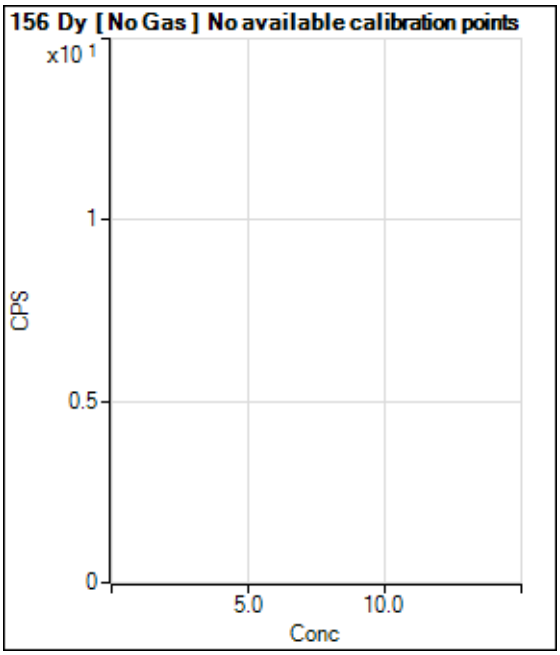


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			0.00		P	
2	☐			7.78		P	49.5
3	☐			17.78		P	60.3
4	☐			43.33		P	7.7
5	☐			81.11		P	16.6
6	☐			118.89		P	7.1
7	☐			248.89		P	6.9
8	☐			110.00		P	19.9

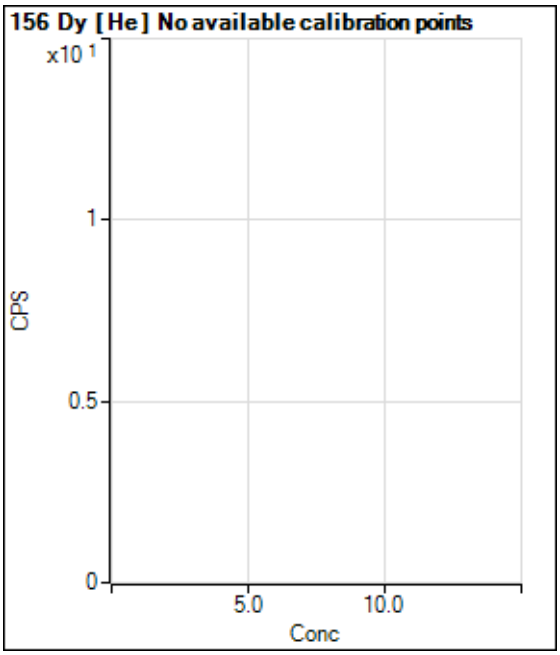


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2.22		P	86.6
2	☐			2.22		P	173.
3	☐			13.34		P	43.3
4	☐			12.22		P	41.7
5	☐			23.33		P	NaN
6	☐			43.33		P	NaN
7	☐			70.00		P	20.8
8	☐			74.44		P	6.8

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

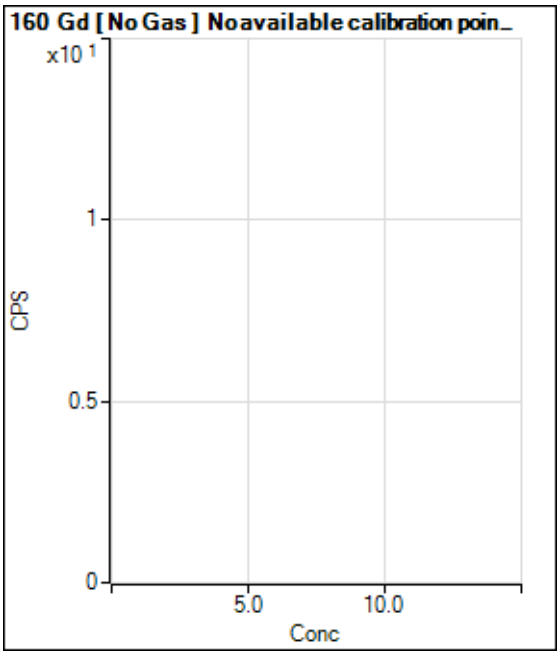


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			12.22		P	15.7
2	☐			15.56		P	75.3
3	☐			25.55		P	52.7
4	☐			40.00		P	16.7
5	☐			48.89		P	19.7
6	☐			78.89		P	24.4
7	☐			162.23		P	4.7
8	☐			254.45		P	7.2

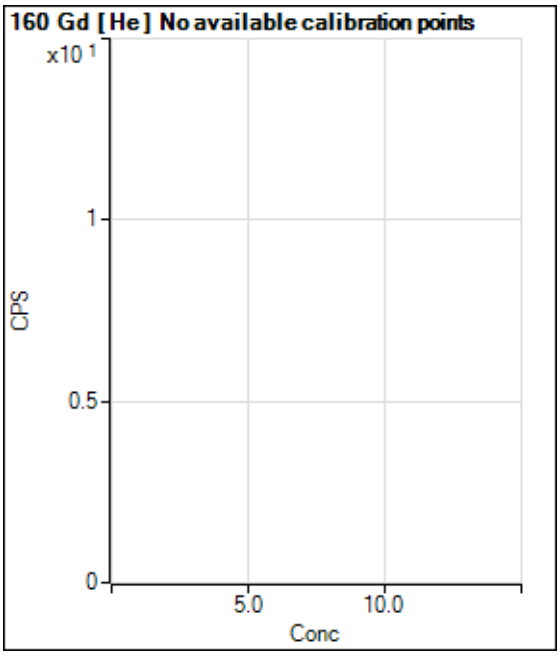


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2.22		P	86.6
2	☐			8.89		P	114.
3	☐			20.00		P	44.1
4	☐			81.11		P	8.6
5	☐			122.22		P	13.5
6	☐			196.67		P	23.7
7	☐			421.12		P	5.2
8	☐			263.34		P	5.1

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

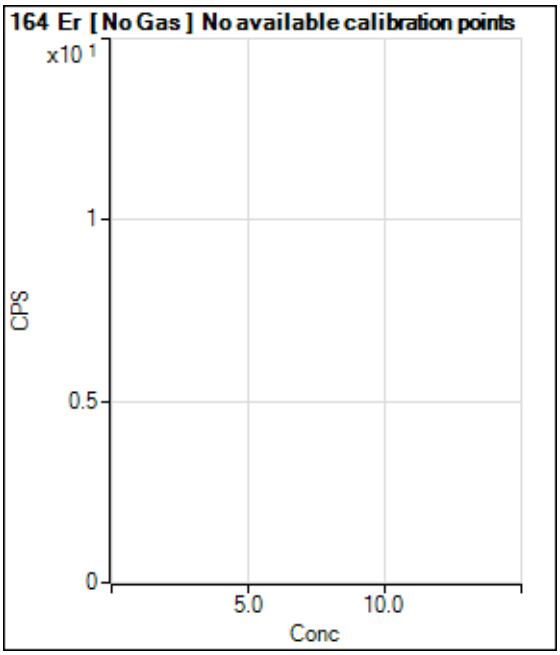


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			23.33		P	62.3
2	☐			11.11		P	34.6
3	☐			32.22		P	23.9
4	☐			28.89		P	6.7
5	☐			57.78		P	8.8
6	☐			71.11		P	25.8
7	☐			110.00		P	10.5
8	☐			314.45		P	3.2

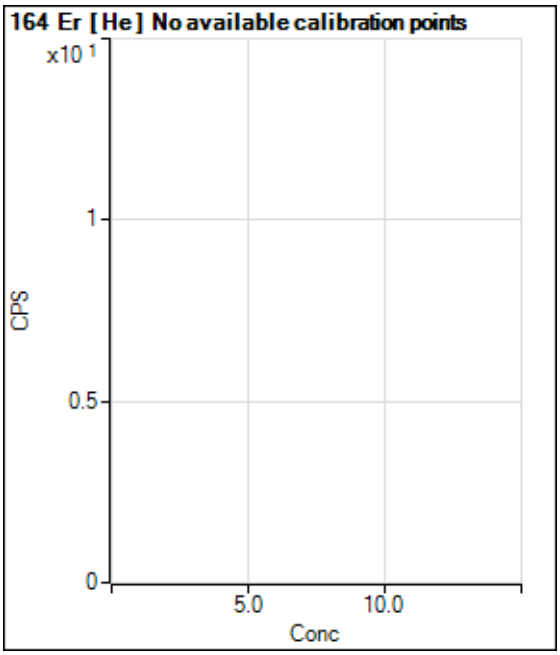


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			273.34		P	18.9
2	☐			233.34		P	13.6
3	☐			252.23		P	3.1
4	☐			261.12		P	15.2
5	☐			298.90		P	12.7
6	☐			288.89		P	13.8
7	☐			308.90		P	18.6
8	☐			463.34		P	5.0

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

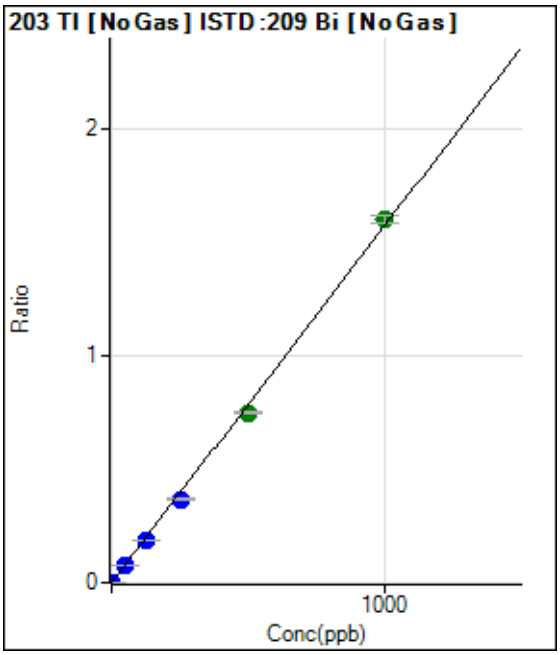


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			26.67		P	25.0
2	☐			25.56		P	19.9
3	☐			30.00		P	44.4
4	☐			45.56		P	22.4
5	☐			77.78		P	15.0
6	☐			104.45		P	16.1
7	☐			205.56		P	5.2
8	☐			541.13		P	22.2



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			15.55		P	24.8
2	☐			17.78		P	47.2
3	☐			21.11		P	50.8
4	☐			36.67		P	24.1
5	☐			47.78		P	31.5
6	☐			95.56		P	22.4
7	☐			154.45		P	18.1
8	☐			397.79		P	4.2

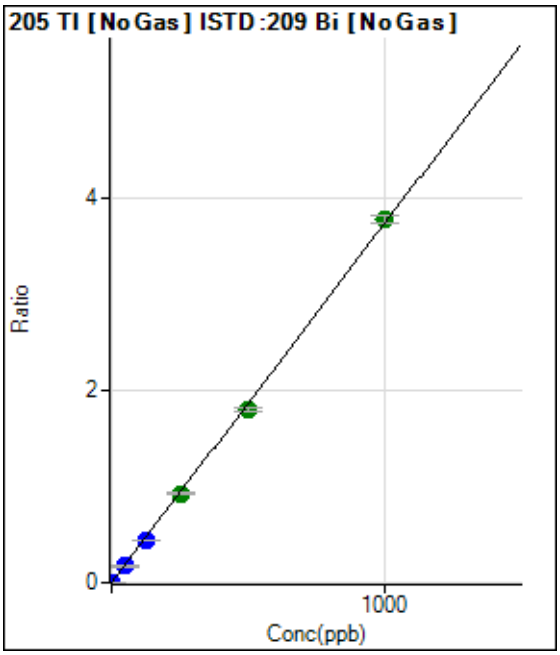
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	40.00	0.0000	P	14.1
2	☐	1.000	1.002	4986.51	0.0016	P	4.2
3	☐	50.000	46.494	233074.64	0.0731	P	1.8
4	☐	125.000	116.732	597072.59	0.1836	P	1.1
5	☐	250.000	233.905	1178218.35	0.3679	P	1.0
6	☐	500.000	476.631	2477312.05	0.7497	A	1.0
7	☐	1000.000	1016.917	5181595.17	1.5994	A	2.3
8	☐			6675.04	0.0022	P	1.8

y = 0.0016 * x + 1.2646E-005
R = 0.9995
DL = 0.003408

Weight: <None>
Min Conc: <None>

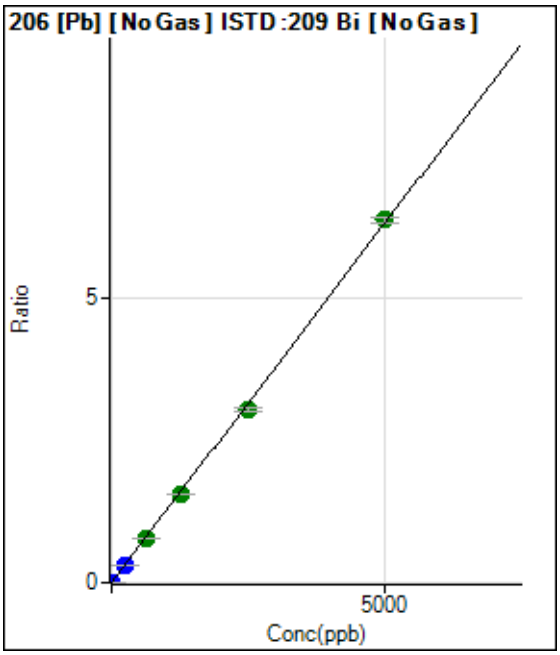


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	122.23	0.0000	P	8.2
2	☐	1.000	0.933	11072.37	0.0035	P	2.7
3	☐	50.000	45.658	544315.00	0.1708	P	1.7
4	☐	125.000	116.727	1419668.88	0.4366	P	1.6
5	☐	250.000	248.652	2978564.64	0.9300	A	1.1
6	☐	500.000	482.180	5957667.00	1.8034	A	3.2
7	☐	1000.000	1010.499	12245228.71	3.7794	A	2.3
8	☐			16048.47	0.0052	P	0.5

y = 0.0037 * x + 3.8664E-005
R = 0.9997
DL = 0.002551

Weight: <None>
Min Conc: <None>

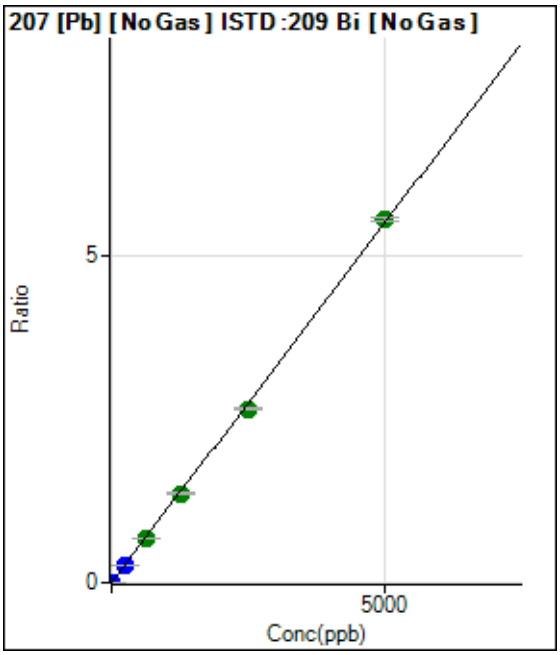
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	408.90	0.0001	P	10.3
2	☐	1.000	0.832	3702.78	0.0012	P	1.5
3	☐	250.000	234.550	943611.51	0.2961	P	1.9
4	☐	625.000	611.615	2509794.93	0.7719	A	2.5
5	☐	1250.000	1237.939	5003395.93	1.5623	A	0.9
6	☐	2500.000	2406.423	10035333.18	3.0368	A	2.4
7	☐	5000.000	5052.249	20656421.64	6.3756	A	1.3
8	☐			7700.04	0.0025	P	2.3

y = 0.0013 * x + 1.2933E-004
R = 0.9997
DL = 0.03168

Weight: <None>
Min Conc: <None>

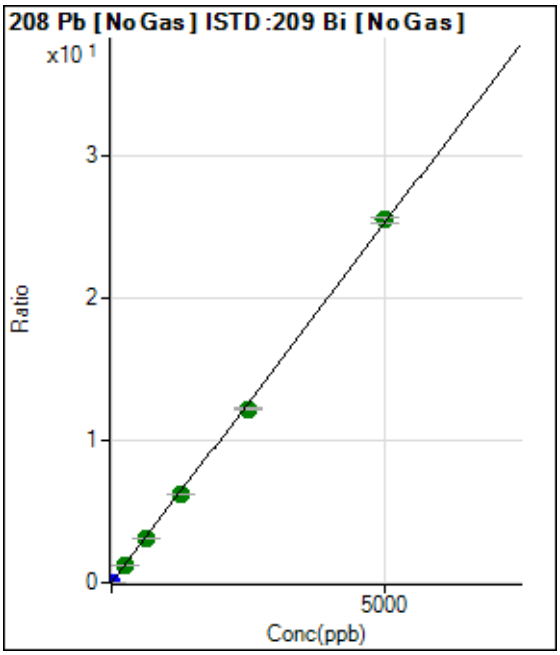


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	372.23	0.0001	P	2.4
2	☐	1.000	0.812	3173.74	0.0010	P	4.8
3	☐	250.000	230.646	808916.06	0.2538	P	1.6
4	☐	625.000	616.512	2205796.13	0.6783	A	1.4
5	☐	1250.000	1238.073	4361866.01	1.3620	A	1.2
6	☐	2500.000	2416.961	8786640.08	2.6588	A	0.7
7	☐	5000.000	5046.530	17986267.92	5.5514	A	1.2
8	☐			6593.89	0.0021	P	3.1

y = 0.0011 * x + 1.1773E-004
R = 0.9998
DL = 0.00773

Weight: <None>
Min Conc: <None>

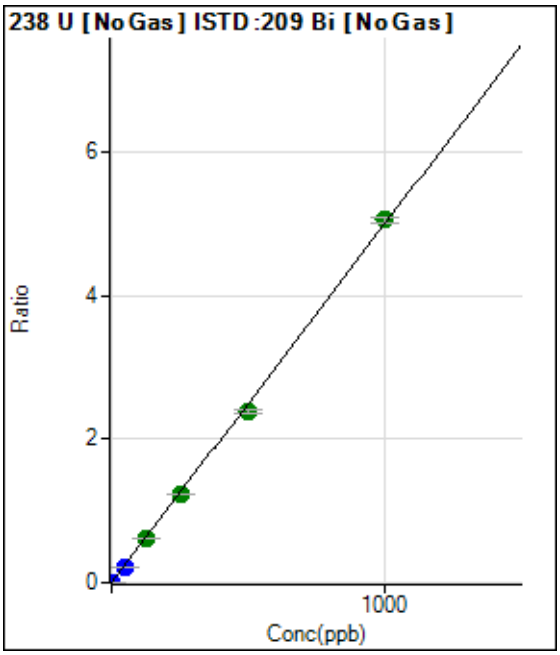
Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1687.84	0.0005	P	2.5
2	☐	1.000	0.813	14544.29	0.0046	P	2.6
3	☐	250.000	238.981	3841857.11	1.2055	A	2.3
4	☐	625.000	616.491	10109555.56	3.1090	A	1.5
5	☐	1250.000	1230.712	19875221.09	6.2061	A	1.2
6	☐	2500.000	2420.108	40330659.47	12.2033	A	1.7
7	☐	5000.000	5046.383	82438732.79	25.4456	A	1.9
8	☐			30327.92	0.0099	P	1.4

y = 0.0050 * x + 5.3385E-004
R = 0.9998
DL = 0.008022

Weight: <None>
Min Conc: <None>

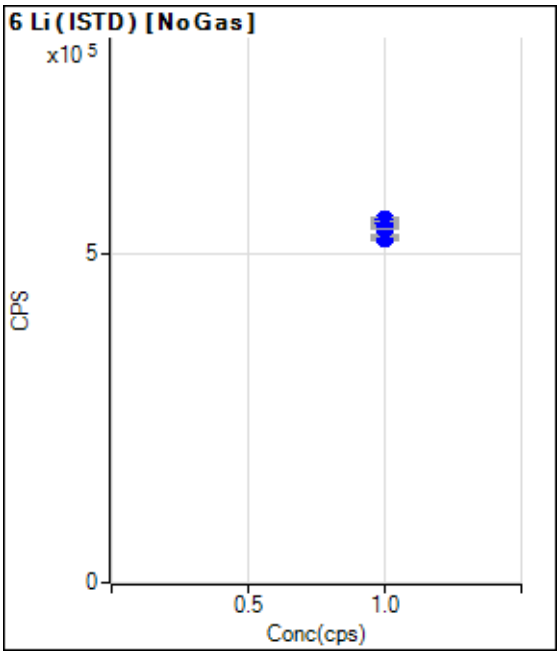


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.22	0.0000	P	86.6
2	☐	1.000	0.857	13448.03	0.0043	P	2.9
3	☐	50.000	44.467	708081.29	0.2222	P	1.7
4	☐	125.000	121.349	1971941.98	0.6064	A	0.6
5	☐	250.000	245.300	3925891.68	1.2257	A	0.8
6	☐	500.000	479.354	7913967.73	2.3953	A	2.5
7	☐	1000.000	1012.232	16387126.14	5.0580	A	1.8
8	☐			751.14	0.0002	P	6.1

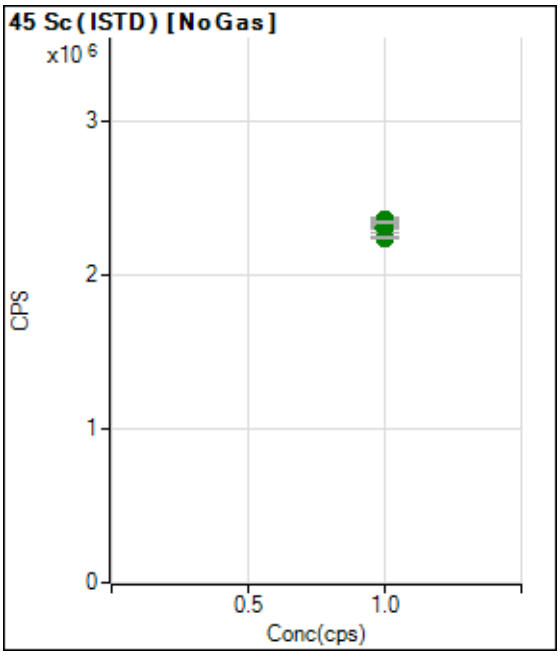
y = 0.0050 * x + 7.0248E-007
R = 0.9997
DL = 0.0003653

Weight: <None>
Min Conc: <None>

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

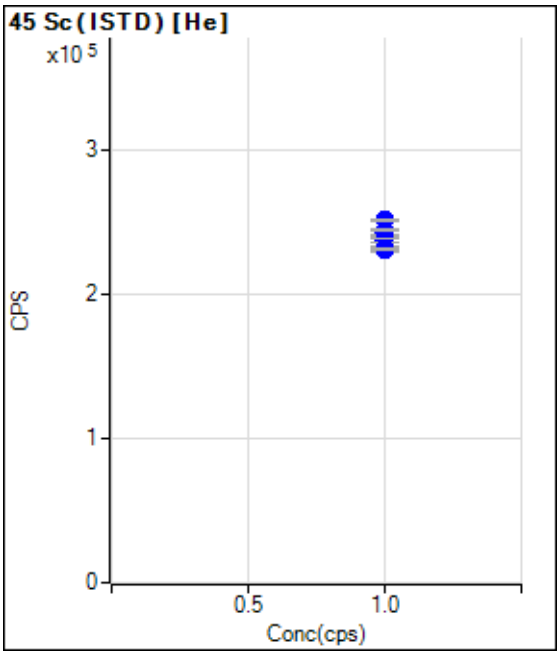


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		523442.47		P	0.7
2	☐	1.000		527170.64		P	0.6
3	☐	1.000		529411.72		P	0.6
4	☐	1.000		546182.43		P	1.1
5	☐	1.000		552406.90		P	1.1
6	☐	1.000		553113.59		P	1.0
7	☐	1.000		548577.62		P	0.8
8	☐	1.000		539887.67		P	0.3

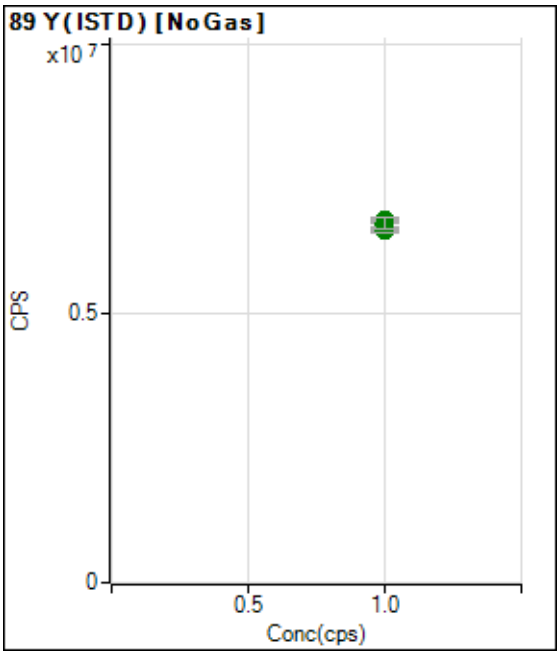


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2354137.06		A	1.8
2	☐	1.000		2341730.03		A	1.2
3	☐	1.000		2306638.98		A	0.4
4	☐	1.000		2322909.22		A	1.0
5	☐	1.000		2313641.30		A	1.8
6	☐	1.000		2296726.39		A	2.4
7	☐	1.000		2236653.07		A	0.8
8	☐	1.000		2339375.70		A	0.7

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

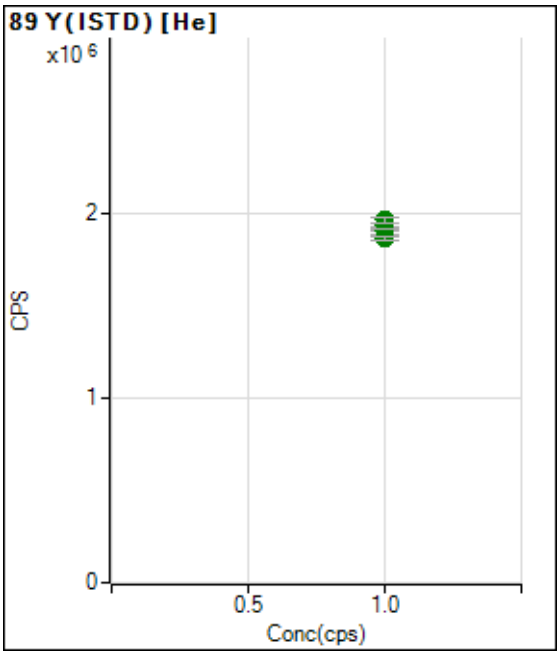


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		242501.45		P	1.1
2	☐	1.000		241918.29		P	1.1
3	☐	1.000		244450.78		P	0.6
4	☐	1.000		236653.15		P	1.1
5	☐	1.000		232346.48		P	0.6
6	☐	1.000		230590.87		P	0.7
7	☐	1.000		231655.74		P	0.7
8	☐	1.000		251454.36		P	0.6

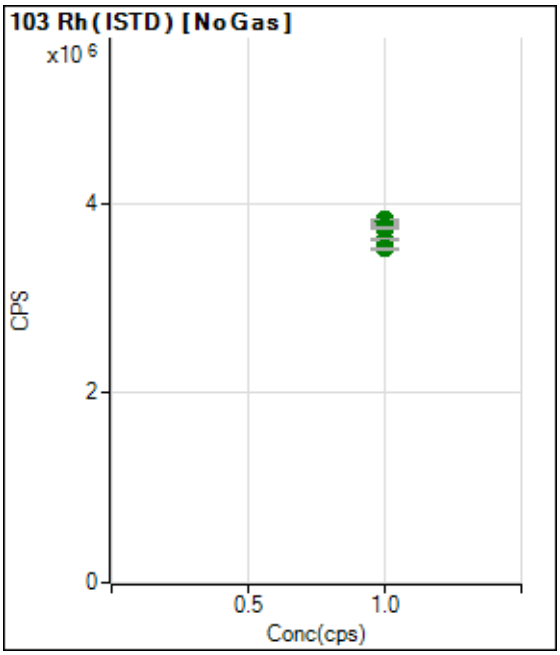


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6743333.09		A	1.2
2	☐	1.000		6704425.67		A	0.3
3	☐	1.000		6742382.05		A	0.6
4	☐	1.000		6658089.90		A	1.8
5	☐	1.000		6651764.76		A	3.1
6	☐	1.000		6639869.69		A	1.6
7	☐	1.000		6548475.32		A	1.0
8	☐	1.000		6685933.72		A	3.3

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

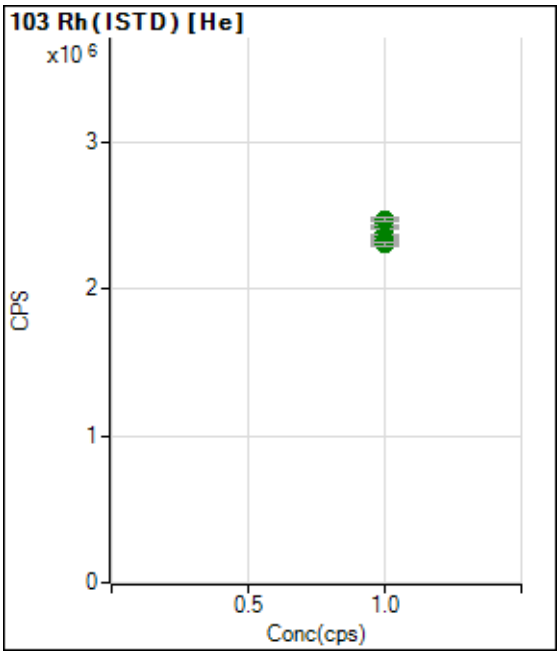


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1931159.60		A	1.5
2	☐	1.000		1918432.16		A	0.9
3	☐	1.000		1933022.66		A	1.5
4	☐	1.000		1900339.60		A	1.2
5	☐	1.000		1861765.43		A	1.3
6	☐	1.000		1862219.57		A	0.8
7	☐	1.000		1867705.93		A	1.1
8	☐	1.000		1964431.15		A	1.6

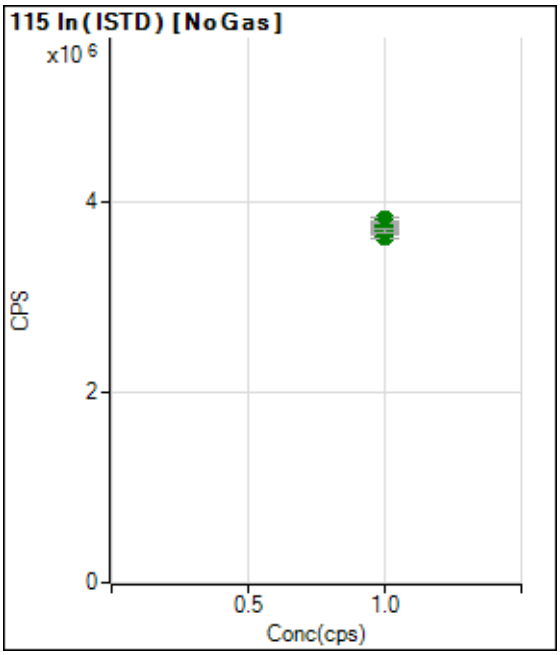


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3822827.34		A	0.6
2	☐	1.000		3766765.26		A	1.2
3	☐	1.000		3809727.13		A	1.2
4	☐	1.000		3754243.94		A	1.2
5	☐	1.000		3733482.38		A	0.7
6	☐	1.000		3736775.01		A	0.8
7	☐	1.000		3614468.77		A	0.8
8	☐	1.000		3517053.14		A	0.4

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

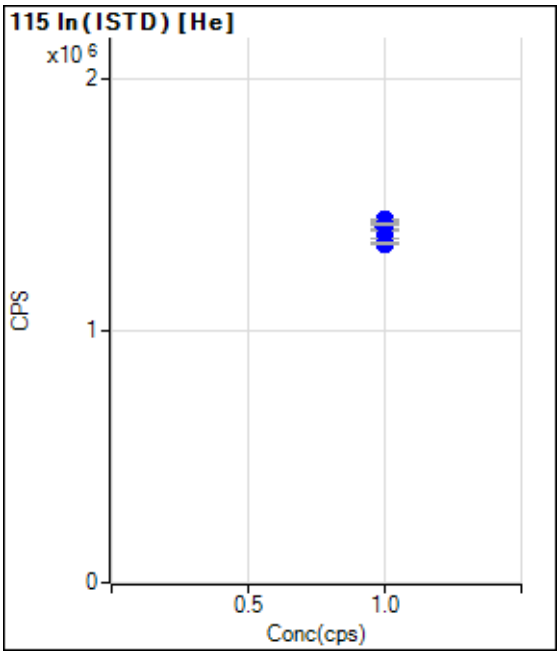


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2450551.08		A	2.1
2	☐	1.000		2424005.47		A	0.7
3	☐	1.000		2472576.75		A	1.2
4	☐	1.000		2383353.73		A	2.2
5	☐	1.000		2355537.08		A	1.7
6	☐	1.000		2332104.74		A	1.4
7	☐	1.000		2315783.47		A	0.7
8	☐	1.000		2303758.98		A	1.2

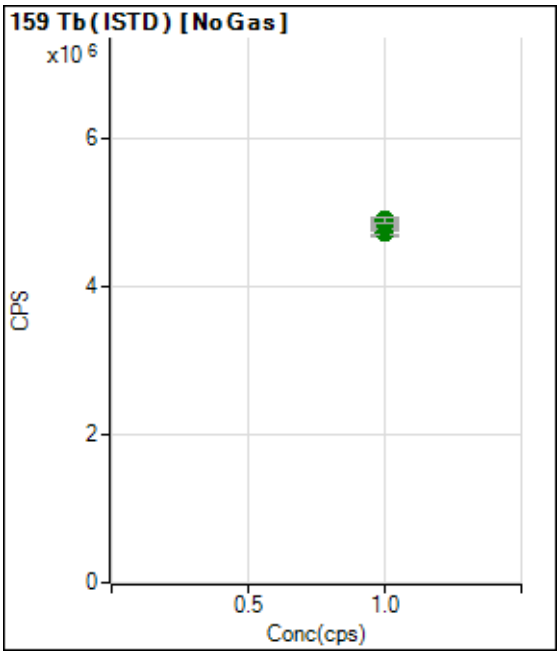


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3783224.48		A	0.9
2	☐	1.000		3818623.22		A	1.5
3	☐	1.000		3781159.34		A	1.5
4	☐	1.000		3772126.17		A	1.8
5	☐	1.000		3741129.43		A	2.7
6	☐	1.000		3685786.14		A	1.4
7	☐	1.000		3638612.42		A	0.9
8	☐	1.000		3699159.80		A	1.3

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

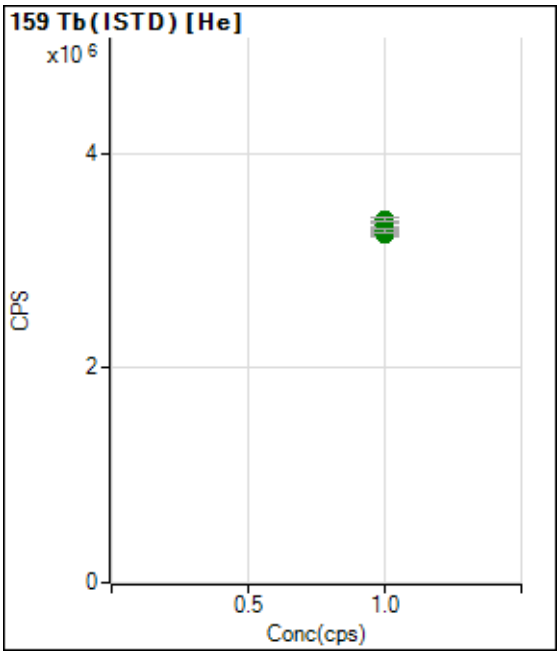


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1442369.95		P	0.4
2	☐	1.000		1437109.11		P	1.0
3	☐	1.000		1439583.72		P	0.7
4	☐	1.000		1417032.36		P	1.1
5	☐	1.000		1404119.02		P	0.8
6	☐	1.000		1368095.89		P	0.4
7	☐	1.000		1347671.91		P	0.3
8	☐	1.000		1424568.72		P	0.2

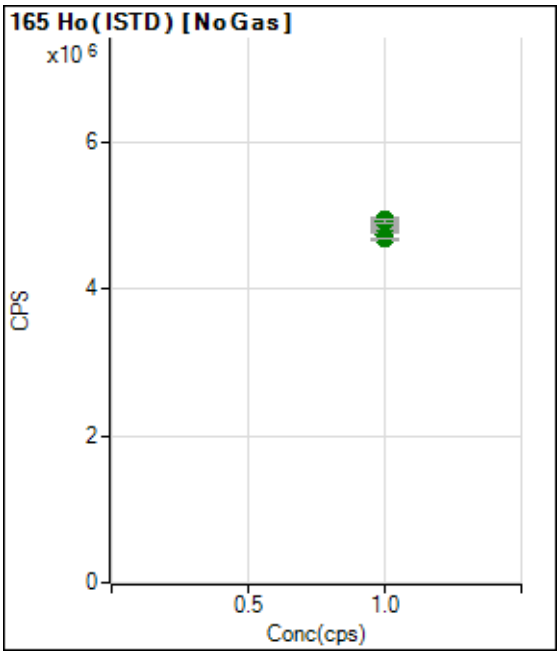


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4760107.08		A	0.7
2	☐	1.000		4714503.99		A	1.9
3	☐	1.000		4733706.63		A	1.2
4	☐	1.000		4810323.12		A	1.3
5	☐	1.000		4864388.36		A	2.9
6	☐	1.000		4848102.43		A	0.8
7	☐	1.000		4890018.92		A	1.1
8	☐	1.000		4897705.00		A	1.6

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

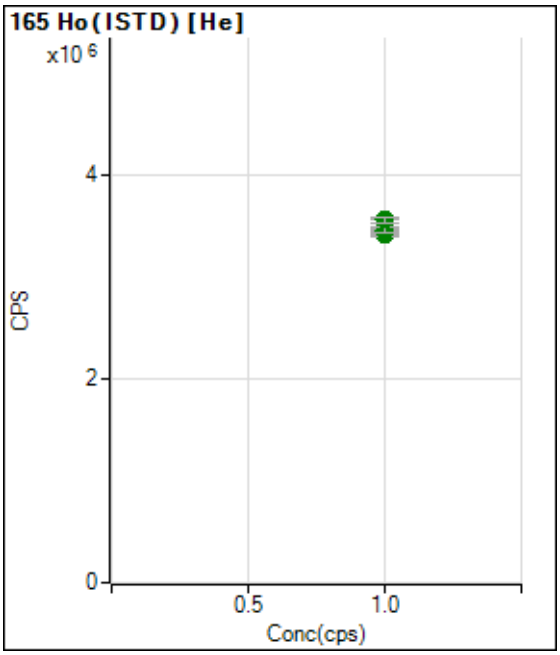


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3264012.17		A	1.0
2	☐	1.000		3244984.78		A	1.1
3	☐	1.000		3270584.09		A	1.0
4	☐	1.000		3326908.77		A	1.2
5	☐	1.000		3287946.51		A	1.5
6	☐	1.000		3298974.95		A	0.4
7	☐	1.000		3275434.81		A	0.9
8	☐	1.000		3381631.27		A	1.1

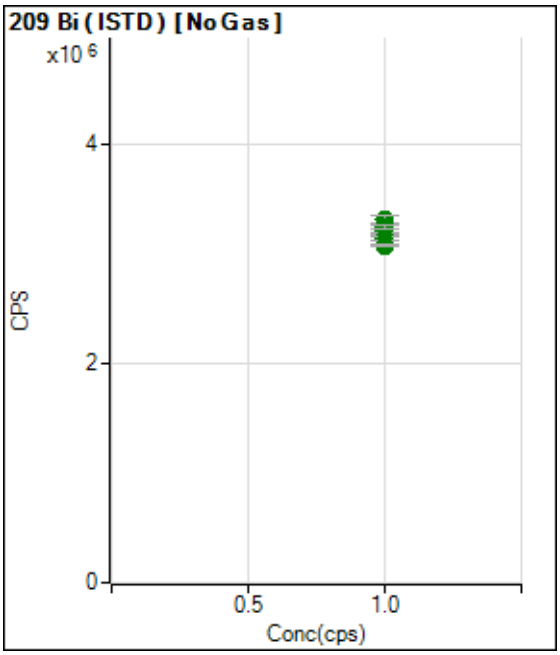


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4689421.67		A	0.7
2	☐	1.000		4769581.56		A	0.1
3	☐	1.000		4746210.41		A	1.8
4	☐	1.000		4822525.90		A	2.1
5	☐	1.000		4841455.45		A	0.8
6	☐	1.000		4945946.14		A	0.8
7	☐	1.000		4933631.45		A	1.9
8	☐	1.000		4927931.52		A	0.9

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

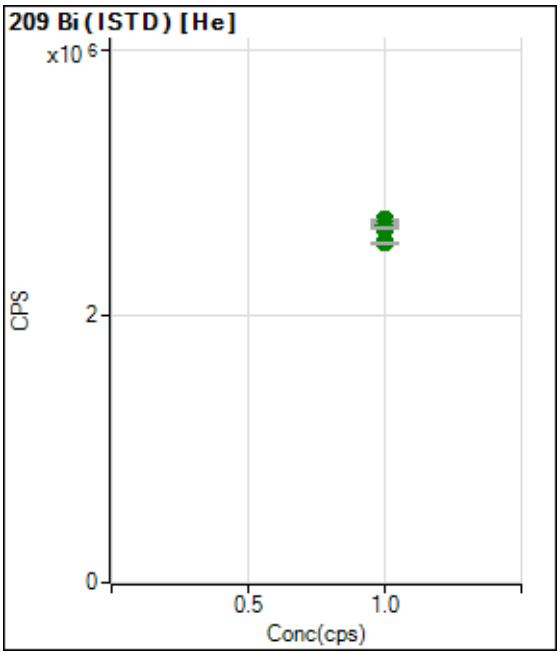


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3424667.90		A	0.3
2	☐	1.000		3403666.82		A	0.7
3	☐	1.000		3455988.39		A	1.2
4	☐	1.000		3433112.79		A	2.0
5	☐	1.000		3457144.88		A	0.5
6	☐	1.000		3516272.00		A	2.1
7	☐	1.000		3454666.72		A	1.7
8	☐	1.000		3554029.39		A	1.8



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3161800.65		A	0.4
2	☐	1.000		3139108.56		A	1.4
3	☐	1.000		3187329.99		A	1.7
4	☐	1.000		3252131.62		A	1.6
5	☐	1.000		3202855.75		A	1.5
6	☐	1.000		3305077.38		A	2.6
7	☐	1.000		3240282.66		A	1.4
8	☐	1.000		3071573.67		A	0.7

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2673620.47		A	0.6
2	☐	1.000		2677102.56		A	1.6
3	☐	1.000		2710013.92		A	0.5
4	☐	1.000		2720211.61		A	0.6
5	☐	1.000		2670991.25		A	1.3
6	☐	1.000		2676325.41		A	1.6
7	☐	1.000		2659364.26		A	0.6
8	☐	1.000		2548595.85		A	0.5

US EPA Tune Check Report

Reviewed By:moh
On:10/27/2025 4:3
PM
Inst Id :P7
LB :LB137649

Operator Name	Jaswal
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\P7102325 MS.b
Acq. Date-Time	2025-10-23 11:24:51
Report Comment	---
Instrument Name	G8403A JP14410463

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		3933	39334.73			0.733	5.000
24		38363	383634.02			0.967	5.000
25		5046	50456.45			1.013	5.000
26		5830	58297.50			0.816	5.000
59		43117	431173.51			0.341	5.000
113		5573	55727.48			0.667	5.000
115		65028	650277.04			1.141	5.000
206		13887	138874.11			0.354	5.000
207		12051	120514.52			0.978	5.000
208		29096	290960.72			0.663	5.000
220		0	2.80			34.810	

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	3890	3933	3929	3948	3968
24	38060	38018	38376	38419	38943
25	5028	5015	5006	5046	5133
26	5760	5812	5829	5875	5873
59	43254	43122	43271	42979	42960
113	5623	5573	5582	5565	5520
115	66227	65088	64883	64227	64713
206	13816	13857	13911	13933	13920
207	12022	12065	12008	11922	12241
208	28854	29007	29154	29088	29377

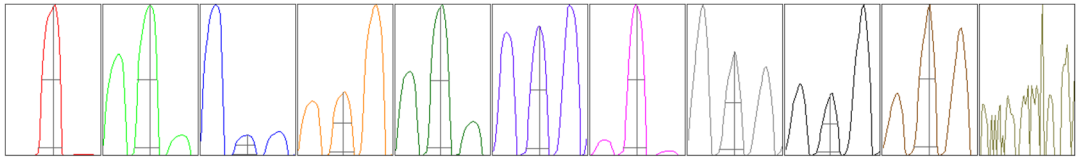
US EPA Tune Check Report

Reviewed By:moh
On:10/27/2025 4:3
PM
Inst Id :P7
LB :LB137649

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	0	0	0	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	7092.74	9.05	8.90 - 9.10	
24	66285.94	24.00	23.90 - 24.10	
25	8800.48	25.00	24.90 - 25.10	
26	10185.77	25.95	25.90 - 26.10	
59	78486.26	58.95	58.90 - 59.10	
113	11230.89	113.00	112.90 - 113.10	
115	128905.49	115.00	114.90 - 115.10	
206	29334.81	206.00	205.90 - 206.10	
207	24831.04	206.95	206.90 - 207.10	
208	61502.45	208.00	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.58	0.730	0.900	
24	0.61	0.782	0.900	
25	0.60	0.764	0.900	
26	0.60	0.779	0.900	
59	0.57	0.769	0.900	
113	0.51	0.722	0.900	
115	0.51	0.724	0.900	
206	0.50	0.767	0.900	
207	0.49	0.734	0.900	
208	0.50	0.736	0.900	
220				

Integration Time [sec] 0.1
Acquisition Time [sec] 256.770000000002
Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.87 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

Reviewed By:moh
On:10/27/2025 4:3
PM
Inst Id :P7
LB :LB137649

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	0.0 V	Omega Lens	7.6 V	Deflect	15.2 V
Extract 2	-140.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-60 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	180 V		

QP Parameters

Mass Gain	138	Axis Gain	0.9974	QP Bias	-3.0 V
Mass Offset	130	Axis Offset	0.13		

Hardware Settings

Torch

Torch H	-2.0 mm	Torch V	1.1 mm

EM

Discriminator	4.8 mV	Analog HV	2287 V	Pulse HV	1221 V

[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		16246	162458.11			0.754	
89		43892	438923.30			0.850	
205		15562	155615.66			1.318	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	16358	16358	16197	16066	16250
89	44523	43900	43598	43639	43802
205	15829	15510	15382	15369	15718

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.87 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	0.0 V	Omega Lens	9.4 V	Deflect	3.0 V

US EPA Tune Check Report

Reviewed By:moh
On:10/27/2025 4:3
PM
Inst Id :P7
LB :LB137649

Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.9 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	138	Axis Gain	0.9974	QP Bias	-13.0 V
Mass Offset	130	Axis Offset	0.13		

Hardware Settings

Torch

Torch H	-2.0 mm	Torch V	1.1 mm		

EM

Discriminator	4.8 mV	Analog HV	2287 V	Pulse HV	1221 V

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:00:25	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.00	0.06	-0.06	0.00	N/A	ppb
Antimony	121-1	0.00	0.00	0.00	0.00	N/A	ppb
Arsenic	75-2	0.00	0.00	0.00	0.00	N/A	ppb
Barium	135-1	0.01	0.00	-0.01	0.00	N/A	ppb
Barium	137-1	0.01	0.00	0.00	0.00	N/A	ppb
Beryllium	9-1	0.00	0.01	0.00	0.00	N/A	ppb
Bismuth	209-1				100		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.05	-0.02	-0.02	0.00	N/A	ppb
Cadmium	106-1	0.83	-0.56	-0.27	0.00	N/A	ppb
Cadmium	111-1	0.06	-0.05	-0.02	0.00	N/A	ppb
Calcium	43-1	3.23	-1.93	-1.31	0.00	N/A	ppb
Calcium	44-1	0.39	1.92	-2.31	0.00	N/A	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.04	-0.03	0.00	0.00	N/A	ppb
Cobalt	59-2	0.00	0.00	0.00	0.00	N/A	ppb
Copper	63-2	0.02	-0.01	-0.02	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	56-2	0.06	-0.02	-0.04	0.00	N/A	ppb
Iron	57-2	0.22	-0.36	0.13	0.00	N/A	ppb
Iron	54-2	-1.15	1.79	-0.65	0.00	N/A	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:00:25	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.01	0.00	-0.01	0.00	N/A	ppb
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	-0.06	0.00	N/A	ppb
Manganese	55-2	0.02	-0.04	0.02	0.00	N/A	ppb
Molybdenum	94-1	-0.02	0.01	0.02	0.00	N/A	ppb
Molybdenum	95-1	0.01	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	0.01	0.01	-0.02	0.00	N/A	ppb
Molybdenum	98-1	0.00	0.00	-0.01	0.00	N/A	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.02	0.00	-0.02	0.00	N/A	ppb
Phosphorus	31-2	-126.39	-123.66	-125.58	-125.21		ppb
Potassium	39-2	4.19	-2.91	-1.28	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	0.08	-0.11	0.00	N/A	ppb
Selenium	77-2	0.00	0.00	0.00	0.00	N/A	ppb
Selenium	78-2	0.25	-0.18	-0.07	0.00	N/A	ppb
Silicon	28-1	-0.08	0.32	-0.24	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	0.59	-0.33	-0.26	0.00	N/A	ppb
Strontium	86-1	0.01	-0.01	0.01	0.00	N/A	ppb
Strontium	88-1	0.00	0.00	0.00	0.00	N/A	ppb
Sulfur	34-1	-142.53	56.65	-231.14	-105.67		ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	0.00	0.00	0.00	0.00	N/A	ppb
Thallium	205-1	0.00	0.00	0.00	0.00	N/A	ppb
Tin	118-1	0.01	-0.01	0.00	0.00	N/A	ppb
Titanium	47-1	-0.02	0.02	0.01	0.00	N/A	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:00:25	DataFile Name :	004CALB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	N/A	ppb
Vanadium	51-2	0.00	0.00	0.00	0.00	N/A	ppb
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	0.19	0.02	-0.21	0.00	N/A	ppb
Zirconium	90-1	0.00	0.00	0.00	0.00	N/A	ppb
Zirconium	91-1	0.00	0.01	-0.01	0.00	N/A	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:03:58	DataFile Name :	005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20.40	21.47	20.66	20.84	2.68	ppb
Antimony	121-1	1.95	2.03	2.15	2.04	4.90	ppb
Arsenic	75-2	1.20	1.29	1.34	1.28	5.72	ppb
Barium	135-1	9.37	9.54	9.81	9.57	2.29	ppb
Barium	137-1	9.09	9.63	9.81	9.51	3.91	ppb
Beryllium	9-1	1.04	1.04	1.03	1.04	0.45	ppb
Bismuth	209-1				99		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	1.07	0.53	0.83	0.81	33.43	ppb
Cadmium	106-1	1.08	1.49	1.16	1.24	17.19	ppb
Cadmium	111-1	0.96	1.03	1.06	1.02	4.71	ppb
Calcium	43-1	497.12	502.17	506.17	501.82	0.90	ppb
Calcium	44-1	496.19	504.58	506.95	502.57	1.13	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.01	2.01	1.87	1.97	4.20	ppb
Cobalt	59-2	1.02	1.04	1.03	1.03	0.90	ppb
Copper	63-2	1.93	1.91	1.84	1.89	2.36	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				102		%
Holmium	165-2				99		%
Indium	115-1				101		%
Indium	115-2				100		%
Iron	56-2	52.99	51.52	51.26	51.92	1.79	ppb
Iron	57-2	55.74	55.33	53.75	54.94	1.92	ppb
Iron	54-2	53.75	53.66	52.43	53.28	1.38	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:03:58	DataFile Name :	005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.82	0.83	0.85	0.83	1.73	ppb
Lead	207-1	0.77	0.82	0.85	0.81	5.46	ppb
Lead	208-1	0.79	0.83	0.83	0.81	2.95	ppb
Lithium	6-1				101		%
Magnesium	24-2	483.68	484.40	475.20	481.09	1.06	ppb
Manganese	55-2	1.08	0.91	0.93	0.97	9.71	ppb
Molybdenum	94-1	5.57	5.62	5.69	5.62	1.07	ppb
Molybdenum	95-1	4.85	4.90	4.93	4.89	0.86	ppb
Molybdenum	96-1	4.96	5.02	5.12	5.03	1.60	ppb
Molybdenum	97-1	4.84	4.71	5.20	4.92	5.12	ppb
Molybdenum	98-1	4.84	4.91	4.77	4.84	1.39	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.83	0.89	0.77	0.83	7.33	ppb
Phosphorus	31-2	140.42	117.46	117.75	125.21	10.52	ppb
Potassium	39-2	513.71	501.08	506.27	507.02	1.25	ppb
Rhodium	103-1				99		%
Rhodium	103-2				99		%
Scandium	45-1				99		%
Scandium	45-2				100		%
Selenium	82-1	4.05	5.41	4.63	4.69	14.53	ppb
Selenium	77-2	4.95	5.50	5.05	5.17	5.67	ppb
Selenium	78-2	6.69	6.29	7.01	6.66	5.44	ppb
Silicon	28-1	0.21	0.82	0.48	0.50	61.11	ppb
Silver	107-1	1.06	1.11	1.05	1.07	2.77	ppb
Silver	109-1	1.02	1.08	1.07	1.05	3.17	ppb
Sodium	23-2	478.49	471.68	464.94	471.70	1.44	ppb
Strontium	86-1	1.00	1.02	0.79	0.93	13.73	ppb
Strontium	88-1	0.93	0.94	0.94	0.93	0.65	ppb
Sulfur	34-1	-61.29	155.91	222.40	105.67	140.40	ppb
Terbium	159-1				99		%
Terbium	159-2				99		%
Thallium	203-1	0.95	1.03	1.03	1.00	4.26	ppb
Thallium	205-1	0.91	0.96	0.94	0.93	2.73	ppb
Tin	118-1	4.90	4.93	4.91	4.91	0.37	ppb
Titanium	47-1	4.57	4.81	5.20	4.86	6.52	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:03:58	DataFile Name :	005CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.83	0.88	0.86	0.86	2.93	ppb
Vanadium	51-2	4.83	4.92	4.95	4.90	1.27	ppb
Yttrium	89-1				99		%
Yttrium	89-2				99		%
Zinc	66-2	5.26	5.12	5.04	5.14	2.12	ppb
Zirconium	90-1	1.01	0.96	0.97	0.98	2.35	ppb
Zirconium	91-1	1.00	1.06	0.96	1.01	5.02	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:07:22	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1020.14	1024.43	1011.03	1018.53	0.67	ppb
Antimony	121-1	50.40	51.15	52.34	51.29	1.91	ppb
Arsenic	75-2	51.83	50.12	51.34	51.10	1.72	ppb
Barium	135-1	244.80	247.10	251.82	247.91	1.44	ppb
Barium	137-1	244.82	245.49	250.74	247.02	1.31	ppb
Beryllium	9-1	51.74	52.01	52.89	52.21	1.14	ppb
Bismuth	209-1				101		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	51.00	54.29	52.83	52.71	3.13	ppb
Cadmium	106-1	50.57	55.17	54.13	53.29	4.53	ppb
Cadmium	111-1	52.12	52.71	53.44	52.75	1.25	ppb
Calcium	43-1	5378.48	5467.79	5290.23	5378.84	1.65	ppb
Calcium	44-1	5341.23	5458.40	5331.36	5377.00	1.31	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	54.31	54.00	54.20	54.17	0.29	ppb
Cobalt	59-2	50.69	50.87	50.25	50.60	0.63	ppb
Copper	63-2	506.70	507.40	509.47	507.86	0.28	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				101		%
Holmium	165-2				101		%
Indium	115-1				100		%
Indium	115-2				100		%
Iron	56-2	2616.45	2632.59	2591.67	2613.57	0.79	ppb
Iron	57-2	2760.19	2807.39	2806.76	2791.45	0.97	ppb
Iron	54-2	2832.15	2849.32	2841.02	2840.83	0.30	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:07:22	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	230.94	233.29	239.42	234.55	1.87	ppb
Lead	207-1	227.35	230.01	234.58	230.65	1.58	ppb
Lead	208-1	232.76	241.11	243.07	238.98	2.29	ppb
Lithium	6-1				101		%
Magnesium	24-2	5022.22	5027.30	5048.26	5032.59	0.27	ppb
Manganese	55-2	501.06	499.73	507.21	502.67	0.79	ppb
Molybdenum	94-1	487.90	489.94	495.05	490.96	0.75	ppb
Molybdenum	95-1	485.30	491.70	491.28	489.43	0.73	ppb
Molybdenum	96-1	488.45	495.25	499.19	494.29	1.10	ppb
Molybdenum	97-1	491.17	492.78	499.90	494.62	0.94	ppb
Molybdenum	98-1	490.85	489.90	501.86	494.20	1.34	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	58.53	59.12	58.82	58.82	0.50	ppb
Phosphorus	31-2	892.87	882.08	889.50	888.15	0.62	ppb
Potassium	39-2	2649.11	2670.28	2653.66	2657.68	0.42	ppb
Rhodium	103-1				100		%
Rhodium	103-2				101		%
Scandium	45-1				98		%
Scandium	45-2				101		%
Selenium	82-1	51.56	50.49	53.02	51.69	2.46	ppb
Selenium	77-2	52.13	53.90	54.41	53.48	2.24	ppb
Selenium	78-2	57.88	51.67	55.96	55.17	5.76	ppb
Silicon	28-1	58.06	57.46	57.33	57.62	0.68	ppb
Silver	107-1	52.89	53.82	55.16	53.96	2.12	ppb
Silver	109-1	51.95	53.50	54.19	53.21	2.16	ppb
Sodium	23-2	5230.09	5171.45	5106.14	5169.23	1.20	ppb
Strontium	86-1	48.20	49.53	48.74	48.82	1.37	ppb
Strontium	88-1	48.45	49.19	49.84	49.16	1.42	ppb
Sulfur	34-1	1050.38	999.42	900.27	983.36	7.76	ppb
Terbium	159-1				99		%
Terbium	159-2				100		%
Thallium	203-1	45.77	46.33	47.38	46.49	1.76	ppb
Thallium	205-1	45.00	45.46	46.51	45.66	1.69	ppb
Tin	118-1	50.29	51.88	52.15	51.44	1.95	ppb
Titanium	47-1	487.82	503.17	494.08	495.03	1.56	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:07:22	DataFile Name :	006CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	43.85	44.22	45.33	44.47	1.74	ppb
Vanadium	51-2	50.53	49.64	51.02	50.39	1.39	ppb
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	514.65	514.87	519.72	516.41	0.55	ppb
Zirconium	90-1	48.83	49.39	49.88	49.37	1.07	ppb
Zirconium	91-1	49.14	49.18	49.44	49.25	0.33	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:10:38	DataFile Name :	007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	2576.72	2596.59	2574.33	2582.54	0.47	ppb
Antimony	121-1	130.34	129.65	128.27	129.42	0.81	ppb
Arsenic	75-2	130.35	130.05	130.61	130.33	0.22	ppb
Barium	135-1	632.27	632.26	624.21	629.58	0.74	ppb
Barium	137-1	630.49	623.15	619.76	624.46	0.88	ppb
Beryllium	9-1	130.25	129.38	130.97	130.20	0.61	ppb
Bismuth	209-1				103		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	129.01	131.07	127.08	129.05	1.55	ppb
Cadmium	106-1	132.55	135.52	131.74	133.27	1.49	ppb
Cadmium	111-1	132.76	132.51	132.14	132.47	0.24	ppb
Calcium	43-1	13435.05	13348.98	13970.62	13584.89	2.48	ppb
Calcium	44-1	12805.54	13079.73	13063.38	12982.88	1.18	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	149.56	150.74	152.20	150.83	0.88	ppb
Cobalt	59-2	127.56	130.27	129.87	129.24	1.13	ppb
Copper	63-2	1303.70	1291.44	1290.67	1295.27	0.56	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				103		%
Holmium	165-2				100		%
Indium	115-1				100		%
Indium	115-2				98		%
Iron	56-2	6715.63	6701.98	6892.44	6770.02	1.57	ppb
Iron	57-2	7138.92	7226.01	7129.22	7164.72	0.74	ppb
Iron	54-2	7284.72	7304.78	7323.40	7304.30	0.26	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:10:38	DataFile Name :	007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	624.56	595.18	615.10	611.62	2.45	ppb
Lead	207-1	614.46	609.31	625.77	616.51	1.37	ppb
Lead	208-1	622.33	605.97	621.17	616.49	1.48	ppb
Lithium	6-1				104		%
Magnesium	24-2	12916.69	12973.33	12842.18	12910.73	0.51	ppb
Manganese	55-2	1267.81	1270.22	1294.47	1277.50	1.15	ppb
Molybdenum	94-1	1258.98	1299.53	1262.96	1273.82	1.75	ppb
Molybdenum	95-1	1248.44	1295.71	1254.01	1266.05	2.04	ppb
Molybdenum	96-1	1240.45	1296.78	1272.34	1269.86	2.22	ppb
Molybdenum	97-1	1234.22	1308.49	1248.65	1263.79	3.12	ppb
Molybdenum	98-1	1217.02	1315.49	1273.07	1268.52	3.89	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	147.68	147.17	147.85	147.57	0.24	ppb
Phosphorus	31-2	2500.81	2516.97	2443.02	2486.93	1.56	ppb
Potassium	39-2	6385.83	6440.79	6401.22	6409.28	0.44	ppb
Rhodium	103-1				98		%
Rhodium	103-2				97		%
Scandium	45-1				99		%
Scandium	45-2				98		%
Selenium	82-1	128.43	137.43	132.70	132.85	3.39	ppb
Selenium	77-2	137.30	139.13	133.72	136.72	2.01	ppb
Selenium	78-2	139.08	127.37	135.72	134.05	4.50	ppb
Silicon	28-1	132.58	135.26	137.98	135.27	2.00	ppb
Silver	107-1	134.75	131.81	132.62	133.06	1.14	ppb
Silver	109-1	133.66	131.42	129.83	131.64	1.46	ppb
Sodium	23-2	12581.27	12863.05	12878.23	12774.18	1.31	ppb
Strontium	86-1	125.47	129.06	126.67	127.07	1.44	ppb
Strontium	88-1	125.56	127.55	124.35	125.82	1.28	ppb
Sulfur	34-1	2188.94	2003.17	2207.82	2133.31	5.30	ppb
Terbium	159-1				101		%
Terbium	159-2				102		%
Thallium	203-1	117.23	115.31	117.66	116.73	1.07	ppb
Thallium	205-1	118.49	114.80	116.89	116.73	1.59	ppb
Tin	118-1	128.37	129.09	127.97	128.48	0.44	ppb
Titanium	47-1	1240.55	1225.23	1268.83	1244.87	1.78	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:10:38	DataFile Name :	007CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	121.30	120.69	122.06	121.35	0.57	ppb
Vanadium	51-2	127.63	129.36	129.09	128.69	0.72	ppb
Yttrium	89-1				99		%
Yttrium	89-2				98		%
Zinc	66-2	1317.05	1327.30	1327.76	1324.04	0.46	ppb
Zirconium	90-1	123.55	129.29	127.53	126.79	2.32	ppb
Zirconium	91-1	125.10	129.69	127.99	127.59	1.82	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:13:47	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	5059.17	5000.72	5002.55	5020.81	0.66	ppb
Antimony	121-1	240.80	255.01	247.36	247.72	2.87	ppb
Arsenic	75-2	254.11	250.25	257.34	253.90	1.40	ppb
Barium	135-1	1166.16	1228.18	1202.68	1199.00	2.60	ppb
Barium	137-1	1199.34	1233.42	1210.25	1214.34	1.43	ppb
Beryllium	9-1	252.13	253.27	252.10	252.50	0.27	ppb
Bismuth	209-1				101		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	241.57	263.60	257.86	254.34	4.49	ppb
Cadmium	106-1	240.81	254.87	255.76	250.48	3.35	ppb
Cadmium	111-1	244.72	260.27	257.53	254.17	3.27	ppb
Calcium	43-1	26197.59	26824.91	25923.76	26315.42	1.76	ppb
Calcium	44-1	25233.56	24970.67	24805.25	25003.16	0.86	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	297.52	293.77	291.73	294.34	1.00	ppb
Cobalt	59-2	255.20	249.70	249.13	251.34	1.33	ppb
Copper	63-2	2507.66	2502.05	2502.44	2504.05	0.12	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				103		%
Holmium	165-2				101		%
Indium	115-1				99		%
Indium	115-2				97		%
Iron	56-2	13215.78	13187.80	13151.74	13185.11	0.24	ppb
Iron	57-2	14165.26	13898.70	13740.24	13934.73	1.54	ppb
Iron	54-2	13722.31	13477.21	13075.98	13425.17	2.43	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:13:47	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1244.61	1243.96	1225.24	1237.94	0.89	ppb
Lead	207-1	1234.62	1254.92	1224.68	1238.07	1.24	ppb
Lead	208-1	1242.49	1235.03	1214.62	1230.71	1.17	ppb
Lithium	6-1				106		%
Magnesium	24-2	24983.85	24782.70	25050.84	24939.13	0.56	ppb
Manganese	55-2	2500.40	2470.05	2474.13	2481.53	0.66	ppb
Molybdenum	94-1	2420.09	2567.22	2367.14	2451.48	4.23	ppb
Molybdenum	95-1	2484.13	2474.28	2330.03	2429.48	3.55	ppb
Molybdenum	96-1	2428.21	2482.88	2372.17	2427.75	2.28	ppb
Molybdenum	97-1	2447.11	2507.01	2411.43	2455.18	1.97	ppb
Molybdenum	98-1	2413.19	2486.36	2433.99	2444.51	1.54	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	286.84	282.76	280.64	283.41	1.11	ppb
Phosphorus	31-2	4974.28	4904.71	4924.82	4934.61	0.73	ppb
Potassium	39-2	12353.76	12312.39	12296.81	12320.99	0.24	ppb
Rhodium	103-1				98		%
Rhodium	103-2				96		%
Scandium	45-1				98		%
Scandium	45-2				96		%
Selenium	82-1	258.45	260.44	248.62	255.84	2.47	ppb
Selenium	77-2	270.78	257.44	284.36	270.86	4.97	ppb
Selenium	78-2	267.36	257.73	275.27	266.79	3.29	ppb
Silicon	28-1	252.97	261.34	254.26	256.19	1.76	ppb
Silver	107-1	244.11	258.97	255.31	252.79	3.06	ppb
Silver	109-1	246.04	256.32	255.64	252.67	2.27	ppb
Sodium	23-2	25320.32	25226.65	24550.29	25032.42	1.68	ppb
Strontium	86-1	240.67	249.88	237.97	242.84	2.57	ppb
Strontium	88-1	238.77	254.94	236.73	243.48	4.10	ppb
Sulfur	34-1	4217.15	4729.56	4173.86	4373.52	7.07	ppb
Terbium	159-1				102		%
Terbium	159-2				101		%
Thallium	203-1	234.88	235.51	231.33	233.90	0.96	ppb
Thallium	205-1	246.19	251.68	248.09	248.65	1.12	ppb
Tin	118-1	237.07	254.91	246.38	246.12	3.63	ppb
Titanium	47-1	2374.86	2459.50	2353.17	2395.84	2.34	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:13:47	DataFile Name :	008CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	243.08	246.71	246.11	245.30	0.79	ppb
Vanadium	51-2	253.06	249.81	247.45	250.11	1.13	ppb
Yttrium	89-1				99		%
Yttrium	89-2				96		%
Zinc	66-2	2580.56	2570.61	2566.97	2572.71	0.27	ppb
Zirconium	90-1	244.71	253.90	239.06	245.89	3.04	ppb
Zirconium	91-1	244.21	256.27	237.91	246.13	3.79	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:16:48	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	10000.90	10199.82	10101.49	10100.74	0.98	ppb
Antimony	121-1	488.81	509.42	491.46	496.56	2.26	ppb
Arsenic	75-2	491.68	494.59	497.48	494.58	0.59	ppb
Barium	135-1	2467.41	2482.70	2469.48	2473.20	0.34	ppb
Barium	137-1	2398.48	2505.61	2509.14	2471.07	2.55	ppb
Beryllium	9-1	498.85	500.50	495.79	498.38	0.48	ppb
Bismuth	209-1				105		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	501.53	501.81	502.25	501.86	0.07	ppb
Cadmium	106-1	492.54	510.31	500.49	501.11	1.78	ppb
Cadmium	111-1	493.18	513.33	501.78	502.76	2.01	ppb
Calcium	43-1	53183.76	52344.11	52042.67	52523.51	1.13	ppb
Calcium	44-1	50444.69	49443.32	49207.54	49698.52	1.32	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	500.29	503.96	501.55	501.93	0.37	ppb
Cobalt	59-2	496.41	497.88	496.14	496.81	0.19	ppb
Copper	63-2	5049.30	4962.44	4945.09	4985.61	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				103		%
Indium	115-1				97		%
Indium	115-2				95		%
Iron	56-2	25852.48	25874.97	25471.75	25733.07	0.88	ppb
Iron	57-2	26590.28	26462.69	25475.20	26176.06	2.33	ppb
Iron	54-2	26681.45	26896.29	26716.60	26764.78	0.43	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:16:48	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2392.72	2355.75	2470.80	2406.42	2.44	ppb
Lead	207-1	2426.80	2397.89	2426.20	2416.96	0.68	ppb
Lead	208-1	2402.22	2392.13	2465.97	2420.11	1.65	ppb
Lithium	6-1				106		%
Magnesium	24-2	49177.48	49802.60	49337.83	49439.30	0.66	ppb
Manganese	55-2	4909.18	4942.75	4973.39	4941.77	0.65	ppb
Molybdenum	94-1	4819.36	4730.15	4852.90	4800.80	1.32	ppb
Molybdenum	95-1	4804.74	4803.35	4987.50	4865.20	2.18	ppb
Molybdenum	96-1	4861.09	4741.99	4938.65	4847.24	2.04	ppb
Molybdenum	97-1	4813.39	4787.84	5014.21	4871.81	2.54	ppb
Molybdenum	98-1	4864.07	4768.52	4881.73	4838.11	1.26	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	501.90	504.68	502.80	503.13	0.28	ppb
Phosphorus	31-2	9842.93	9906.09	9681.66	9810.23	1.18	ppb
Potassium	39-2	24527.24	24552.58	24495.77	24525.20	0.12	ppb
Rhodium	103-1				98		%
Rhodium	103-2				95		%
Scandium	45-1				98		%
Scandium	45-2				95		%
Selenium	82-1	506.17	496.98	500.52	501.22	0.93	ppb
Selenium	77-2	521.90	498.40	510.79	510.36	2.30	ppb
Selenium	78-2	489.75	499.03	497.18	495.32	0.99	ppb
Silicon	28-1	534.12	518.99	520.34	524.48	1.60	ppb
Silver	107-1	499.73	511.62	502.44	504.60	1.23	ppb
Silver	109-1	492.70	507.41	501.89	500.67	1.48	ppb
Sodium	23-2	50350.76	50679.99	49253.37	50094.71	1.49	ppb
Strontium	86-1	485.46	480.94	487.38	484.59	0.68	ppb
Strontium	88-1	479.20	472.64	491.07	480.97	1.94	ppb
Sulfur	34-1	9885.84	9403.20	9071.80	9453.61	4.33	ppb
Terbium	159-1				102		%
Terbium	159-2				101		%
Thallium	203-1	478.98	471.04	479.88	476.63	1.02	ppb
Thallium	205-1	489.63	464.43	492.48	482.18	3.20	ppb
Tin	118-1	486.53	506.59	493.63	495.58	2.05	ppb
Titanium	47-1	4822.25	4864.95	4814.65	4833.95	0.56	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:16:48	DataFile Name :	009CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	483.50	466.03	488.54	479.35	2.46	ppb
Vanadium	51-2	496.20	501.58	498.33	498.70	0.54	ppb
Yttrium	89-1				98		%
Yttrium	89-2				96		%
Zinc	66-2	4971.44	4974.19	4997.73	4981.12	0.29	ppb
Zirconium	90-1	499.40	495.55	490.12	495.02	0.94	ppb
Zirconium	91-1	489.07	487.14	490.22	488.81	0.32	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:19:41	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20137.71	19988.80	20034.13	20053.55	0.38	ppb
Antimony	121-1	1000.53	989.66	1014.82	1001.67	1.26	ppb
Arsenic	75-2	1007.52	995.55	999.96	1001.01	0.60	ppb
Barium	135-1	5076.94	5005.78	4994.34	5025.68	0.89	ppb
Barium	137-1	5035.07	4953.64	5082.08	5023.60	1.29	ppb
Beryllium	9-1	994.88	997.46	1005.93	999.42	0.58	ppb
Bismuth	209-1				102		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	998.80	985.40	1007.83	997.34	1.13	ppb
Cadmium	106-1	999.73	980.75	1013.89	998.13	1.67	ppb
Cadmium	111-1	982.67	991.48	1015.37	996.51	1.70	ppb
Calcium	43-1	107207.07	107485.51	103459.80	106050.79	2.12	ppb
Calcium	44-1	103925.85	102840.12	104741.38	103835.79	0.92	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1005.66	983.52	964.36	984.51	2.10	ppb
Cobalt	59-2	1032.92	984.82	984.36	1000.70	2.79	ppb
Copper	63-2	10096.57	10049.04	9854.78	10000.13	1.28	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				105		%
Holmium	165-2				101		%
Indium	115-1				96		%
Indium	115-2				93		%
Iron	56-2	52712.29	51950.36	52321.74	52328.13	0.73	ppb
Iron	57-2	53332.68	52684.52	51925.24	52647.48	1.34	ppb
Iron	54-2	54075.24	52443.93	52805.80	53108.32	1.61	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:19:41	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	5058.87	4984.23	5113.65	5052.25	1.29	ppb
Lead	207-1	5007.54	5015.58	5116.46	5046.53	1.20	ppb
Lead	208-1	4978.17	5006.53	5154.45	5046.38	1.88	ppb
Lithium	6-1				105		%
Magnesium	24-2	100410.50	97890.77	100223.04	99508.10	1.41	ppb
Manganese	55-2	10116.36	10071.49	9902.64	10030.16	1.12	ppb
Molybdenum	94-1	10107.53	9994.30	10225.77	10109.20	1.14	ppb
Molybdenum	95-1	10152.06	9920.89	10177.70	10083.55	1.40	ppb
Molybdenum	96-1	10062.19	10064.63	10149.91	10092.24	0.50	ppb
Molybdenum	97-1	10024.33	10102.64	10094.56	10073.84	0.43	ppb
Molybdenum	98-1	10037.48	10171.11	10069.78	10092.79	0.69	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	997.58	982.96	979.92	986.82	0.96	ppb
Phosphorus	31-2	20298.06	19929.23	20128.09	20118.46	0.92	ppb
Potassium	39-2	50357.28	49440.40	49715.16	49837.61	0.94	ppb
Rhodium	103-1				95		%
Rhodium	103-2				95		%
Scandium	45-1				95		%
Scandium	45-2				96		%
Selenium	82-1	1000.55	986.05	1004.00	996.87	0.96	ppb
Selenium	77-2	984.00	979.24	1000.65	987.96	1.14	ppb
Selenium	78-2	988.38	985.18	1016.68	996.75	1.74	ppb
Silicon	28-1	983.49	985.41	985.03	984.64	0.10	ppb
Silver	107-1	1001.69	988.33	997.37	995.80	0.68	ppb
Silver	109-1	989.98	981.01	1023.04	998.01	2.22	ppb
Sodium	23-2	102534.58	100315.39	101797.56	101549.18	1.11	ppb
Strontium	86-1	1019.81	994.27	1013.80	1009.29	1.32	ppb
Strontium	88-1	1006.26	1013.31	1013.68	1011.08	0.41	ppb
Sulfur	34-1	20564.45	20276.16	20588.83	20476.48	0.85	ppb
Terbium	159-1				103		%
Terbium	159-2				100		%
Thallium	203-1	1004.08	1003.29	1043.38	1016.92	2.25	ppb
Thallium	205-1	984.95	1016.70	1029.85	1010.50	2.28	ppb
Tin	118-1	993.99	997.01	1017.02	1002.67	1.25	ppb
Titanium	47-1	10143.88	10001.16	10184.82	10109.95	0.95	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:19:41	DataFile Name :	010CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	998.34	1005.02	1033.34	1012.23	1.84	ppb
Vanadium	51-2	1025.18	983.32	991.93	1000.14	2.21	ppb
Yttrium	89-1				97		%
Yttrium	89-2				97		%
Zinc	66-2	10183.90	9898.54	9861.12	9981.19	1.77	ppb
Zirconium	90-1	1008.40	993.31	1008.26	1003.32	0.86	ppb
Zirconium	91-1	1010.89	987.78	1020.16	1006.28	1.66	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:22:29	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	98667.88	101193.33	100066.57	99975.93	1.27	ppb
Antimony	121-1	1.99	2.16	2.16	2.11	4.62	ppb
Arsenic	75-2	2.15	2.28	2.22	2.21	2.86	ppb
Barium	135-1	8.04	8.42	7.96	8.14	3.02	ppb
Barium	137-1	8.10	8.10	8.02	8.07	0.56	ppb
Beryllium	9-1	0.35	0.33	0.40	0.36	10.35	ppb
Bismuth	209-1				97		%
Bismuth	209-2				95		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.87	0.73	0.68	0.76	13.20	ppb
Cadmium	106-1	-0.18	0.89	0.63	0.45	124.55	ppb
Cadmium	111-1	0.35	0.45	0.48	0.42	15.75	ppb
Calcium	43-1	491529.64	494272.66	509520.12	498440.81	1.94	ppb
Calcium	44-1	487656.71	497051.47	513032.79	499246.99	2.57	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	14.92	14.91	14.93	14.92	0.07	ppb
Cobalt	59-2	3.26	3.36	3.38	3.33	1.93	ppb
Copper	63-2	2.62	2.69	2.64	2.65	1.50	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				105		%
Holmium	165-2				104		%
Indium	115-1				98		%
Indium	115-2				99		%
Iron	56-2	251412.50	250856.48	245969.05	249412.68	1.20	ppb
Iron	57-2	244348.79	251861.30	251556.04	249255.38	1.71	ppb
Iron	54-2	249513.13	249805.38	248058.99	249125.83	0.38	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:22:29	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1.94	1.86	1.86	1.88	2.47	ppb
Lead	207-1	1.91	1.82	1.80	1.84	3.25	ppb
Lead	208-1	1.88	1.83	1.84	1.85	1.51	ppb
Lithium	6-1				103		%
Magnesium	24-2	496868.55	503754.10	499818.09	500146.92	0.69	ppb
Manganese	55-2	8.43	8.57	8.51	8.50	0.82	ppb
Molybdenum	94-1	5.03	5.05	4.74	4.94	3.52	ppb
Molybdenum	95-1	3.77	3.70	3.71	3.73	1.00	ppb
Molybdenum	96-1	5.25	4.80	4.78	4.95	5.40	ppb
Molybdenum	97-1	3.97	3.81	3.83	3.87	2.28	ppb
Molybdenum	98-1	3.86	3.74	3.70	3.76	2.16	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	11.19	11.41	11.65	11.42	2.00	ppb
Phosphorus	31-2	-128.69	-125.62	-115.99	-123.43		ppb
Potassium	39-2	248756.74	252644.71	248848.56	250083.33	0.89	ppb
Rhodium	103-1				92		%
Rhodium	103-2				94		%
Scandium	45-1				99		%
Scandium	45-2				104		%
Selenium	82-1	0.84	1.27	0.68	0.93	32.75	ppb
Selenium	77-2	-0.25	0.73	0.23	0.24	205.47	ppb
Selenium	78-2	1.33	1.95	1.22	1.50	26.24	ppb
Silicon	28-1	1.02	1.55	1.32	1.29	20.45	ppb
Silver	107-1	0.79	0.79	0.82	0.80	1.87	ppb
Silver	109-1	0.81	0.83	0.80	0.81	1.74	ppb
Sodium	23-2	495893.87	500456.39	502661.41	499670.55	0.69	ppb
Strontium	86-1	13.33	12.44	12.52	12.77	3.83	ppb
Strontium	88-1	13.41	12.99	12.79	13.06	2.44	ppb
Sulfur	34-1	-708.21	-386.60	-148.49	-414.43		ppb
Terbium	159-1				103		%
Terbium	159-2				104		%
Thallium	203-1	1.38	1.39	1.35	1.37	1.77	ppb
Thallium	205-1	1.39	1.38	1.39	1.39	0.55	ppb
Tin	118-1	1.09	1.11	1.18	1.13	3.93	ppb
Titanium	47-1	1.37	1.40	1.47	1.41	3.45	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:22:29	DataFile Name :	011CALS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.05	0.05	0.05	0.05	6.14	ppb
Vanadium	51-2	1.69	1.74	1.72	1.72	1.49	ppb
Yttrium	89-1				99		%
Yttrium	89-2				102		%
Zinc	66-2	14.11	14.41	14.64	14.38	1.85	ppb
Zirconium	90-1	0.94	0.88	0.90	0.91	3.38	ppb
Zirconium	91-1	0.95	0.94	0.83	0.90	7.42	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:44:19	DataFile Name :	012ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1510.37	1497.51	1493.84	1500.57	0.58	ppb
Antimony	121-1	439.59	443.00	434.14	438.91	1.02	ppb
Arsenic	75-2	410.66	416.44	421.63	416.24	1.32	ppb
Barium	135-1	1616.89	1648.31	1657.08	1640.76	1.29	ppb
Barium	137-1	1620.62	1602.72	1599.19	1607.51	0.71	ppb
Beryllium	9-1	43.10	43.18	43.34	43.20	0.28	ppb
Bismuth	209-1				102		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	192.34	197.94	198.77	196.35	1.78	ppb
Cadmium	106-1	198.60	201.43	197.88	199.30	0.94	ppb
Cadmium	111-1	217.16	216.93	217.62	217.24	0.16	ppb
Calcium	43-1	4073.30	4181.87	4291.63	4182.27	2.61	ppb
Calcium	44-1	4082.17	4168.24	4237.30	4162.57	1.87	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	159.10	161.21	158.66	159.66	0.85	ppb
Cobalt	59-2	411.60	395.86	401.14	402.87	1.99	ppb
Copper	63-2	188.61	186.40	186.69	187.24	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				102		%
Holmium	165-2				102		%
Indium	115-1				101		%
Indium	115-2				101		%
Iron	56-2	825.45	798.96	801.08	808.50	1.82	ppb
Iron	57-2	885.65	874.89	874.15	878.23	0.73	ppb
Iron	54-2	977.93	963.70	965.49	969.04	0.80	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:44:19	DataFile Name :	012ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	380.20	380.06	380.08	380.11	0.02	ppb
Lead	207-1	368.00	366.03	373.11	369.05	0.99	ppb
Lead	208-1	388.64	386.55	384.85	386.68	0.49	ppb
Lithium	6-1				97		%
Magnesium	24-2	3686.89	3688.17	3648.83	3674.63	0.61	ppb
Manganese	55-2	397.20	392.07	391.60	393.62	0.79	ppb
Molybdenum	94-1	0.46	0.39	0.43	0.43	8.63	ppb
Molybdenum	95-1	0.46	0.46	0.41	0.45	6.40	ppb
Molybdenum	96-1	0.49	0.48	0.46	0.48	3.15	ppb
Molybdenum	97-1	0.46	0.47	0.52	0.48	7.37	ppb
Molybdenum	98-1	0.50	0.48	0.49	0.49	1.83	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	405.16	403.55	403.95	404.22	0.21	ppb
Phosphorus	31-2	-124.68	-125.50	-123.29	-124.49		ppb
Potassium	39-2	4201.64	4215.15	4213.81	4210.20	0.18	ppb
Rhodium	103-1				99		%
Rhodium	103-2				100		%
Scandium	45-1				100		%
Scandium	45-2				100		%
Selenium	82-1	418.47	440.00	427.50	428.66	2.52	ppb
Selenium	77-2	429.26	446.18	423.09	432.84	2.76	ppb
Selenium	78-2	432.17	451.97	442.44	442.19	2.24	ppb
Silicon	28-1	-0.06	0.23	0.41	0.19	125.65	ppb
Silver	107-1	214.47	212.33	210.70	212.50	0.89	ppb
Silver	109-1	209.37	211.24	210.09	210.24	0.45	ppb
Sodium	23-2	3919.88	3888.32	3935.84	3914.68	0.62	ppb
Strontium	86-1	0.09	0.09	0.11	0.10	12.01	ppb
Strontium	88-1	0.06	0.06	0.06	0.06	1.00	ppb
Sulfur	34-1	-190.69	-140.75	-256.03	-195.82		ppb
Terbium	159-1				100		%
Terbium	159-2				100		%
Thallium	203-1	387.29	402.58	392.98	394.28	1.96	ppb
Thallium	205-1	389.75	390.67	391.21	390.55	0.19	ppb
Tin	118-1	0.36	0.37	0.38	0.37	3.43	ppb
Titanium	47-1	0.41	0.36	0.32	0.36	12.56	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:44:19	DataFile Name :	012ICV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	49.25	ppb
Vanadium	51-2	401.01	404.91	403.38	403.10	0.49	ppb
Yttrium	89-1				101		%
Yttrium	89-2				101		%
Zinc	66-2	382.70	375.12	379.44	379.09	1.00	ppb
Zirconium	90-1	0.01	0.01	0.02	0.01	63.47	ppb
Zirconium	91-1	0.11	0.07	0.13	0.10	26.37	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	LLICV01	Instrumnet Name :	P7
Client Sample ID :	LLICV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:53:46	DataFile Name :	013LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	20.44	20.78	20.37	20.53	1.07	ppb
Antimony	121-1	1.99	2.00	2.10	2.03	2.94	ppb
Arsenic	75-2	1.06	1.18	1.24	1.16	7.91	ppb
Barium	135-1	9.69	9.45	9.38	9.51	1.69	ppb
Barium	137-1	9.21	9.35	9.62	9.39	2.23	ppb
Beryllium	9-1	1.08	1.07	1.06	1.07	0.64	ppb
Bismuth	209-1				102		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	1.20	0.96	1.21	1.12	12.47	ppb
Cadmium	106-1	-1.35	0.57	0.21	-0.19		ppb
Cadmium	111-1	0.83	0.94	0.82	0.86	7.36	ppb
Calcium	43-1	467.97	527.90	530.46	508.78	6.95	ppb
Calcium	44-1	512.57	518.35	503.77	511.57	1.44	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1.88	1.99	1.96	1.94	2.79	ppb
Cobalt	59-2	1.09	1.04	1.02	1.05	3.21	ppb
Copper	63-2	1.91	1.96	1.95	1.94	1.19	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				102		%
Holmium	165-2				103		%
Indium	115-1				103		%
Indium	115-2				101		%
Iron	56-2	52.17	52.41	52.19	52.26	0.26	ppb
Iron	57-2	54.47	51.90	51.96	52.78	2.78	ppb
Iron	54-2	52.53	55.74	52.55	53.61	3.45	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	LLICV01	Instrumnet Name :	P7
Client Sample ID :	LLICV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:53:46	DataFile Name :	013LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.83	0.83	0.88	0.85	3.02	ppb
Lead	207-1	0.90	0.87	0.78	0.85	6.87	ppb
Lead	208-1	0.84	0.83	0.83	0.83	0.72	ppb
Lithium	6-1				99		%
Magnesium	24-2	479.17	477.97	481.33	479.49	0.36	ppb
Manganese	55-2	0.92	1.00	0.90	0.94	5.38	ppb
Molybdenum	94-1	5.68	5.56	5.69	5.65	1.30	ppb
Molybdenum	95-1	4.76	4.51	4.55	4.60	2.88	ppb
Molybdenum	96-1	4.73	4.82	4.77	4.77	0.96	ppb
Molybdenum	97-1	4.89	4.75	5.05	4.90	3.06	ppb
Molybdenum	98-1	4.73	4.69	4.86	4.76	1.87	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.93	1.06	1.02	1.00	6.77	ppb
Phosphorus	31-2	113.48	116.46	111.18	113.70	2.33	ppb
Potassium	39-2	506.13	506.14	504.93	505.73	0.14	ppb
Rhodium	103-1				99		%
Rhodium	103-2				101		%
Scandium	45-1				100		%
Scandium	45-2				101		%
Selenium	82-1	4.58	4.54	5.18	4.77	7.48	ppb
Selenium	77-2	7.67	5.16	5.78	6.21	21.03	ppb
Selenium	78-2	6.77	5.04	5.91	5.91	14.60	ppb
Silicon	28-1	0.19	0.31	0.29	0.26	24.04	ppb
Silver	107-1	1.09	1.10	1.13	1.11	1.77	ppb
Silver	109-1	1.09	1.09	1.08	1.09	0.76	ppb
Sodium	23-2	484.80	485.66	481.46	483.97	0.46	ppb
Strontium	86-1	0.93	0.86	0.85	0.88	5.27	ppb
Strontium	88-1	0.93	0.93	0.94	0.93	0.46	ppb
Sulfur	34-1	-33.53	84.60	59.60	36.89	168.75	ppb
Terbium	159-1				101		%
Terbium	159-2				102		%
Thallium	203-1	1.00	0.99	0.96	0.98	1.93	ppb
Thallium	205-1	0.97	0.99	0.94	0.97	2.19	ppb
Tin	118-1	5.00	4.87	5.01	4.96	1.62	ppb
Titanium	47-1	4.73	5.33	5.18	5.08	6.15	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	LLICV01	Instrumnet Name :	P7
Client Sample ID :	LLICV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:53:46	DataFile Name :	013LLIC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.88	0.86	0.85	0.86	1.49	ppb
Vanadium	51-2	4.90	4.83	4.93	4.89	1.08	ppb
Yttrium	89-1				102		%
Yttrium	89-2				101		%
Zinc	66-2	5.05	5.06	4.94	5.02	1.28	ppb
Zirconium	90-1	0.96	0.95	0.95	0.95	0.25	ppb
Zirconium	91-1	1.04	0.95	0.95	0.98	5.01	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:58:33	DataFile Name :	014CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.07	0.39	0.38	0.28	63.71	ppb
Antimony	121-1	0.02	0.01	0.02	0.02	44.50	ppb
Arsenic	75-2	0.02	0.00	0.00	0.01	119.98	ppb
Barium	135-1	0.00	-0.01	0.00	-0.01		ppb
Barium	137-1	-0.01	0.02	0.01	0.01	162.42	ppb
Beryllium	9-1	-0.01	0.00	0.01	0.00	598.32	ppb
Bismuth	209-1				101		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.01	0.08	0.05	0.05	74.66	ppb
Cadmium	106-1	-1.03	-0.13	-0.46	-0.54		ppb
Cadmium	111-1	-0.07	-0.01	-0.04	-0.04		ppb
Calcium	43-1	-1.52	0.39	0.69	-0.14		ppb
Calcium	44-1	2.41	2.02	3.47	2.63	28.45	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.00	0.01	-0.02	-0.01		ppb
Cobalt	59-2	0.00	0.00	0.00	0.00		ppb
Copper	63-2	-0.02	0.03	0.04	0.02	172.25	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				100		%
Indium	115-1				100		%
Indium	115-2				99		%
Iron	56-2	13.38	13.76	13.51	13.55	1.43	ppb
Iron	57-2	11.87	14.36	10.30	12.18	16.79	ppb
Iron	54-2	13.26	14.43	13.75	13.81	4.24	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:58:33	DataFile Name :	014CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.01	0.04	0.04	0.03	47.30	ppb
Lead	207-1	0.03	0.04	0.04	0.04	20.23	ppb
Lead	208-1	0.03	0.05	0.04	0.04	28.76	ppb
Lithium	6-1				99		%
Magnesium	24-2	0.14	0.25	-0.05	0.11	135.21	ppb
Manganese	55-2	-0.01	0.02	0.04	0.02	164.41	ppb
Molybdenum	94-1	-0.02	0.02	0.00	0.00		ppb
Molybdenum	95-1	0.01	0.00	0.00	0.00	191.37	ppb
Molybdenum	96-1	0.00	0.00	-0.01	0.00	2168.46	ppb
Molybdenum	97-1	-0.01	0.00	-0.01	0.00		ppb
Molybdenum	98-1	0.02	0.00	0.00	0.00	217.91	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.05	-0.06	-0.01	-0.04		ppb
Phosphorus	31-2	-125.26	-116.09	-125.10	-122.15		ppb
Potassium	39-2	3.05	9.65	8.59	7.10	49.93	ppb
Rhodium	103-1				100		%
Rhodium	103-2				98		%
Scandium	45-1				100		%
Scandium	45-2				99		%
Selenium	82-1	-0.37	0.60	-0.94	-0.24		ppb
Selenium	77-2	-0.25	-0.25	-0.25	-0.25		ppb
Selenium	78-2	0.62	1.71	0.55	0.96	67.42	ppb
Silicon	28-1	-0.08	-0.02	0.22	0.04	392.34	ppb
Silver	107-1	0.01	0.01	0.01	0.01	13.75	ppb
Silver	109-1	0.01	0.01	0.01	0.01	9.37	ppb
Sodium	23-2	12.03	13.39	14.29	13.23	8.59	ppb
Strontium	86-1	-0.02	-0.04	-0.03	-0.03		ppb
Strontium	88-1	0.00	0.00	0.00	0.00	978.14	ppb
Sulfur	34-1	-167.01	179.62	187.15	66.59	303.85	ppb
Terbium	159-1				99		%
Terbium	159-2				102		%
Thallium	203-1	0.02	0.02	0.02	0.02	13.27	ppb
Thallium	205-1	0.02	0.01	0.02	0.02	23.19	ppb
Tin	118-1	0.37	0.37	0.35	0.36	2.79	ppb
Titanium	47-1	0.04	0.02	0.00	0.02	108.11	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:58:33	DataFile Name :	014CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	57.81	ppb
Vanadium	51-2	0.00	0.00	0.00	0.00		ppb
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	-0.08	0.07	0.31	0.10	194.19	ppb
Zirconium	90-1	0.01	0.01	0.01	0.01	16.69	ppb
Zirconium	91-1	-0.01	0.01	-0.01	0.00		ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:03:33	DataFile Name :	015ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	85978.06	86561.61	85757.96	86099.21	0.48	ppb
Antimony	121-1	1.03	1.09	1.09	1.07	3.13	ppb
Arsenic	75-2	0.70	0.72	0.72	0.71	2.07	ppb
Barium	135-1	1.42	1.37	1.38	1.39	1.92	ppb
Barium	137-1	1.34	1.36	1.36	1.35	0.78	ppb
Beryllium	9-1	0.30	0.27	0.23	0.27	12.10	ppb
Bismuth	209-1				99		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	6.94	7.89	7.22	7.35	6.70	ppb
Cadmium	106-1	-1.62	-1.52	-0.61	-1.25		ppb
Cadmium	111-1	0.24	0.18	0.22	0.21	14.19	ppb
Calcium	43-1	96165.50	97530.68	95359.56	96351.92	1.14	ppb
Calcium	44-1	96194.15	96281.83	94837.78	95771.25	0.85	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	19.31	19.45	18.93	19.23	1.40	ppb
Cobalt	59-2	1.29	1.25	1.22	1.25	2.86	ppb
Copper	63-2	6.70	6.95	6.90	6.85	1.90	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				103		%
Indium	115-1				102		%
Indium	115-2				99		%
Iron	56-2	96487.87	96382.26	95633.37	96167.83	0.48	ppb
Iron	57-2	96438.11	97135.79	94964.57	96179.49	1.15	ppb
Iron	54-2	97977.84	99220.24	98335.48	98511.19	0.65	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:03:33	DataFile Name :	015ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	4.41	4.48	4.41	4.44	0.86	ppb
Lead	207-1	3.92	4.04	4.06	4.01	1.85	ppb
Lead	208-1	4.10	4.18	4.15	4.15	0.99	ppb
Lithium	6-1				97		%
Magnesium	24-2	88128.27	89227.36	86862.34	88072.66	1.34	ppb
Manganese	55-2	6.99	7.17	7.05	7.07	1.29	ppb
Molybdenum	94-1	1548.56	1586.58	1499.51	1544.88	2.83	ppb
Molybdenum	95-1	1846.15	1909.88	1816.68	1857.57	2.56	ppb
Molybdenum	96-1	1832.84	1832.57	1822.57	1829.33	0.32	ppb
Molybdenum	97-1	1925.65	1883.55	1849.72	1886.31	2.02	ppb
Molybdenum	98-1	1935.13	1931.69	1887.11	1917.98	1.40	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	5.27	5.34	5.22	5.28	1.13	ppb
Phosphorus	31-2	98247.38	97672.77	96245.60	97388.58	1.06	ppb
Potassium	39-2	95680.53	96271.53	96701.29	96217.78	0.53	ppb
Rhodium	103-1				97		%
Rhodium	103-2				98		%
Scandium	45-1				99		%
Scandium	45-2				101		%
Selenium	82-1	0.25	-0.27	0.20	0.06	478.92	ppb
Selenium	77-2	0.49	-0.25	-0.25	0.00		ppb
Selenium	78-2	-0.69	0.23	0.56	0.03	1962.96	ppb
Silicon	28-1	0.79	0.77	0.58	0.71	16.77	ppb
Silver	107-1	0.05	0.04	0.04	0.04	10.91	ppb
Silver	109-1	0.05	0.04	0.04	0.04	14.13	ppb
Sodium	23-2	94310.80	93822.40	91491.53	93208.24	1.62	ppb
Strontium	86-1	31.24	30.91	30.12	30.76	1.86	ppb
Strontium	88-1	31.13	31.46	30.78	31.13	1.09	ppb
Sulfur	34-1	99605.59	100320.01	95558.27	98494.62	2.61	ppb
Terbium	159-1				103		%
Terbium	159-2				104		%
Thallium	203-1	0.07	0.06	0.08	0.07	8.45	ppb
Thallium	205-1	0.06	0.07	0.08	0.07	12.26	ppb
Tin	118-1	0.48	0.53	0.53	0.51	5.89	ppb
Titanium	47-1	1901.65	1870.36	1874.52	1882.18	0.90	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:03:33	DataFile Name :	015ICSA.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.02	0.01	0.02	0.02	23.23	ppb
Vanadium	51-2	0.23	0.20	0.21	0.21	8.94	ppb
Yttrium	89-1				100		%
Yttrium	89-2				100		%
Zinc	66-2	10.08	10.09	9.69	9.95	2.29	ppb
Zirconium	90-1	0.02	0.01	0.02	0.01	38.11	ppb
Zirconium	91-1	0.02	0.01	0.02	0.02	51.10	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:07:39	DataFile Name :	016ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	85089.06	89252.73	86207.94	86849.91	2.48	ppb
Antimony	121-1	20.00	20.47	19.69	20.05	1.94	ppb
Arsenic	75-2	19.09	19.80	19.76	19.55	2.04	ppb
Barium	135-1	19.92	20.86	19.94	20.24	2.67	ppb
Barium	137-1	20.32	20.39	19.67	20.13	1.97	ppb
Beryllium	9-1	20.67	20.47	20.91	20.68	1.06	ppb
Bismuth	209-1				102		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	24.85	24.53	24.01	24.46	1.72	ppb
Cadmium	106-1	15.05	15.89	15.80	15.58	2.98	ppb
Cadmium	111-1	19.27	19.30	18.94	19.17	1.06	ppb
Calcium	43-1	96056.38	95401.57	98805.52	96754.49	1.87	ppb
Calcium	44-1	95604.08	94878.36	97615.35	96032.60	1.48	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	38.33	38.43	38.02	38.26	0.55	ppb
Cobalt	59-2	20.65	20.91	20.69	20.75	0.68	ppb
Copper	63-2	24.67	24.87	24.53	24.69	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				108		%
Holmium	165-2				105		%
Indium	115-1				102		%
Indium	115-2				103		%
Iron	56-2	93828.82	94514.97	93460.31	93934.70	0.57	ppb
Iron	57-2	94649.59	95885.89	95191.76	95242.41	0.65	ppb
Iron	54-2	96332.74	99234.75	96302.99	97290.16	1.73	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:07:39	DataFile Name :	016ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	23.39	22.21	23.27	22.96	2.82	ppb
Lead	207-1	22.22	21.11	22.41	21.91	3.20	ppb
Lead	208-1	22.52	21.53	22.35	22.13	2.41	ppb
Lithium	6-1				96		%
Magnesium	24-2	87078.25	88340.46	87989.14	87802.62	0.74	ppb
Manganese	55-2	24.46	24.59	24.72	24.59	0.53	ppb
Molybdenum	94-1	1485.10	1500.86	1540.00	1508.65	1.87	ppb
Molybdenum	95-1	1826.23	1811.94	1831.61	1823.26	0.56	ppb
Molybdenum	96-1	1790.66	1779.83	1813.76	1794.75	0.97	ppb
Molybdenum	97-1	1811.24	1842.45	1892.43	1848.71	2.22	ppb
Molybdenum	98-1	1834.25	1876.05	1916.46	1875.59	2.19	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	24.79	24.44	24.39	24.54	0.89	ppb
Phosphorus	31-2	95769.12	98337.76	97280.76	97129.21	1.33	ppb
Potassium	39-2	93450.75	94117.89	95406.29	94324.98	1.05	ppb
Rhodium	103-1				97		%
Rhodium	103-2				101		%
Scandium	45-1				100		%
Scandium	45-2				104		%
Selenium	82-1	19.89	18.67	19.33	19.30	3.18	ppb
Selenium	77-2	18.90	20.50	18.94	19.44	4.70	ppb
Selenium	78-2	19.25	18.38	20.61	19.41	5.80	ppb
Silicon	28-1	0.61	0.79	0.86	0.75	17.26	ppb
Silver	107-1	18.54	19.10	18.43	18.69	1.93	ppb
Silver	109-1	18.66	18.79	18.46	18.64	0.89	ppb
Sodium	23-2	93818.65	94789.12	94531.76	94379.85	0.53	ppb
Strontium	86-1	30.50	30.83	30.95	30.76	0.76	ppb
Strontium	88-1	30.43	30.62	31.30	30.78	1.49	ppb
Sulfur	34-1	98215.62	95588.75	97520.98	97108.45	1.40	ppb
Terbium	159-1				106		%
Terbium	159-2				105		%
Thallium	203-1	19.01	18.40	19.18	18.86	2.19	ppb
Thallium	205-1	19.24	18.36	18.72	18.77	2.37	ppb
Tin	118-1	0.48	0.45	0.50	0.47	5.28	ppb
Titanium	47-1	1896.21	1865.94	1861.82	1874.65	1.00	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:07:39	DataFile Name :	016ICSB.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.01	0.02	0.01	0.01	25.52	ppb
Vanadium	51-2	19.28	19.65	19.22	19.38	1.21	ppb
Yttrium	89-1				103		%
Yttrium	89-2				105		%
Zinc	66-2	28.46	29.02	28.50	28.66	1.08	ppb
Zirconium	90-1	0.01	0.01	0.02	0.01	29.27	ppb
Zirconium	91-1	0.01	0.01	0.00	0.01	146.50	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:10:52	DataFile Name :	017CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	49008.83	47828.79	49400.68	48746.10	1.68	ppb
Antimony	121-1	526.56	513.15	533.74	524.48	1.99	ppb
Arsenic	75-2	519.05	502.57	523.30	514.97	2.13	ppb
Barium	135-1	2609.24	2549.69	2632.41	2597.11	1.64	ppb
Barium	137-1	2546.03	2545.54	2608.96	2566.84	1.42	ppb
Beryllium	9-1	515.95	521.86	535.45	524.42	1.91	ppb
Bismuth	209-1				104		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	501.24	503.99	518.06	507.76	1.78	ppb
Cadmium	106-1	501.22	501.26	510.97	504.48	1.11	ppb
Cadmium	111-1	501.37	497.08	511.39	503.28	1.46	ppb
Calcium	43-1	249690.90	251824.55	251929.60	251148.35	0.50	ppb
Calcium	44-1	248404.19	251202.22	254068.86	251225.09	1.13	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	501.34	512.33	511.43	508.37	1.20	ppb
Cobalt	59-2	503.04	494.73	509.95	502.57	1.52	ppb
Copper	63-2	4950.66	5013.63	4976.02	4980.11	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				110		%
Holmium	165-2				108		%
Indium	115-1				102		%
Indium	115-2				101		%
Iron	56-2	125676.03	125182.35	126501.24	125786.54	0.53	ppb
Iron	57-2	128400.26	127965.22	129088.73	128484.74	0.44	ppb
Iron	54-2	130269.24	128216.22	127317.67	128601.04	1.18	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:10:52	DataFile Name :	017CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2608.60	2626.50	2579.37	2604.82	0.91	ppb
Lead	207-1	2554.52	2636.34	2559.03	2583.30	1.78	ppb
Lead	208-1	2585.81	2605.67	2579.13	2590.20	0.53	ppb
Lithium	6-1				98		%
Magnesium	24-2	249170.14	242870.11	258555.28	250198.51	3.15	ppb
Manganese	55-2	5043.57	4994.58	5010.93	5016.36	0.50	ppb
Molybdenum	94-1	5205.66	5272.04	5356.79	5278.16	1.44	ppb
Molybdenum	95-1	5213.09	5224.18	5308.22	5248.50	0.99	ppb
Molybdenum	96-1	5243.05	5238.16	5291.17	5257.46	0.56	ppb
Molybdenum	97-1	5203.43	5276.77	5185.09	5221.77	0.93	ppb
Molybdenum	98-1	5206.45	5298.86	5325.18	5276.83	1.18	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	503.91	496.17	493.83	497.97	1.06	ppb
Phosphorus	31-2	10392.39	10182.26	10391.85	10322.17	1.17	ppb
Potassium	39-2	125655.58	128283.38	124887.02	126275.33	1.41	ppb
Rhodium	103-1				99		%
Rhodium	103-2				100		%
Scandium	45-1				102		%
Scandium	45-2				106		%
Selenium	82-1	487.84	497.28	507.84	497.65	2.01	ppb
Selenium	77-2	493.98	507.73	514.27	505.32	2.05	ppb
Selenium	78-2	487.77	484.78	499.37	490.64	1.57	ppb
Silicon	28-1	541.48	549.16	542.77	544.47	0.76	ppb
Silver	107-1	501.65	501.05	527.06	509.92	2.91	ppb
Silver	109-1	501.34	515.23	512.60	509.73	1.45	ppb
Sodium	23-2	247280.53	243734.71	250972.08	247329.11	1.46	ppb
Strontium	86-1	519.99	528.64	534.27	527.63	1.36	ppb
Strontium	88-1	520.09	525.29	524.54	523.31	0.54	ppb
Sulfur	34-1	9266.73	9599.20	9550.13	9472.02	1.89	ppb
Terbium	159-1				108		%
Terbium	159-2				106		%
Thallium	203-1	520.14	521.85	512.94	518.31	0.91	ppb
Thallium	205-1	516.81	510.32	514.98	514.04	0.65	ppb
Tin	118-1	517.34	503.51	531.01	517.29	2.66	ppb
Titanium	47-1	4957.74	5150.90	4934.85	5014.50	2.37	ppb

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:10:52	DataFile Name :	017CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	522.76	517.12	526.83	522.24	0.93	ppb
Vanadium	51-2	522.72	518.65	524.23	521.87	0.55	ppb
Yttrium	89-1				104		%
Yttrium	89-2				105		%
Zinc	66-2	4823.24	4687.48	4849.72	4786.81	1.82	ppb
Zirconium	90-1	517.76	521.44	530.28	523.16	1.23	ppb
Zirconium	91-1	520.72	532.03	537.15	529.97	1.59	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:14:26	DataFile Name :	018CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.97	1.40	0.16	0.84	74.37	ppb
Antimony	121-1	0.15	0.18	0.18	0.17	10.39	ppb
Arsenic	75-2	-0.01	-0.01	0.00	-0.01		ppb
Barium	135-1	0.01	0.00	-0.02	0.00	1777.03	ppb
Barium	137-1	0.01	0.01	0.02	0.01	20.51	ppb
Beryllium	9-1	0.00	0.00	0.01	0.01	68.11	ppb
Bismuth	209-1				106		%
Bismuth	209-2				102		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.14	0.15	0.11	0.13	16.59	ppb
Cadmium	106-1	-0.19	-2.01	-1.29	-1.16		ppb
Cadmium	111-1	-0.01	-0.14	-0.08	-0.08		ppb
Calcium	43-1	1.68	1.99	5.13	2.93	65.01	ppb
Calcium	44-1	-4.15	-1.64	-5.08	-3.63		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.11	0.00	0.01	0.04	146.82	ppb
Cobalt	59-2	-0.01	0.00	0.00	0.00		ppb
Copper	63-2	0.22	0.24	0.24	0.23	4.12	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				106		%
Holmium	165-2				104		%
Indium	115-1				105		%
Indium	115-2				103		%
Iron	56-2	14.55	14.73	14.79	14.69	0.81	ppb
Iron	57-2	16.57	13.94	15.67	15.39	8.67	ppb
Iron	54-2	16.05	15.57	15.44	15.69	2.05	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:14:26	DataFile Name :	018CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.12	0.11	0.12	0.12	3.00	ppb
Lead	207-1	0.11	0.11	0.12	0.12	5.87	ppb
Lead	208-1	0.11	0.11	0.11	0.11	2.54	ppb
Lithium	6-1				98		%
Magnesium	24-2	2.34	1.59	2.33	2.09	20.49	ppb
Manganese	55-2	0.07	0.05	0.03	0.05	43.07	ppb
Molybdenum	94-1	0.20	0.14	0.15	0.16	19.00	ppb
Molybdenum	95-1	0.12	0.14	0.15	0.14	10.63	ppb
Molybdenum	96-1	0.10	0.15	0.12	0.12	18.46	ppb
Molybdenum	97-1	0.15	0.14	0.13	0.14	7.89	ppb
Molybdenum	98-1	0.13	0.13	0.14	0.13	4.82	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.01	0.00	-0.06	-0.02		ppb
Phosphorus	31-2	-123.93	-129.50	-124.74	-126.05		ppb
Potassium	39-2	20.91	20.97	18.78	20.22	6.16	ppb
Rhodium	103-1				102		%
Rhodium	103-2				103		%
Scandium	45-1				100		%
Scandium	45-2				101		%
Selenium	82-1	-0.23	0.23	-0.20	-0.07		ppb
Selenium	77-2	-0.25	-0.25	-0.01	-0.17		ppb
Selenium	78-2	0.77	1.00	0.18	0.65	64.43	ppb
Silicon	28-1	-0.44	3.44	-0.29	0.90	243.94	ppb
Silver	107-1	0.03	0.03	0.03	0.03	7.55	ppb
Silver	109-1	0.03	0.03	1.43	0.50	161.85	ppb
Sodium	23-2	55.90	54.29	52.75	54.31	2.90	ppb
Strontium	86-1	0.01	0.01	0.00	0.01	121.65	ppb
Strontium	88-1	0.00	0.00	0.01	0.00	72.29	ppb
Sulfur	34-1	-484.75	-296.61	-311.32	-364.23		ppb
Terbium	159-1				104		%
Terbium	159-2				104		%
Thallium	203-1	0.11	0.09	0.11	0.10	11.12	ppb
Thallium	205-1	0.11	0.11	0.10	0.11	8.19	ppb
Tin	118-1	0.38	0.36	0.35	0.36	3.32	ppb
Titanium	47-1	0.11	0.04	0.04	0.06	61.73	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:14:26	DataFile Name :	018CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.01	0.00	0.01	0.01	29.62	ppb
Vanadium	51-2	0.00	0.01	0.00	0.00	412.61	ppb
Yttrium	89-1				104		%
Yttrium	89-2				104		%
Zinc	66-2	0.13	-0.07	0.47	0.18	153.79	ppb
Zirconium	90-1	0.04	0.03	0.05	0.04	18.09	ppb
Zirconium	91-1	0.02	0.03	0.03	0.03	4.37	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CRI01	Instrumnet Name :	P7
Client Sample ID :	CRI01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:18:20	DataFile Name :	019LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	19.92	22.47	21.15	21.18	6.02	ppb
Antimony	121-1	2.07	2.05	2.08	2.07	0.89	ppb
Arsenic	75-2	1.26	1.34	1.27	1.29	3.22	ppb
Barium	135-1	9.05	9.45	9.59	9.36	3.02	ppb
Barium	137-1	9.60	9.25	9.65	9.50	2.32	ppb
Beryllium	9-1	0.98	1.12	1.14	1.08	8.08	ppb
Bismuth	209-1				104		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.88	1.16	1.16	1.07	15.43	ppb
Cadmium	106-1	1.08	1.28	0.62	0.99	33.88	ppb
Cadmium	111-1	0.95	0.94	0.94	0.94	0.46	ppb
Calcium	43-1	518.38	532.88	509.71	520.32	2.25	ppb
Calcium	44-1	499.68	510.67	510.73	507.03	1.25	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2.04	2.05	1.98	2.02	1.95	ppb
Cobalt	59-2	1.04	1.05	1.05	1.05	0.52	ppb
Copper	63-2	1.95	2.12	2.01	2.02	4.22	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				107		%
Holmium	165-2				102		%
Indium	115-1				104		%
Indium	115-2				101		%
Iron	56-2	52.99	54.11	53.02	53.38	1.19	ppb
Iron	57-2	55.27	59.66	58.22	57.72	3.88	ppb
Iron	54-2	53.51	53.39	55.36	54.09	2.04	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CRI01	Instrumnet Name :	P7
Client Sample ID :	CRI01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:18:20	DataFile Name :	019LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.87	0.87	0.91	0.88	2.50	ppb
Lead	207-1	0.83	0.89	0.88	0.87	3.83	ppb
Lead	208-1	0.85	0.87	0.89	0.87	2.54	ppb
Lithium	6-1				97		%
Magnesium	24-2	472.67	484.45	472.08	476.40	1.46	ppb
Manganese	55-2	1.02	0.96	1.05	1.01	4.28	ppb
Molybdenum	94-1	5.82	5.76	5.78	5.79	0.53	ppb
Molybdenum	95-1	4.87	4.73	4.90	4.84	1.93	ppb
Molybdenum	96-1	5.00	4.99	5.00	5.00	0.18	ppb
Molybdenum	97-1	4.95	4.82	4.92	4.90	1.42	ppb
Molybdenum	98-1	4.88	4.97	5.05	4.97	1.73	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.76	0.97	0.85	0.86	12.18	ppb
Phosphorus	31-2	115.31	119.09	95.13	109.84	11.73	ppb
Potassium	39-2	512.78	524.60	518.34	518.57	1.14	ppb
Rhodium	103-1				102		%
Rhodium	103-2				101		%
Scandium	45-1				101		%
Scandium	45-2				101		%
Selenium	82-1	4.41	5.05	5.13	4.86	8.12	ppb
Selenium	77-2	4.85	6.56	3.97	5.13	25.65	ppb
Selenium	78-2	7.82	5.34	3.81	5.66	35.78	ppb
Silicon	28-1	-0.39	-0.16	0.08	-0.16		ppb
Silver	107-1	1.10	1.10	1.09	1.10	0.97	ppb
Silver	109-1	1.08	1.12	1.09	1.10	2.23	ppb
Sodium	23-2	506.23	515.67	507.29	509.73	1.01	ppb
Strontium	86-1	0.96	0.97	0.99	0.97	1.59	ppb
Strontium	88-1	0.93	0.94	0.94	0.94	0.35	ppb
Sulfur	34-1	-246.81	-149.81	-127.30	-174.64		ppb
Terbium	159-1				104		%
Terbium	159-2				103		%
Thallium	203-1	1.05	1.11	1.04	1.07	3.43	ppb
Thallium	205-1	1.00	1.03	1.08	1.04	3.55	ppb
Tin	118-1	4.92	4.94	4.84	4.90	1.11	ppb
Titanium	47-1	4.99	4.83	5.05	4.95	2.21	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CRI01	Instrumnet Name :	P7
Client Sample ID :	CRI01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:18:20	DataFile Name :	019LLCC.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.84	0.89	0.87	0.87	3.02	ppb
Vanadium	51-2	4.87	4.94	4.87	4.89	0.83	ppb
Yttrium	89-1				103		%
Yttrium	89-2				101		%
Zinc	66-2	4.99	5.16	5.52	5.22	5.23	ppb
Zirconium	90-1	1.01	1.00	1.03	1.01	1.37	ppb
Zirconium	91-1	0.98	1.05	1.09	1.04	5.47	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	PB170226BL	Instrumnet Name :	P7
Client Sample ID :	PB170226BL	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:21:44	DataFile Name :	020CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.41	0.07	-0.15	0.11	256.33	ppb
Antimony	121-1	0.02	0.03	0.04	0.03	43.56	ppb
Arsenic	75-2	-0.01	0.00	0.00	0.00		ppb
Barium	135-1	-0.01	0.00	-0.01	0.00		ppb
Barium	137-1	0.02	0.01	0.00	0.01	86.54	ppb
Beryllium	9-1	0.00	0.00	0.01	0.00	327.13	ppb
Bismuth	209-1				102		%
Bismuth	209-2				103		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.05	0.08	0.04	0.06	34.44	ppb
Cadmium	106-1	-0.22	-0.52	0.01	-0.24		ppb
Cadmium	111-1	0.00	-0.04	0.00	-0.01		ppb
Calcium	43-1	7.26	0.97	1.42	3.22	109.20	ppb
Calcium	44-1	-3.37	-3.22	-4.55	-3.71		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	-0.03	-0.01	-0.02	-0.02		ppb
Cobalt	59-2	-0.01	0.00	0.00	0.00		ppb
Copper	63-2	0.10	0.13	0.08	0.10	25.31	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				104		%
Indium	115-1				103		%
Indium	115-2				102		%
Iron	56-2	15.22	14.13	14.14	14.49	4.32	ppb
Iron	57-2	14.84	15.18	12.80	14.27	9.01	ppb
Iron	54-2	11.91	14.88	13.04	13.28	11.31	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	PB170226BL	Instrumnet Name :	P7
Client Sample ID :	PB170226BL	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:21:44	DataFile Name :	020CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.08	0.05	0.07	0.07	20.98	ppb
Lead	207-1	0.06	0.08	0.04	0.06	28.35	ppb
Lead	208-1	0.06	0.06	0.05	0.06	10.11	ppb
Lithium	6-1				96		%
Magnesium	24-2	0.93	1.11	0.91	0.98	11.00	ppb
Manganese	55-2	0.01	0.01	0.03	0.02	77.01	ppb
Molybdenum	94-1	0.03	0.10	0.07	0.07	50.18	ppb
Molybdenum	95-1	0.04	0.04	0.03	0.04	11.64	ppb
Molybdenum	96-1	0.02	0.04	0.06	0.04	40.39	ppb
Molybdenum	97-1	0.02	0.05	0.04	0.04	36.42	ppb
Molybdenum	98-1	0.02	0.02	0.03	0.02	12.75	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.00	0.00	0.00	0.00	499.93	ppb
Phosphorus	31-2	-126.66	-128.31	-129.42	-128.13		ppb
Potassium	39-2	8.26	5.01	8.09	7.12	25.73	ppb
Rhodium	103-1				102		%
Rhodium	103-2				101		%
Scandium	45-1				98		%
Scandium	45-2				101		%
Selenium	82-1	-0.35	-0.11	-0.39	-0.28		ppb
Selenium	77-2	-0.25	-0.25	-0.25	-0.25		ppb
Selenium	78-2	0.22	0.20	0.55	0.33	60.33	ppb
Silicon	28-1	-0.25	0.06	-0.36	-0.18		ppb
Silver	107-1	0.01	0.02	0.01	0.02	11.89	ppb
Silver	109-1	0.01	0.01	0.01	0.01	9.83	ppb
Sodium	23-2	30.72	28.56	31.80	30.36	5.43	ppb
Strontium	86-1	0.01	-0.05	-0.04	-0.03		ppb
Strontium	88-1	0.00	0.00	0.00	0.00	49.68	ppb
Sulfur	34-1	-117.98	-77.04	-282.62	-159.21		ppb
Terbium	159-1				102		%
Terbium	159-2				100		%
Thallium	203-1	0.08	0.07	0.08	0.08	7.92	ppb
Thallium	205-1	0.07	0.07	0.07	0.07	1.68	ppb
Tin	118-1	0.39	0.37	0.34	0.36	7.26	ppb
Titanium	47-1	-0.02	-0.01	-0.02	-0.02		ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	PB170226BL	Instrumnet Name :	P7
Client Sample ID :	PB170226BL	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:21:44	DataFile Name :	020CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	29.26	ppb
Vanadium	51-2	-0.01	0.00	0.01	0.00	633.45	ppb
Yttrium	89-1				102		%
Yttrium	89-2				103		%
Zinc	66-2	0.19	0.01	0.08	0.10	92.80	ppb
Zirconium	90-1	0.01	0.01	0.00	0.01	31.28	ppb
Zirconium	91-1	0.00	0.01	0.00	0.00	74.72	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	PB170226BS	Instrumnet Name :	P7
Client Sample ID :	PB170226BS	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:25:05	DataFile Name :	021LCSS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	9851.60	10061.18	9904.09	9938.95	1.10	ppb
Antimony	121-1	523.53	503.70	497.32	508.18	2.69	ppb
Arsenic	75-2	507.07	500.00	506.22	504.43	0.77	ppb
Barium	135-1	2510.87	2515.42	2465.07	2497.12	1.12	ppb
Barium	137-1	2592.87	2460.77	2420.57	2491.40	3.62	ppb
Beryllium	9-1	498.28	503.95	492.21	498.15	1.18	ppb
Bismuth	209-1				103		%
Bismuth	209-2				99		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	510.69	508.15	501.35	506.73	0.95	ppb
Cadmium	106-1	515.71	513.64	496.82	508.72	2.04	ppb
Cadmium	111-1	514.74	510.53	500.91	508.73	1.39	ppb
Calcium	43-1	52411.20	52198.87	52971.15	52527.07	0.76	ppb
Calcium	44-1	50292.80	48867.55	50780.51	49980.29	1.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	507.77	501.60	500.88	503.42	0.75	ppb
Cobalt	59-2	504.33	500.18	507.12	503.88	0.69	ppb
Copper	63-2	5024.17	4914.14	4935.47	4957.93	1.18	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				105		%
Holmium	165-2				103		%
Indium	115-1				100		%
Indium	115-2				99		%
Iron	56-2	26150.46	24836.03	25882.15	25622.88	2.71	ppb
Iron	57-2	26423.41	26003.16	26209.56	26212.04	0.80	ppb
Iron	54-2	27230.69	26104.97	26842.72	26726.13	2.14	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	PB170226BS	Instrumnet Name :	P7
Client Sample ID :	PB170226BS	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:25:05	DataFile Name :	021LCSS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2480.36	2437.91	2466.40	2461.56	0.88	ppb
Lead	207-1	2347.18	2425.92	2477.95	2417.02	2.72	ppb
Lead	208-1	2437.64	2439.69	2477.17	2451.50	0.91	ppb
Lithium	6-1				97		%
Magnesium	24-2	48518.65	48583.40	48546.66	48549.57	0.07	ppb
Manganese	55-2	5014.42	4928.83	4953.79	4965.68	0.89	ppb
Molybdenum	94-1	4993.41	4810.29	4992.03	4931.91	2.14	ppb
Molybdenum	95-1	4977.35	4815.00	4805.68	4866.01	1.98	ppb
Molybdenum	96-1	4865.01	4891.77	4775.99	4844.25	1.25	ppb
Molybdenum	97-1	4850.36	4665.23	4841.37	4785.65	2.18	ppb
Molybdenum	98-1	4902.32	4810.87	4941.98	4885.05	1.38	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	506.25	503.14	502.54	503.98	0.40	ppb
Phosphorus	31-2	9792.63	9814.02	9839.09	9815.25	0.24	ppb
Potassium	39-2	25100.92	24499.10	24768.41	24789.48	1.22	ppb
Rhodium	103-1				99		%
Rhodium	103-2				98		%
Scandium	45-1				99		%
Scandium	45-2				99		%
Selenium	82-1	496.08	489.64	503.64	496.45	1.41	ppb
Selenium	77-2	518.50	514.96	533.91	522.46	1.93	ppb
Selenium	78-2	503.81	508.58	511.99	508.13	0.81	ppb
Silicon	28-1	514.10	497.70	506.17	505.99	1.62	ppb
Silver	107-1	530.61	528.11	499.49	519.40	3.33	ppb
Silver	109-1	523.37	519.36	513.15	518.63	0.99	ppb
Sodium	23-2	49378.37	49571.86	49483.63	49477.95	0.20	ppb
Strontium	86-1	478.50	474.94	487.44	480.30	1.34	ppb
Strontium	88-1	483.38	478.92	478.75	480.35	0.55	ppb
Sulfur	34-1	9564.51	9140.38	9176.31	9293.73	2.53	ppb
Terbium	159-1				103		%
Terbium	159-2				102		%
Thallium	203-1	494.04	486.21	485.35	488.53	0.98	ppb
Thallium	205-1	495.60	484.92	483.98	488.16	1.32	ppb
Tin	118-1	510.57	512.45	495.63	506.21	1.82	ppb
Titanium	47-1	4720.73	4679.61	4963.08	4787.81	3.20	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	PB170226BS	Instrumnet Name :	P7
Client Sample ID :	PB170226BS	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:25:05	DataFile Name :	021LCSS.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	472.04	469.79	471.23	471.02	0.24	ppb
Vanadium	51-2	503.53	496.58	498.53	499.55	0.72	ppb
Yttrium	89-1				102		%
Yttrium	89-2				100		%
Zinc	66-2	5084.13	5069.28	4926.56	5026.66	1.73	ppb
Zirconium	90-1	478.47	487.18	504.19	489.95	2.67	ppb
Zirconium	91-1	485.48	485.99	495.49	488.99	1.15	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:33:34	DataFile Name :	022SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	72234.06	73655.37	72564.27	72817.90	1.02	ppb
Antimony	121-1	1.04	1.05	1.10	1.06	3.20	ppb
Arsenic	75-2	97.49	101.75	100.29	99.84	2.17	ppb
Barium	135-1	942.23	933.98	944.38	940.20	0.58	ppb
Barium	137-1	971.25	950.06	963.61	961.64	1.12	ppb
Beryllium	9-1	6.24	6.05	5.82	6.03	3.52	ppb
Bismuth	209-1				113		%
Bismuth	209-2				114		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	40.21	40.59	38.51	39.77	2.79	ppb
Cadmium	106-1	42.31	45.74	43.55	43.87	3.96	ppb
Cadmium	111-1	35.11	35.10	35.96	35.39	1.39	ppb
Calcium	43-1	53918.68	54806.43	55439.12	54721.41	1.40	ppb
Calcium	44-1	51246.72	52835.88	52243.83	52108.81	1.54	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1234.92	1235.98	1226.45	1232.45	0.42	ppb
Cobalt	59-2	76.70	77.20	78.45	77.45	1.17	ppb
Copper	63-2	1404.25	1420.99	1378.66	1401.30	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				117		%
Holmium	165-2				115		%
Indium	115-1				109		%
Indium	115-2				109		%
Iron	56-2	200843.45	200444.85	199281.99	200190.10	0.41	ppb
Iron	57-2	203728.76	199799.12	199891.15	201139.68	1.11	ppb
Iron	54-2	206524.10	205215.81	207118.51	206286.14	0.47	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:33:34	DataFile Name :	022SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1797.62	1856.80	1853.57	1836.00	1.81	ppb
Lead	207-1	1761.96	1858.61	1782.25	1800.94	2.83	ppb
Lead	208-1	1774.10	1857.88	1790.40	1807.46	2.46	ppb
Lithium	6-1				111		%
Magnesium	24-2	50293.36	50864.31	50564.69	50574.12	0.56	ppb
Manganese	55-2	2635.36	2659.56	2609.41	2634.78	0.95	ppb
Molybdenum	94-1	123.55	124.38	124.19	124.04	0.35	ppb
Molybdenum	95-1	13.32	13.72	13.23	13.42	1.94	ppb
Molybdenum	96-1	26.05	26.82	26.29	26.39	1.50	ppb
Molybdenum	97-1	13.63	13.68	13.74	13.68	0.42	ppb
Molybdenum	98-1	13.54	13.70	13.60	13.61	0.58	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	390.62	395.47	395.03	393.71	0.68	ppb
Phosphorus	31-2	9213.62	9317.39	9342.98	9291.33	0.74	ppb
Potassium	39-2	17697.51	17813.65	17328.10	17613.09	1.44	ppb
Rhodium	103-1				106		%
Rhodium	103-2				108		%
Scandium	45-1				120		%
Scandium	45-2				123		%
Selenium	82-1	9.00	8.61	9.78	9.13	6.54	ppb
Selenium	77-2	35.16	38.21	38.26	37.21	4.78	ppb
Selenium	78-2	13.00	12.48	12.25	12.58	3.03	ppb
Silicon	28-1	108.64	219.91	97.02	141.86	47.83	ppb
Silver	107-1	40.82	40.36	41.05	40.74	0.86	ppb
Silver	109-1	39.74	40.25	40.53	40.17	1.00	ppb
Sodium	23-2	42660.40	43396.84	43629.70	43228.98	1.17	ppb
Strontium	86-1	309.11	314.79	312.03	311.98	0.91	ppb
Strontium	88-1	309.22	309.75	302.09	307.02	1.39	ppb
Sulfur	34-1	103487.59	104977.41	104821.55	104428.85	0.78	ppb
Terbium	159-1				114		%
Terbium	159-2				115		%
Thallium	203-1	1.79	1.93	1.89	1.87	3.75	ppb
Thallium	205-1	1.79	1.85	1.87	1.84	2.22	ppb
Tin	118-1	152.06	151.62	152.72	152.13	0.36	ppb
Titanium	47-1	1867.42	1897.26	1897.87	1887.52	0.92	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:33:34	DataFile Name :	022SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	9.14	9.60	9.39	9.38	2.45	ppb
Vanadium	51-2	288.06	290.55	285.61	288.08	0.86	ppb
Yttrium	89-1				137		%
Yttrium	89-2				136		%
Zinc	66-2	2439.74	2465.22	2448.82	2451.26	0.53	ppb
Zirconium	90-1	62.48	63.18	65.24	63.63	2.25	ppb
Zirconium	91-1	65.53	62.05	62.59	63.39	2.95	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DUP	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:36:37	DataFile Name :	023SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	73500.46	73971.12	73136.00	73535.86	0.57	ppb
Antimony	121-1	1.08	1.09	1.03	1.07	2.77	ppb
Arsenic	75-2	99.93	101.25	100.69	100.63	0.66	ppb
Barium	135-1	965.89	936.50	950.86	951.08	1.55	ppb
Barium	137-1	986.83	962.59	991.05	980.16	1.57	ppb
Beryllium	9-1	5.99	6.18	5.94	6.04	2.12	ppb
Bismuth	209-1				117		%
Bismuth	209-2				115		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	38.99	39.46	39.64	39.36	0.85	ppb
Cadmium	106-1	46.44	44.77	43.50	44.90	3.28	ppb
Cadmium	111-1	36.69	36.05	35.37	36.04	1.83	ppb
Calcium	43-1	54048.00	55309.70	54802.79	54720.17	1.16	ppb
Calcium	44-1	51750.02	53254.11	53213.03	52739.05	1.62	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1646.31	1247.52	1245.91	1379.91	16.72	ppb
Cobalt	59-2	77.96	78.21	77.03	77.73	0.80	ppb
Copper	63-2	1403.63	1408.97	1376.74	1396.45	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				118		%
Holmium	165-2				115		%
Indium	115-1				113		%
Indium	115-2				109		%
Iron	56-2	200983.52	202801.78	201691.97	201825.76	0.45	ppb
Iron	57-2	203870.85	203214.94	199253.22	202113.01	1.24	ppb
Iron	54-2	205281.48	211749.62	202190.30	206407.13	2.36	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DUP	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:36:37	DataFile Name :	023SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1855.63	1788.78	1797.90	1814.11	2.00	ppb
Lead	207-1	1775.41	1740.78	1698.47	1738.22	2.22	ppb
Lead	208-1	1809.10	1777.80	1736.28	1774.40	2.06	ppb
Lithium	6-1				112		%
Magnesium	24-2	51924.08	50969.78	50210.82	51034.89	1.68	ppb
Manganese	55-2	2637.57	2662.52	2658.20	2652.76	0.50	ppb
Molybdenum	94-1	128.03	126.49	128.10	127.54	0.72	ppb
Molybdenum	95-1	13.94	13.63	13.90	13.82	1.24	ppb
Molybdenum	96-1	26.83	26.89	27.23	26.98	0.81	ppb
Molybdenum	97-1	14.21	14.14	14.12	14.16	0.35	ppb
Molybdenum	98-1	14.09	13.76	14.23	14.02	1.71	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	394.64	400.74	397.84	397.74	0.77	ppb
Phosphorus	31-2	9377.66	9462.74	9397.35	9412.59	0.47	ppb
Potassium	39-2	17506.83	17437.38	17758.30	17567.51	0.96	ppb
Rhodium	103-1				109		%
Rhodium	103-2				109		%
Scandium	45-1				122		%
Scandium	45-2				125		%
Selenium	82-1	9.19	9.10	9.05	9.11	0.80	ppb
Selenium	77-2	35.86	37.11	39.59	37.52	5.07	ppb
Selenium	78-2	11.71	12.52	13.10	12.44	5.64	ppb
Silicon	28-1	158.59	496.65	269.84	308.36	55.87	ppb
Silver	107-1	42.75	42.25	42.19	42.40	0.73	ppb
Silver	109-1	42.61	41.73	41.88	42.07	1.13	ppb
Sodium	23-2	43545.14	44037.64	43730.89	43771.22	0.57	ppb
Strontium	86-1	317.89	313.86	320.58	317.44	1.06	ppb
Strontium	88-1	318.82	312.59	316.09	315.83	0.99	ppb
Sulfur	34-1	102640.59	106191.76	104849.14	104560.50	1.71	ppb
Terbium	159-1				115		%
Terbium	159-2				113		%
Thallium	203-1	1.75	1.72	1.78	1.75	1.57	ppb
Thallium	205-1	1.79	1.75	1.75	1.76	1.17	ppb
Tin	118-1	152.19	148.48	148.12	149.60	1.51	ppb
Titanium	47-1	1877.09	1951.77	1964.07	1930.97	2.44	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DUP	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:36:37	DataFile Name :	023SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	9.37	9.30	9.19	9.29	0.96	ppb
Vanadium	51-2	290.57	290.52	288.34	289.81	0.44	ppb
Yttrium	89-1				137		%
Yttrium	89-2				136		%
Zinc	66-2	2473.10	2441.20	2451.94	2455.42	0.66	ppb
Zirconium	90-1	64.80	64.17	64.29	64.42	0.52	ppb
Zirconium	91-1	64.62	64.34	64.80	64.59	0.36	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01LX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 16:39:42	DataFile Name :	024SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	14759.58	14161.69	14478.37	14466.55	2.07	ppb
Antimony	121-1	0.19	0.19	0.19	0.19	0.97	ppb
Arsenic	75-2	20.97	21.38	20.32	20.89	2.57	ppb
Barium	135-1	167.26	168.98	170.00	168.75	0.82	ppb
Barium	137-1	167.70	171.04	169.03	169.26	0.99	ppb
Beryllium	9-1	1.08	1.25	1.03	1.12	10.08	ppb
Bismuth	209-1				110		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	8.39	8.05	7.48	7.98	5.75	ppb
Cadmium	106-1	7.45	6.94	9.02	7.80	13.87	ppb
Cadmium	111-1	6.47	6.67	6.57	6.57	1.53	ppb
Calcium	43-1	10766.69	10604.75	10774.51	10715.31	0.89	ppb
Calcium	44-1	10164.19	10043.59	10148.44	10118.74	0.65	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	247.96	248.58	244.95	247.16	0.79	ppb
Cobalt	59-2	15.55	15.62	15.28	15.48	1.17	ppb
Copper	63-2	279.04	278.97	277.39	278.46	0.34	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				110		%
Holmium	165-2				108		%
Indium	115-1				108		%
Indium	115-2				106		%
Iron	56-2	40078.82	38939.69	39271.32	39429.95	1.49	ppb
Iron	57-2	40563.57	39882.32	39456.62	39967.50	1.40	ppb
Iron	54-2	40676.81	39764.37	40024.19	40155.12	1.17	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01LX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 16:39:42	DataFile Name :	024SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	310.24	317.25	312.97	313.49	1.13	ppb
Lead	207-1	295.42	302.11	299.65	299.06	1.13	ppb
Lead	208-1	316.54	316.50	319.79	317.61	0.59	ppb
Lithium	6-1				101		%
Magnesium	24-2	10115.23	10103.28	10105.33	10107.95	0.06	ppb
Manganese	55-2	525.75	511.95	518.58	518.76	1.33	ppb
Molybdenum	94-1	25.57	26.38	26.52	26.16	1.95	ppb
Molybdenum	95-1	2.76	2.94	2.88	2.86	3.28	ppb
Molybdenum	96-1	5.60	5.66	5.83	5.69	2.12	ppb
Molybdenum	97-1	3.01	2.93	2.90	2.94	1.94	ppb
Molybdenum	98-1	2.90	3.00	2.96	2.95	1.73	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	80.23	79.47	79.59	79.76	0.51	ppb
Phosphorus	31-2	1771.47	1740.34	1736.77	1749.53	1.09	ppb
Potassium	39-2	3676.78	3658.62	3655.32	3663.57	0.32	ppb
Rhodium	103-1				105		%
Rhodium	103-2				106		%
Scandium	45-1				106		%
Scandium	45-2				108		%
Selenium	82-1	1.23	1.07	1.61	1.31	21.13	ppb
Selenium	77-2	7.11	7.49	9.35	7.98	15.01	ppb
Selenium	78-2	3.60	4.15	2.92	3.56	17.24	ppb
Silicon	28-1	23.07	15.46	31.34	23.29	34.08	ppb
Silver	107-1	7.24	7.56	7.63	7.48	2.74	ppb
Silver	109-1	7.41	7.59	7.42	7.47	1.34	ppb
Sodium	23-2	8730.37	8493.59	8522.10	8582.02	1.51	ppb
Strontium	86-1	64.98	68.61	66.98	66.85	2.72	ppb
Strontium	88-1	65.34	67.28	67.41	66.68	1.74	ppb
Sulfur	34-1	19103.60	18460.93	18639.73	18734.75	1.77	ppb
Terbium	159-1				108		%
Terbium	159-2				108		%
Thallium	203-1	0.33	0.38	0.34	0.35	7.52	ppb
Thallium	205-1	0.36	0.34	0.36	0.35	3.23	ppb
Tin	118-1	27.77	27.69	27.90	27.79	0.38	ppb
Titanium	47-1	366.58	365.40	370.27	367.42	0.69	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01LX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 16:39:42	DataFile Name :	024SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.66	1.69	1.68	1.68	0.88	ppb
Vanadium	51-2	56.20	55.93	56.42	56.18	0.44	ppb
Yttrium	89-1				110		%
Yttrium	89-2				112		%
Zinc	66-2	499.92	502.19	498.83	500.31	0.34	ppb
Zirconium	90-1	13.17	13.51	13.51	13.40	1.48	ppb
Zirconium	91-1	13.13	13.18	13.42	13.24	1.16	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-02	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:43:20	DataFile Name :	025SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	70136.54	69120.03	70238.17	69831.58	0.89	ppb
Antimony	121-1	431.42	453.61	438.92	441.32	2.56	ppb
Arsenic	75-2	506.32	511.38	501.62	506.44	0.96	ppb
Barium	135-1	2872.45	2955.23	2943.35	2923.67	1.53	ppb
Barium	137-1	2849.47	2922.17	2846.58	2872.74	1.49	ppb
Beryllium	9-1	435.42	432.94	446.96	438.44	1.71	ppb
Bismuth	209-1				115		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	453.30	466.56	461.37	460.41	1.45	ppb
Cadmium	106-1	471.31	478.48	473.99	474.59	0.76	ppb
Cadmium	111-1	456.60	472.47	467.45	465.51	1.74	ppb
Calcium	43-1	82773.01	87094.67	83916.29	84594.66	2.65	ppb
Calcium	44-1	80796.83	84206.98	82742.75	82582.19	2.07	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1555.34	1564.56	1555.72	1558.54	0.33	ppb
Cobalt	59-2	471.51	472.41	476.10	473.34	0.51	ppb
Copper	63-2	5158.37	5195.04	5250.02	5201.14	0.89	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				115		%
Holmium	165-2				112		%
Indium	115-1				108		%
Indium	115-2				105		%
Iron	56-2	192340.23	190971.27	189983.40	191098.30	0.62	ppb
Iron	57-2	189154.47	191612.29	192430.39	191065.72	0.89	ppb
Iron	54-2	193207.07	193093.00	198377.79	194892.62	1.55	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-02	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:43:20	DataFile Name :	025SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	3922.19	3943.06	3777.72	3880.99	2.32	ppb
Lead	207-1	3806.98	3891.27	3815.67	3837.98	1.21	ppb
Lead	208-1	3823.14	3895.81	3740.79	3819.91	2.03	ppb
Lithium	6-1				106		%
Magnesium	24-2	87085.32	87885.83	87154.01	87375.05	0.51	ppb
Manganese	55-2	6019.66	6018.95	6019.79	6019.47	0.01	ppb
Molybdenum	94-1	1886.49	1881.08	1901.14	1889.57	0.55	ppb
Molybdenum	95-1	1394.57	1386.49	1381.30	1387.45	0.48	ppb
Molybdenum	96-1	1416.70	1441.18	1445.87	1434.58	1.09	ppb
Molybdenum	97-1	1367.33	1391.98	1424.92	1394.74	2.07	ppb
Molybdenum	98-1	1403.61	1386.34	1395.53	1395.16	0.62	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	762.97	761.49	773.25	765.90	0.84	ppb
Phosphorus	31-2	7741.47	7804.96	7815.80	7787.41	0.52	ppb
Potassium	39-2	34179.69	34396.71	33932.52	34169.64	0.68	ppb
Rhodium	103-1				106		%
Rhodium	103-2				104		%
Scandium	45-1				119		%
Scandium	45-2				119		%
Selenium	82-1	375.60	379.54	373.41	376.18	0.83	ppb
Selenium	77-2	416.14	398.52	397.76	404.14	2.57	ppb
Selenium	78-2	392.96	388.47	376.83	386.09	2.16	ppb
Silicon	28-1	97.70	454.41	156.30	236.14	81.01	ppb
Silver	107-1	106.54	110.89	108.10	108.51	2.03	ppb
Silver	109-1	106.37	110.21	106.98	107.85	1.92	ppb
Sodium	23-2	81137.05	81161.66	80181.22	80826.64	0.69	ppb
Strontium	86-1	680.26	698.81	698.89	692.66	1.55	ppb
Strontium	88-1	685.01	713.26	696.04	698.10	2.04	ppb
Sulfur	34-1	84823.91	90233.39	87278.24	87445.18	3.10	ppb
Terbium	159-1				115		%
Terbium	159-2				112		%
Thallium	203-1	419.83	411.39	414.03	415.08	1.04	ppb
Thallium	205-1	422.83	420.81	420.96	421.53	0.27	ppb
Tin	118-1	543.49	559.41	555.92	552.94	1.51	ppb
Titanium	47-1	1637.88	1650.68	1637.98	1642.18	0.45	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-02	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:43:20	DataFile Name :	025SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	411.84	414.80	408.54	411.73	0.76	ppb
Vanadium	51-2	659.07	672.04	659.12	663.41	1.13	ppb
Yttrium	89-1				131		%
Yttrium	89-2				126		%
Zinc	66-2	6115.91	6281.69	6409.30	6268.97	2.35	ppb
Zirconium	90-1	421.49	415.94	415.62	417.69	0.79	ppb
Zirconium	91-1	413.38	417.53	410.22	413.71	0.89	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-03	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:46:14	DataFile Name :	026SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	71518.43	69527.40	70945.17	70663.67	1.45	ppb
Antimony	121-1	447.19	432.37	441.61	440.39	1.70	ppb
Arsenic	75-2	492.38	481.45	496.17	490.00	1.56	ppb
Barium	135-1	2924.76	2858.04	2942.93	2908.58	1.54	ppb
Barium	137-1	2882.55	2803.67	2953.41	2879.88	2.60	ppb
Beryllium	9-1	426.91	434.78	434.87	432.19	1.06	ppb
Bismuth	209-1				115		%
Bismuth	209-2				108		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	461.11	452.32	455.91	456.45	0.97	ppb
Cadmium	106-1	474.84	456.94	476.64	469.47	2.32	ppb
Cadmium	111-1	469.44	456.37	471.35	465.72	1.75	ppb
Calcium	43-1	83113.93	86627.05	84650.17	84797.05	2.08	ppb
Calcium	44-1	83781.74	85426.24	83298.42	84168.80	1.33	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1566.61	1526.24	1558.05	1550.30	1.37	ppb
Cobalt	59-2	464.88	475.12	468.35	469.45	1.11	ppb
Copper	63-2	5212.81	5124.86	5174.39	5170.68	0.85	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				116		%
Holmium	165-2				112		%
Indium	115-1				108		%
Indium	115-2				105		%
Iron	56-2	195858.95	189185.78	193182.00	192742.24	1.74	ppb
Iron	57-2	191061.75	190596.91	190019.91	190559.53	0.27	ppb
Iron	54-2	198659.46	195400.88	197863.95	197308.10	0.86	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-03	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:46:14	DataFile Name :	026SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	3900.15	3839.91	3831.13	3857.06	0.97	ppb
Lead	207-1	3837.06	3785.62	3805.54	3809.40	0.68	ppb
Lead	208-1	3835.12	3871.33	3828.59	3845.01	0.60	ppb
Lithium	6-1				107		%
Magnesium	24-2	86255.55	87991.81	88254.13	87500.50	1.24	ppb
Manganese	55-2	5999.38	5972.10	6016.54	5996.00	0.37	ppb
Molybdenum	94-1	1864.52	1877.88	1894.91	1879.10	0.81	ppb
Molybdenum	95-1	1359.94	1362.17	1386.56	1369.55	1.08	ppb
Molybdenum	96-1	1423.50	1418.71	1427.28	1423.16	0.30	ppb
Molybdenum	97-1	1372.90	1379.04	1393.51	1381.81	0.77	ppb
Molybdenum	98-1	1352.53	1381.90	1383.13	1372.52	1.26	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	772.72	764.79	768.25	768.59	0.52	ppb
Phosphorus	31-2	7768.79	7882.40	7919.57	7856.92	1.00	ppb
Potassium	39-2	34632.83	33775.11	33764.66	34057.53	1.46	ppb
Rhodium	103-1				105		%
Rhodium	103-2				106		%
Scandium	45-1				115		%
Scandium	45-2				117		%
Selenium	82-1	361.81	377.62	372.90	370.78	2.19	ppb
Selenium	77-2	405.11	399.34	406.82	403.75	0.97	ppb
Selenium	78-2	382.88	373.94	383.49	380.10	1.41	ppb
Silicon	28-1	202.04	101.13	187.41	163.53	33.35	ppb
Silver	107-1	109.03	105.66	109.59	108.09	1.97	ppb
Silver	109-1	107.88	104.75	108.09	106.91	1.75	ppb
Sodium	23-2	79921.60	79253.11	80512.86	79895.85	0.79	ppb
Strontium	86-1	677.10	687.57	704.67	689.78	2.02	ppb
Strontium	88-1	680.29	691.05	684.88	685.41	0.79	ppb
Sulfur	34-1	85097.28	89188.84	88258.80	87514.97	2.45	ppb
Terbium	159-1				114		%
Terbium	159-2				111		%
Thallium	203-1	412.32	414.34	408.67	411.78	0.70	ppb
Thallium	205-1	411.52	411.29	409.25	410.69	0.30	ppb
Tin	118-1	556.23	539.12	557.69	551.01	1.87	ppb
Titanium	47-1	1606.40	1654.03	1610.23	1623.55	1.63	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-03	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:46:14	DataFile Name :	026SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	407.90	417.15	408.03	411.03	1.29	ppb
Vanadium	51-2	664.84	663.01	651.22	659.69	1.12	ppb
Yttrium	89-1				130		%
Yttrium	89-2				128		%
Zinc	66-2	6261.49	6282.53	6144.41	6229.48	1.19	ppb
Zirconium	90-1	406.70	409.18	415.80	410.56	1.14	ppb
Zirconium	91-1	407.45	411.30	420.03	412.93	1.56	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01A	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:49:06	DataFile Name :	027SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	72734.16	72626.33	74245.94	73202.15	1.24	ppb
Antimony	121-1	443.04	443.57	436.02	440.87	0.96	ppb
Arsenic	75-2	498.23	488.22	493.95	493.47	1.02	ppb
Barium	135-1	2912.55	2909.46	2809.83	2877.28	2.03	ppb
Barium	137-1	2958.99	2838.00	2847.43	2881.47	2.34	ppb
Beryllium	9-1	433.53	428.77	436.47	432.92	0.90	ppb
Bismuth	209-1				114		%
Bismuth	209-2				109		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	453.27	448.13	444.82	448.74	0.95	ppb
Cadmium	106-1	468.19	462.78	458.48	463.15	1.05	ppb
Cadmium	111-1	463.18	465.14	452.01	460.11	1.54	ppb
Calcium	43-1	85355.22	90716.73	87147.17	87739.71	3.11	ppb
Calcium	44-1	86330.69	87570.99	87269.88	87057.19	0.74	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1539.54	1581.23	1510.06	1543.61	2.32	ppb
Cobalt	59-2	473.67	477.47	473.25	474.80	0.49	ppb
Copper	63-2	5151.75	5185.05	5123.22	5153.34	0.60	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				116		%
Holmium	165-2				112		%
Indium	115-1				107		%
Indium	115-2				103		%
Iron	56-2	203429.37	201258.08	199107.87	201265.11	1.07	ppb
Iron	57-2	198632.01	203729.81	205349.27	202570.37	1.73	ppb
Iron	54-2	206126.21	203925.27	202430.41	204160.63	0.91	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01A	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:49:06	DataFile Name :	027SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	4001.82	3813.82	3973.02	3929.55	2.58	ppb
Lead	207-1	3886.07	3769.37	3905.37	3853.60	1.91	ppb
Lead	208-1	3945.91	3848.25	3889.29	3894.48	1.26	ppb
Lithium	6-1				106		%
Magnesium	24-2	89294.94	90795.02	87916.72	89335.56	1.61	ppb
Manganese	55-2	6223.05	6096.07	6017.39	6112.17	1.70	ppb
Molybdenum	94-1	1886.66	1868.09	1845.94	1866.90	1.09	ppb
Molybdenum	95-1	1334.42	1368.85	1356.12	1353.13	1.29	ppb
Molybdenum	96-1	1392.33	1430.71	1396.42	1406.49	1.50	ppb
Molybdenum	97-1	1348.26	1367.04	1391.98	1369.10	1.60	ppb
Molybdenum	98-1	1343.27	1346.19	1375.61	1355.02	1.32	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	768.66	764.55	764.04	765.75	0.33	ppb
Phosphorus	31-2	8337.88	8475.49	8351.38	8388.25	0.90	ppb
Potassium	39-2	34891.79	34883.08	33973.59	34582.82	1.53	ppb
Rhodium	103-1				104		%
Rhodium	103-2				104		%
Scandium	45-1				115		%
Scandium	45-2				117		%
Selenium	82-1	361.53	370.33	373.31	368.39	1.66	ppb
Selenium	77-2	383.41	400.25	404.68	396.11	2.83	ppb
Selenium	78-2	376.91	376.35	379.60	377.62	0.46	ppb
Silicon	28-1	123.12	107.38	95.46	108.65	12.77	ppb
Silver	107-1	108.27	107.73	106.75	107.58	0.72	ppb
Silver	109-1	107.08	107.06	105.70	106.61	0.74	ppb
Sodium	23-2	82544.23	82103.02	81157.92	81935.06	0.86	ppb
Strontium	86-1	682.15	716.75	720.97	706.62	3.01	ppb
Strontium	88-1	679.66	694.63	709.17	694.48	2.13	ppb
Sulfur	34-1	92464.98	91314.31	95081.65	92953.65	2.08	ppb
Terbium	159-1				114		%
Terbium	159-2				110		%
Thallium	203-1	426.40	408.56	422.27	419.08	2.23	ppb
Thallium	205-1	420.84	415.82	425.28	420.65	1.13	ppb
Tin	118-1	536.66	530.16	555.26	540.69	2.41	ppb
Titanium	47-1	1695.72	1734.19	1727.75	1719.22	1.20	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01A	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:49:06	DataFile Name :	027SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	422.68	414.19	417.51	418.13	1.02	ppb
Vanadium	51-2	658.97	666.26	650.40	658.54	1.20	ppb
Yttrium	89-1				130		%
Yttrium	89-2				128		%
Zinc	66-2	6118.21	6160.48	6092.48	6123.72	0.56	ppb
Zirconium	90-1	410.68	412.37	423.47	415.51	1.67	ppb
Zirconium	91-1	401.31	413.96	414.50	409.92	1.82	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-04	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-119133-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:51:59	DataFile Name :	028SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	122650.66	121612.25	121284.81	121849.24	0.59	ppb
Antimony	121-1	2.21	2.24	2.22	2.22	0.85	ppb
Arsenic	75-2	344.34	343.38	338.36	342.03	0.94	ppb
Barium	135-1	3214.92	3247.30	3267.13	3243.12	0.81	ppb
Barium	137-1	3143.61	3228.01	3234.65	3202.09	1.58	ppb
Beryllium	9-1	9.26	9.46	9.27	9.33	1.16	ppb
Bismuth	209-1				123		%
Bismuth	209-2				116		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	28.59	28.04	27.52	28.05	1.92	ppb
Cadmium	106-1	33.11	37.42	36.46	35.66	6.34	ppb
Cadmium	111-1	23.07	23.30	23.30	23.23	0.56	ppb
Calcium	43-1	66279.97	68701.47	66283.02	67088.15	2.08	ppb
Calcium	44-1	64145.31	66150.28	63521.46	64605.68	2.13	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1270.73	1252.07	1256.22	1259.67	0.78	ppb
Cobalt	59-2	108.57	108.45	108.54	108.52	0.06	ppb
Copper	63-2	2788.24	2801.10	2791.55	2793.63	0.24	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				117		%
Holmium	165-2				114		%
Indium	115-1				108		%
Indium	115-2				107		%
Iron	56-2	357571.14	365213.96	365149.86	362644.99	1.21	ppb
Iron	57-2	363211.70	364268.93	362424.85	363301.83	0.25	ppb
Iron	54-2	373953.96	372756.81	369853.50	372188.09	0.57	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-04	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-119133-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:51:59	DataFile Name :	028SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	6040.07	5959.99	6075.56	6025.21	0.98	ppb
Lead	207-1	5892.03	5801.47	5881.84	5858.45	0.85	ppb
Lead	208-1	5970.84	5981.91	5913.96	5955.57	0.61	ppb
Lithium	6-1				111		%
Magnesium	24-2	68849.07	68354.20	69362.73	68855.33	0.73	ppb
Manganese	55-2	3608.48	3697.25	3618.42	3641.38	1.34	ppb
Molybdenum	94-1	157.31	159.45	160.53	159.10	1.03	ppb
Molybdenum	95-1	12.33	12.39	12.79	12.50	1.99	ppb
Molybdenum	96-1	29.26	29.87	29.93	29.69	1.25	ppb
Molybdenum	97-1	12.81	12.62	12.70	12.71	0.75	ppb
Molybdenum	98-1	12.31	12.48	12.68	12.49	1.52	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	486.87	491.73	488.26	488.95	0.51	ppb
Phosphorus	31-2	11372.96	11395.70	11404.30	11390.99	0.14	ppb
Potassium	39-2	28116.83	27348.43	27510.69	27658.65	1.46	ppb
Rhodium	103-1				103		%
Rhodium	103-2				105		%
Scandium	45-1				124		%
Scandium	45-2				130		%
Selenium	82-1	50.90	49.93	51.57	50.80	1.63	ppb
Selenium	77-2	96.81	97.09	100.58	98.16	2.14	ppb
Selenium	78-2	56.15	53.91	53.96	54.68	2.34	ppb
Silicon	28-1	123.99	137.39	537.39	266.26	88.23	ppb
Silver	107-1	43.92	44.49	44.65	44.35	0.87	ppb
Silver	109-1	43.15	44.49	44.70	44.11	1.90	ppb
Sodium	23-2	33963.50	33793.40	33872.17	33876.36	0.25	ppb
Strontium	86-1	503.97	507.60	513.70	508.42	0.97	ppb
Strontium	88-1	507.52	510.31	505.63	507.82	0.46	ppb
Sulfur	34-1	160369.45	168078.83	162524.76	163657.68	2.43	ppb
Terbium	159-1				114		%
Terbium	159-2				112		%
Thallium	203-1	4.80	4.84	4.78	4.81	0.69	ppb
Thallium	205-1	4.78	4.77	4.68	4.74	1.11	ppb
Tin	118-1	408.22	417.24	425.69	417.05	2.09	ppb
Titanium	47-1	1936.10	2051.42	2006.37	1997.96	2.91	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-04	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-119133-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:51:59	DataFile Name :	028SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	20.80	21.20	21.32	21.11	1.30	ppb
Vanadium	51-2	426.00	429.34	425.60	426.98	0.48	ppb
Yttrium	89-1				149		%
Yttrium	89-2				150		%
Zinc	66-2	5087.15	5118.98	5042.50	5082.88	0.76	ppb
Zirconium	90-1	81.71	82.61	82.85	82.39	0.73	ppb
Zirconium	91-1	81.80	83.57	84.96	83.44	1.90	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:54:59	DataFile Name :	029CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51800.42	50620.57	50500.65	50973.88	1.41	ppb
Antimony	121-1	532.74	536.09	538.92	535.92	0.58	ppb
Arsenic	75-2	547.83	525.10	518.28	530.40	2.92	ppb
Barium	135-1	2688.52	2656.35	2727.27	2690.71	1.32	ppb
Barium	137-1	2691.82	2684.16	2647.35	2674.44	0.89	ppb
Beryllium	9-1	521.68	533.04	534.32	529.68	1.31	ppb
Bismuth	209-1				101		%
Bismuth	209-2				97		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	517.20	523.04	521.38	520.54	0.58	ppb
Cadmium	106-1	519.91	512.23	527.72	519.95	1.49	ppb
Cadmium	111-1	517.65	518.63	525.85	520.71	0.86	ppb
Calcium	43-1	256966.33	256001.69	272163.06	261710.36	3.46	ppb
Calcium	44-1	259208.18	254519.94	262703.93	258810.68	1.59	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	534.94	538.30	540.53	537.92	0.52	ppb
Cobalt	59-2	526.96	524.34	524.15	525.15	0.30	ppb
Copper	63-2	5214.73	5088.42	5229.25	5177.47	1.50	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				105		%
Indium	115-1				102		%
Indium	115-2				98		%
Iron	56-2	131377.61	130534.82	131761.90	131224.77	0.48	ppb
Iron	57-2	132426.96	129524.83	131240.03	131063.94	1.11	ppb
Iron	54-2	135263.77	135618.06	138342.33	136408.06	1.23	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:54:59	DataFile Name :	029CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2663.96	2670.09	2743.19	2692.41	1.64	ppb
Lead	207-1	2635.06	2708.39	2704.90	2682.78	1.54	ppb
Lead	208-1	2663.69	2706.09	2698.03	2689.27	0.84	ppb
Lithium	6-1				99		%
Magnesium	24-2	263573.34	265094.98	250274.60	259647.64	3.14	ppb
Manganese	55-2	5313.10	5317.68	5271.22	5300.67	0.48	ppb
Molybdenum	94-1	5336.33	5450.57	5293.44	5360.11	1.52	ppb
Molybdenum	95-1	5298.32	5428.51	5246.56	5324.46	1.76	ppb
Molybdenum	96-1	5302.60	5419.10	5372.31	5364.67	1.09	ppb
Molybdenum	97-1	5291.04	5312.68	5440.65	5348.13	1.51	ppb
Molybdenum	98-1	5357.47	5376.98	5295.88	5343.45	0.79	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	520.40	512.14	526.69	519.74	1.40	ppb
Phosphorus	31-2	10618.10	10709.81	10610.83	10646.25	0.52	ppb
Potassium	39-2	129911.33	129451.10	129533.17	129631.87	0.19	ppb
Rhodium	103-1				97		%
Rhodium	103-2				95		%
Scandium	45-1				99		%
Scandium	45-2				101		%
Selenium	82-1	508.81	514.48	509.65	510.98	0.60	ppb
Selenium	77-2	518.16	512.10	503.67	511.31	1.42	ppb
Selenium	78-2	545.39	507.69	492.87	515.32	5.25	ppb
Silicon	28-1	543.30	566.56	581.79	563.88	3.44	ppb
Silver	107-1	529.24	525.82	523.32	526.12	0.56	ppb
Silver	109-1	535.28	536.01	529.61	533.63	0.66	ppb
Sodium	23-2	253998.56	259942.18	256373.75	256771.50	1.17	ppb
Strontium	86-1	532.99	532.00	534.99	533.33	0.29	ppb
Strontium	88-1	525.62	535.42	538.47	533.17	1.26	ppb
Sulfur	34-1	9709.67	9811.81	10223.54	9915.01	2.74	ppb
Terbium	159-1				104		%
Terbium	159-2				104		%
Thallium	203-1	525.08	550.49	544.66	540.08	2.46	ppb
Thallium	205-1	541.30	540.18	534.02	538.50	0.73	ppb
Tin	118-1	539.39	544.57	559.10	547.69	1.87	ppb
Titanium	47-1	5020.07	5109.84	5264.37	5131.43	2.41	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:54:59	DataFile Name :	029CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	535.80	547.21	540.44	541.15	1.06	ppb
Vanadium	51-2	541.18	540.63	539.15	540.32	0.19	ppb
Yttrium	89-1				101		%
Yttrium	89-2				101		%
Zinc	66-2	4974.37	4897.32	5105.97	4992.55	2.11	ppb
Zirconium	90-1	539.05	548.86	553.75	547.22	1.37	ppb
Zirconium	91-1	540.43	540.99	532.37	537.93	0.90	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:00:18	DataFile Name :	030CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.68	0.81	0.37	0.62	36.35	ppb
Antimony	121-1	0.12	0.10	0.13	0.12	12.40	ppb
Arsenic	75-2	0.01	0.01	0.01	0.01	28.71	ppb
Barium	135-1	0.04	0.02	0.01	0.02	69.88	ppb
Barium	137-1	0.02	0.03	0.03	0.03	20.29	ppb
Beryllium	9-1	0.00	0.01	0.00	0.00	70.00	ppb
Bismuth	209-1				103		%
Bismuth	209-2				101		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.18	0.08	-0.02	0.08	129.58	ppb
Cadmium	106-1	-1.01	-2.02	-1.10	-1.38		ppb
Cadmium	111-1	-0.05	-0.12	-0.06	-0.08		ppb
Calcium	43-1	1.49	-3.22	1.52	-0.07		ppb
Calcium	44-1	-6.74	-5.18	-4.41	-5.44		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.02	0.00	0.04	0.02	115.18	ppb
Cobalt	59-2	-0.01	-0.02	-0.01	-0.01		ppb
Copper	63-2	0.23	0.24	0.18	0.21	14.10	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				105		%
Holmium	165-2				101		%
Indium	115-1				101		%
Indium	115-2				99		%
Iron	56-2	15.62	15.64	15.46	15.58	0.63	ppb
Iron	57-2	15.72	14.02	15.32	15.02	5.90	ppb
Iron	54-2	15.72	14.47	16.44	15.54	6.41	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:00:18	DataFile Name :	030CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.06	0.08	0.09	0.08	17.43	ppb
Lead	207-1	0.07	0.06	0.09	0.07	17.81	ppb
Lead	208-1	0.06	0.07	0.07	0.07	4.98	ppb
Lithium	6-1				95		%
Magnesium	24-2	1.38	1.83	1.37	1.53	17.24	ppb
Manganese	55-2	0.08	0.08	0.11	0.09	17.12	ppb
Molybdenum	94-1	0.10	0.12	0.13	0.11	9.70	ppb
Molybdenum	95-1	0.05	0.09	0.06	0.07	28.84	ppb
Molybdenum	96-1	0.09	0.07	0.11	0.09	22.05	ppb
Molybdenum	97-1	0.08	0.03	0.03	0.05	56.43	ppb
Molybdenum	98-1	0.08	0.08	0.05	0.07	20.73	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.01	0.02	0.07	0.03	142.10	ppb
Phosphorus	31-2	-134.99	-131.87	-133.93	-133.60		ppb
Potassium	39-2	22.98	17.73	20.36	20.35	12.90	ppb
Rhodium	103-1				100		%
Rhodium	103-2				100		%
Scandium	45-1				97		%
Scandium	45-2				98		%
Selenium	82-1	-0.09	-0.60	-0.60	-0.43		ppb
Selenium	77-2	-0.25	-0.25	-0.25	-0.25		ppb
Selenium	78-2	0.18	0.90	1.45	0.84	75.77	ppb
Silicon	28-1	-0.43	-0.84	-0.53	-0.60		ppb
Silver	107-1	0.02	0.02	0.02	0.02	16.74	ppb
Silver	109-1	0.02	0.03	0.02	0.02	29.05	ppb
Sodium	23-2	67.28	67.39	65.70	66.79	1.41	ppb
Strontium	86-1	0.03	-0.01	0.00	0.01	193.60	ppb
Strontium	88-1	0.00	0.01	0.01	0.01	43.44	ppb
Sulfur	34-1	-465.30	-534.26	-445.48	-481.68		ppb
Terbium	159-1				102		%
Terbium	159-2				100		%
Thallium	203-1	0.11	0.10	0.10	0.10	2.63	ppb
Thallium	205-1	0.11	0.11	0.10	0.10	4.13	ppb
Tin	118-1	0.36	0.34	0.35	0.35	3.19	ppb
Titanium	47-1	0.03	-0.02	0.03	0.01	225.54	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:00:18	DataFile Name :	030CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.01	0.00	0.00	41.38	ppb
Vanadium	51-2	0.01	0.01	0.00	0.01	87.14	ppb
Yttrium	89-1				100		%
Yttrium	89-2				99		%
Zinc	66-2	0.16	0.21	0.21	0.19	12.86	ppb
Zirconium	90-1	0.03	0.03	0.03	0.03	7.40	ppb
Zirconium	91-1	0.01	0.03	0.01	0.02	70.77	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-05	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-094119-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:03:43	DataFile Name :	031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	96399.25	94898.28	97528.67	96275.40	1.37	ppb
Antimony	121-1	3.05	3.11	3.18	3.11	2.04	ppb
Arsenic	75-2	243.43	244.35	245.11	244.30	0.35	ppb
Barium	135-1	2323.76	2395.72	2359.13	2359.54	1.52	ppb
Barium	137-1	2248.58	2322.58	2324.08	2298.41	1.88	ppb
Beryllium	9-1	8.10	7.83	8.34	8.09	3.13	ppb
Bismuth	209-1				117		%
Bismuth	209-2				114		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	87.22	89.48	89.50	88.73	1.47	ppb
Cadmium	106-1	89.67	92.07	92.33	91.36	1.60	ppb
Cadmium	111-1	82.32	85.76	85.61	84.57	2.30	ppb
Calcium	43-1	55258.61	55809.36	55525.99	55531.32	0.50	ppb
Calcium	44-1	52794.55	53051.96	53042.90	52963.14	0.28	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2823.19	2780.25	2829.01	2810.82	0.95	ppb
Cobalt	59-2	91.12	89.39	91.50	90.67	1.24	ppb
Copper	63-2	3365.00	3298.95	3351.27	3338.41	1.04	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				114		%
Holmium	165-2				112		%
Indium	115-1				106		%
Indium	115-2				104		%
Iron	56-2	255019.90	246431.10	258029.41	253160.14	2.38	ppb
Iron	57-2	255934.60	254642.33	254228.61	254935.18	0.35	ppb
Iron	54-2	265369.59	255126.68	257575.68	259357.32	2.06	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-05	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-094119-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:03:43	DataFile Name :	031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	4417.03	4369.44	4314.77	4367.08	1.17	ppb
Lead	207-1	4322.02	4313.08	4174.85	4269.98	1.93	ppb
Lead	208-1	4420.59	4352.41	4222.29	4331.77	2.33	ppb
Lithium	6-1				107		%
Magnesium	24-2	53803.25	53533.55	53316.00	53550.93	0.46	ppb
Manganese	55-2	2405.41	2313.34	2350.57	2356.44	1.97	ppb
Molybdenum	94-1	147.98	145.81	149.27	147.69	1.19	ppb
Molybdenum	95-1	24.25	23.43	24.18	23.95	1.89	ppb
Molybdenum	96-1	38.80	37.60	38.95	38.45	1.92	ppb
Molybdenum	97-1	24.75	23.82	24.82	24.46	2.29	ppb
Molybdenum	98-1	24.51	23.64	24.54	24.23	2.11	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	666.67	664.18	672.07	667.64	0.60	ppb
Phosphorus	31-2	13227.27	12933.22	13289.24	13149.91	1.45	ppb
Potassium	39-2	21354.84	21099.76	20812.39	21089.00	1.29	ppb
Rhodium	103-1				103		%
Rhodium	103-2				104		%
Scandium	45-1				118		%
Scandium	45-2				123		%
Selenium	82-1	24.10	24.65	24.22	24.32	1.18	ppb
Selenium	77-2	59.04	64.81	58.88	60.91	5.55	ppb
Selenium	78-2	28.56	28.91	28.79	28.75	0.63	ppb
Silicon	28-1	95.74	100.04	99.20	98.33	2.32	ppb
Silver	107-1	52.80	54.40	54.43	53.88	1.73	ppb
Silver	109-1	51.84	53.72	53.56	53.04	1.96	ppb
Sodium	23-2	36653.85	35846.34	36930.57	36476.92	1.54	ppb
Strontium	86-1	455.89	444.90	452.73	451.17	1.25	ppb
Strontium	88-1	459.14	454.16	452.98	455.42	0.72	ppb
Sulfur	34-1	118408.70	118412.97	122381.49	119734.39	1.91	ppb
Terbium	159-1				111		%
Terbium	159-2				111		%
Thallium	203-1	3.45	3.43	3.39	3.42	0.96	ppb
Thallium	205-1	3.53	3.47	3.41	3.47	1.73	ppb
Tin	118-1	463.92	493.64	483.16	480.24	3.14	ppb
Titanium	47-1	2299.01	2311.45	2281.26	2297.24	0.66	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-05	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-094119-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:03:43	DataFile Name :	031SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	18.60	18.84	18.40	18.61	1.19	ppb
Vanadium	51-2	507.89	504.68	506.87	506.48	0.32	ppb
Yttrium	89-1				139		%
Yttrium	89-2				139		%
Zinc	66-2	5182.83	4943.23	5088.58	5071.55	2.38	ppb
Zirconium	90-1	71.62	70.36	71.46	71.14	0.96	ppb
Zirconium	91-1	71.42	70.02	71.55	70.99	1.20	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3422-01	Instrumnet Name :	P7
Client Sample ID :	PR132-S15-000008-2025	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:06:47	DataFile Name :	032SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	66315.99	67733.22	66263.77	66770.99	1.25	ppb
Antimony	121-1	1.44	1.45	1.45	1.45	0.41	ppb
Arsenic	75-2	202.81	203.85	202.42	203.03	0.36	ppb
Barium	135-1	1856.02	1749.44	1857.07	1820.84	3.40	ppb
Barium	137-1	1745.79	1804.87	1846.56	1799.07	2.81	ppb
Beryllium	9-1	5.06	5.13	5.02	5.07	1.08	ppb
Bismuth	209-1				118		%
Bismuth	209-2				113		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	46.92	45.16	48.09	46.73	3.15	ppb
Cadmium	106-1	50.60	50.64	51.84	51.03	1.38	ppb
Cadmium	111-1	48.10	47.36	49.46	48.31	2.21	ppb
Calcium	43-1	22192.38	22859.13	22448.18	22499.89	1.49	ppb
Calcium	44-1	21363.71	21361.54	21879.31	21534.85	1.39	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1309.04	1308.54	1288.47	1302.02	0.90	ppb
Cobalt	59-2	64.59	65.78	64.26	64.88	1.23	ppb
Copper	63-2	1633.89	1619.26	1586.41	1613.19	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				115		%
Holmium	165-2				114		%
Indium	115-1				110		%
Indium	115-2				108		%
Iron	56-2	171044.24	169914.98	168432.34	169797.19	0.77	ppb
Iron	57-2	164250.36	169020.62	166169.77	166480.25	1.44	ppb
Iron	54-2	173507.44	171967.13	173464.99	172979.85	0.51	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3422-01	Instrumnet Name :	P7
Client Sample ID :	PR132-S15-000008-2025	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:06:47	DataFile Name :	032SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	3475.48	3514.11	3423.19	3470.93	1.31	ppb
Lead	207-1	3511.48	3443.85	3375.30	3443.54	1.98	ppb
Lead	208-1	3476.87	3427.75	3391.41	3432.01	1.25	ppb
Lithium	6-1				107		%
Magnesium	24-2	38333.17	38104.29	37797.27	38078.24	0.71	ppb
Manganese	55-2	2298.11	2319.45	2284.42	2300.66	0.77	ppb
Molybdenum	94-1	95.90	95.30	93.54	94.91	1.29	ppb
Molybdenum	95-1	11.96	11.90	11.66	11.84	1.32	ppb
Molybdenum	96-1	21.72	21.90	21.44	21.68	1.06	ppb
Molybdenum	97-1	12.45	12.36	11.99	12.27	1.97	ppb
Molybdenum	98-1	12.19	12.28	12.10	12.19	0.72	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	294.67	298.48	291.00	294.72	1.27	ppb
Phosphorus	31-2	3901.94	3963.42	3971.33	3945.56	0.96	ppb
Potassium	39-2	15407.42	15517.78	15759.20	15561.46	1.16	ppb
Rhodium	103-1				106		%
Rhodium	103-2				107		%
Scandium	45-1				116		%
Scandium	45-2				121		%
Selenium	82-1	12.40	12.65	12.94	12.66	2.14	ppb
Selenium	77-2	45.98	41.96	44.26	44.07	4.58	ppb
Selenium	78-2	17.85	18.73	19.21	18.60	3.69	ppb
Silicon	28-1	121.17	141.24	180.31	147.57	20.38	ppb
Silver	107-1	32.01	31.52	32.70	32.07	1.85	ppb
Silver	109-1	31.74	31.33	32.83	31.97	2.42	ppb
Sodium	23-2	13433.09	13876.84	13382.30	13564.08	2.01	ppb
Strontium	86-1	204.74	208.56	203.13	205.47	1.36	ppb
Strontium	88-1	209.49	208.36	205.24	207.70	1.06	ppb
Sulfur	34-1	72167.13	74348.03	72067.22	72860.79	1.77	ppb
Terbium	159-1				114		%
Terbium	159-2				112		%
Thallium	203-1	2.47	2.45	2.39	2.44	1.60	ppb
Thallium	205-1	2.48	2.42	2.44	2.45	1.18	ppb
Tin	118-1	149.75	145.49	152.63	149.29	2.41	ppb
Titanium	47-1	1706.03	1691.33	1640.42	1679.26	2.05	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3422-01	Instrumnet Name :	P7
Client Sample ID :	PR132-S15-000008-2025	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:06:47	DataFile Name :	032SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	10.54	10.81	10.74	10.69	1.30	ppb
Vanadium	51-2	242.47	244.18	244.84	243.83	0.50	ppb
Yttrium	89-1				133		%
Yttrium	89-2				133		%
Zinc	66-2	2590.10	2650.68	2578.19	2606.32	1.49	ppb
Zirconium	90-1	47.28	47.78	47.14	47.40	0.71	ppb
Zirconium	91-1	47.96	47.45	46.13	47.18	2.01	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-01	Instrumnet Name :	P7
Client Sample ID :	PR132-DP3-20251021	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:09:54	DataFile Name :	033SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	97472.28	95463.50	95890.47	96275.42	1.10	ppb
Antimony	121-1	1.81	1.79	1.68	1.76	4.01	ppb
Arsenic	75-2	162.05	162.55	163.98	162.86	0.62	ppb
Barium	135-1	2516.36	2563.82	2467.37	2515.85	1.92	ppb
Barium	137-1	2481.69	2504.82	2416.50	2467.67	1.86	ppb
Beryllium	9-1	7.66	7.86	7.56	7.69	1.96	ppb
Bismuth	209-1				124		%
Bismuth	209-2				120		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	132.15	130.45	132.10	131.57	0.73	ppb
Cadmium	106-1	134.77	136.13	132.86	134.59	1.22	ppb
Cadmium	111-1	122.42	124.37	120.49	122.43	1.59	ppb
Calcium	43-1	57029.48	55739.49	56747.33	56505.43	1.20	ppb
Calcium	44-1	54054.41	52595.64	54765.88	53805.31	2.06	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3074.25	3146.75	3078.37	3099.79	1.31	ppb
Cobalt	59-2	99.90	99.66	100.36	99.97	0.35	ppb
Copper	63-2	3202.37	3178.38	3249.52	3210.09	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				117		%
Holmium	165-2				114		%
Indium	115-1				110		%
Indium	115-2				107		%
Iron	56-2	253323.01	255702.62	260378.83	256468.15	1.40	ppb
Iron	57-2	262220.17	254149.91	256040.18	257470.08	1.64	ppb
Iron	54-2	261613.55	259697.48	263228.21	261513.08	0.68	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-01	Instrumnet Name :	P7
Client Sample ID :	PR132-DP3-20251021	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:09:54	DataFile Name :	033SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	3440.57	3543.12	3494.89	3492.86	1.47	ppb
Lead	207-1	3368.00	3398.41	3494.87	3420.42	1.94	ppb
Lead	208-1	3407.23	3476.26	3461.37	3448.29	1.05	ppb
Lithium	6-1				109		%
Magnesium	24-2	60350.52	60582.05	59702.10	60211.56	0.76	ppb
Manganese	55-2	2491.79	2564.41	2535.52	2530.57	1.44	ppb
Molybdenum	94-1	172.02	173.58	174.44	173.35	0.71	ppb
Molybdenum	95-1	29.98	30.35	30.41	30.25	0.78	ppb
Molybdenum	96-1	46.91	46.97	47.62	47.17	0.84	ppb
Molybdenum	97-1	29.90	31.01	30.80	30.57	1.94	ppb
Molybdenum	98-1	30.08	30.54	30.82	30.48	1.24	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	601.57	600.38	594.45	598.80	0.64	ppb
Phosphorus	31-2	13461.35	13258.05	13534.80	13418.07	1.07	ppb
Potassium	39-2	22203.85	22057.10	22516.83	22259.26	1.05	ppb
Rhodium	103-1				106		%
Rhodium	103-2				106		%
Scandium	45-1				122		%
Scandium	45-2				125		%
Selenium	82-1	18.61	18.49	17.40	18.17	3.68	ppb
Selenium	77-2	59.83	54.84	56.15	56.94	4.54	ppb
Selenium	78-2	22.68	21.15	21.36	21.73	3.81	ppb
Silicon	28-1	99.41	293.30	120.13	170.95	62.28	ppb
Silver	107-1	37.55	37.41	37.14	37.37	0.55	ppb
Silver	109-1	36.91	37.64	36.24	36.93	1.89	ppb
Sodium	23-2	72584.89	72091.39	72044.04	72240.10	0.41	ppb
Strontium	86-1	498.69	504.24	506.96	503.30	0.84	ppb
Strontium	88-1	512.57	503.36	503.44	506.45	1.05	ppb
Sulfur	34-1	143355.78	138450.24	142157.28	141321.10	1.81	ppb
Terbium	159-1				115		%
Terbium	159-2				113		%
Thallium	203-1	2.80	2.68	2.75	2.74	2.10	ppb
Thallium	205-1	2.69	2.80	2.73	2.74	2.08	ppb
Tin	118-1	277.73	283.85	274.46	278.68	1.71	ppb
Titanium	47-1	2464.92	2288.39	2435.10	2396.13	3.94	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-01	Instrumnet Name :	P7
Client Sample ID :	PR132-DP3-20251021	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:09:54	DataFile Name :	033SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	15.35	15.86	15.68	15.63	1.66	ppb
Vanadium	51-2	442.78	435.21	441.62	439.87	0.93	ppb
Yttrium	89-1				142		%
Yttrium	89-2				140		%
Zinc	66-2	5426.96	5381.19	5403.44	5403.86	0.42	ppb
Zirconium	90-1	81.52	82.20	82.74	82.15	0.74	ppb
Zirconium	91-1	81.27	81.56	83.19	82.01	1.26	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-02	Instrumnet Name :	P7
Client Sample ID :	PR132-S11-010080-2025	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:12:56	DataFile Name :	034SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	106887.14	103140.88	104473.25	104833.75	1.81	ppb
Antimony	121-1	1.37	1.46	1.38	1.40	3.36	ppb
Arsenic	75-2	142.80	139.24	143.71	141.91	1.66	ppb
Barium	135-1	1693.80	1745.20	1713.58	1717.53	1.51	ppb
Barium	137-1	1685.48	1691.69	1674.85	1684.01	0.51	ppb
Beryllium	9-1	9.35	9.50	9.60	9.48	1.31	ppb
Bismuth	209-1				124		%
Bismuth	209-2				120		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	98.45	95.12	97.88	97.15	1.83	ppb
Cadmium	106-1	101.74	102.70	98.91	101.12	1.95	ppb
Cadmium	111-1	83.96	84.99	83.46	84.14	0.93	ppb
Calcium	43-1	69310.22	70334.01	67472.95	69039.06	2.10	ppb
Calcium	44-1	64869.42	67684.21	65696.21	66083.28	2.19	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2330.11	2285.03	2340.02	2318.39	1.26	ppb
Cobalt	59-2	112.87	112.29	114.41	113.19	0.97	ppb
Copper	63-2	2526.10	2532.37	2588.02	2548.83	1.34	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				120		%
Holmium	165-2				117		%
Indium	115-1				111		%
Indium	115-2				109		%
Iron	56-2	278160.57	280342.65	283854.09	280785.77	1.02	ppb
Iron	57-2	276263.19	276157.27	282700.39	278373.62	1.35	ppb
Iron	54-2	282714.82	284654.53	287526.25	284965.20	0.85	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-02	Instrumnet Name :	P7
Client Sample ID :	PR132-S11-010080-2025	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:12:56	DataFile Name :	034SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	3628.69	3763.70	3800.36	3730.92	2.42	ppb
Lead	207-1	3629.44	3678.52	3694.25	3667.40	0.92	ppb
Lead	208-1	3580.98	3713.57	3726.24	3673.60	2.19	ppb
Lithium	6-1				113		%
Magnesium	24-2	69483.97	68546.84	69330.02	69120.28	0.73	ppb
Manganese	55-2	2866.28	2828.05	2905.81	2866.71	1.36	ppb
Molybdenum	94-1	190.83	190.83	188.08	189.91	0.84	ppb
Molybdenum	95-1	30.64	30.39	30.32	30.45	0.55	ppb
Molybdenum	96-1	49.15	49.48	49.25	49.30	0.35	ppb
Molybdenum	97-1	31.37	31.16	30.58	31.04	1.31	ppb
Molybdenum	98-1	30.86	31.10	30.75	30.90	0.59	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	641.56	644.76	646.91	644.41	0.42	ppb
Phosphorus	31-2	10938.22	10822.74	11129.76	10963.57	1.41	ppb
Potassium	39-2	24203.33	24513.74	24405.62	24374.23	0.65	ppb
Rhodium	103-1				107		%
Rhodium	103-2				108		%
Scandium	45-1				126		%
Scandium	45-2				129		%
Selenium	82-1	14.77	14.52	16.33	15.20	6.46	ppb
Selenium	77-2	53.21	54.17	51.37	52.92	2.68	ppb
Selenium	78-2	19.69	19.72	20.29	19.90	1.71	ppb
Silicon	28-1	213.12	99.22	69.49	127.28	59.56	ppb
Silver	107-1	41.72	42.71	43.07	42.50	1.64	ppb
Silver	109-1	41.06	42.44	42.37	41.96	1.85	ppb
Sodium	23-2	76375.56	75451.50	74983.70	75603.59	0.94	ppb
Strontium	86-1	523.94	534.03	519.93	525.97	1.38	ppb
Strontium	88-1	532.61	542.73	527.17	534.17	1.48	ppb
Sulfur	34-1	162601.59	166478.42	162578.13	163886.05	1.37	ppb
Terbium	159-1				117		%
Terbium	159-2				115		%
Thallium	203-1	2.85	2.84	2.88	2.86	0.67	ppb
Thallium	205-1	2.78	2.79	2.93	2.83	2.94	ppb
Tin	118-1	288.04	292.44	289.99	290.15	0.76	ppb
Titanium	47-1	2498.18	2438.71	2425.17	2454.02	1.58	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-02	Instrumnet Name :	P7
Client Sample ID :	PR132-S11-010080-2025	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:12:56	DataFile Name :	034SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	15.38	15.94	15.80	15.71	1.88	ppb
Vanadium	51-2	433.96	429.80	436.95	433.57	0.83	ppb
Yttrium	89-1				148		%
Yttrium	89-2				147		%
Zinc	66-2	4904.35	4826.97	4995.54	4908.95	1.72	ppb
Zirconium	90-1	91.91	91.90	89.86	91.23	1.30	ppb
Zirconium	91-1	90.53	91.76	89.65	90.65	1.17	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-03	Instrumnet Name :	P7
Client Sample ID :	PR132-S14-00094-20251	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:16:03	DataFile Name :	035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	71651.41	70855.15	72374.68	71627.08	1.06	ppb
Antimony	121-1	1.31	1.38	1.34	1.34	2.61	ppb
Arsenic	75-2	126.69	125.50	125.12	125.77	0.65	ppb
Barium	135-1	1308.73	1289.81	1307.55	1302.03	0.81	ppb
Barium	137-1	1293.07	1283.79	1284.49	1287.12	0.40	ppb
Beryllium	9-1	6.68	7.36	6.67	6.90	5.74	ppb
Bismuth	209-1				118		%
Bismuth	209-2				114		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	60.68	63.56	61.34	61.86	2.44	ppb
Cadmium	106-1	68.74	66.18	64.07	66.33	3.52	ppb
Cadmium	111-1	56.85	57.11	56.61	56.86	0.44	ppb
Calcium	43-1	41583.70	41163.67	42587.27	41778.21	1.75	ppb
Calcium	44-1	39948.26	39827.11	40155.19	39976.85	0.41	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1700.50	1758.27	1730.48	1729.75	1.67	ppb
Cobalt	59-2	76.64	76.96	75.63	76.41	0.91	ppb
Copper	63-2	1941.23	1932.71	1933.52	1935.82	0.24	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				120		%
Holmium	165-2				116		%
Indium	115-1				109		%
Indium	115-2				108		%
Iron	56-2	189396.25	189759.43	189532.32	189562.67	0.10	ppb
Iron	57-2	188388.82	189237.48	188389.09	188671.79	0.26	ppb
Iron	54-2	192341.81	195715.62	191531.98	193196.47	1.15	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-03	Instrumnet Name :	P7
Client Sample ID :	PR132-S14-00094-20251	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:16:03	DataFile Name :	035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2146.90	2144.86	2150.39	2147.39	0.13	ppb
Lead	207-1	2075.52	2076.27	2104.18	2085.32	0.78	ppb
Lead	208-1	2112.72	2112.06	2128.86	2117.88	0.45	ppb
Lithium	6-1				111		%
Magnesium	24-2	46424.19	47345.64	46565.73	46778.52	1.06	ppb
Manganese	55-2	1981.31	1986.22	1949.40	1972.31	1.01	ppb
Molybdenum	94-1	130.36	137.22	133.60	133.73	2.57	ppb
Molybdenum	95-1	22.50	22.97	23.41	22.96	1.99	ppb
Molybdenum	96-1	34.50	36.67	35.82	35.66	3.06	ppb
Molybdenum	97-1	22.88	23.81	23.21	23.30	2.03	ppb
Molybdenum	98-1	22.82	23.37	23.30	23.16	1.30	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	433.58	433.11	433.58	433.42	0.06	ppb
Phosphorus	31-2	8455.08	8447.49	8603.66	8502.08	1.04	ppb
Potassium	39-2	16594.96	16802.48	16645.05	16680.83	0.65	ppb
Rhodium	103-1				106		%
Rhodium	103-2				109		%
Scandium	45-1				118		%
Scandium	45-2				122		%
Selenium	82-1	11.59	11.63	12.07	11.76	2.23	ppb
Selenium	77-2	36.23	39.43	35.10	36.92	6.08	ppb
Selenium	78-2	15.85	16.47	14.55	15.62	6.29	ppb
Silicon	28-1	59.07	81.15	55.39	65.20	21.36	ppb
Silver	107-1	44.49	44.18	44.02	44.23	0.54	ppb
Silver	109-1	43.88	44.26	43.56	43.90	0.80	ppb
Sodium	23-2	50638.21	50631.79	50842.80	50704.26	0.24	ppb
Strontium	86-1	333.16	342.24	339.72	338.37	1.38	ppb
Strontium	88-1	338.31	342.97	344.94	342.07	1.00	ppb
Sulfur	34-1	103256.96	99815.67	100420.41	101164.35	1.82	ppb
Terbium	159-1				117		%
Terbium	159-2				114		%
Thallium	203-1	1.88	1.84	1.89	1.87	1.37	ppb
Thallium	205-1	1.88	1.86	1.88	1.87	0.73	ppb
Tin	118-1	213.60	211.33	213.10	212.68	0.56	ppb
Titanium	47-1	1670.17	1711.11	1740.46	1707.24	2.07	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-03	Instrumnet Name :	P7
Client Sample ID :	PR132-S14-00094-20251	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:16:03	DataFile Name :	035SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	10.99	11.10	11.13	11.07	0.69	ppb
Vanadium	51-2	320.42	321.61	319.94	320.66	0.27	ppb
Yttrium	89-1				134		%
Yttrium	89-2				132		%
Zinc	66-2	3658.22	3627.82	3655.77	3647.27	0.46	ppb
Zirconium	90-1	61.84	64.12	64.20	63.39	2.11	ppb
Zirconium	91-1	61.58	64.86	63.31	63.25	2.60	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3434-01	Instrumnet Name :	P7
Client Sample ID :	PR132-WC1-20251022	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:19:03	DataFile Name :	036SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	57453.44	57415.33	57609.27	57492.68	0.18	ppb
Antimony	121-1	2.26	2.17	2.20	2.21	2.10	ppb
Arsenic	75-2	116.36	122.82	119.88	119.69	2.70	ppb
Barium	135-1	1520.65	1513.85	1584.20	1539.57	2.52	ppb
Barium	137-1	1554.75	1509.20	1569.47	1544.47	2.03	ppb
Beryllium	9-1	4.76	4.68	4.69	4.71	0.93	ppb
Bismuth	209-1				116		%
Bismuth	209-2				111		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	73.63	66.97	71.72	70.77	4.85	ppb
Cadmium	106-1	76.06	70.74	72.32	73.04	3.74	ppb
Cadmium	111-1	69.07	69.51	70.06	69.54	0.71	ppb
Calcium	43-1	31323.34	30792.29	30481.67	30865.77	1.38	ppb
Calcium	44-1	30068.27	30378.52	28975.39	29807.40	2.47	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1944.61	1911.07	1934.60	1930.09	0.89	ppb
Cobalt	59-2	58.73	59.13	58.51	58.79	0.53	ppb
Copper	63-2	2030.87	2028.38	2045.90	2035.05	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				115		%
Holmium	165-2				112		%
Indium	115-1				109		%
Indium	115-2				105		%
Iron	56-2	148860.69	150301.98	150644.68	149935.79	0.63	ppb
Iron	57-2	152265.90	149503.14	146296.49	149355.18	2.00	ppb
Iron	54-2	155592.53	153433.25	154351.71	154459.16	0.70	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3434-01	Instrumnet Name :	P7
Client Sample ID :	PR132-WC1-20251022	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:19:03	DataFile Name :	036SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1952.04	1937.82	1964.46	1951.44	0.68	ppb
Lead	207-1	1883.42	1932.93	1928.92	1915.09	1.44	ppb
Lead	208-1	1902.75	1916.40	1948.56	1922.57	1.22	ppb
Lithium	6-1				106		%
Magnesium	24-2	33986.44	33838.70	33575.73	33800.29	0.62	ppb
Manganese	55-2	1589.94	1591.83	1567.27	1583.02	0.86	ppb
Molybdenum	94-1	105.77	108.34	103.99	106.03	2.06	ppb
Molybdenum	95-1	22.25	22.65	21.96	22.29	1.56	ppb
Molybdenum	96-1	31.98	32.75	31.36	32.03	2.18	ppb
Molybdenum	97-1	22.80	23.49	22.66	22.98	1.94	ppb
Molybdenum	98-1	22.47	22.65	22.30	22.48	0.78	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	359.88	361.67	359.98	360.51	0.28	ppb
Phosphorus	31-2	7461.76	7579.05	7480.24	7507.01	0.84	ppb
Potassium	39-2	13324.33	13399.92	13263.44	13329.23	0.51	ppb
Rhodium	103-1				106		%
Rhodium	103-2				105		%
Scandium	45-1				113		%
Scandium	45-2				116		%
Selenium	82-1	9.80	10.73	10.34	10.29	4.55	ppb
Selenium	77-2	32.35	38.66	32.45	34.49	10.48	ppb
Selenium	78-2	12.84	13.84	13.03	13.24	4.02	ppb
Silicon	28-1	138.66	111.78	91.11	113.85	20.94	ppb
Silver	107-1	51.09	51.10	51.82	51.34	0.81	ppb
Silver	109-1	50.57	50.92	51.27	50.92	0.69	ppb
Sodium	23-2	29939.70	30338.68	29961.55	30079.98	0.75	ppb
Strontium	86-1	293.75	304.15	292.29	296.73	2.18	ppb
Strontium	88-1	303.80	305.15	292.41	300.45	2.33	ppb
Sulfur	34-1	79059.59	77039.30	76144.09	77414.32	1.93	ppb
Terbium	159-1				111		%
Terbium	159-2				110		%
Thallium	203-1	1.64	1.71	1.64	1.66	2.20	ppb
Thallium	205-1	1.68	1.73	1.72	1.71	1.57	ppb
Tin	118-1	157.31	156.47	159.99	157.92	1.16	ppb
Titanium	47-1	1597.09	1607.45	1571.64	1592.06	1.16	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3434-01	Instrumnet Name :	P7
Client Sample ID :	PR132-WC1-20251022	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:19:03	DataFile Name :	036SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	10.58	10.81	11.13	10.84	2.54	ppb
Vanadium	51-2	290.95	291.33	291.25	291.18	0.07	ppb
Yttrium	89-1				127		%
Yttrium	89-2				125		%
Zinc	66-2	3228.62	3257.87	3259.94	3248.81	0.54	ppb
Zirconium	90-1	48.12	49.65	47.92	48.56	1.94	ppb
Zirconium	91-1	47.46	49.22	47.55	48.08	2.06	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:22:31	DataFile Name :	037SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	16096.64	16302.76	16013.30	16137.57	0.92	ppb
Antimony	121-1	0.19	0.21	0.22	0.21	6.02	ppb
Arsenic	75-2	24.01	24.70	22.93	23.88	3.72	ppb
Barium	135-1	184.66	185.83	188.96	186.48	1.19	ppb
Barium	137-1	183.66	183.13	184.93	183.91	0.50	ppb
Beryllium	9-1	1.14	1.17	1.21	1.17	2.70	ppb
Bismuth	209-1				108		%
Bismuth	209-2				108		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	8.02	7.59	9.45	8.35	11.60	ppb
Cadmium	106-1	8.56	7.82	8.49	8.29	4.95	ppb
Cadmium	111-1	7.20	7.35	7.07	7.21	1.93	ppb
Calcium	43-1	11598.16	12089.20	11567.33	11751.57	2.49	ppb
Calcium	44-1	11134.24	11302.30	11270.26	11235.60	0.79	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	273.98	276.19	271.39	273.85	0.88	ppb
Cobalt	59-2	17.20	17.32	16.86	17.13	1.40	ppb
Copper	63-2	307.41	305.21	307.51	306.71	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				113		%
Holmium	165-2				109		%
Indium	115-1				109		%
Indium	115-2				106		%
Iron	56-2	43986.16	43997.90	42626.70	43536.92	1.81	ppb
Iron	57-2	44331.47	44760.62	43301.81	44131.30	1.70	ppb
Iron	54-2	45091.29	43903.69	45005.56	44666.85	1.48	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:22:31	DataFile Name :	037SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	361.99	350.31	353.73	355.34	1.69	ppb
Lead	207-1	345.52	335.82	338.24	339.86	1.49	ppb
Lead	208-1	361.10	357.45	356.96	358.50	0.63	ppb
Lithium	6-1				101		%
Magnesium	24-2	11301.07	11389.85	11179.29	11290.07	0.94	ppb
Manganese	55-2	572.37	572.26	574.73	573.12	0.24	ppb
Molybdenum	94-1	29.31	29.46	28.47	29.08	1.85	ppb
Molybdenum	95-1	3.09	3.21	3.03	3.11	2.88	ppb
Molybdenum	96-1	6.01	6.22	5.98	6.07	2.17	ppb
Molybdenum	97-1	3.16	3.23	3.23	3.20	1.19	ppb
Molybdenum	98-1	3.22	3.24	3.14	3.20	1.57	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	87.43	88.15	87.27	87.62	0.54	ppb
Phosphorus	31-2	1858.37	1939.29	1924.20	1907.29	2.26	ppb
Potassium	39-2	3830.76	3882.98	3847.05	3853.60	0.69	ppb
Rhodium	103-1				106		%
Rhodium	103-2				105		%
Scandium	45-1				106		%
Scandium	45-2				109		%
Selenium	82-1	1.71	2.01	1.67	1.80	10.23	ppb
Selenium	77-2	8.29	8.50	9.16	8.65	5.29	ppb
Selenium	78-2	5.62	4.39	2.97	4.33	30.74	ppb
Silicon	28-1	26.93	24.73	33.14	28.26	15.43	ppb
Silver	107-1	7.97	8.30	8.24	8.17	2.12	ppb
Silver	109-1	8.00	8.11	8.20	8.11	1.27	ppb
Sodium	23-2	9405.87	9558.92	9692.98	9552.59	1.50	ppb
Strontium	86-1	73.36	71.79	71.53	72.23	1.38	ppb
Strontium	88-1	73.38	72.71	72.49	72.86	0.64	ppb
Sulfur	34-1	20146.86	20742.60	20419.82	20436.42	1.46	ppb
Terbium	159-1				111		%
Terbium	159-2				106		%
Thallium	203-1	0.43	0.41	0.40	0.41	4.56	ppb
Thallium	205-1	0.43	0.40	0.42	0.42	4.06	ppb
Tin	118-1	30.85	30.52	30.68	30.68	0.54	ppb
Titanium	47-1	400.00	424.98	403.38	409.45	3.31	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:22:31	DataFile Name :	037SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	1.93	1.85	1.87	1.88	2.12	ppb
Vanadium	51-2	62.92	62.47	62.55	62.65	0.39	ppb
Yttrium	89-1				113		%
Yttrium	89-2				111		%
Zinc	66-2	556.89	553.30	557.74	555.98	0.42	ppb
Zirconium	90-1	14.66	14.54	14.64	14.62	0.43	ppb
Zirconium	91-1	14.63	14.53	14.16	14.44	1.70	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:25:48	DataFile Name :	038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	17592.70	17358.27	17392.52	17447.83	0.73	ppb
Antimony	121-1	0.22	0.24	0.22	0.23	4.69	ppb
Arsenic	75-2	25.85	26.90	26.42	26.39	1.99	ppb
Barium	135-1	201.73	209.02	206.11	205.62	1.79	ppb
Barium	137-1	201.07	208.30	202.50	203.95	1.88	ppb
Beryllium	9-1	1.35	1.44	1.24	1.34	7.15	ppb
Bismuth	209-1				107		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	8.75	9.73	8.97	9.15	5.63	ppb
Cadmium	106-1	9.71	8.04	8.20	8.65	10.64	ppb
Cadmium	111-1	8.05	7.93	7.95	7.98	0.83	ppb
Calcium	43-1	12762.30	13046.84	12712.50	12840.55	1.40	ppb
Calcium	44-1	12030.87	12391.90	12250.93	12224.57	1.49	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	299.99	295.76	296.39	297.38	0.77	ppb
Cobalt	59-2	18.69	18.73	18.37	18.60	1.05	ppb
Copper	63-2	334.20	332.43	330.77	332.46	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				111		%
Holmium	165-2				110		%
Indium	115-1				108		%
Indium	115-2				106		%
Iron	56-2	48766.62	47547.09	48176.14	48163.28	1.27	ppb
Iron	57-2	48234.56	48767.25	48265.86	48422.56	0.62	ppb
Iron	54-2	49733.77	49574.59	48873.42	49393.93	0.93	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:25:48	DataFile Name :	038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	380.38	382.42	387.03	383.28	0.89	ppb
Lead	207-1	361.43	364.36	371.80	365.87	1.46	ppb
Lead	208-1	387.12	384.27	391.58	387.66	0.95	ppb
Lithium	6-1				100		%
Magnesium	24-2	12218.85	12106.45	12057.10	12127.47	0.68	ppb
Manganese	55-2	649.04	618.55	630.58	632.72	2.43	ppb
Molybdenum	94-1	30.89	30.71	31.09	30.89	0.62	ppb
Molybdenum	95-1	3.29	3.40	3.46	3.38	2.58	ppb
Molybdenum	96-1	6.42	6.66	6.66	6.58	2.09	ppb
Molybdenum	97-1	3.41	3.36	3.55	3.44	2.81	ppb
Molybdenum	98-1	3.44	3.54	3.52	3.50	1.62	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	96.30	94.53	93.88	94.90	1.32	ppb
Phosphorus	31-2	2109.84	2114.20	2102.20	2108.75	0.29	ppb
Potassium	39-2	4210.13	4219.21	4220.38	4216.57	0.13	ppb
Rhodium	103-1				107		%
Rhodium	103-2				107		%
Scandium	45-1				105		%
Scandium	45-2				109		%
Selenium	82-1	2.23	1.89	2.32	2.15	10.66	ppb
Selenium	77-2	13.40	10.70	8.56	10.89	22.27	ppb
Selenium	78-2	4.91	3.63	3.38	3.97	20.61	ppb
Silicon	28-1	32.20	36.49	50.57	39.76	24.17	ppb
Silver	107-1	9.17	9.41	9.30	9.29	1.29	ppb
Silver	109-1	8.84	9.17	9.17	9.06	2.09	ppb
Sodium	23-2	10525.73	10463.97	10247.82	10412.50	1.40	ppb
Strontium	86-1	77.38	77.80	78.91	78.03	1.02	ppb
Strontium	88-1	77.11	78.27	79.06	78.15	1.25	ppb
Sulfur	34-1	21876.14	22789.29	22161.53	22275.65	2.10	ppb
Terbium	159-1				109		%
Terbium	159-2				107		%
Thallium	203-1	0.42	0.43	0.42	0.42	1.22	ppb
Thallium	205-1	0.42	0.42	0.44	0.43	3.12	ppb
Tin	118-1	32.22	33.02	32.13	32.46	1.52	ppb
Titanium	47-1	439.70	459.16	444.51	447.79	2.26	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:25:48	DataFile Name :	038SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.02	2.01	2.04	2.03	0.78	ppb
Vanadium	51-2	68.52	68.68	67.60	68.26	0.85	ppb
Yttrium	89-1				113		%
Yttrium	89-2				111		%
Zinc	66-2	609.91	603.51	604.12	605.85	0.58	ppb
Zirconium	90-1	17.12	15.86	15.98	16.32	4.25	ppb
Zirconium	91-1	15.47	15.46	15.82	15.58	1.32	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01LDLX25	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	25
Date & Time Acquired :	2025-10-23 17:29:03	DataFile Name :	039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.26	0.54	0.85	0.89	40.66	ppb
Antimony	121-1	0.01	0.00	0.00	0.00	43.10	ppb
Arsenic	75-2	0.01	-0.01	0.00	0.00		ppb
Barium	135-1	0.05	0.04	0.01	0.03	51.15	ppb
Barium	137-1	0.03	0.03	0.02	0.03	20.94	ppb
Beryllium	9-1	0.01	0.01	-0.01	0.00	239.06	ppb
Bismuth	209-1				104		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.07	0.14	-0.02	0.06	129.39	ppb
Cadmium	106-1	-0.07	-0.98	-0.17	-0.41		ppb
Cadmium	111-1	-0.01	-0.07	-0.01	-0.03		ppb
Calcium	43-1	1.32	-0.40	-1.53	-0.20		ppb
Calcium	44-1	-11.41	-9.30	-7.97	-9.56		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.05	0.04	0.05	0.04	10.21	ppb
Cobalt	59-2	-0.01	-0.02	-0.02	-0.02		ppb
Copper	63-2	0.06	0.04	0.06	0.05	26.61	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				107		%
Holmium	165-2				106		%
Indium	115-1				105		%
Indium	115-2				104		%
Iron	56-2	3.14	2.75	3.09	2.99	7.05	ppb
Iron	57-2	1.87	2.08	2.31	2.09	10.60	ppb
Iron	54-2	3.28	1.35	2.84	2.49	40.59	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01LDLX25	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	25
Date & Time Acquired :	2025-10-23 17:29:03	DataFile Name :	039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.11	0.08	0.08	0.09	18.96	ppb
Lead	207-1	0.09	0.05	0.06	0.06	34.47	ppb
Lead	208-1	0.08	0.06	0.07	0.07	11.11	ppb
Lithium	6-1				97		%
Magnesium	24-2	2.03	1.73	1.40	1.72	18.13	ppb
Manganese	55-2	-0.10	-0.10	-0.10	-0.10		ppb
Molybdenum	94-1	0.00	0.03	0.01	0.01	74.89	ppb
Molybdenum	95-1	0.02	0.00	0.01	0.01	72.51	ppb
Molybdenum	96-1	-0.01	0.00	0.02	0.00	340.98	ppb
Molybdenum	97-1	-0.03	-0.02	0.00	-0.02		ppb
Molybdenum	98-1	0.00	0.00	-0.01	0.00		ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	-0.04	0.00	-0.07	-0.04		ppb
Phosphorus	31-2	-128.76	-126.86	-130.63	-128.75		ppb
Potassium	39-2	7.68	8.17	6.00	7.28	15.66	ppb
Rhodium	103-1				103		%
Rhodium	103-2				104		%
Scandium	45-1				100		%
Scandium	45-2				103		%
Selenium	82-1	0.12	-0.55	-0.77	-0.40		ppb
Selenium	77-2	-0.25	-0.01	-0.01	-0.09		ppb
Selenium	78-2	1.86	0.50	1.05	1.14	59.88	ppb
Silicon	28-1	-1.18	-0.70	-0.83	-0.90		ppb
Silver	107-1	0.02	0.02	0.01	0.02	34.14	ppb
Silver	109-1	0.02	0.02	0.02	0.02	5.81	ppb
Sodium	23-2	47.71	46.38	45.09	46.40	2.82	ppb
Strontium	86-1	-0.04	-0.03	0.04	-0.01		ppb
Strontium	88-1	0.01	0.01	0.01	0.01	24.79	ppb
Sulfur	34-1	-2147.82	-1846.66	-1872.95	-1955.81		ppb
Terbium	159-1				105		%
Terbium	159-2				104		%
Thallium	203-1	0.04	0.03	0.03	0.03	14.46	ppb
Thallium	205-1	0.03	0.03	0.03	0.03	1.64	ppb
Tin	118-1	0.14	0.22	0.15	0.17	25.85	ppb
Titanium	47-1	0.03	0.04	0.05	0.04	32.11	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01LDLX25	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	25
Date & Time Acquired :	2025-10-23 17:29:03	DataFile Name :	039SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.00	0.00	0.00	41.31	ppb
Vanadium	51-2	0.01	0.01	0.00	0.01	87.14	ppb
Yttrium	89-1				104		%
Yttrium	89-2				103		%
Zinc	66-2	0.14	-0.10	-0.12	-0.03		ppb
Zirconium	90-1	0.00	-0.01	0.00	0.00		ppb
Zirconium	91-1	0.01	-0.02	0.00	-0.01		ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-02DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:32:39	DataFile Name :	040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	15052.06	15083.61	15206.11	15113.92	0.54	ppb
Antimony	121-1	89.73	89.38	84.52	87.88	3.31	ppb
Arsenic	75-2	114.47	112.59	113.73	113.60	0.83	ppb
Barium	135-1	569.52	559.09	545.72	558.11	2.14	ppb
Barium	137-1	566.75	549.79	546.84	554.46	1.94	ppb
Beryllium	9-1	88.34	88.30	88.64	88.43	0.21	ppb
Bismuth	209-1				106		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	95.17	89.94	92.67	92.59	2.82	ppb
Cadmium	106-1	94.69	97.34	93.49	95.17	2.07	ppb
Cadmium	111-1	99.70	98.67	91.91	96.76	4.37	ppb
Calcium	43-1	18419.34	18809.99	18184.44	18471.26	1.71	ppb
Calcium	44-1	17762.44	18161.24	18004.51	17976.07	1.12	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	333.59	334.13	334.96	334.23	0.21	ppb
Cobalt	59-2	102.41	101.52	101.47	101.80	0.52	ppb
Copper	63-2	1127.48	1141.19	1174.19	1147.62	2.09	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				110		%
Holmium	165-2				109		%
Indium	115-1				106		%
Indium	115-2				105		%
Iron	56-2	40428.43	41157.24	41090.51	40892.06	0.99	ppb
Iron	57-2	41496.76	42355.73	41231.72	41694.74	1.41	ppb
Iron	54-2	41893.36	42308.31	42560.14	42253.94	0.80	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-02DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:32:39	DataFile Name :	040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	795.84	804.31	795.79	798.65	0.61	ppb
Lead	207-1	798.13	794.25	818.54	803.64	1.62	ppb
Lead	208-1	785.73	791.03	802.82	793.19	1.10	ppb
Lithium	6-1				102		%
Magnesium	24-2	18697.78	18587.78	19254.16	18846.57	1.90	ppb
Manganese	55-2	1293.43	1288.15	1314.07	1298.55	1.05	ppb
Molybdenum	94-1	423.03	424.29	424.86	424.06	0.22	ppb
Molybdenum	95-1	304.73	305.05	308.10	305.96	0.61	ppb
Molybdenum	96-1	321.08	325.68	324.12	323.62	0.72	ppb
Molybdenum	97-1	311.82	315.85	310.83	312.83	0.85	ppb
Molybdenum	98-1	308.34	314.82	314.99	312.72	1.21	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	168.34	168.75	169.86	168.98	0.46	ppb
Phosphorus	31-2	1609.59	1609.37	1614.06	1611.01	0.16	ppb
Potassium	39-2	7311.14	7419.17	7318.82	7349.71	0.82	ppb
Rhodium	103-1				104		%
Rhodium	103-2				105		%
Scandium	45-1				106		%
Scandium	45-2				107		%
Selenium	82-1	88.20	90.86	91.03	90.03	1.76	ppb
Selenium	77-2	100.30	97.46	87.24	95.00	7.23	ppb
Selenium	78-2	90.18	92.37	89.26	90.60	1.77	ppb
Silicon	28-1	30.61	36.35	23.89	30.28	20.59	ppb
Silver	107-1	22.73	22.47	21.74	22.32	2.31	ppb
Silver	109-1	22.21	21.77	21.19	21.72	2.34	ppb
Sodium	23-2	17453.52	17123.54	17549.27	17375.44	1.29	ppb
Strontium	86-1	155.83	156.94	155.63	156.13	0.45	ppb
Strontium	88-1	153.14	160.44	157.76	157.11	2.35	ppb
Sulfur	34-1	17034.49	17215.78	16472.68	16907.65	2.29	ppb
Terbium	159-1				109		%
Terbium	159-2				107		%
Thallium	203-1	80.15	78.52	82.73	80.47	2.64	ppb
Thallium	205-1	80.31	80.08	80.73	80.38	0.41	ppb
Tin	118-1	110.19	108.26	104.69	107.71	2.59	ppb
Titanium	47-1	337.30	358.70	344.29	346.76	3.15	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-02DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:32:39	DataFile Name :	040SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	77.20	76.37	77.52	77.03	0.77	ppb
Vanadium	51-2	143.64	143.51	142.99	143.38	0.24	ppb
Yttrium	89-1				110		%
Yttrium	89-2				110		%
Zinc	66-2	1405.77	1405.38	1417.46	1409.54	0.49	ppb
Zirconium	90-1	92.79	93.69	93.68	93.39	0.55	ppb
Zirconium	91-1	92.13	91.16	94.17	92.49	1.66	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:35:48	DataFile Name :	041CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	50954.59	50975.37	50587.83	50839.26	0.43	ppb
Antimony	121-1	529.31	530.19	535.78	531.76	0.66	ppb
Arsenic	75-2	544.05	526.65	523.67	531.46	2.07	ppb
Barium	135-1	2644.12	2672.72	2725.07	2680.63	1.53	ppb
Barium	137-1	2627.12	2666.72	2669.25	2654.37	0.89	ppb
Beryllium	9-1	521.81	530.64	530.30	527.59	0.95	ppb
Bismuth	209-1				100		%
Bismuth	209-2				96		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	510.16	519.99	518.24	516.13	1.02	ppb
Cadmium	106-1	511.31	523.15	514.13	516.20	1.20	ppb
Cadmium	111-1	507.01	514.59	520.30	513.97	1.30	ppb
Calcium	43-1	262902.26	261418.90	260915.28	261745.48	0.39	ppb
Calcium	44-1	258862.33	261088.20	256621.54	258857.36	0.86	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	527.57	519.65	524.66	523.96	0.76	ppb
Cobalt	59-2	543.33	536.42	529.08	536.28	1.33	ppb
Copper	63-2	5319.75	5182.51	5173.63	5225.30	1.57	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				104		%
Indium	115-1				99		%
Indium	115-2				97		%
Iron	56-2	130768.59	130789.48	131590.32	131049.46	0.36	ppb
Iron	57-2	134228.03	130719.99	134571.59	133173.21	1.60	ppb
Iron	54-2	133458.88	132164.07	134479.41	133367.46	0.87	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:35:48	DataFile Name :	041CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2679.61	2628.27	2740.59	2682.82	2.10	ppb
Lead	207-1	2716.00	2615.75	2748.32	2693.36	2.57	ppb
Lead	208-1	2689.72	2645.73	2742.02	2692.49	1.79	ppb
Lithium	6-1				99		%
Magnesium	24-2	264187.47	261489.08	266177.61	263951.38	0.89	ppb
Manganese	55-2	5303.80	5289.69	5350.58	5314.69	0.60	ppb
Molybdenum	94-1	5266.82	5251.08	5391.48	5303.12	1.45	ppb
Molybdenum	95-1	5349.35	5298.57	5423.88	5357.27	1.18	ppb
Molybdenum	96-1	5267.72	5289.86	5385.44	5314.34	1.18	ppb
Molybdenum	97-1	5311.66	5196.70	5451.20	5319.85	2.40	ppb
Molybdenum	98-1	5299.52	5304.27	5477.36	5360.38	1.89	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	522.94	512.79	516.01	517.25	1.00	ppb
Phosphorus	31-2	10757.66	10806.81	10637.18	10733.88	0.81	ppb
Potassium	39-2	130311.40	128968.05	128869.81	129383.09	0.62	ppb
Rhodium	103-1				96		%
Rhodium	103-2				95		%
Scandium	45-1				98		%
Scandium	45-2				100		%
Selenium	82-1	504.49	497.11	523.73	508.44	2.70	ppb
Selenium	77-2	525.94	520.78	522.85	523.19	0.50	ppb
Selenium	78-2	520.58	507.23	508.22	512.01	1.45	ppb
Silicon	28-1	577.00	577.81	571.38	575.40	0.61	ppb
Silver	107-1	520.20	536.58	526.74	527.84	1.56	ppb
Silver	109-1	508.46	535.35	526.65	523.49	2.62	ppb
Sodium	23-2	262069.39	257061.42	260437.33	259856.05	0.98	ppb
Strontium	86-1	526.08	519.48	536.04	527.20	1.58	ppb
Strontium	88-1	532.22	515.88	549.05	532.38	3.12	ppb
Sulfur	34-1	10576.57	10260.36	10106.09	10314.34	2.33	ppb
Terbium	159-1				105		%
Terbium	159-2				103		%
Thallium	203-1	543.82	529.54	545.57	539.64	1.63	ppb
Thallium	205-1	549.24	538.64	544.41	544.09	0.98	ppb
Tin	118-1	526.42	536.52	529.96	530.97	0.97	ppb
Titanium	47-1	5130.38	5220.56	5162.25	5171.07	0.88	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:35:48	DataFile Name :	041CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	538.12	533.81	563.87	545.26	2.98	ppb
Vanadium	51-2	543.77	535.05	540.52	539.78	0.82	ppb
Yttrium	89-1				101		%
Yttrium	89-2				100		%
Zinc	66-2	5152.28	4922.91	5080.24	5051.81	2.32	ppb
Zirconium	90-1	532.76	522.15	541.99	532.30	1.86	ppb
Zirconium	91-1	532.98	527.44	543.33	534.58	1.51	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:43:18	DataFile Name :	042CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	0.44	1.12	1.20	0.92	45.64	ppb
Antimony	121-1	0.08	0.08	0.09	0.09	7.79	ppb
Arsenic	75-2	0.01	0.02	-0.01	0.00	353.02	ppb
Barium	135-1	0.04	0.02	0.02	0.02	50.51	ppb
Barium	137-1	0.05	0.05	0.03	0.04	18.71	ppb
Beryllium	9-1	0.02	0.02	0.00	0.01	55.21	ppb
Bismuth	209-1				102		%
Bismuth	209-2				100		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.04	-0.02	0.01	0.01	331.19	ppb
Cadmium	106-1	-1.21	-1.24	-3.10	-1.85		ppb
Cadmium	111-1	-0.07	-0.08	-0.20	-0.12		ppb
Calcium	43-1	10.45	-1.49	0.93	3.30	191.55	ppb
Calcium	44-1	-4.10	-3.96	-6.02	-4.69		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.02	0.05	0.03	0.03	53.65	ppb
Cobalt	59-2	0.00	-0.02	-0.01	-0.01		ppb
Copper	63-2	0.14	0.12	0.16	0.14	13.37	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				101		%
Indium	115-1				101		%
Indium	115-2				99		%
Iron	56-2	15.94	15.64	16.07	15.88	1.40	ppb
Iron	57-2	16.11	18.77	13.63	16.17	15.90	ppb
Iron	54-2	18.75	18.16	15.02	17.31	11.57	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:43:18	DataFile Name :	042CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.08	0.05	0.06	0.06	17.74	ppb
Lead	207-1	0.06	0.07	0.05	0.06	14.13	ppb
Lead	208-1	0.06	0.05	0.06	0.05	13.67	ppb
Lithium	6-1				95		%
Magnesium	24-2	2.05	2.57	2.53	2.38	12.13	ppb
Manganese	55-2	0.04	0.07	0.10	0.07	40.46	ppb
Molybdenum	94-1	0.07	0.10	0.13	0.10	28.66	ppb
Molybdenum	95-1	0.04	0.06	0.08	0.06	29.87	ppb
Molybdenum	96-1	0.06	0.09	0.07	0.08	19.79	ppb
Molybdenum	97-1	0.04	0.08	0.07	0.06	35.25	ppb
Molybdenum	98-1	0.07	0.05	0.06	0.06	15.95	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.08	0.00	-0.02	0.02	276.55	ppb
Phosphorus	31-2	-121.85	-135.27	-130.72	-129.28		ppb
Potassium	39-2	16.43	19.58	21.34	19.12	13.01	ppb
Rhodium	103-1				97		%
Rhodium	103-2				100		%
Scandium	45-1				95		%
Scandium	45-2				97		%
Selenium	82-1	-0.21	0.00	-0.61	-0.27		ppb
Selenium	77-2	-0.25	0.00	-0.25	-0.16		ppb
Selenium	78-2	0.27	1.11	1.14	0.84	58.64	ppb
Silicon	28-1	-0.55	-0.63	-0.46	-0.54		ppb
Silver	107-1	0.01	0.01	0.01	0.01	13.42	ppb
Silver	109-1	0.01	0.01	0.01	0.01	23.51	ppb
Sodium	23-2	59.06	57.48	59.24	58.59	1.65	ppb
Strontium	86-1	0.01	0.01	-0.04	-0.01		ppb
Strontium	88-1	0.01	0.00	0.01	0.01	28.94	ppb
Sulfur	34-1	-203.29	-246.00	-569.94	-339.74		ppb
Terbium	159-1				103		%
Terbium	159-2				100		%
Thallium	203-1	0.06	0.05	0.05	0.05	11.09	ppb
Thallium	205-1	0.06	0.05	0.05	0.05	10.25	ppb
Tin	118-1	0.32	0.29	0.32	0.31	5.33	ppb
Titanium	47-1	0.10	0.07	0.02	0.06	69.31	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:43:18	DataFile Name :	042CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.01	0.00	0.01	0.01	26.63	ppb
Vanadium	51-2	0.00	0.00	0.00	0.00	64.14	ppb
Yttrium	89-1				100		%
Yttrium	89-2				99		%
Zinc	66-2	0.27	0.22	0.48	0.33	42.44	ppb
Zirconium	90-1	0.02	0.02	0.03	0.02	28.55	ppb
Zirconium	91-1	0.01	0.03	0.04	0.02	58.34	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-03DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:47:07	DataFile Name :	043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	15358.64	15686.55	15216.05	15420.41	1.56	ppb
Antimony	121-1	88.70	87.81	88.99	88.50	0.70	ppb
Arsenic	75-2	112.01	114.33	117.58	114.64	2.44	ppb
Barium	135-1	560.43	568.54	561.85	563.61	0.77	ppb
Barium	137-1	565.66	560.49	567.68	564.61	0.66	ppb
Beryllium	9-1	90.85	88.11	91.39	90.12	1.95	ppb
Bismuth	209-1				107		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	93.44	93.34	95.72	94.17	1.43	ppb
Cadmium	106-1	95.37	95.34	95.20	95.30	0.09	ppb
Cadmium	111-1	95.39	95.90	98.14	96.48	1.52	ppb
Calcium	43-1	18689.04	19633.32	19243.46	19188.61	2.47	ppb
Calcium	44-1	18297.26	18876.98	18093.82	18422.68	2.21	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	334.45	336.40	337.40	336.08	0.45	ppb
Cobalt	59-2	101.88	103.05	102.65	102.53	0.58	ppb
Copper	63-2	1167.83	1161.23	1129.90	1152.99	1.76	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				109		%
Holmium	165-2				107		%
Indium	115-1				103		%
Indium	115-2				103		%
Iron	56-2	42494.30	41888.42	41728.27	42036.99	0.96	ppb
Iron	57-2	43050.74	41834.63	41590.87	42158.75	1.86	ppb
Iron	54-2	43177.11	42856.21	42609.14	42880.82	0.66	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-03DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:47:07	DataFile Name :	043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	800.03	789.99	795.39	795.14	0.63	ppb
Lead	207-1	806.57	794.57	804.72	801.95	0.81	ppb
Lead	208-1	807.54	787.69	797.55	797.59	1.24	ppb
Lithium	6-1				100		%
Magnesium	24-2	19352.75	19003.56	18706.68	19020.99	1.70	ppb
Manganese	55-2	1311.40	1292.21	1299.14	1300.92	0.75	ppb
Molybdenum	94-1	426.55	425.36	434.81	428.91	1.20	ppb
Molybdenum	95-1	310.05	312.00	315.80	312.62	0.94	ppb
Molybdenum	96-1	327.38	323.56	332.34	327.76	1.34	ppb
Molybdenum	97-1	317.33	314.13	323.88	318.45	1.56	ppb
Molybdenum	98-1	318.17	317.39	317.51	317.69	0.13	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	169.52	169.75	169.18	169.48	0.17	ppb
Phosphorus	31-2	1631.33	1599.92	1653.95	1628.40	1.67	ppb
Potassium	39-2	7441.45	7516.16	7593.56	7517.06	1.01	ppb
Rhodium	103-1				101		%
Rhodium	103-2				102		%
Scandium	45-1				101		%
Scandium	45-2				104		%
Selenium	82-1	90.45	89.00	93.27	90.91	2.39	ppb
Selenium	77-2	92.55	96.40	98.73	95.89	3.26	ppb
Selenium	78-2	86.94	86.06	95.54	89.51	5.86	ppb
Silicon	28-1	16.84	29.46	134.26	60.19	107.10	ppb
Silver	107-1	21.60	22.06	22.61	22.09	2.28	ppb
Silver	109-1	21.75	21.62	22.04	21.80	0.99	ppb
Sodium	23-2	17752.46	17519.26	17532.92	17601.55	0.74	ppb
Strontium	86-1	157.11	155.18	161.37	157.89	2.00	ppb
Strontium	88-1	155.75	156.99	161.04	157.93	1.75	ppb
Sulfur	34-1	18383.66	18155.85	18663.11	18400.88	1.38	ppb
Terbium	159-1				107		%
Terbium	159-2				104		%
Thallium	203-1	81.45	78.05	80.52	80.01	2.19	ppb
Thallium	205-1	80.81	78.79	81.14	80.25	1.58	ppb
Tin	118-1	109.98	108.66	109.66	109.44	0.63	ppb
Titanium	47-1	358.73	353.75	359.19	357.22	0.85	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-03DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:47:07	DataFile Name :	043SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	77.76	75.24	77.96	76.99	1.97	ppb
Vanadium	51-2	144.26	144.22	143.42	143.97	0.33	ppb
Yttrium	89-1				107		%
Yttrium	89-2				107		%
Zinc	66-2	1417.15	1421.34	1412.94	1417.14	0.30	ppb
Zirconium	90-1	94.17	94.66	95.64	94.83	0.79	ppb
Zirconium	91-1	94.87	93.84	95.64	94.78	0.95	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01ADLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:50:14	DataFile Name :	044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	16317.24	16378.88	16045.89	16247.34	1.09	ppb
Antimony	121-1	88.86	91.78	88.12	89.58	2.16	ppb
Arsenic	75-2	115.33	116.94	115.07	115.78	0.88	ppb
Barium	135-1	570.09	584.84	563.80	572.91	1.89	ppb
Barium	137-1	561.11	575.25	564.06	566.81	1.32	ppb
Beryllium	9-1	85.98	87.66	89.92	87.85	2.25	ppb
Bismuth	209-1				109		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	94.74	98.64	92.37	95.25	3.32	ppb
Cadmium	106-1	101.71	97.57	98.73	99.33	2.15	ppb
Cadmium	111-1	97.75	100.14	96.02	97.97	2.11	ppb
Calcium	43-1	20000.68	20333.89	19765.06	20033.21	1.43	ppb
Calcium	44-1	19173.03	19262.43	19085.00	19173.49	0.46	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	335.10	341.10	333.53	336.57	1.19	ppb
Cobalt	59-2	102.13	104.71	102.45	103.10	1.36	ppb
Copper	63-2	1143.74	1178.25	1135.71	1152.57	1.96	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				111		%
Holmium	165-2				109		%
Indium	115-1				106		%
Indium	115-2				103		%
Iron	56-2	43794.11	44448.44	43559.44	43934.00	1.05	ppb
Iron	57-2	43934.69	43989.89	43563.79	43829.46	0.53	ppb
Iron	54-2	44789.09	45398.49	44077.06	44754.88	1.48	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01ADLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:50:14	DataFile Name :	044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	795.11	799.94	771.16	788.74	1.95	ppb
Lead	207-1	810.10	790.88	771.67	790.88	2.43	ppb
Lead	208-1	795.47	795.73	770.68	787.29	1.83	ppb
Lithium	6-1				104		%
Magnesium	24-2	19791.22	19519.18	19427.94	19579.45	0.97	ppb
Manganese	55-2	1371.05	1356.86	1327.71	1351.87	1.63	ppb
Molybdenum	94-1	417.35	429.71	426.54	424.53	1.51	ppb
Molybdenum	95-1	301.51	310.03	313.92	308.49	2.06	ppb
Molybdenum	96-1	315.14	322.88	328.29	322.10	2.05	ppb
Molybdenum	97-1	307.35	313.83	317.41	312.86	1.63	ppb
Molybdenum	98-1	305.91	316.16	316.46	312.85	1.92	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	167.99	172.84	167.34	169.39	1.78	ppb
Phosphorus	31-2	1762.19	1688.02	1719.25	1723.15	2.16	ppb
Potassium	39-2	7724.41	7687.02	7315.38	7575.60	2.98	ppb
Rhodium	103-1				102		%
Rhodium	103-2				103		%
Scandium	45-1				102		%
Scandium	45-2				105		%
Selenium	82-1	89.46	90.34	90.49	90.10	0.62	ppb
Selenium	77-2	100.19	91.32	96.35	95.95	4.63	ppb
Selenium	78-2	89.56	90.09	93.89	91.18	2.59	ppb
Silicon	28-1	53.76	19.24	60.78	44.59	49.86	ppb
Silver	107-1	22.50	23.11	22.32	22.64	1.83	ppb
Silver	109-1	21.78	22.60	22.12	22.17	1.87	ppb
Sodium	23-2	17481.53	18103.98	18125.08	17903.53	2.04	ppb
Strontium	86-1	154.63	160.17	162.54	159.12	2.55	ppb
Strontium	88-1	161.38	157.76	159.69	159.61	1.14	ppb
Sulfur	34-1	19081.74	18624.47	19039.56	18915.26	1.34	ppb
Terbium	159-1				107		%
Terbium	159-2				107		%
Thallium	203-1	78.68	79.10	80.34	79.38	1.09	ppb
Thallium	205-1	78.74	79.35	78.77	78.95	0.43	ppb
Tin	118-1	108.18	110.99	109.86	109.68	1.29	ppb
Titanium	47-1	365.22	368.74	371.17	368.38	0.81	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01ADLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:50:14	DataFile Name :	044SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	75.33	76.38	76.99	76.24	1.10	ppb
Vanadium	51-2	144.48	146.82	145.07	145.46	0.84	ppb
Yttrium	89-1				109		%
Yttrium	89-2				107		%
Zinc	66-2	1407.38	1425.54	1393.67	1408.86	1.13	ppb
Zirconium	90-1	92.46	96.36	95.60	94.81	2.18	ppb
Zirconium	91-1	92.05	94.40	96.38	94.27	2.30	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-04DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-119133-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:53:24	DataFile Name :	045SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	28277.41	28118.52	28843.53	28413.15	1.34	ppb
Antimony	121-1	0.46	0.48	0.50	0.48	4.92	ppb
Arsenic	75-2	89.76	88.42	90.21	89.46	1.04	ppb
Barium	135-1	631.01	637.07	658.55	642.21	2.25	ppb
Barium	137-1	615.75	625.59	651.43	630.92	2.92	ppb
Beryllium	9-1	1.84	2.00	2.00	1.95	4.89	ppb
Bismuth	209-1				107		%
Bismuth	209-2				108		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	6.05	5.59	5.74	5.79	4.05	ppb
Cadmium	106-1	7.51	7.33	7.70	7.51	2.47	ppb
Cadmium	111-1	4.91	4.89	5.12	4.97	2.59	ppb
Calcium	43-1	15476.05	15106.05	15327.69	15303.26	1.22	ppb
Calcium	44-1	14744.56	14917.53	14625.98	14762.69	0.99	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	294.91	294.39	299.12	296.14	0.88	ppb
Cobalt	59-2	25.55	25.23	25.60	25.46	0.80	ppb
Copper	63-2	661.87	644.10	671.43	659.13	2.10	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				110		%
Holmium	165-2				109		%
Indium	115-1				106		%
Indium	115-2				105		%
Iron	56-2	84997.53	83449.24	86705.83	85050.87	1.92	ppb
Iron	57-2	85005.58	83049.56	84479.40	84178.18	1.20	ppb
Iron	54-2	86203.56	86586.25	86202.44	86330.75	0.26	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-04DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-119133-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:53:24	DataFile Name :	045SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	1312.42	1362.92	1352.15	1342.50	1.98	ppb
Lead	207-1	1271.59	1327.52	1289.56	1296.23	2.20	ppb
Lead	208-1	1283.43	1342.00	1321.39	1315.61	2.26	ppb
Lithium	6-1				105		%
Magnesium	24-2	15892.85	15858.01	16164.59	15971.81	1.05	ppb
Manganese	55-2	854.70	864.35	875.61	864.89	1.21	ppb
Molybdenum	94-1	40.45	40.42	40.75	40.54	0.46	ppb
Molybdenum	95-1	3.10	3.21	3.23	3.18	2.08	ppb
Molybdenum	96-1	7.27	7.66	7.66	7.53	2.98	ppb
Molybdenum	97-1	3.17	3.05	3.13	3.12	2.08	ppb
Molybdenum	98-1	3.22	3.20	3.23	3.22	0.42	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	113.83	115.09	115.64	114.85	0.81	ppb
Phosphorus	31-2	2613.32	2559.26	2642.41	2605.00	1.62	ppb
Potassium	39-2	6430.02	6301.41	6516.62	6416.02	1.69	ppb
Rhodium	103-1				104		%
Rhodium	103-2				106		%
Scandium	45-1				107		%
Scandium	45-2				111		%
Selenium	82-1	13.64	13.27	13.90	13.60	2.35	ppb
Selenium	77-2	25.33	25.75	21.30	24.13	10.19	ppb
Selenium	78-2	15.68	16.58	15.42	15.89	3.83	ppb
Silicon	28-1	31.27	53.24	21.51	35.34	45.98	ppb
Silver	107-1	9.14	9.28	9.59	9.33	2.46	ppb
Silver	109-1	9.00	9.22	9.71	9.31	3.90	ppb
Sodium	23-2	8004.20	7705.35	8008.51	7906.02	2.20	ppb
Strontium	86-1	128.11	129.09	127.92	128.37	0.49	ppb
Strontium	88-1	130.54	132.12	131.66	131.44	0.62	ppb
Sulfur	34-1	37346.13	36225.97	36113.70	36561.93	1.86	ppb
Terbium	159-1				108		%
Terbium	159-2				108		%
Thallium	203-1	1.07	1.12	1.11	1.10	2.39	ppb
Thallium	205-1	1.07	1.07	1.08	1.08	0.44	ppb
Tin	118-1	82.08	85.03	87.45	84.85	3.17	ppb
Titanium	47-1	460.87	461.13	458.01	460.00	0.38	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-04DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-119133-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:53:24	DataFile Name :	045SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	4.46	4.66	4.49	4.54	2.40	ppb
Vanadium	51-2	98.42	97.28	98.49	98.06	0.69	ppb
Yttrium	89-1				115		%
Yttrium	89-2				115		%
Zinc	66-2	1243.83	1245.49	1267.37	1252.23	1.05	ppb
Zirconium	90-1	20.78	20.92	21.13	20.94	0.84	ppb
Zirconium	91-1	20.72	21.25	20.83	20.93	1.33	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-05DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-094119-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:56:35	DataFile Name :	046SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	22336.75	22390.01	21802.01	22176.26	1.47	ppb
Antimony	121-1	0.65	0.61	0.59	0.62	4.74	ppb
Arsenic	75-2	60.97	63.39	61.96	62.11	1.96	ppb
Barium	135-1	476.18	473.69	466.19	472.02	1.10	ppb
Barium	137-1	467.62	464.95	464.12	465.56	0.39	ppb
Beryllium	9-1	1.73	1.65	1.78	1.72	3.74	ppb
Bismuth	209-1				108		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	18.11	18.92	18.59	18.54	2.21	ppb
Cadmium	106-1	20.96	19.68	20.30	20.31	3.17	ppb
Cadmium	111-1	18.45	18.14	18.05	18.21	1.16	ppb
Calcium	43-1	12882.10	12637.71	13172.75	12897.52	2.08	ppb
Calcium	44-1	12274.87	12084.79	12360.67	12240.11	1.15	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	648.16	637.26	647.08	644.17	0.93	ppb
Cobalt	59-2	21.02	21.40	21.01	21.15	1.05	ppb
Copper	63-2	785.92	795.13	806.65	795.90	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				113		%
Holmium	165-2				110		%
Indium	115-1				108		%
Indium	115-2				105		%
Iron	56-2	59126.85	58960.18	57766.68	58617.91	1.27	ppb
Iron	57-2	58465.73	59111.46	58300.39	58625.86	0.73	ppb
Iron	54-2	60042.93	61333.95	60024.63	60467.17	1.24	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-05DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-094119-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:56:35	DataFile Name :	046SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	964.72	936.07	957.37	952.72	1.56	ppb
Lead	207-1	947.95	920.40	951.89	940.08	1.82	ppb
Lead	208-1	961.42	927.44	959.60	949.49	2.01	ppb
Lithium	6-1				104		%
Magnesium	24-2	12452.00	12537.60	12501.09	12496.90	0.34	ppb
Manganese	55-2	544.87	554.10	547.15	548.71	0.88	ppb
Molybdenum	94-1	36.11	37.20	37.06	36.79	1.62	ppb
Molybdenum	95-1	5.84	6.00	5.98	5.94	1.53	ppb
Molybdenum	96-1	9.29	9.58	9.64	9.50	1.93	ppb
Molybdenum	97-1	5.93	6.07	6.35	6.12	3.49	ppb
Molybdenum	98-1	5.99	6.09	6.12	6.07	1.13	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	156.40	157.84	156.58	156.94	0.50	ppb
Phosphorus	31-2	3047.77	3013.08	2953.47	3004.77	1.59	ppb
Potassium	39-2	4877.61	4872.55	4897.79	4882.65	0.27	ppb
Rhodium	103-1				106		%
Rhodium	103-2				106		%
Scandium	45-1				104		%
Scandium	45-2				108		%
Selenium	82-1	5.70	5.53	6.29	5.84	6.81	ppb
Selenium	77-2	14.82	12.95	16.10	14.63	10.83	ppb
Selenium	78-2	8.36	5.51	8.88	7.58	23.93	ppb
Silicon	28-1	30.99	25.34	23.29	26.54	15.03	ppb
Silver	107-1	11.47	11.47	11.25	11.40	1.12	ppb
Silver	109-1	11.31	11.23	11.40	11.31	0.78	ppb
Sodium	23-2	8131.50	8421.02	8530.95	8361.16	2.47	ppb
Strontium	86-1	110.93	113.77	114.08	112.93	1.53	ppb
Strontium	88-1	111.38	113.44	118.99	114.60	3.43	ppb
Sulfur	34-1	26207.12	25802.75	27147.91	26385.93	2.62	ppb
Terbium	159-1				108		%
Terbium	159-2				107		%
Thallium	203-1	0.84	0.78	0.86	0.82	5.12	ppb
Thallium	205-1	0.78	0.78	0.78	0.78	0.39	ppb
Tin	118-1	100.99	99.81	99.82	100.20	0.67	ppb
Titanium	47-1	519.24	518.77	541.39	526.47	2.45	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-05DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-094119-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:56:35	DataFile Name :	046SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	3.90	3.93	4.04	3.96	1.92	ppb
Vanadium	51-2	116.13	117.53	116.25	116.64	0.67	ppb
Yttrium	89-1				113		%
Yttrium	89-2				112		%
Zinc	66-2	1235.66	1226.95	1225.81	1229.47	0.44	ppb
Zirconium	90-1	17.41	17.96	17.75	17.71	1.59	ppb
Zirconium	91-1	17.27	17.88	17.89	17.68	2.02	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3422-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S15-000008-2025	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:59:54	DataFile Name :	047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	14867.97	14758.50	14848.01	14824.83	0.39	ppb
Antimony	121-1	0.32	0.30	0.30	0.31	3.52	ppb
Arsenic	75-2	48.20	48.13	48.34	48.22	0.22	ppb
Barium	135-1	365.52	374.19	370.27	369.99	1.17	ppb
Barium	137-1	364.17	372.43	365.16	367.25	1.23	ppb
Beryllium	9-1	1.06	1.14	1.19	1.13	5.43	ppb
Bismuth	209-1				109		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	9.41	10.58	10.03	10.01	5.83	ppb
Cadmium	106-1	12.85	12.28	10.63	11.92	9.66	ppb
Cadmium	111-1	10.18	10.86	10.42	10.49	3.29	ppb
Calcium	43-1	4931.65	5058.48	5078.03	5022.72	1.58	ppb
Calcium	44-1	4831.50	4998.36	4986.34	4938.73	1.88	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	295.58	291.29	292.64	293.17	0.75	ppb
Cobalt	59-2	14.55	14.24	14.49	14.43	1.15	ppb
Copper	63-2	358.19	357.99	361.58	359.25	0.56	ppb
Dysprosium	156-1						cps
Dysprosium	156-2						cps
Erbium	164-1						cps
Erbium	164-2						cps
Gadolinium	160-1						cps
Gadolinium	160-2						cps
Holmium	165-1				111		%
Holmium	165-2				109		%
Indium	115-1				107		%
Indium	115-2				106		%
Iron	56-2	38223.47	38026.03	38060.71	38103.41	0.28	ppb
Iron	57-2	37854.50	37539.92	37273.12	37555.85	0.77	ppb
Iron	54-2	38985.63	38276.36	38659.55	38640.51	0.92	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3422-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S15-000008-2025	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:59:54	DataFile Name :	047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	740.50	755.90	728.20	741.53	1.87	ppb
Lead	207-1	732.21	772.99	707.76	737.65	4.47	ppb
Lead	208-1	736.84	762.23	723.56	740.88	2.65	ppb
Lithium	6-1				102		%
Magnesium	24-2	8616.28	8612.49	8698.88	8642.55	0.56	ppb
Manganese	55-2	517.25	508.01	516.23	513.83	0.99	ppb
Molybdenum	94-1	22.11	22.38	22.17	22.22	0.63	ppb
Molybdenum	95-1	2.76	2.85	2.87	2.83	2.09	ppb
Molybdenum	96-1	5.17	5.10	5.09	5.12	0.80	ppb
Molybdenum	97-1	2.87	2.88	2.88	2.88	0.12	ppb
Molybdenum	98-1	2.93	2.88	2.87	2.90	1.16	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	66.16	66.10	67.49	66.58	1.17	ppb
Phosphorus	31-2	817.40	747.99	816.13	793.84	5.00	ppb
Potassium	39-2	3619.37	3648.80	3642.06	3636.74	0.42	ppb
Rhodium	103-1				106		%
Rhodium	103-2				106		%
Scandium	45-1				105		%
Scandium	45-2				109		%
Selenium	82-1	3.69	2.45	2.76	2.96	21.76	ppb
Selenium	77-2	10.19	9.62	7.61	9.14	14.85	ppb
Selenium	78-2	3.81	4.73	4.20	4.25	10.85	ppb
Silicon	28-1	39.81	25.04	44.24	36.36	27.65	ppb
Silver	107-1	6.80	6.99	6.90	6.90	1.39	ppb
Silver	109-1	6.77	7.12	6.88	6.92	2.61	ppb
Sodium	23-2	3125.56	3122.84	3047.71	3098.70	1.43	ppb
Strontium	86-1	48.41	51.00	48.28	49.23	3.12	ppb
Strontium	88-1	48.89	48.89	49.14	48.97	0.29	ppb
Sulfur	34-1	14210.70	14799.45	14357.38	14455.84	2.12	ppb
Terbium	159-1				107		%
Terbium	159-2				108		%
Thallium	203-1	0.53	0.62	0.55	0.57	9.02	ppb
Thallium	205-1	0.53	0.60	0.53	0.55	6.97	ppb
Tin	118-1	31.61	32.32	31.78	31.90	1.17	ppb
Titanium	47-1	357.32	368.69	372.20	366.07	2.12	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3422-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S15-000008-2025	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:59:54	DataFile Name :	047SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.18	2.31	2.18	2.22	3.49	ppb
Vanadium	51-2	54.93	54.35	54.14	54.47	0.75	ppb
Yttrium	89-1				112		%
Yttrium	89-2				112		%
Zinc	66-2	600.09	597.23	590.75	596.02	0.80	ppb
Zirconium	90-1	11.05	11.18	11.15	11.13	0.59	ppb
Zirconium	91-1	11.03	11.19	11.14	11.12	0.74	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-DP3-20251021DL	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:03:09	DataFile Name :	048SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	22206.68	22428.80	22330.78	22322.09	0.50	ppb
Antimony	121-1	0.37	0.38	0.41	0.39	5.00	ppb
Arsenic	75-2	40.26	40.93	41.90	41.03	2.01	ppb
Barium	135-1	513.24	522.34	494.01	509.86	2.84	ppb
Barium	137-1	501.68	507.91	493.01	500.87	1.49	ppb
Beryllium	9-1	1.71	1.67	1.75	1.71	2.26	ppb
Bismuth	209-1				108		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	27.57	29.72	28.88	28.72	3.78	ppb
Cadmium	106-1	30.28	28.20	28.14	28.87	4.22	ppb
Cadmium	111-1	26.39	27.37	26.04	26.60	2.58	ppb
Calcium	43-1	12671.21	13346.54	12697.60	12905.12	2.96	ppb
Calcium	44-1	12297.57	12581.87	12263.23	12380.89	1.41	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	693.58	712.28	712.57	706.15	1.54	ppb
Cobalt	59-2	23.15	23.21	23.12	23.16	0.20	ppb
Copper	63-2	772.09	764.63	736.95	757.89	2.44	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				108		%
Indium	115-2				105		%
Iron	56-2	59453.35	59912.64	59488.75	59618.25	0.43	ppb
Iron	57-2	59325.68	59246.44	57597.87	58723.33	1.66	ppb
Iron	54-2	61637.47	61092.22	60577.85	61102.52	0.87	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-DP3-20251021DL	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:03:09	DataFile Name :	048SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	794.56	789.11	809.39	797.69	1.32	ppb
Lead	207-1	750.93	764.61	784.46	766.67	2.20	ppb
Lead	208-1	765.37	774.33	786.79	775.49	1.39	ppb
Lithium	6-1				101		%
Magnesium	24-2	13842.21	13892.30	13669.83	13801.45	0.85	ppb
Manganese	55-2	577.76	578.12	574.44	576.77	0.35	ppb
Molybdenum	94-1	42.31	41.56	42.92	42.27	1.61	ppb
Molybdenum	95-1	7.54	7.23	7.70	7.49	3.25	ppb
Molybdenum	96-1	11.77	11.36	11.51	11.54	1.81	ppb
Molybdenum	97-1	7.78	7.58	7.65	7.67	1.29	ppb
Molybdenum	98-1	7.54	7.44	7.58	7.52	0.95	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	140.36	141.18	138.22	139.92	1.09	ppb
Phosphorus	31-2	3006.84	3061.83	2965.40	3011.36	1.61	ppb
Potassium	39-2	5171.94	5160.70	5129.84	5154.16	0.42	ppb
Rhodium	103-1				106		%
Rhodium	103-2				104		%
Scandium	45-1				106		%
Scandium	45-2				109		%
Selenium	82-1	4.82	3.67	5.06	4.51	16.43	ppb
Selenium	77-2	12.34	12.94	12.13	12.47	3.36	ppb
Selenium	78-2	5.40	5.82	9.51	6.91	32.78	ppb
Silicon	28-1	18.29	79.15	24.57	40.67	82.31	ppb
Silver	107-1	7.96	8.38	7.91	8.08	3.22	ppb
Silver	109-1	7.90	8.13	7.85	7.96	1.84	ppb
Sodium	23-2	16566.17	16691.40	16423.47	16560.35	0.81	ppb
Strontium	86-1	126.29	120.39	126.01	124.23	2.68	ppb
Strontium	88-1	127.68	120.93	127.52	125.38	3.07	ppb
Sulfur	34-1	29235.01	30680.60	30505.97	30140.53	2.62	ppb
Terbium	159-1				108		%
Terbium	159-2				107		%
Thallium	203-1	0.64	0.59	0.63	0.62	4.80	ppb
Thallium	205-1	0.63	0.62	0.63	0.63	1.17	ppb
Tin	118-1	58.88	59.65	57.40	58.64	1.95	ppb
Titanium	47-1	521.10	541.14	543.73	535.33	2.31	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-DP3-20251021DL	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:03:09	DataFile Name :	048SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	3.26	3.30	3.48	3.35	3.61	ppb
Vanadium	51-2	101.20	100.87	99.40	100.49	0.96	ppb
Yttrium	89-1				114		%
Yttrium	89-2				113		%
Zinc	66-2	1280.98	1294.40	1283.42	1286.26	0.56	ppb
Zirconium	90-1	20.61	19.91	20.32	20.28	1.74	ppb
Zirconium	91-1	20.33	19.69	20.11	20.04	1.63	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-02DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S11-010080-2025	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:06:16	DataFile Name :	049SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	23844.93	23869.97	23526.19	23747.03	0.81	ppb
Antimony	121-1	0.30	0.34	0.30	0.31	7.22	ppb
Arsenic	75-2	35.97	34.58	35.18	35.24	1.98	ppb
Barium	135-1	336.06	342.60	330.77	336.48	1.76	ppb
Barium	137-1	336.05	341.79	327.56	335.13	2.14	ppb
Beryllium	9-1	1.99	1.79	2.07	1.95	7.27	ppb
Bismuth	209-1				108		%
Bismuth	209-2				106		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	19.36	19.51	20.07	19.65	1.90	ppb
Cadmium	106-1	21.97	21.62	19.37	20.99	6.73	ppb
Cadmium	111-1	17.52	17.71	17.49	17.57	0.67	ppb
Calcium	43-1	15423.36	15813.98	15335.80	15524.38	1.64	ppb
Calcium	44-1	14993.05	15196.85	14652.99	14947.63	1.84	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	524.42	519.87	523.64	522.64	0.47	ppb
Cobalt	59-2	25.87	25.87	25.71	25.82	0.35	ppb
Copper	63-2	589.89	592.57	592.31	591.59	0.25	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				105		%
Iron	56-2	63997.05	63935.56	63127.94	63686.85	0.76	ppb
Iron	57-2	64231.46	63383.50	63111.14	63575.37	0.92	ppb
Iron	54-2	64987.96	64188.14	65397.67	64857.92	0.95	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-02DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S11-010080-2025	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:06:16	DataFile Name :	049SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	810.16	807.20	781.25	799.54	1.99	ppb
Lead	207-1	804.52	796.09	767.23	789.28	2.48	ppb
Lead	208-1	792.89	788.56	776.61	786.02	1.07	ppb
Lithium	6-1				100		%
Magnesium	24-2	15583.01	15416.49	15441.49	15480.33	0.58	ppb
Manganese	55-2	656.94	664.14	660.69	660.59	0.54	ppb
Molybdenum	94-1	47.19	46.76	46.17	46.71	1.10	ppb
Molybdenum	95-1	7.51	7.37	7.32	7.40	1.34	ppb
Molybdenum	96-1	12.32	12.02	12.10	12.15	1.28	ppb
Molybdenum	97-1	7.29	7.45	7.80	7.51	3.48	ppb
Molybdenum	98-1	7.54	7.53	7.62	7.57	0.68	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	148.68	147.73	147.90	148.10	0.34	ppb
Phosphorus	31-2	2353.99	2422.41	2416.45	2397.62	1.58	ppb
Potassium	39-2	5557.56	5562.44	5599.80	5573.26	0.41	ppb
Rhodium	103-1				104		%
Rhodium	103-2				105		%
Scandium	45-1				106		%
Scandium	45-2				110		%
Selenium	82-1	3.66	3.69	3.63	3.66	0.78	ppb
Selenium	77-2	14.43	14.28	12.11	13.61	9.55	ppb
Selenium	78-2	5.98	5.27	5.77	5.67	6.42	ppb
Silicon	28-1	17.75	28.05	13.60	19.80	37.58	ppb
Silver	107-1	8.85	9.13	8.94	8.97	1.59	ppb
Silver	109-1	8.85	9.03	8.75	8.87	1.58	ppb
Sodium	23-2	16891.59	17208.95	17109.17	17069.90	0.95	ppb
Strontium	86-1	130.11	129.43	133.17	130.90	1.52	ppb
Strontium	88-1	130.94	132.10	132.92	131.99	0.75	ppb
Sulfur	34-1	34664.28	35577.85	33585.15	34609.09	2.88	ppb
Terbium	159-1				107		%
Terbium	159-2				107		%
Thallium	203-1	0.65	0.64	0.67	0.65	1.88	ppb
Thallium	205-1	0.62	0.62	0.61	0.62	1.16	ppb
Tin	118-1	59.80	59.71	58.84	59.45	0.89	ppb
Titanium	47-1	539.51	558.52	539.91	545.98	1.99	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-02DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S11-010080-2025	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:06:16	DataFile Name :	049SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	3.27	3.22	3.17	3.22	1.53	ppb
Vanadium	51-2	97.99	97.14	97.34	97.49	0.46	ppb
Yttrium	89-1				114		%
Yttrium	89-2				115		%
Zinc	66-2	1169.06	1157.48	1155.34	1160.63	0.64	ppb
Zirconium	90-1	22.39	22.32	22.50	22.40	0.38	ppb
Zirconium	91-1	22.40	22.32	22.83	22.52	1.21	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-03DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S14-00094-20251	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:09:30	DataFile Name :	050SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	15601.20	15529.68	15952.81	15694.56	1.44	ppb
Antimony	121-1	0.27	0.26	0.30	0.27	7.62	ppb
Arsenic	75-2	29.75	30.22	29.46	29.81	1.29	ppb
Barium	135-1	254.80	254.67	258.63	256.03	0.88	ppb
Barium	137-1	250.24	252.21	256.49	252.98	1.26	ppb
Beryllium	9-1	1.43	1.51	1.54	1.49	3.53	ppb
Bismuth	209-1				109		%
Bismuth	209-2				107		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	12.88	12.90	12.67	12.81	1.01	ppb
Cadmium	106-1	12.12	12.46	12.01	12.20	1.93	ppb
Cadmium	111-1	11.62	11.63	11.92	11.72	1.43	ppb
Calcium	43-1	9094.96	9422.97	9366.32	9294.75	1.89	ppb
Calcium	44-1	8687.88	9361.43	9132.69	9060.67	3.78	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	383.05	387.19	381.09	383.78	0.81	ppb
Cobalt	59-2	16.95	17.11	17.22	17.10	0.79	ppb
Copper	63-2	422.33	430.57	422.63	425.18	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				110		%
Holmium	165-2				109		%
Indium	115-1				108		%
Indium	115-2				106		%
Iron	56-2	41752.16	41915.71	41612.41	41760.09	0.36	ppb
Iron	57-2	41395.10	41634.45	42418.54	41816.03	1.28	ppb
Iron	54-2	42866.34	43686.24	42153.62	42902.06	1.79	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-03DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S14-00094-20251	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:09:30	DataFile Name :	050SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	436.10	460.45	445.37	447.30	2.75	ppb
Lead	207-1	398.14	411.63	402.04	403.94	1.72	ppb
Lead	208-1	422.00	440.51	429.88	430.80	2.16	ppb
Lithium	6-1				99		%
Magnesium	24-2	10177.61	10596.33	10171.17	10315.04	2.36	ppb
Manganese	55-2	435.07	439.66	434.59	436.44	0.64	ppb
Molybdenum	94-1	30.28	30.80	31.29	30.79	1.64	ppb
Molybdenum	95-1	5.41	5.37	5.57	5.45	1.94	ppb
Molybdenum	96-1	8.06	8.54	8.26	8.28	2.90	ppb
Molybdenum	97-1	5.49	5.48	5.29	5.42	2.11	ppb
Molybdenum	98-1	5.48	5.50	5.40	5.46	0.91	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	95.89	96.68	96.77	96.44	0.50	ppb
Phosphorus	31-2	1770.77	1841.85	1764.09	1792.24	2.40	ppb
Potassium	39-2	3891.97	3907.00	3923.30	3907.43	0.40	ppb
Rhodium	103-1				105		%
Rhodium	103-2				105		%
Scandium	45-1				103		%
Scandium	45-2				108		%
Selenium	82-1	2.53	3.19	2.31	2.68	17.20	ppb
Selenium	77-2	9.35	9.89	9.52	9.59	2.93	ppb
Selenium	78-2	4.06	4.99	3.80	4.29	14.54	ppb
Silicon	28-1	12.57	15.56	12.88	13.67	12.05	ppb
Silver	107-1	9.02	9.23	9.34	9.20	1.75	ppb
Silver	109-1	8.86	9.17	9.28	9.11	2.40	ppb
Sodium	23-2	11143.41	11212.41	11192.34	11182.72	0.32	ppb
Strontium	86-1	77.51	79.19	79.92	78.87	1.57	ppb
Strontium	88-1	78.22	79.75	80.82	79.60	1.64	ppb
Sulfur	34-1	20039.21	20802.97	20334.00	20392.06	1.89	ppb
Terbium	159-1				110		%
Terbium	159-2				107		%
Thallium	203-1	0.40	0.41	0.42	0.41	1.93	ppb
Thallium	205-1	0.40	0.42	0.40	0.41	3.26	ppb
Tin	118-1	43.31	44.40	44.56	44.09	1.54	ppb
Titanium	47-1	374.90	386.96	380.45	380.77	1.59	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-03DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S14-00094-20251	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:09:30	DataFile Name :	050SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.20	2.27	2.21	2.23	1.71	ppb
Vanadium	51-2	69.74	70.62	70.62	70.33	0.72	ppb
Yttrium	89-1				110		%
Yttrium	89-2				111		%
Zinc	66-2	823.74	823.94	823.48	823.72	0.03	ppb
Zirconium	90-1	14.56	14.89	15.02	14.82	1.59	ppb
Zirconium	91-1	14.35	14.45	14.93	14.58	2.14	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3434-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-WC1-20251022D	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:12:42	DataFile Name :	051SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	12530.93	12474.17	12151.68	12385.59	1.65	ppb
Antimony	121-1	0.47	0.43	0.43	0.44	4.74	ppb
Arsenic	75-2	27.09	25.94	26.40	26.48	2.17	ppb
Barium	135-1	295.02	298.83	296.77	296.87	0.64	ppb
Barium	137-1	293.21	296.61	296.04	295.29	0.62	ppb
Beryllium	9-1	1.03	0.90	0.96	0.96	6.36	ppb
Bismuth	209-1				107		%
Bismuth	209-2				105		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	13.70	14.54	13.45	13.89	4.11	ppb
Cadmium	106-1	13.55	15.09	13.46	14.03	6.52	ppb
Cadmium	111-1	14.01	14.16	14.33	14.17	1.11	ppb
Calcium	43-1	6720.48	6621.31	6689.01	6676.93	0.76	ppb
Calcium	44-1	6352.07	6285.30	6146.37	6261.25	1.68	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	408.82	408.71	410.54	409.35	0.25	ppb
Cobalt	59-2	12.59	12.73	12.42	12.58	1.25	ppb
Copper	63-2	433.07	435.32	433.45	433.95	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				111		%
Holmium	165-2				108		%
Indium	115-1				108		%
Indium	115-2				105		%
Iron	56-2	31990.09	31452.47	31771.83	31738.13	0.85	ppb
Iron	57-2	32044.26	32958.11	31609.43	32203.93	2.14	ppb
Iron	54-2	33423.39	33299.58	33099.60	33274.19	0.49	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3434-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-WC1-20251022D	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:12:42	DataFile Name :	051SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	411.54	420.32	396.88	409.58	2.89	ppb
Lead	207-1	369.62	381.50	362.97	371.36	2.53	ppb
Lead	208-1	396.37	410.01	386.88	397.76	2.92	ppb
Lithium	6-1				99		%
Magnesium	24-2	7134.53	7285.25	7194.39	7204.72	1.05	ppb
Manganese	55-2	336.66	343.37	337.27	339.10	1.09	ppb
Molybdenum	94-1	25.34	23.86	24.21	24.47	3.16	ppb
Molybdenum	95-1	4.88	5.08	5.21	5.05	3.30	ppb
Molybdenum	96-1	6.89	7.19	7.31	7.13	2.97	ppb
Molybdenum	97-1	4.91	4.92	5.24	5.02	3.72	ppb
Molybdenum	98-1	4.97	5.36	5.23	5.19	3.78	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	77.95	78.02	77.48	77.82	0.38	ppb
Phosphorus	31-2	1546.43	1508.32	1506.21	1520.32	1.49	ppb
Potassium	39-2	3022.28	2952.18	2940.55	2971.67	1.49	ppb
Rhodium	103-1				106		%
Rhodium	103-2				105		%
Scandium	45-1				103		%
Scandium	45-2				107		%
Selenium	82-1	2.54	2.53	2.65	2.58	2.49	ppb
Selenium	77-2	6.99	11.01	4.95	7.65	40.28	ppb
Selenium	78-2	3.39	4.13	4.15	3.89	11.01	ppb
Silicon	28-1	47.76	22.26	19.62	29.88	52.01	ppb
Silver	107-1	10.44	10.65	10.61	10.57	1.07	ppb
Silver	109-1	10.27	10.36	10.43	10.35	0.77	ppb
Sodium	23-2	6417.32	6433.16	6399.12	6416.53	0.27	ppb
Strontium	86-1	65.01	68.55	68.08	67.21	2.85	ppb
Strontium	88-1	65.73	68.29	68.12	67.38	2.13	ppb
Sulfur	34-1	14508.08	14182.89	14922.40	14537.79	2.55	ppb
Terbium	159-1				108		%
Terbium	159-2				106		%
Thallium	203-1	0.37	0.39	0.37	0.38	3.92	ppb
Thallium	205-1	0.36	0.38	0.36	0.37	3.39	ppb
Tin	118-1	31.72	32.03	31.88	31.88	0.48	ppb
Titanium	47-1	334.40	336.33	340.08	336.93	0.86	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3434-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-WC1-20251022D	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:12:42	DataFile Name :	051SMPL.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	2.16	2.24	2.16	2.19	2.15	ppb
Vanadium	51-2	61.47	61.40	61.62	61.50	0.18	ppb
Yttrium	89-1				110		%
Yttrium	89-2				111		%
Zinc	66-2	708.21	710.33	700.66	706.40	0.72	ppb
Zirconium	90-1	10.62	11.20	11.08	10.97	2.80	ppb
Zirconium	91-1	10.49	10.91	10.93	10.78	2.29	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P7
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 18:19:25	DataFile Name :	053CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	51245.56	51783.08	49819.51	50949.38	1.99	ppb
Antimony	121-1	531.31	550.27	544.68	542.09	1.80	ppb
Arsenic	75-2	530.43	532.10	521.08	527.87	1.12	ppb
Barium	135-1	2651.87	2697.44	2672.23	2673.85	0.85	ppb
Barium	137-1	2647.38	2612.16	2710.54	2656.69	1.88	ppb
Beryllium	9-1	524.34	528.37	533.23	528.65	0.84	ppb
Bismuth	209-1				102		%
Bismuth	209-2				98		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	515.30	518.05	528.43	520.59	1.33	ppb
Cadmium	106-1	509.24	523.70	520.72	517.89	1.47	ppb
Cadmium	111-1	509.99	515.19	524.81	516.66	1.45	ppb
Calcium	43-1	268306.68	265982.75	269355.06	267881.50	0.64	ppb
Calcium	44-1	265931.07	260647.01	262940.67	263172.92	1.01	ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	534.35	534.17	532.37	533.63	0.21	ppb
Cobalt	59-2	532.03	538.76	527.83	532.87	1.03	ppb
Copper	63-2	5077.95	5216.89	5184.24	5159.70	1.41	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				107		%
Indium	115-1				103		%
Indium	115-2				99		%
Iron	56-2	132117.11	132401.41	130349.50	131622.67	0.84	ppb
Iron	57-2	131459.59	133148.50	133572.59	132726.89	0.84	ppb
Iron	54-2	134508.54	134254.63	132471.98	133745.05	0.83	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P7
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 18:19:25	DataFile Name :	053CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	2647.91	2697.82	2685.63	2677.12	0.97	ppb
Lead	207-1	2642.26	2673.23	2658.21	2657.90	0.58	ppb
Lead	208-1	2647.30	2702.63	2657.57	2669.16	1.10	ppb
Lithium	6-1				99		%
Magnesium	24-2	259964.80	266499.95	258254.17	261572.97	1.66	ppb
Manganese	55-2	5323.49	5265.18	5250.71	5279.79	0.73	ppb
Molybdenum	94-1	5352.00	5534.72	5344.40	5410.37	1.99	ppb
Molybdenum	95-1	5313.61	5426.44	5326.46	5355.50	1.15	ppb
Molybdenum	96-1	5384.03	5452.03	5337.11	5391.06	1.07	ppb
Molybdenum	97-1	5306.33	5550.91	5252.00	5369.75	2.97	ppb
Molybdenum	98-1	5276.33	5525.82	5292.97	5365.04	2.60	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	508.75	524.65	514.76	516.05	1.55	ppb
Phosphorus	31-2	10601.86	10733.55	10619.04	10651.49	0.67	ppb
Potassium	39-2	129224.11	131209.02	131562.09	130665.07	0.96	ppb
Rhodium	103-1				98		%
Rhodium	103-2				98		%
Scandium	45-1				99		%
Scandium	45-2				103		%
Selenium	82-1	505.96	514.11	508.48	509.52	0.82	ppb
Selenium	77-2	516.89	492.31	493.83	501.01	2.75	ppb
Selenium	78-2	508.09	498.47	484.78	497.11	2.36	ppb
Silicon	28-1	586.04	587.28	578.29	583.87	0.83	ppb
Silver	107-1	524.09	526.05	534.34	528.16	1.03	ppb
Silver	109-1	526.60	528.18	524.71	526.50	0.33	ppb
Sodium	23-2	256698.97	265790.07	258376.17	260288.40	1.86	ppb
Strontium	86-1	525.73	541.19	528.76	531.89	1.54	ppb
Strontium	88-1	528.35	536.52	541.54	535.47	1.24	ppb
Sulfur	34-1	10371.25	10243.45	10238.84	10284.51	0.73	ppb
Terbium	159-1				107		%
Terbium	159-2				106		%
Thallium	203-1	530.28	535.17	539.98	535.14	0.91	ppb
Thallium	205-1	547.21	540.70	549.05	545.65	0.80	ppb
Tin	118-1	534.67	540.68	550.01	541.79	1.43	ppb
Titanium	47-1	5332.28	5442.45	5342.39	5372.37	1.13	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P7
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 18:19:25	DataFile Name :	053CCV.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	544.75	530.64	531.23	535.54	1.49	ppb
Vanadium	51-2	538.41	547.15	540.86	542.14	0.83	ppb
Yttrium	89-1				103		%
Yttrium	89-2				104		%
Zinc	66-2	4971.38	5087.35	5012.69	5023.81	1.17	ppb
Zirconium	90-1	543.24	552.80	537.31	544.45	1.43	ppb
Zirconium	91-1	532.26	544.82	537.01	538.03	1.18	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P7
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 18:28:42	DataFile Name :	055CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Aluminium	27-2	1.17	0.97	0.52	0.88	37.73	ppb
Antimony	121-1	0.03	0.04	0.06	0.04	30.67	ppb
Arsenic	75-2	-0.01	0.00	0.00	0.00		ppb
Barium	135-1	0.04	0.04	0.04	0.04	1.07	ppb
Barium	137-1	0.03	0.04	0.04	0.04	12.43	ppb
Beryllium	9-1	0.00	0.02	0.03	0.02	85.62	ppb
Bismuth	209-1				109		%
Bismuth	209-2				104		%
Bromine	81-1						cps
Bromine	81-2						cps
Cadmium	108-1	0.11	0.07	0.01	0.06	78.45	ppb
Cadmium	106-1	-0.70	-0.23	-1.88	-0.94		ppb
Cadmium	111-1	-0.04	0.00	-0.13	-0.06		ppb
Calcium	43-1	1.64	1.18	4.91	2.58	78.96	ppb
Calcium	44-1	-8.68	-7.40	-9.33	-8.47		ppb
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	0.04	0.02	0.07	0.04	59.22	ppb
Cobalt	59-2	-0.01	-0.01	-0.01	-0.01		ppb
Copper	63-2	0.09	0.06	0.05	0.07	28.30	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				110		%
Holmium	165-2				107		%
Indium	115-1				107		%
Indium	115-2				104		%
Iron	56-2	2.21	2.23	1.97	2.14	6.84	ppb
Iron	57-2	1.27	0.21	0.89	0.79	68.00	ppb
Iron	54-2	2.53	1.22	1.45	1.74	40.31	ppb
Krypton	83-1						cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P7
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 18:28:42	DataFile Name :	055CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Lead	206-1	0.07	0.05	0.06	0.06	17.17	ppb
Lead	207-1	0.07	0.05	0.06	0.06	15.58	ppb
Lead	208-1	0.07	0.05	0.06	0.06	14.42	ppb
Lithium	6-1				96		%
Magnesium	24-2	3.68	3.49	2.65	3.28	16.76	ppb
Manganese	55-2	-0.08	-0.07	-0.09	-0.08		ppb
Molybdenum	94-1	0.06	0.06	0.09	0.07	31.52	ppb
Molybdenum	95-1	0.06	0.07	0.04	0.06	20.32	ppb
Molybdenum	96-1	0.06	0.05	0.06	0.06	2.01	ppb
Molybdenum	97-1	0.01	0.07	0.08	0.05	66.43	ppb
Molybdenum	98-1	0.06	0.06	0.06	0.06	4.28	ppb
Neodymium	150-1						cps
Neodymium	150-2						cps
Nickel	60-2	0.03	-0.03	0.02	0.00	951.37	ppb
Phosphorus	31-2	-132.92	-133.21	-139.98	-135.37		ppb
Potassium	39-2	5.25	6.24	7.82	6.44	20.19	ppb
Rhodium	103-1				104		%
Rhodium	103-2				104		%
Scandium	45-1				101		%
Scandium	45-2				101		%
Selenium	82-1	0.22	-0.66	-0.10	-0.18		ppb
Selenium	77-2	-0.25	-0.25	-0.25	-0.25		ppb
Selenium	78-2	0.57	-0.73	-0.63	-0.26		ppb
Silicon	28-1	-1.28	-1.42	-1.18	-1.29		ppb
Silver	107-1	0.01	0.01	0.01	0.01	18.59	ppb
Silver	109-1	0.01	0.01	0.01	0.01	30.22	ppb
Sodium	23-2	43.89	44.18	43.78	43.95	0.47	ppb
Strontium	86-1	-0.02	0.00	-0.03	-0.01		ppb
Strontium	88-1	0.00	0.01	0.01	0.01	45.66	ppb
Sulfur	34-1	-998.43	-1003.69	-849.46	-950.53		ppb
Terbium	159-1				106		%
Terbium	159-2				106		%
Thallium	203-1	0.04	0.04	0.04	0.04	4.37	ppb
Thallium	205-1	0.04	0.04	0.04	0.04	8.07	ppb
Tin	118-1	0.18	0.20	0.15	0.18	16.08	ppb
Titanium	47-1	0.04	0.05	0.08	0.05	36.87	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P7
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 18:28:42	DataFile Name :	055CCBE.d

Parameter	Mass	ConRep1	ConRep2	ConRep3	Avg. Conc.	ConcRSD	Units
Uranium	238-1	0.00	0.01	0.00	0.00	22.99	ppb
Vanadium	51-2	0.01	0.00	0.00	0.00	410.82	ppb
Yttrium	89-1				105		%
Yttrium	89-2				105		%
Zinc	66-2	-0.05	-0.07	-0.03	-0.05		ppb
Zirconium	90-1	0.01	0.01	0.02	0.01	35.49	ppb
Zirconium	91-1	0.01	-0.01	0.01	0.01	184.00	ppb

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:00:25	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	463	473	463	467	1.24	cps
Antimony	121-1	27	23	17	22	22.88	cps
Arsenic	75-2	13	11	10	11	17.27	cps
Barium	135-1	43	33	30	36	19.51	cps
Barium	137-1	60	43	47	50	17.64	cps
Beryllium	9-1	7	17	7	10	57.72	cps
Bismuth	209-1	3164839	3149501	3171062	3161801	0.35	cps
Bismuth	209-2	2654820	2683208	2682833	2673620	0.61	cps
Bromine	81-1	7832	8042	8052	7976	1.56	cps
Bromine	81-2	167	147	143	152	8.29	cps
Cadmium	108-1	7	0	0	2	173.21	cps
Cadmium	106-1	1713	1530	1587	1610	5.83	cps
Cadmium	111-1	1215	1071	1124	1137	6.39	cps
Calcium	43-1	213	140	153	169	23.13	cps
Calcium	44-1	14360	14334	13900	14198	1.82	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1540	1357	1460	1452	6.33	cps
Cobalt	59-2	133	143	127	134	6.24	cps
Copper	63-2	837	760	740	779	6.55	cps
Dysprosium	156-1	13	13	10	12	15.73	cps
Dysprosium	156-2	3	0	3	2	86.60	cps
Erbium	164-1	33	20	27	27	24.99	cps
Erbium	164-2	13	13	20	16	24.76	cps
Gadolinium	160-1	7	33	30	23	62.26	cps
Gadolinium	160-2	223	327	270	273	18.93	cps
Holmium	165-1	4725012	4663077	4680176	4689422	0.68	cps
Holmium	165-2	3428347	3411553	3434104	3424668	0.34	cps
Indium	115-1	3754866	3818326	3776481	3783224	0.85	cps
Indium	115-2	1446796	1436079	1444234	1442370	0.39	cps
Iron	56-2	24874	24740	25154	24923	0.85	cps
Iron	57-2	1433	1403	1457	1431	1.87	cps
Iron	54-2	2227	2590	2334	2384	7.84	cps
Krypton	83-1	373	360	383	372	3.14	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:00:25	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	453	403	370	409	10.26	cps
Lead	207-1	380	373	363	372	2.25	cps
Lead	208-1	1660	1730	1673	1688	2.20	cps
Lithium	6-1	523944	526606	519778	523442	0.66	cps
Magnesium	24-2	200	227	193	207	8.53	cps
Manganese	55-2	770	660	800	743	9.92	cps
Molybdenum	94-1	140	193	213	182	20.80	cps
Molybdenum	95-1	157	143	137	146	7.00	cps
Molybdenum	96-1	200	210	207	206	2.48	cps
Molybdenum	97-1	123	130	90	114	18.73	cps
Molybdenum	98-1	253	267	217	246	10.54	cps
Neodymium	150-1	0	0	0	0	0.00	cps
Neodymium	150-2	3	0	3	2	86.60	cps
Nickel	60-2	403	387	377	389	3.46	cps
Phosphorus	31-2	327	350	340	339	3.46	cps
Potassium	39-2	53186	51373	52744	52434	1.80	cps
Rhodium	103-1	3846110	3801861	3820511	3822827	0.58	cps
Rhodium	103-2	2507602	2437316	2406735	2450551	2.11	cps
Scandium	45-1	2366306	2307980	2388126	2354137	1.76	cps
Scandium	45-2	240754	241206	245545	242501	1.09	cps
Selenium	82-1	137	145	122	134	8.79	cps
Selenium	77-2	3	3	3	3	0.00	cps
Selenium	78-2	323	297	310	310	4.30	cps
Silicon	28-1	577813	581360	575545	578239	0.51	cps
Silver	107-1	37	23	30	30	22.23	cps
Silver	109-1	17	23	27	22	22.91	cps
Sodium	23-2	19048	18715	19082	18948	1.07	cps
Strontium	86-1	623	607	633	621	2.17	cps
Strontium	88-1	127	143	107	126	14.62	cps
Sulfur	34-1	164433	164713	163955	164367	0.23	cps
Terbium	159-1	4738695	4743145	4798481	4760107	0.70	cps
Terbium	159-2	3264663	3295983	3231390	3264012	0.99	cps
Thallium	203-1	43	33	43	40	14.43	cps
Thallium	205-1	117	133	117	122	7.87	cps
Tin	118-1	1483	1393	1453	1443	3.18	cps
Titanium	47-1	50	73	70	64	19.58	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S0	Instrumnet Name :	P7
Client Sample ID :	S0	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:00:25	DataFile Name :	004CALB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	0	3	3	2	86.60	cps
Vanadium	51-2	17	17	13	16	12.40	cps
Yttrium	89-1	6671512	6827082	6731406	6743333	1.16	cps
Yttrium	89-2	1945220	1898319	1949940	1931160	1.48	cps
Zinc	66-2	1530	1433	1320	1428	7.36	cps
Zirconium	90-1	263	320	247	277	13.90	cps
Zirconium	91-1	57	87	57	67	25.98	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:03:58	DataFile Name :	005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3447	3654	3564	3555	2.92	cps
Antimony	121-1	9243	9472	9807	9507	2.99	cps
Arsenic	75-2	638	681	700	673	4.75	cps
Barium	135-1	10491	10554	10577	10541	0.43	cps
Barium	137-1	17918	18746	18619	18428	2.42	cps
Beryllium	9-1	867	857	850	858	0.98	cps
Bismuth	209-1	3186983	3131477	3098865	3139109	1.42	cps
Bismuth	209-2	2701730	2700586	2628991	2677103	1.56	cps
Bromine	81-1	7849	7922	7849	7873	0.54	cps
Bromine	81-2	127	147	110	128	14.37	cps
Cadmium	108-1	107	53	80	80	33.34	cps
Cadmium	106-1	1767	1800	1713	1760	2.48	cps
Cadmium	111-1	2452	2516	2483	2484	1.29	cps
Calcium	43-1	6918	6862	6875	6885	0.43	cps
Calcium	44-1	122876	122476	122275	122543	0.25	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	6448	6538	6231	6406	2.46	cps
Cobalt	59-2	4017	4144	4134	4098	1.72	cps
Copper	63-2	6481	6501	6368	6450	1.12	cps
Dysprosium	156-1	27	17	3	16	75.27	cps
Dysprosium	156-2	20	0	7	9	114.55	cps
Erbium	164-1	27	20	30	26	19.92	cps
Erbium	164-2	10	17	27	18	47.19	cps
Gadolinium	160-1	13	7	13	11	34.61	cps
Gadolinium	160-2	237	200	263	233	13.63	cps
Holmium	165-1	4767122	4766265	4775358	4769582	0.11	cps
Holmium	165-2	3397198	3430806	3382996	3403667	0.72	cps
Indium	115-1	3835292	3866978	3753600	3818623	1.53	cps
Indium	115-2	1432250	1452543	1426534	1437109	0.95	cps
Iron	56-2	144005	142656	143316	143326	0.47	cps
Iron	57-2	4507	4547	4497	4517	0.59	cps
Iron	54-2	8853	8966	8893	8904	0.65	cps
Krypton	83-1	473	353	453	427	15.07	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:03:58	DataFile Name :	005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3701	3697	3711	3703	0.19	cps
Lead	207-1	3060	3184	3277	3174	3.43	cps
Lead	208-1	14326	14700	14607	14544	1.34	cps
Lithium	6-1	529934	527477	524101	527171	0.56	cps
Magnesium	24-2	122722	124616	123333	123557	0.78	cps
Manganese	55-2	2990	2664	2737	2797	6.13	cps
Molybdenum	94-1	9843	9940	10000	9928	0.80	cps
Molybdenum	95-1	12225	12362	12372	12320	0.67	cps
Molybdenum	96-1	13556	13740	13917	13738	1.31	cps
Molybdenum	97-1	7562	7379	8076	7672	4.71	cps
Molybdenum	98-1	19423	19723	19073	19406	1.68	cps
Neodymium	150-1	3	10	10	8	49.52	cps
Neodymium	150-2	7	0	0	2	173.21	cps
Nickel	60-2	1217	1293	1180	1230	4.70	cps
Phosphorus	31-2	2524	2367	2390	2427	3.48	cps
Potassium	39-2	188643	187857	190932	189144	0.84	cps
Rhodium	103-1	3808002	3775421	3716873	3766765	1.23	cps
Rhodium	103-2	2442211	2411490	2418315	2424005	0.67	cps
Scandium	45-1	2374616	2332028	2318546	2341730	1.25	cps
Scandium	45-2	238986	242315	244454	241918	1.14	cps
Selenium	82-1	602	760	666	676	11.77	cps
Selenium	77-2	70	77	70	72	5.33	cps
Selenium	78-2	610	587	613	603	2.41	cps
Silicon	28-1	592928	609769	590979	597892	1.73	cps
Silver	107-1	6835	7045	6525	6802	3.85	cps
Silver	109-1	6268	6572	6351	6397	2.45	cps
Sodium	23-2	208475	208644	207749	208289	0.23	cps
Strontium	86-1	2200	2237	1857	2098	9.99	cps
Strontium	88-1	12966	13113	13056	13045	0.57	cps
Sulfur	34-1	166829	168611	169090	168177	0.71	cps
Terbium	159-1	4791271	4735090	4617151	4714504	1.88	cps
Terbium	159-2	3280586	3245473	3208895	3244985	1.10	cps
Thallium	203-1	4818	5101	5041	4987	3.00	cps
Thallium	205-1	10918	11318	10981	11072	1.94	cps
Tin	118-1	20625	20525	19937	20362	1.82	cps
Titanium	47-1	3187	3290	3530	3336	5.28	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S2	Instrumnet Name :	P7
Client Sample ID :	S2	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:03:58	DataFile Name :	005CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	13220	13764	13360	13448	2.10	cps
Vanadium	51-2	9980	10314	10457	10250	2.39	cps
Yttrium	89-1	6713229	6720777	6679272	6704426	0.33	cps
Yttrium	89-2	1935748	1918193	1901356	1918432	0.90	cps
Zinc	66-2	4484	4467	4457	4470	0.30	cps
Zirconium	90-1	8846	8493	8493	8610	2.37	cps
Zirconium	91-1	1970	2080	1877	1976	5.15	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:07:22	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	154220	153381	151398	153000	0.95	cps
Antimony	121-1	236374	240612	240672	239219	1.03	cps
Arsenic	75-2	26773	26606	26634	26671	0.34	cps
Barium	135-1	271339	274706	273640	273228	0.63	cps
Barium	137-1	477923	480649	479877	479483	0.29	cps
Beryllium	9-1	42769	42508	43310	42862	0.95	cps
Bismuth	209-1	3212520	3225589	3123881	3187330	1.74	cps
Bismuth	209-2	2706759	2725872	2697410	2710014	0.54	cps
Bromine	81-1	7982	8136	8182	8100	1.29	cps
Bromine	81-2	153	120	147	140	12.60	cps
Cadmium	108-1	4928	5261	5004	5064	3.45	cps
Cadmium	106-1	8392	9036	8696	8708	3.70	cps
Cadmium	111-1	71352	72363	71695	71803	0.72	cps
Calcium	43-1	70831	72214	70218	71088	1.44	cps
Calcium	44-1	1144850	1173071	1151729	1156550	1.27	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	140767	138618	139148	139511	0.80	cps
Cobalt	59-2	198668	197465	195091	197075	0.92	cps
Copper	63-2	1546140	1533419	1539849	1539803	0.41	cps
Dysprosium	156-1	40	13	23	26	52.73	cps
Dysprosium	156-2	23	27	10	20	44.10	cps
Erbium	164-1	43	17	30	30	44.43	cps
Erbium	164-2	33	13	17	21	50.75	cps
Gadolinium	160-1	23	37	37	32	23.90	cps
Gadolinium	160-2	257	243	257	252	3.05	cps
Holmium	165-1	4765026	4822024	4651582	4746210	1.83	cps
Holmium	165-2	3503894	3436029	3428042	3455988	1.21	cps
Indium	115-1	3787031	3833002	3723446	3781159	1.45	cps
Indium	115-2	1451776	1432178	1434797	1439584	0.74	cps
Iron	56-2	6096384	6075039	5981671	6051032	1.01	cps
Iron	57-2	159328	160475	160457	160087	0.41	cps
Iron	54-2	355192	353904	352921	354006	0.32	cps
Krypton	83-1	333	347	353	344	2.96	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:07:22	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	936621	950011	944203	943612	0.71	cps
Lead	207-1	803789	816514	806445	808916	0.83	cps
Lead	208-1	3771994	3923190	3830387	3841857	1.98	cps
Lithium	6-1	533044	527053	528138	529412	0.60	cps
Magnesium	24-2	1309772	1298527	1304088	1304129	0.43	cps
Manganese	55-2	1076450	1063298	1079312	1073020	0.80	cps
Molybdenum	94-1	850229	859727	857655	855870	0.58	cps
Molybdenum	95-1	1214752	1239342	1222537	1225544	1.03	cps
Molybdenum	96-1	1320196	1347902	1341359	1336486	1.08	cps
Molybdenum	97-1	759434	767231	768425	765030	0.64	cps
Molybdenum	98-1	1953626	1963439	1985787	1967617	0.84	cps
Neodymium	150-1	13	30	10	18	60.28	cps
Neodymium	150-2	17	7	17	13	43.29	cps
Nickel	60-2	60645	60665	60361	60557	0.28	cps
Phosphorus	31-2	8983	8806	8869	8886	1.01	cps
Potassium	39-2	780279	778553	774122	777651	0.41	cps
Rhodium	103-1	3757841	3851040	3820301	3809727	1.25	cps
Rhodium	103-2	2460704	2450776	2506251	2472577	1.20	cps
Scandium	45-1	2298394	2305093	2316430	2306639	0.40	cps
Scandium	45-2	246014	243656	243683	244451	0.55	cps
Selenium	82-1	6125	6042	6258	6142	1.77	cps
Selenium	77-2	697	740	730	722	3.14	cps
Selenium	78-2	2867	2664	2794	2775	3.71	cps
Silicon	28-1	3142686	3124807	3134673	3134055	0.29	cps
Silver	107-1	336619	343528	344187	341445	1.23	cps
Silver	109-1	317390	327844	324608	323281	1.66	cps
Sodium	23-2	2154857	2110486	2084308	2116551	1.68	cps
Strontium	86-1	77355	80023	77751	78376	1.84	cps
Strontium	88-1	673146	688171	688473	683264	1.28	cps
Sulfur	34-1	185558	184991	183736	184762	0.50	cps
Terbium	159-1	4760082	4774296	4666742	4733707	1.23	cps
Terbium	159-2	3245060	3305484	3261208	3270584	0.96	cps
Thallium	203-1	231323	235059	232842	233075	0.81	cps
Thallium	205-1	540848	548545	543552	544315	0.72	cps
Tin	118-1	197074	203853	200311	200413	1.69	cps
Titanium	47-1	322356	333468	329055	328293	1.70	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S3	Instrumnet Name :	P7
Client Sample ID :	S3	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:07:22	DataFile Name :	006CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	703916	712674	707654	708081	0.62	cps
Vanadium	51-2	107314	104408	107328	106350	1.58	cps
Yttrium	89-1	6739801	6786783	6700562	6742382	0.64	cps
Yttrium	89-2	1912835	1965418	1920816	1933023	1.47	cps
Zinc	66-2	311479	308621	311551	310551	0.54	cps
Zirconium	90-1	417333	425045	423833	422070	0.98	cps
Zirconium	91-1	93781	94505	93804	94030	0.44	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:10:38	DataFile Name :	007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	378429	376576	369584	374863	1.24	cps
Antimony	121-1	609863	614526	615655	613348	0.50	cps
Arsenic	75-2	67463	67030	66127	66873	1.02	cps
Barium	135-1	699097	708195	707978	705090	0.74	cps
Barium	137-1	1227826	1229323	1238043	1231731	0.45	cps
Beryllium	9-1	108969	109939	111859	110256	1.33	cps
Bismuth	209-1	3201218	3302968	3252208	3252132	1.56	cps
Bismuth	209-2	2717277	2738027	2705331	2720212	0.61	cps
Bromine	81-1	7889	7789	7775	7818	0.79	cps
Bromine	81-2	137	120	123	127	6.96	cps
Cadmium	108-1	12432	12796	12562	12597	1.46	cps
Cadmium	106-1	19343	19997	19730	19690	1.67	cps
Cadmium	111-1	179574	181572	183343	181496	1.04	cps
Calcium	43-1	178855	179038	183695	180529	1.52	cps
Calcium	44-1	2758874	2838706	2779595	2792392	1.48	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	374756	372984	372789	373510	0.29	cps
Cobalt	59-2	486409	490521	484090	487006	0.67	cps
Copper	63-2	3870620	3786305	3745846	3800924	1.67	cps
Dysprosium	156-1	40	47	33	40	16.68	cps
Dysprosium	156-2	87	73	83	81	8.56	cps
Erbium	164-1	37	43	57	46	22.36	cps
Erbium	164-2	33	47	30	37	24.06	cps
Gadolinium	160-1	30	30	27	29	6.65	cps
Gadolinium	160-2	217	273	293	261	15.23	cps
Holmium	165-1	4712278	4840553	4914746	4822526	2.12	cps
Holmium	165-2	3508030	3419082	3372226	3433113	2.01	cps
Indium	115-1	3802845	3817976	3695558	3772126	1.77	cps
Indium	115-2	1433645	1414724	1402728	1417032	1.10	cps
Iron	56-2	15191179	14970799	15240186	15134055	0.95	cps
Iron	57-2	398839	398639	389349	395609	1.37	cps
Iron	54-2	885510	876841	870197	877516	0.88	cps
Krypton	83-1	390	383	380	384	1.32	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:10:38	DataFile Name :	007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	2523411	2481174	2524800	2509795	0.99	cps
Lead	207-1	2164126	2214200	2239063	2205796	1.73	cps
Lead	208-1	10046881	10093802	10187984	10109556	0.71	cps
Lithium	6-1	539596	548076	550876	546182	1.08	cps
Magnesium	24-2	3278339	3251545	3186194	3238693	1.46	cps
Manganese	55-2	2649817	2621649	2644725	2638730	0.57	cps
Molybdenum	94-1	2205438	2194769	2176250	2192152	0.67	cps
Molybdenum	95-1	3141504	3143454	3103971	3129643	0.71	cps
Molybdenum	96-1	3370450	3397054	3400583	3389362	0.49	cps
Molybdenum	97-1	1918394	1960857	1909108	1929453	1.43	cps
Molybdenum	98-1	4869493	5074622	5010513	4984876	2.11	cps
Neodymium	150-1	43	40	47	43	7.70	cps
Neodymium	150-2	17	7	13	12	41.65	cps
Nickel	60-2	148349	145986	145182	146506	1.12	cps
Phosphorus	31-2	22023	21879	21061	21654	2.39	cps
Potassium	39-2	1757647	1750169	1722173	1743330	1.07	cps
Rhodium	103-1	3742734	3805633	3714364	3754244	1.24	cps
Rhodium	103-2	2436983	2379856	2333222	2383354	2.18	cps
Scandium	45-1	2326632	2344024	2298072	2322909	1.00	cps
Scandium	45-2	239444	236451	234064	236653	1.14	cps
Selenium	82-1	15138	15608	15381	15376	1.53	cps
Selenium	77-2	1833	1850	1747	1810	3.07	cps
Selenium	78-2	6471	5928	6185	6195	4.39	cps
Silicon	28-1	6530307	6700730	6690104	6640380	1.44	cps
Silver	107-1	855539	847729	863729	855665	0.94	cps
Silver	109-1	814736	811495	811787	812673	0.22	cps
Sodium	23-2	5018908	5066747	5021509	5035721	0.53	cps
Strontium	86-1	201445	199757	200038	200413	0.45	cps
Strontium	88-1	1753800	1717616	1708526	1726647	1.39	cps
Sulfur	34-1	212807	210293	210604	211234	0.65	cps
Terbium	159-1	4748910	4810724	4871336	4810323	1.27	cps
Terbium	159-2	3300640	3371485	3308601	3326909	1.17	cps
Thallium	203-1	590302	599051	601865	597073	1.01	cps
Thallium	205-1	1418827	1418279	1421901	1419669	0.14	cps
Tin	118-1	499633	508981	510908	506507	1.19	cps
Titanium	47-1	829741	825618	838236	831199	0.77	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S4	Instrumnet Name :	P7
Client Sample ID :	S4	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:10:38	DataFile Name :	007CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1940284	1991917	1983624	1971942	1.41	cps
Vanadium	51-2	263802	264034	260814	262883	0.68	cps
Yttrium	89-1	6776040	6532912	6665317	6658090	1.83	cps
Yttrium	89-2	1916920	1908997	1875102	1900340	1.17	cps
Zinc	66-2	773622	769885	762380	768629	0.74	cps
Zirconium	90-1	1061178	1070647	1077447	1069757	0.76	cps
Zirconium	91-1	239927	239808	241461	240399	0.38	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:13:47	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	715873	715502	713868	715081	0.15	cps
Antimony	121-1	1189583	1188394	1181814	1186597	0.35	cps
Arsenic	75-2	127664	127462	127688	127604	0.10	cps
Barium	135-1	1361388	1352524	1357849	1357253	0.33	cps
Barium	137-1	2465984	2392320	2406581	2421628	1.61	cps
Beryllium	9-1	214481	215698	218553	216244	0.97	cps
Bismuth	209-1	3190542	3163611	3254414	3202856	1.46	cps
Bismuth	209-2	2711179	2655257	2646537	2670991	1.31	cps
Bromine	81-1	7795	7515	7395	7569	2.71	cps
Bromine	81-2	107	133	100	113	15.57	cps
Cadmium	108-1	24578	25299	25372	25083	1.75	cps
Cadmium	106-1	35717	35567	36586	35957	1.53	cps
Cadmium	111-1	348481	349547	354609	350879	0.93	cps
Calcium	43-1	349371	347615	347427	348137	0.31	cps
Calcium	44-1	5434808	5226218	5369160	5343395	2.00	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	717357	716241	709381	714326	0.60	cps
Cobalt	59-2	937981	928036	923438	929818	0.80	cps
Copper	63-2	7176754	7240595	7222562	7213304	0.46	cps
Dysprosium	156-1	43	43	60	49	19.69	cps
Dysprosium	156-2	130	133	103	122	13.46	cps
Erbium	164-1	67	77	90	78	15.05	cps
Erbium	164-2	63	47	33	48	31.46	cps
Gadolinium	160-1	57	63	53	58	8.81	cps
Gadolinium	160-2	330	257	310	299	12.68	cps
Holmium	165-1	4847606	4802236	4874523	4841455	0.75	cps
Holmium	165-2	3472192	3462908	3436334	3457145	0.54	cps
Indium	115-1	3840634	3638395	3744360	3741129	2.70	cps
Indium	115-2	1391528	1407922	1412907	1404119	0.80	cps
Iron	56-2	28797147	29056840	28900693	28918227	0.45	cps
Iron	57-2	761593	755625	745047	754088	1.11	cps
Iron	54-2	1606068	1595021	1543505	1581531	2.11	cps
Krypton	83-1	410	373	430	404	7.11	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:13:47	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	5011438	4966527	5032223	5003396	0.67	cps
Lead	207-1	4333455	4367519	4384624	4361866	0.60	cps
Lead	208-1	19990137	19702447	19933080	19875221	0.77	cps
Lithium	6-1	548710	549323	559187	552407	1.06	cps
Magnesium	24-2	6112896	6131335	6181253	6141828	0.58	cps
Manganese	55-2	5037438	5031820	5026775	5032011	0.11	cps
Molybdenum	94-1	4152581	4280806	4202434	4211940	1.53	cps
Molybdenum	95-1	6122993	5926722	5942145	5997287	1.82	cps
Molybdenum	96-1	6462635	6421769	6532206	6472203	0.86	cps
Molybdenum	97-1	3725754	3709309	3798639	3744567	1.27	cps
Molybdenum	98-1	9457948	9469912	9869964	9599275	2.44	cps
Neodymium	150-1	67	93	83	81	16.60	cps
Neodymium	150-2	23	23	23	23	0.00	cps
Nickel	60-2	277426	276532	273736	275898	0.70	cps
Phosphorus	31-2	40925	40821	40874	40873	0.13	cps
Potassium	39-2	3231371	3256651	3243977	3243999	0.39	cps
Rhodium	103-1	3726330	3711276	3762841	3733482	0.71	cps
Rhodium	103-2	2321519	2398103	2346989	2355537	1.66	cps
Scandium	45-1	2331789	2265840	2343295	2313641	1.81	cps
Scandium	45-2	230836	233411	232793	232346	0.58	cps
Selenium	82-1	29707	29090	29572	29456	1.10	cps
Selenium	77-2	3507	3380	3637	3508	3.66	cps
Selenium	78-2	11801	11545	11992	11779	1.90	cps
Silicon	28-1	11967816	11995626	12085324	12016256	0.51	cps
Silver	107-1	1636359	1637566	1655155	1643027	0.64	cps
Silver	109-1	1583464	1556088	1591123	1576892	1.17	cps
Sodium	23-2	9719343	9791492	9504215	9671683	1.55	cps
Strontium	86-1	377933	381303	386641	381959	1.15	cps
Strontium	88-1	3266797	3389624	3351142	3335854	1.88	cps
Sulfur	34-1	257857	261508	258173	259180	0.78	cps
Terbium	159-1	5014079	4729889	4849198	4864388	2.93	cps
Terbium	159-2	3235897	3293260	3334683	3287947	1.51	cps
Thallium	203-1	1178667	1171853	1184135	1178218	0.52	cps
Thallium	205-1	2937828	2977999	3019867	2978565	1.38	cps
Tin	118-1	972917	986731	977853	979167	0.71	cps
Titanium	47-1	1591885	1601985	1585129	1593000	0.53	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S5	Instrumnet Name :	P7
Client Sample ID :	S5	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:13:47	DataFile Name :	008CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	3875412	3900022	4002241	3925892	1.71	cps
Vanadium	51-2	504240	503313	497240	501598	0.76	cps
Yttrium	89-1	6637506	6450326	6867462	6651765	3.14	cps
Yttrium	89-2	1860871	1886556	1837869	1861765	1.31	cps
Zinc	66-2	1459993	1470598	1464629	1465074	0.36	cps
Zirconium	90-1	2058599	2075602	2080744	2071648	0.56	cps
Zirconium	91-1	458745	467807	462391	462981	0.98	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:16:48	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1422681	1429933	1429073	1427229	0.28	cps
Antimony	121-1	2341800	2410952	2362097	2371616	1.50	cps
Arsenic	75-2	249509	247793	248620	248641	0.35	cps
Barium	135-1	2793377	2776629	2804727	2791578	0.51	cps
Barium	137-1	4782430	4935523	5019209	4912387	2.44	cps
Beryllium	9-1	423128	430010	428910	427349	0.87	cps
Bismuth	209-1	3221906	3394063	3299264	3305077	2.61	cps
Bismuth	209-2	2658421	2725269	2645287	2676325	1.60	cps
Bromine	81-1	7559	7369	7575	7501	1.53	cps
Bromine	81-2	117	173	153	148	19.45	cps
Cadmium	108-1	49481	48909	49712	49367	0.84	cps
Cadmium	106-1	69127	70695	70443	70088	1.20	cps
Cadmium	111-1	679887	699040	693947	690958	1.44	cps
Calcium	43-1	679745	691564	697579	689629	1.32	cps
Calcium	44-1	10401741	10539158	10641454	10527451	1.14	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1212120	1203286	1208463	1207956	0.37	cps
Cobalt	59-2	1834726	1813489	1823631	1823949	0.58	cps
Copper	63-2	14531616	14074584	14153324	14253175	1.71	cps
Dysprosium	156-1	90	90	57	79	24.39	cps
Dysprosium	156-2	243	150	197	197	23.73	cps
Erbium	164-1	107	120	87	104	16.06	cps
Erbium	164-2	87	80	120	96	22.43	cps
Gadolinium	160-1	70	90	53	71	25.82	cps
Gadolinium	160-2	317	243	307	289	13.76	cps
Holmium	165-1	4904357	4952891	4980590	4945946	0.78	cps
Holmium	165-2	3546709	3568212	3433894	3516272	2.05	cps
Indium	115-1	3629854	3697667	3729837	3685786	1.38	cps
Indium	115-2	1366267	1373778	1364243	1368096	0.37	cps
Iron	56-2	56627706	55855249	55486818	55989924	1.04	cps
Iron	57-2	1436493	1408880	1368730	1404701	2.43	cps
Iron	54-2	3138290	3117676	3125115	3127027	0.33	cps
Krypton	83-1	313	357	340	337	6.49	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:16:48	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	9728613	10090097	10287289	10035333	2.82	cps
Lead	207-1	8601302	8952977	8805641	8786640	2.01	cps
Lead	208-1	39027279	40939864	41024835	40330659	2.80	cps
Lithium	6-1	547127	554193	558021	553114	1.00	cps
Magnesium	24-2	12100190	12076337	12072784	12083104	0.12	cps
Manganese	55-2	9945443	9868259	10020026	9944576	0.76	cps
Molybdenum	94-1	8119492	8220375	8379599	8239822	1.59	cps
Molybdenum	95-1	11628311	11991350	12371221	11996961	3.10	cps
Molybdenum	96-1	12703167	12782535	13227251	12904318	2.19	cps
Molybdenum	97-1	7195628	7383020	7682490	7420379	3.31	cps
Molybdenum	98-1	18718128	18928813	19253926	18966956	1.42	cps
Neodymium	150-1	120	110	127	119	7.06	cps
Neodymium	150-2	43	43	43	43	0.00	cps
Nickel	60-2	487888	483474	486065	485809	0.46	cps
Phosphorus	31-2	80138	79475	78413	79342	1.10	cps
Potassium	39-2	6402342	6315988	6358977	6359102	0.68	cps
Rhodium	103-1	3704522	3767280	3738524	3736775	0.84	cps
Rhodium	103-2	2354767	2348188	2293360	2332105	1.45	cps
Scandium	45-1	2235303	2310642	2344234	2296726	2.43	cps
Scandium	45-2	232139	228773	230860	230591	0.74	cps
Selenium	82-1	57002	57733	57771	57502	0.75	cps
Selenium	77-2	6825	6435	6578	6613	2.98	cps
Selenium	78-2	21586	21709	21576	21624	0.34	cps
Silicon	28-1	23612880	23733371	24139694	23828648	1.16	cps
Silver	107-1	3248622	3285620	3276776	3270339	0.59	cps
Silver	109-1	3075017	3128442	3142487	3115315	1.14	cps
Sodium	23-2	19418601	19262081	18891153	19190611	1.41	cps
Strontium	86-1	747916	764298	769560	760591	1.48	cps
Strontium	88-1	6437423	6549447	6761147	6582672	2.50	cps
Sulfur	34-1	366626	368471	366504	367200	0.30	cps
Terbium	159-1	4862511	4803607	4878189	4848102	0.81	cps
Terbium	159-2	3293279	3312582	3291064	3298975	0.36	cps
Thallium	203-1	2427232	2514544	2490160	2477312	1.82	cps
Thallium	205-1	5900278	5895668	6077055	5957667	1.74	cps
Tin	118-1	1934795	1990133	1969353	1964760	1.42	cps
Titanium	47-1	3098570	3231367	3244444	3191460	2.53	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S6	Instrumnet Name :	P7
Client Sample ID :	S6	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:16:48	DataFile Name :	009CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	7784131	7903702	8054071	7913968	1.71	cps
Vanadium	51-2	994267	990483	993045	992598	0.19	cps
Yttrium	89-1	6517295	6722717	6679598	6639870	1.63	cps
Yttrium	89-2	1879718	1855783	1851157	1862220	0.82	cps
Zinc	66-2	2827288	2787839	2826583	2813903	0.80	cps
Zirconium	90-1	4124735	4221900	4148889	4165175	1.21	cps
Zirconium	91-1	901993	926745	926637	918458	1.55	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:19:41	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2841069	2857192	2840619	2846294	0.33	cps
Antimony	121-1	4805483	4825478	4845571	4825511	0.42	cps
Arsenic	75-2	513285	502286	498634	504735	1.51	cps
Barium	135-1	5762179	5767725	5635249	5721718	1.31	cps
Barium	137-1	10065061	10052717	10099553	10072444	0.24	cps
Beryllium	9-1	847173	854733	847902	849936	0.49	cps
Bismuth	209-1	3247671	3280200	3192977	3240283	1.36	cps
Bismuth	209-2	2669722	2640876	2667495	2659364	0.60	cps
Bromine	81-1	7312	7472	7262	7349	1.49	cps
Bromine	81-2	133	147	140	140	4.76	cps
Cadmium	108-1	98790	98945	99099	98945	0.16	cps
Cadmium	106-1	138968	138433	140089	139163	0.61	cps
Cadmium	111-1	1356965	1389927	1393870	1380254	1.47	cps
Calcium	43-1	1370727	1385215	1312758	1356233	2.83	cps
Calcium	44-1	21425781	21370682	21429536	21408666	0.15	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	2415418	2393380	2327887	2378895	1.91	cps
Cobalt	59-2	3786674	3657873	3626721	3690423	2.30	cps
Copper	63-2	28821543	29063528	28272287	28719119	1.41	cps
Dysprosium	156-1	167	153	167	162	4.74	cps
Dysprosium	156-2	400	420	443	421	5.15	cps
Erbium	164-1	210	213	193	206	5.21	cps
Erbium	164-2	187	140	137	154	18.10	cps
Gadolinium	160-1	97	117	117	110	10.50	cps
Gadolinium	160-2	373	263	290	309	18.58	cps
Holmium	165-1	4919512	4847454	5033928	4933631	1.91	cps
Holmium	165-2	3404385	3518134	3441482	3454667	1.68	cps
Indium	115-1	3641353	3669152	3605332	3638612	0.88	cps
Indium	115-2	1349944	1350599	1342473	1347672	0.33	cps
Iron	56-2	114503085	114334118	114224345	114353849	0.12	cps
Iron	57-2	2856525	2858978	2795112	2836872	1.28	cps
Iron	54-2	6306579	6196924	6189439	6230981	1.05	cps
Krypton	83-1	393	323	420	379	13.18	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:19:41	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	20733022	20631689	20604554	20656422	0.33	cps
Lead	207-1	17889772	18097973	17971058	17986268	0.58	cps
Lead	208-1	81521801	82807479	82986919	82438733	0.97	cps
Lithium	6-1	549276	552745	543711	548578	0.83	cps
Magnesium	24-2	24506042	24205639	24582845	24431509	0.82	cps
Manganese	55-2	20328018	20504316	19998280	20276871	1.27	cps
Molybdenum	94-1	17008122	17115240	17211993	17111785	0.60	cps
Molybdenum	95-1	24540058	24405692	24609059	24518270	0.42	cps
Molybdenum	96-1	26263040	26734310	26499554	26498968	0.89	cps
Molybdenum	97-1	14967399	15351292	15076555	15131749	1.31	cps
Molybdenum	98-1	38579944	39785449	38715114	39026836	1.69	cps
Neodymium	150-1	263	230	253	249	6.87	cps
Neodymium	150-2	63	87	60	70	20.76	cps
Nickel	60-2	961515	959899	949223	956879	0.70	cps
Phosphorus	31-2	162526	161698	161984	162069	0.26	cps
Potassium	39-2	12985963	12918302	12885249	12929838	0.40	cps
Rhodium	103-1	3591128	3607778	3644500	3614469	0.76	cps
Rhodium	103-2	2325344	2326009	2295997	2315783	0.74	cps
Scandium	45-1	2236396	2254180	2219383	2236653	0.78	cps
Scandium	45-2	230261	233292	231414	231656	0.66	cps
Selenium	82-1	112414	112748	112834	112665	0.20	cps
Selenium	77-2	12916	12729	12856	12833	0.74	cps
Selenium	78-2	43427	42869	43714	43337	0.99	cps
Silicon	28-1	43038018	43464081	42776826	43092975	0.81	cps
Silver	107-1	6528198	6538940	6461961	6509700	0.64	cps
Silver	109-1	6194237	6231419	6363643	6263100	1.42	cps
Sodium	23-2	39205549	38862416	39118888	39062284	0.46	cps
Strontium	86-1	1568594	1556381	1559793	1561590	0.40	cps
Strontium	88-1	13501342	13836624	13604810	13647592	1.26	cps
Sulfur	34-1	591911	590492	587918	590107	0.34	cps
Terbium	159-1	4874847	4948904	4846306	4890019	1.08	cps
Terbium	159-2	3277544	3302517	3246243	3275435	0.86	cps
Thallium	203-1	5128830	5176119	5239837	5181595	1.08	cps
Thallium	205-1	11963901	12473212	12298573	12245229	2.11	cps
Tin	118-1	3961324	4033725	4029379	4008143	1.01	cps
Titanium	47-1	6521134	6480514	6497643	6499764	0.31	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S7	Instrumnet Name :	P7
Client Sample ID :	S7	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:19:41	DataFile Name :	010CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	16201376	16473104	16486899	16387126	0.98	cps
Vanadium	51-2	2037580	1980115	1981375	1999690	1.64	cps
Yttrium	89-1	6509454	6624660	6511312	6548475	1.01	cps
Yttrium	89-2	1887129	1868880	1847109	1867706	1.07	cps
Zinc	66-2	5743366	5655970	5589236	5662857	1.36	cps
Zirconium	90-1	8318430	8338952	8319619	8325667	0.14	cps
Zirconium	91-1	1862072	1851716	1879686	1864491	0.76	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:22:29	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	15299346	15535128	15366892	15400455	0.79	cps
Antimony	121-1	9767	10277	10494	10179	3.67	cps
Arsenic	75-2	1133	1217	1207	1186	3.86	cps
Barium	135-1	9323	9457	9156	9312	1.62	cps
Barium	137-1	16523	16012	16239	16258	1.57	cps
Beryllium	9-1	300	290	347	312	9.69	cps
Bismuth	209-1	3054994	3063859	3095868	3071574	0.70	cps
Bismuth	209-2	2538960	2543767	2563060	2548596	0.50	cps
Bromine	81-1	7565	8119	8189	7958	4.29	cps
Bromine	81-2	147	140	147	144	2.67	cps
Cadmium	108-1	90	73	70	78	13.78	cps
Cadmium	106-1	1653	1747	1753	1718	3.26	cps
Cadmium	111-1	1674	1758	1838	1757	4.67	cps
Calcium	43-1	6626174	6595835	6773911	6665306	1.43	cps
Calcium	44-1	105958852	106908795	109933658	107600435	1.93	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	40895	40451	40518	40621	0.59	cps
Cobalt	59-2	13263	13533	13613	13469	1.36	cps
Copper	63-2	9029	9176	8999	9068	1.04	cps
Dysprosium	156-1	273	253	237	254	7.22	cps
Dysprosium	156-2	263	277	250	263	5.06	cps
Erbium	164-1	680	467	477	541	22.25	cps
Erbium	164-2	380	400	413	398	4.22	cps
Gadolinium	160-1	317	303	323	314	3.24	cps
Gadolinium	160-2	490	453	447	463	5.04	cps
Holmium	165-1	4892023	4979484	4912287	4927932	0.93	cps
Holmium	165-2	3589182	3592537	3480370	3554029	1.80	cps
Indium	115-1	3684856	3660965	3751658	3699160	1.27	cps
Indium	115-2	1420982	1425816	1426907	1424569	0.22	cps
Iron	56-2	600206351	592932551	581560311	591566405	1.59	cps
Iron	57-2	14380455	14675359	14662095	14572636	1.14	cps
Iron	54-2	31977615	31697180	31485311	31720035	0.78	cps
Krypton	83-1	377	373	423	391	7.15	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:22:29	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	7866	7586	7649	7700	1.91	cps
Lead	207-1	6788	6495	6498	6594	2.56	cps
Lead	208-1	30660	29956	30367	30328	1.17	cps
Lithium	6-1	541307	540499	537857	539888	0.33	cps
Magnesium	24-2	133294471	133799785	132795311	133296522	0.38	cps
Manganese	55-2	19403	19516	19376	19432	0.38	cps
Molybdenum	94-1	8543	8986	8599	8709	2.77	cps
Molybdenum	95-1	9153	9413	9610	9392	2.44	cps
Molybdenum	96-1	13767	13196	13380	13447	2.17	cps
Molybdenum	97-1	5971	6005	6145	6040	1.52	cps
Molybdenum	98-1	14898	15141	15255	15098	1.21	cps
Neodymium	150-1	90	107	133	110	19.87	cps
Neodymium	150-2	80	73	70	74	6.84	cps
Nickel	60-2	12258	12365	12619	12414	1.49	cps
Phosphorus	31-2	323	347	430	367	15.29	cps
Potassium	39-2	70296876	70685831	69646022	70209576	0.75	cps
Rhodium	103-1	3524124	3524457	3502578	3517053	0.36	cps
Rhodium	103-2	2313817	2272920	2324540	2303759	1.18	cps
Scandium	45-1	2358164	2334340	2325623	2339376	0.72	cps
Scandium	45-2	253104	250591	250668	251454	0.57	cps
Selenium	82-1	222	282	217	241	15.02	cps
Selenium	77-2	0	13	7	7	99.98	cps
Selenium	78-2	370	403	377	383	4.60	cps
Silicon	28-1	625757	643224	630726	633236	1.42	cps
Silver	107-1	5274	5118	5408	5267	2.76	cps
Silver	109-1	5198	5144	5091	5144	1.04	cps
Sodium	23-2	208346944	208175904	209157544	208560130	0.25	cps
Strontium	86-1	20872	20448	20958	20759	1.32	cps
Strontium	88-1	178183	180706	181223	180037	0.90	cps
Sulfur	34-1	151294	156841	161476	156537	3.26	cps
Terbium	159-1	4961634	4807663	4923818	4897705	1.64	cps
Terbium	159-2	3420925	3348915	3375053	3381631	1.08	cps
Thallium	203-1	6678	6752	6595	6675	1.18	cps
Thallium	205-1	16026	15909	16210	16048	0.94	cps
Tin	118-1	5941	5838	6238	6006	3.46	cps
Titanium	47-1	993	1003	1043	1013	2.61	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	S8	Instrumnet Name :	P7
Client Sample ID :	S8	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:22:29	DataFile Name :	011CALS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	800	723	730	751	5.65	cps
Vanadium	51-2	3714	3787	3727	3743	1.04	cps
Yttrium	89-1	6441458	6745800	6870543	6685934	3.30	cps
Yttrium	89-2	1934052	1962230	1997011	1964431	1.61	cps
Zinc	66-2	10234	10317	10460	10337	1.11	cps
Zirconium	90-1	7966	7825	8146	7979	2.01	cps
Zirconium	91-1	1793	1857	1677	1776	5.14	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:44:19	DataFile Name :	012ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	224871	223041	223471	223795	0.43	cps
Antimony	121-1	2041711	2063485	2069424	2058206	0.71	cps
Arsenic	75-2	221907	216984	218131	219007	1.18	cps
Barium	135-1	1774630	1814340	1866555	1818508	2.54	cps
Barium	137-1	3132803	3107155	3172656	3137538	1.05	cps
Beryllium	9-1	33974	33653	34585	34071	1.39	cps
Bismuth	209-1	3223779	3217202	3228961	3223314	0.18	cps
Bismuth	209-2	2691449	2645781	2717485	2684905	1.35	cps
Bromine	81-1	8159	7662	8059	7960	3.30	cps
Bromine	81-2	133	113	127	124	8.19	cps
Cadmium	108-1	18398	18989	19513	18967	2.94	cps
Cadmium	106-1	27974	28431	28612	28339	1.16	cps
Cadmium	111-1	290869	291392	299145	293802	1.58	cps
Calcium	43-1	55444	56103	57375	56308	1.74	cps
Calcium	44-1	907070	912649	924370	914696	0.97	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	403711	409195	404506	405804	0.73	cps
Cobalt	59-2	1589400	1529161	1556366	1558309	1.94	cps
Copper	63-2	567868	561427	564761	564685	0.57	cps
Dysprosium	156-1	30	27	30	29	6.65	cps
Dysprosium	156-2	87	103	97	96	8.78	cps
Erbium	164-1	20	17	17	18	10.81	cps
Erbium	164-2	30	20	30	27	21.65	cps
Gadolinium	160-1	43	30	20	31	37.62	cps
Gadolinium	160-2	263	240	230	244	7.00	cps
Holmium	165-1	4722839	4731837	4908989	4787888	2.19	cps
Holmium	165-2	3511233	3453586	3538074	3500964	1.23	cps
Indium	115-1	3845820	3738860	3889006	3824562	2.02	cps
Indium	115-2	1448949	1447262	1457039	1451083	0.36	cps
Iron	56-2	1913140	1853206	1866209	1877518	1.68	cps
Iron	57-2	51371	50782	50963	51039	0.59	cps
Iron	54-2	122470	120766	121516	121584	0.70	cps
Krypton	83-1	400	403	423	409	3.09	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:44:19	DataFile Name :	012ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1547115	1543381	1549128	1546541	0.19	cps
Lead	207-1	1305372	1295749	1325648	1308923	1.17	cps
Lead	208-1	6319016	6272279	6267588	6286294	0.45	cps
Lithium	6-1	508338	502619	514626	508528	1.18	cps
Magnesium	24-2	947961	948630	942628	946406	0.35	cps
Manganese	55-2	841382	830829	833464	835225	0.66	cps
Molybdenum	94-1	1010	847	957	938	8.88	cps
Molybdenum	95-1	1347	1290	1210	1282	5.36	cps
Molybdenum	96-1	1563	1497	1480	1513	2.91	cps
Molybdenum	97-1	843	827	943	871	7.24	cps
Molybdenum	98-1	2304	2147	2267	2239	3.66	cps
Neodymium	150-1	60	57	47	54	12.74	cps
Neodymium	150-2	13	7	20	13	49.99	cps
Nickel	60-2	411546	410066	412270	411294	0.27	cps
Phosphorus	31-2	343	337	357	346	2.95	cps
Potassium	39-2	1189304	1193390	1198254	1193649	0.38	cps
Rhodium	103-1	3753700	3761823	3802773	3772766	0.70	cps
Rhodium	103-2	2430912	2462862	2424368	2439381	0.84	cps
Scandium	45-1	2373817	2339861	2331873	2348517	0.95	cps
Scandium	45-2	242530	242617	243680	242942	0.26	cps
Selenium	82-1	50182	50774	51010	50655	0.84	cps
Selenium	77-2	5978	5991	5641	5870	3.38	cps
Selenium	78-2	20321	20478	19910	20236	1.45	cps
Silicon	28-1	580282	585059	591422	585588	0.95	cps
Silver	107-1	1351680	1342050	1362813	1352181	0.77	cps
Silver	109-1	1266854	1281868	1304643	1284455	1.48	cps
Sodium	23-2	1596909	1584773	1610938	1597540	0.82	cps
Strontium	86-1	780	763	813	786	3.24	cps
Strontium	88-1	1033	1007	1023	1021	1.32	cps
Sulfur	34-1	163878	162635	159546	162019	1.38	cps
Terbium	159-1	4714097	4727711	4838025	4759944	1.43	cps
Terbium	159-2	3300396	3268850	3221645	3263630	1.21	cps
Thallium	203-1	1963740	2037098	1995777	1998871	1.84	cps
Thallium	205-1	4699452	4700961	4724640	4708351	0.30	cps
Tin	118-1	2804	2854	2977	2878	3.10	cps
Titanium	47-1	347	303	280	310	10.91	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICV01	Instrumnet Name :	P7
Client Sample ID :	ICV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:44:19	DataFile Name :	012ICV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	40	23	17	27	45.07	cps
Vanadium	51-2	839508	847965	848474	845316	0.60	cps
Yttrium	89-1	6936664	6675832	6902544	6838347	2.07	cps
Yttrium	89-2	2001560	1929980	1916333	1949291	2.35	cps
Zinc	66-2	228702	224282	227845	226943	1.03	cps
Zirconium	90-1	357	330	460	382	17.96	cps
Zirconium	91-1	283	203	313	267	21.32	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	LLICV01	Instrumnet Name :	P7
Client Sample ID :	LLICV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:53:46	DataFile Name :	013LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3530	3584	3514	3543	1.03	cps
Antimony	121-1	9453	9569	9966	9662	2.78	cps
Arsenic	75-2	585	633	651	623	5.54	cps
Barium	135-1	10908	10677	10551	10712	1.69	cps
Barium	137-1	18252	18596	19043	18630	2.13	cps
Beryllium	9-1	880	870	870	873	0.66	cps
Bismuth	209-1	3203341	3259118	3259118	3240526	0.99	cps
Bismuth	209-2	2751939	2690686	2639732	2694119	2.09	cps
Bromine	81-1	8616	8466	8606	8563	0.98	cps
Bromine	81-2	163	127	110	133	20.47	cps
Cadmium	108-1	120	97	120	112	12.00	cps
Cadmium	106-1	1447	1713	1657	1606	8.75	cps
Cadmium	111-1	2289	2438	2269	2332	3.97	cps
Calcium	43-1	6495	7198	7288	6994	6.21	cps
Calcium	44-1	125921	125329	123142	124797	1.17	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	6265	6538	6441	6415	2.16	cps
Cobalt	59-2	4361	4201	4094	4218	3.18	cps
Copper	63-2	6585	6722	6678	6662	1.05	cps
Dysprosium	156-1	17	7	10	11	45.82	cps
Dysprosium	156-2	7	7	3	6	34.70	cps
Erbium	164-1	17	30	17	21	36.45	cps
Erbium	164-2	13	7	23	14	58.06	cps
Gadolinium	160-1	17	27	17	20	28.86	cps
Gadolinium	160-2	300	247	247	264	11.65	cps
Holmium	165-1	4810453	4833424	4768876	4804251	0.68	cps
Holmium	165-2	3550179	3479245	3509117	3512847	1.01	cps
Indium	115-1	3966364	3836110	3883718	3895397	1.69	cps
Indium	115-2	1462467	1465273	1456488	1461409	0.31	cps
Iron	56-2	145361	146024	145166	145517	0.31	cps
Iron	57-2	4537	4394	4387	4440	1.91	cps
Iron	54-2	8903	9306	8889	9033	2.62	cps
Krypton	83-1	400	403	413	406	1.71	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	LLICV01	Instrumnet Name :	P7
Client Sample ID :	LLICV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:53:46	DataFile Name :	013LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3774	3844	4024	3881	3.32	cps
Lead	207-1	3541	3490	3197	3409	5.44	cps
Lead	208-1	15250	15387	15324	15320	0.45	cps
Lithium	6-1	520937	517046	521394	519792	0.46	cps
Magnesium	24-2	124327	124099	124677	124368	0.23	cps
Manganese	55-2	2717	2874	2660	2750	4.02	cps
Molybdenum	94-1	10264	10217	10220	10234	0.25	cps
Molybdenum	95-1	12262	11832	11668	11920	2.57	cps
Molybdenum	96-1	13206	13686	13266	13386	1.96	cps
Molybdenum	97-1	7812	7719	8016	7849	1.93	cps
Molybdenum	98-1	19393	19567	19813	19591	1.08	cps
Neodymium	150-1	7	0	3	3	100.05	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	1340	1477	1430	1416	4.91	cps
Phosphorus	31-2	2354	2380	2330	2355	1.06	cps
Potassium	39-2	190840	190968	190191	190666	0.22	cps
Rhodium	103-1	3739120	3800879	3784106	3774701	0.85	cps
Rhodium	103-2	2487776	2464476	2470687	2474313	0.49	cps
Scandium	45-1	2364470	2330066	2348046	2347527	0.73	cps
Scandium	45-2	244387	244548	243974	244303	0.12	cps
Selenium	82-1	678	686	745	703	5.21	cps
Selenium	77-2	110	73	80	88	22.25	cps
Selenium	78-2	633	540	567	580	8.29	cps
Silicon	28-1	589604	586224	590108	588645	0.36	cps
Silver	107-1	7068	7118	7289	7158	1.61	cps
Silver	109-1	6775	6805	6682	6754	0.95	cps
Sodium	23-2	215747	216241	214031	215340	0.54	cps
Strontium	86-1	2147	2067	1993	2069	3.71	cps
Strontium	88-1	13246	13473	13276	13332	0.92	cps
Sulfur	34-1	166735	166903	167638	167092	0.29	cps
Terbium	159-1	4820506	4836993	4814104	4823868	0.24	cps
Terbium	159-2	3297072	3406955	3269094	3324374	2.19	cps
Thallium	203-1	5081	5118	4981	5060	1.40	cps
Thallium	205-1	11732	12152	11638	11841	2.31	cps
Tin	118-1	21156	20708	21186	21017	1.27	cps
Titanium	47-1	3277	3630	3560	3489	5.36	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	LLICV01	Instrumnet Name :	P7
Client Sample ID :	LLICV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:53:46	DataFile Name :	013LLIC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	14034	13964	13881	13960	0.55	cps
Vanadium	51-2	10357	10204	10394	10318	0.98	cps
Yttrium	89-1	6859523	6976261	6821229	6885671	1.17	cps
Yttrium	89-2	1998092	1948714	1907676	1951494	2.32	cps
Zinc	66-2	4461	4471	4391	4441	0.98	cps
Zirconium	90-1	8596	8709	8509	8605	1.17	cps
Zirconium	91-1	2077	1937	1910	1975	4.53	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:58:33	DataFile Name :	014CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	480	510	513	501	3.66	cps
Antimony	121-1	107	60	123	97	33.95	cps
Arsenic	75-2	24	13	13	17	39.34	cps
Barium	135-1	30	23	30	28	13.86	cps
Barium	137-1	40	80	67	62	32.73	cps
Beryllium	9-1	3	13	17	11	62.48	cps
Bismuth	209-1	3172914	3213289	3177285	3187829	0.70	cps
Bismuth	209-2	2673401	2662562	2596608	2644191	1.57	cps
Bromine	81-1	7986	8543	8269	8266	3.37	cps
Bromine	81-2	183	137	133	151	18.50	cps
Cadmium	108-1	3	10	7	7	50.03	cps
Cadmium	106-1	1467	1590	1530	1529	4.03	cps
Cadmium	111-1	1038	1119	1073	1077	3.80	cps
Calcium	43-1	150	173	177	167	8.72	cps
Calcium	44-1	14894	14584	14841	14773	1.12	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1450	1437	1363	1417	3.29	cps
Cobalt	59-2	147	123	120	130	11.18	cps
Copper	63-2	733	833	897	821	10.03	cps
Dysprosium	156-1	3	23	7	11	96.43	cps
Dysprosium	156-2	7	7	0	4	86.60	cps
Erbium	164-1	33	20	30	28	24.98	cps
Erbium	164-2	13	17	23	18	28.64	cps
Gadolinium	160-1	33	17	23	24	34.31	cps
Gadolinium	160-2	217	263	237	239	9.80	cps
Holmium	165-1	4688106	4832985	4784069	4768387	1.55	cps
Holmium	165-2	3499814	3432026	3380518	3437453	1.74	cps
Indium	115-1	3845143	3772766	3728100	3782003	1.56	cps
Indium	115-2	1457537	1425565	1418658	1433920	1.45	cps
Iron	56-2	55786	54800	54763	55116	1.05	cps
Iron	57-2	2110	2177	1973	2087	4.97	cps
Iron	54-2	4031	4037	3994	4021	0.58	cps
Krypton	83-1	373	313	427	371	15.28	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:58:33	DataFile Name :	014CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	470	587	577	544	11.88	cps
Lead	207-1	473	520	523	506	5.53	cps
Lead	208-1	2097	2457	2343	2299	8.01	cps
Lithium	6-1	513047	524719	521699	519822	1.17	cps
Magnesium	24-2	243	263	190	232	16.33	cps
Manganese	55-2	720	763	820	768	6.53	cps
Molybdenum	94-1	153	210	177	180	15.82	cps
Molybdenum	95-1	177	137	153	156	12.92	cps
Molybdenum	96-1	210	217	190	206	6.75	cps
Molybdenum	97-1	103	117	103	108	7.15	cps
Molybdenum	98-1	310	233	247	263	15.56	cps
Neodymium	150-1	0	3	7	3	100.05	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	343	320	373	346	7.74	cps
Phosphorus	31-2	340	403	333	359	10.76	cps
Potassium	39-2	53504	53480	53711	53565	0.24	cps
Rhodium	103-1	3816809	3822687	3845074	3828190	0.39	cps
Rhodium	103-2	2469108	2395770	2373417	2412765	2.07	cps
Scandium	45-1	2380908	2344935	2336078	2353974	1.01	cps
Scandium	45-2	243599	235596	237853	239016	1.73	cps
Selenium	82-1	91	204	25	107	84.77	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	337	383	333	351	7.96	cps
Silicon	28-1	581094	575431	584029	580185	0.75	cps
Silver	107-1	67	77	67	70	8.25	cps
Silver	109-1	60	67	67	64	5.98	cps
Sodium	23-2	23899	23645	24226	23923	1.22	cps
Strontium	86-1	597	557	570	574	3.55	cps
Strontium	88-1	140	130	110	127	12.06	cps
Sulfur	34-1	164899	170069	169592	168186	1.70	cps
Terbium	159-1	4740723	4750581	4702793	4731366	0.53	cps
Terbium	159-2	3306029	3312657	3329106	3315931	0.36	cps
Thallium	203-1	130	153	157	147	9.91	cps
Thallium	205-1	317	290	380	329	14.06	cps
Tin	118-1	2857	2894	2787	2846	1.91	cps
Titanium	47-1	93	77	63	78	19.33	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICB01	Instrumnet Name :	P7
Client Sample ID :	ICB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 15:58:33	DataFile Name :	014CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	17	10	7	11	45.82	cps
Vanadium	51-2	7	20	13	13	49.99	cps
Yttrium	89-1	6741317	6724656	6702926	6722966	0.29	cps
Yttrium	89-2	1925120	1916688	1923657	1921822	0.23	cps
Zinc	66-2	1390	1427	1580	1466	6.88	cps
Zirconium	90-1	343	353	330	342	3.42	cps
Zirconium	91-1	57	83	57	66	23.48	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:03:33	DataFile Name :	015ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	12904580	12960319	12870004	12911634	0.35	cps
Antimony	121-1	5039	5295	5269	5201	2.71	cps
Arsenic	75-2	375	387	384	382	1.68	cps
Barium	135-1	1663	1593	1607	1621	2.29	cps
Barium	137-1	2760	2774	2780	2771	0.37	cps
Beryllium	9-1	243	217	197	219	10.70	cps
Bismuth	209-1	3069832	3153559	3197847	3140413	2.07	cps
Bismuth	209-2	2694779	2667932	2609076	2657262	1.65	cps
Bromine	81-1	9156	9326	9867	9450	3.93	cps
Bromine	81-2	557	553	597	569	4.24	cps
Cadmium	108-1	697	787	720	734	6.36	cps
Cadmium	106-1	1443	1447	1573	1488	4.98	cps
Cadmium	111-1	1513	1419	1471	1467	3.21	cps
Calcium	43-1	1274704	1277770	1298235	1283570	1.00	cps
Calcium	44-1	20560809	20340332	20819772	20573638	1.17	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	50788	51029	49815	50544	1.27	cps
Cobalt	59-2	5164	5011	4884	5020	2.79	cps
Copper	63-2	21142	21829	21753	21575	1.75	cps
Dysprosium	156-1	3	20	7	10	88.20	cps
Dysprosium	156-2	17	13	47	26	71.84	cps
Erbium	164-1	33	40	30	34	14.78	cps
Erbium	164-2	33	20	20	24	31.49	cps
Gadolinium	160-1	30	30	37	32	11.95	cps
Gadolinium	160-2	237	277	247	253	8.22	cps
Holmium	165-1	4936707	5007202	4993953	4979287	0.75	cps
Holmium	165-2	3549721	3547338	3488033	3528364	0.99	cps
Indium	115-1	3851690	3853745	3883422	3862952	0.46	cps
Indium	115-2	1438555	1427011	1424171	1429912	0.53	cps
Iron	56-2	222984043	222194057	220983017	222053706	0.45	cps
Iron	57-2	5494617	5520792	5410035	5475148	1.06	cps
Iron	54-2	12155978	12279918	12198879	12211592	0.52	cps
Krypton	83-1	343	390	370	368	6.37	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:03:33	DataFile Name :	015ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	17491	18236	18229	17985	2.38	cps
Lead	207-1	13610	14374	14668	14218	3.84	cps
Lead	208-1	65138	68200	68681	67340	2.85	cps
Lithium	6-1	505755	502171	515711	507879	1.38	cps
Magnesium	24-2	22884753	23113366	22553322	22850480	1.23	cps
Manganese	55-2	15688	16035	15828	15851	1.10	cps
Molybdenum	94-1	2642513	2756667	2675650	2691610	2.18	cps
Molybdenum	95-1	4525328	4766786	4656432	4649515	2.60	cps
Molybdenum	96-1	4851141	4938732	5044212	4944695	1.96	cps
Molybdenum	97-1	2915641	2903824	2928557	2916008	0.42	cps
Molybdenum	98-1	7542401	7666083	7691079	7633188	1.04	cps
Neodymium	150-1	30	33	47	37	24.06	cps
Neodymium	150-2	23	13	10	16	44.60	cps
Nickel	60-2	5791	5855	5748	5798	0.93	cps
Phosphorus	31-2	831622	824740	814609	823657	1.04	cps
Potassium	39-2	26204897	26301807	26480722	26329142	0.53	cps
Rhodium	103-1	3729242	3759999	3691029	3726757	0.93	cps
Rhodium	103-2	2417069	2392787	2409578	2406478	0.52	cps
Scandium	45-1	2318490	2291541	2381245	2330425	1.98	cps
Scandium	45-2	244994	244394	244965	244784	0.14	cps
Selenium	82-1	160	103	161	141	23.72	cps
Selenium	77-2	10	0	0	3	173.21	cps
Selenium	78-2	280	320	333	311	8.92	cps
Silicon	28-1	605182	597278	611590	604683	1.19	cps
Silver	107-1	343	317	280	313	10.15	cps
Silver	109-1	317	257	250	274	13.38	cps
Sodium	23-2	38370057	38077894	37219154	37889035	1.58	cps
Strontium	86-1	49309	49683	49747	49580	0.48	cps
Strontium	88-1	423685	435987	438073	432581	1.80	cps
Sulfur	34-1	2340996	2329217	2313517	2327910	0.59	cps
Terbium	159-1	4934558	4897417	4901642	4911206	0.41	cps
Terbium	159-2	3349329	3482777	3316150	3382752	2.61	cps
Thallium	203-1	360	360	420	380	9.12	cps
Thallium	205-1	823	960	1063	949	12.69	cps
Tin	118-1	3430	3624	3607	3554	3.02	cps
Titanium	47-1	1267430	1232089	1283162	1260894	2.07	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICSA01	Instrumnet Name :	P7
Client Sample ID :	ICSA01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:03:33	DataFile Name :	015ICSA.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	307	197	263	256	21.68	cps
Vanadium	51-2	510	430	457	466	8.75	cps
Yttrium	89-1	6600794	6720972	6902185	6741317	2.25	cps
Yttrium	89-2	1938080	1930499	1920784	1929787	0.45	cps
Zinc	66-2	7489	7479	7255	7407	1.78	cps
Zirconium	90-1	430	347	423	400	11.58	cps
Zirconium	91-1	97	80	113	97	17.24	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:07:39	DataFile Name :	016ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	13245152	13583097	13264545	13364265	1.42	cps
Antimony	121-1	98442	100838	100163	99814	1.24	cps
Arsenic	75-2	10594	10756	10678	10676	0.76	cps
Barium	135-1	23199	24321	23997	23839	2.42	cps
Barium	137-1	41678	41855	41691	41741	0.24	cps
Beryllium	9-1	16092	15875	16312	16093	1.36	cps
Bismuth	209-1	3143153	3316954	3232041	3230716	2.69	cps
Bismuth	209-2	2775218	2684040	2662875	2707378	2.20	cps
Bromine	81-1	9213	10110	10434	9919	6.38	cps
Bromine	81-2	493	550	547	530	6.00	cps
Cadmium	108-1	2520	2490	2517	2509	0.66	cps
Cadmium	106-1	3807	3931	4044	3927	3.01	cps
Cadmium	111-1	28434	28511	28896	28614	0.86	cps
Calcium	43-1	1284194	1299931	1321655	1301927	1.44	cps
Calcium	44-1	20610289	20846693	21054933	20837305	1.07	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	103046	101012	101059	101706	1.14	cps
Cobalt	59-2	83658	82830	82858	83115	0.57	cps
Copper	63-2	78528	77392	77171	77697	0.94	cps
Dysprosium	156-1	7	17	30	18	65.83	cps
Dysprosium	156-2	13	17	23	18	28.64	cps
Erbium	164-1	40	37	23	33	26.47	cps
Erbium	164-2	37	27	53	39	34.63	cps
Gadolinium	160-1	33	40	43	39	13.09	cps
Gadolinium	160-2	250	327	233	270	18.44	cps
Holmium	165-1	5037665	5023177	5136621	5065821	1.22	cps
Holmium	165-2	3594824	3579803	3635752	3603460	0.80	cps
Indium	115-1	3840435	3903112	3869138	3870895	0.81	cps
Indium	115-2	1492699	1470277	1480930	1481302	0.76	cps
Iron	56-2	224887623	221474803	221420963	222594463	0.89	cps
Iron	57-2	5592892	5539438	5560047	5564126	0.48	cps
Iron	54-2	12395507	12483788	12248762	12376019	0.96	cps
Krypton	83-1	333	457	337	376	18.71	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:07:39	DataFile Name :	016ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	93163	93402	95342	93969	1.27	cps
Lead	207-1	77189	77412	80048	78216	2.03	cps
Lead	208-1	358665	361793	365941	362133	1.01	cps
Lithium	6-1	501934	499933	502974	501614	0.31	cps
Magnesium	24-2	23451337	23260140	23423348	23378275	0.44	cps
Manganese	55-2	55003	54067	54943	54671	0.96	cps
Molybdenum	94-1	2656976	2725031	2775798	2719268	2.19	cps
Molybdenum	95-1	4693342	4725761	4742381	4720495	0.53	cps
Molybdenum	96-1	4969061	5012340	5070816	5017405	1.02	cps
Molybdenum	97-1	2875251	2968225	3026603	2956693	2.58	cps
Molybdenum	98-1	7495482	7780151	7890029	7721887	2.64	cps
Neodymium	150-1	40	13	40	31	49.50	cps
Neodymium	150-2	10	10	10	10	0.00	cps
Nickel	60-2	26761	25806	26029	26199	1.91	cps
Phosphorus	31-2	840768	844008	844167	842981	0.23	cps
Potassium	39-2	26545414	26137695	26787199	26490103	1.24	cps
Rhodium	103-1	3693030	3730348	3740734	3721371	0.67	cps
Rhodium	103-2	2494583	2460844	2469336	2474921	0.71	cps
Scandium	45-1	2338404	2383305	2339665	2353791	1.09	cps
Scandium	45-2	254087	248415	251157	251220	1.13	cps
Selenium	82-1	2511	2400	2462	2458	2.26	cps
Selenium	77-2	273	290	267	277	4.35	cps
Selenium	78-2	1243	1177	1273	1231	4.02	cps
Silicon	28-1	602120	621901	613905	612642	1.62	cps
Silver	107-1	123851	127720	127198	126256	1.66	cps
Silver	109-1	119649	120621	122334	120868	1.12	cps
Sodium	23-2	39586599	39103001	39427309	39372303	0.63	cps
Strontium	86-1	50496	51798	51613	51302	1.37	cps
Strontium	88-1	434194	443351	449942	442496	1.79	cps
Sulfur	34-1	2330466	2316203	2316404	2321025	0.35	cps
Terbium	159-1	4994851	4999846	5161666	5052121	1.88	cps
Terbium	159-2	3400308	3484053	3426521	3436961	1.25	cps
Thallium	203-1	94025	96012	97533	95857	1.84	cps
Thallium	205-1	226345	227867	226457	226890	0.37	cps
Tin	118-1	3457	3337	3654	3483	4.59	cps
Titanium	47-1	1274657	1278394	1252215	1268422	1.12	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	ICSAB01	Instrumnet Name :	P7
Client Sample ID :	ICSAB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:07:39	DataFile Name :	016ICSB.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	197	307	193	232	27.77	cps
Vanadium	51-2	42292	42159	41691	42047	0.75	cps
Yttrium	89-1	6920509	7023276	6972284	6972023	0.74	cps
Yttrium	89-2	2053074	2010188	1999048	2020770	1.41	cps
Zinc	66-2	19206	19116	19009	19110	0.52	cps
Zirconium	90-1	367	417	440	408	9.19	cps
Zirconium	91-1	97	90	60	82	23.76	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:10:52	DataFile Name :	017CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7711982	7570382	7784103	7688823	1.41	cps
Antimony	121-1	2664164	2645366	2678751	2662760	0.63	cps
Arsenic	75-2	281544	279448	282665	281219	0.58	cps
Barium	135-1	3119666	3106031	3122006	3115901	0.28	cps
Barium	137-1	5361454	5461649	5449710	5424271	1.01	cps
Beryllium	9-1	412999	418014	422703	417905	1.16	cps
Bismuth	209-1	3281157	3285278	3296912	3287783	0.25	cps
Bismuth	209-2	2636259	2628419	2670617	2645098	0.85	cps
Bromine	81-1	8913	8533	8716	8720	2.18	cps
Bromine	81-2	197	230	197	208	9.26	cps
Cadmium	108-1	52227	53505	53545	53092	1.41	cps
Cadmium	106-1	74262	75669	75063	74998	0.94	cps
Cadmium	111-1	729942	737371	738501	735271	0.63	cps
Calcium	43-1	3428709	3440474	3467017	3445400	0.57	cps
Calcium	44-1	54984736	55322013	56361332	55556027	1.29	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1343962	1381428	1372810	1366067	1.44	cps
Cobalt	59-2	2057171	2035017	2088233	2060140	1.30	cps
Copper	63-2	15764416	16058429	15866503	15896449	0.94	cps
Dysprosium	156-1	203	167	210	193	12.07	cps
Dysprosium	156-2	353	297	320	323	8.81	cps
Erbium	164-1	373	283	393	350	16.74	cps
Erbium	164-2	277	247	217	247	12.16	cps
Gadolinium	160-1	167	200	173	180	9.80	cps
Gadolinium	160-2	450	367	340	386	14.88	cps
Holmium	165-1	5253324	5098800	5182925	5178349	1.49	cps
Holmium	165-2	3735319	3639146	3704932	3693132	1.33	cps
Indium	115-1	3863335	3835150	3895484	3864656	0.78	cps
Indium	115-2	1468927	1459227	1454451	1460868	0.50	cps
Iron	56-2	304484802	305065042	306896455	305482100	0.41	cps
Iron	57-2	7669193	7687977	7720684	7692618	0.34	cps
Iron	54-2	16943616	16774295	16582063	16766658	1.08	cps
Krypton	83-1	407	373	420	400	6.01	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:10:52	DataFile Name :	017CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	10801367	10889143	10731640	10807384	0.73	cps
Lead	207-1	9220490	9527733	9281103	9343109	1.74	cps
Lead	208-1	42782324	43165039	42876777	42941380	0.46	cps
Lithium	6-1	516333	516683	509216	514077	0.82	cps
Magnesium	24-2	67834079	66506192	70483826	68274699	2.97	cps
Manganese	55-2	11305360	11261112	11247306	11271259	0.27	cps
Molybdenum	94-1	9438455	9558812	9584963	9527410	0.82	cps
Molybdenum	95-1	13577755	13606666	13644035	13609485	0.24	cps
Molybdenum	96-1	14745115	14731395	14685113	14720541	0.21	cps
Molybdenum	97-1	8371302	8489304	8232292	8364299	1.54	cps
Molybdenum	98-1	21562033	21944796	21764252	21757027	0.88	cps
Neodymium	150-1	193	237	210	213	10.25	cps
Neodymium	150-2	77	107	103	96	17.21	cps
Nickel	60-2	541983	536786	531862	536877	0.94	cps
Phosphorus	31-2	93537	92212	93658	93136	0.86	cps
Potassium	39-2	36062405	37031016	35890414	36327945	1.69	cps
Rhodium	103-1	3809774	3821740	3752595	3794703	0.97	cps
Rhodium	103-2	2453493	2437685	2435018	2442065	0.41	cps
Scandium	45-1	2402028	2389849	2407283	2399720	0.37	cps
Scandium	45-2	256850	258354	257196	257467	0.31	cps
Selenium	82-1	59128	60270	60739	60046	1.38	cps
Selenium	77-2	6905	7275	7158	7113	2.66	cps
Selenium	78-2	22981	23415	23422	23273	1.09	cps
Silicon	28-1	25715735	25939817	25831761	25829104	0.43	cps
Silver	107-1	3444056	3504896	3589356	3512769	2.08	cps
Silver	109-1	3304501	3460195	3351496	3372064	2.37	cps
Sodium	23-2	105441208	104538215	107159038	105712821	1.26	cps
Strontium	86-1	862092	876420	874122	870878	0.88	cps
Strontium	88-1	7519024	7594210	7483780	7532338	0.75	cps
Sulfur	34-1	379953	385517	387215	384229	0.99	cps
Terbium	159-1	5135322	5232286	5093937	5153848	1.38	cps
Terbium	159-2	3460958	3456263	3427422	3448214	0.53	cps
Thallium	203-1	2684272	2696502	2659837	2680204	0.70	cps
Thallium	205-1	6342282	6270595	6350161	6321013	0.69	cps
Tin	118-1	2172677	2154549	2212069	2179765	1.35	cps
Titanium	47-1	3423230	3538571	3414885	3458895	2.00	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV01	Instrumnet Name :	P7
Client Sample ID :	CCV01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:10:52	DataFile Name :	017CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	8571027	8489119	8679126	8579757	1.11	cps
Vanadium	51-2	1158916	1156612	1163820	1159783	0.32	cps
Yttrium	89-1	7013805	7013821	6921731	6983119	0.76	cps
Yttrium	89-2	2009205	2059631	2000826	2023221	1.57	cps
Zinc	66-2	3035044	2966933	3055809	3019262	1.54	cps
Zirconium	90-1	4602091	4634812	4651574	4629493	0.54	cps
Zirconium	91-1	1033527	1055983	1052136	1047215	1.15	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:14:26	DataFile Name :	018CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	617	683	497	599	15.79	cps
Antimony	121-1	740	867	927	845	11.28	cps
Arsenic	75-2	6	6	13	8	51.26	cps
Barium	135-1	53	40	20	38	44.41	cps
Barium	137-1	73	77	87	79	8.80	cps
Beryllium	9-1	13	13	20	16	24.76	cps
Bismuth	209-1	3301512	3376809	3349296	3342539	1.14	cps
Bismuth	209-2	2717714	2721689	2716216	2718540	0.10	cps
Bromine	81-1	8823	9096	9283	9067	2.55	cps
Bromine	81-2	193	200	177	190	6.32	cps
Cadmium	108-1	17	17	13	16	12.40	cps
Cadmium	106-1	1633	1377	1527	1512	8.53	cps
Cadmium	111-1	1155	979	1096	1077	8.34	cps
Calcium	43-1	193	193	237	208	12.04	cps
Calcium	44-1	13439	13693	13042	13392	2.45	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1747	1477	1493	1572	9.62	cps
Cobalt	59-2	113	117	127	119	5.84	cps
Copper	63-2	1467	1527	1503	1499	2.02	cps
Dysprosium	156-1	3	13	7	8	65.47	cps
Dysprosium	156-2	0	0	0	0	0.00	cps
Erbium	164-1	27	37	30	31	16.37	cps
Erbium	164-2	10	10	10	10	0.00	cps
Gadolinium	160-1	20	30	10	20	50.00	cps
Gadolinium	160-2	263	227	257	249	7.85	cps
Holmium	165-1	4986576	4993133	4960707	4980139	0.34	cps
Holmium	165-2	3576600	3555345	3575037	3568994	0.33	cps
Indium	115-1	3997113	3903946	4011559	3970873	1.47	cps
Indium	115-2	1482410	1489389	1477486	1483095	0.40	cps
Iron	56-2	58828	59303	59394	59175	0.51	cps
Iron	57-2	2390	2244	2340	2325	3.21	cps
Iron	54-2	4401	4347	4327	4358	0.87	cps
Krypton	83-1	380	357	347	361	4.74	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:14:26	DataFile Name :	018CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	910	927	947	928	1.98	cps
Lead	207-1	797	807	847	817	3.24	cps
Lead	208-1	3584	3670	3720	3658	1.89	cps
Lithium	6-1	516657	508389	506461	510503	1.06	cps
Magnesium	24-2	817	623	813	751	14.73	cps
Manganese	55-2	907	850	817	858	5.30	cps
Molybdenum	94-1	560	437	463	487	13.33	cps
Molybdenum	95-1	473	503	540	506	6.60	cps
Molybdenum	96-1	517	623	553	564	9.60	cps
Molybdenum	97-1	373	333	333	347	6.66	cps
Molybdenum	98-1	813	773	840	809	4.15	cps
Neodymium	150-1	7	0	0	2	173.21	cps
Neodymium	150-2	0	3	3	2	86.60	cps
Nickel	60-2	400	390	337	376	9.07	cps
Phosphorus	31-2	353	307	347	336	7.52	cps
Potassium	39-2	58706	58803	58157	58555	0.59	cps
Rhodium	103-1	3819564	3875234	3949678	3881492	1.68	cps
Rhodium	103-2	2510356	2533849	2511128	2518444	0.53	cps
Scandium	45-1	2378414	2328104	2343673	2350064	1.10	cps
Scandium	45-2	245059	245388	245194	245214	0.07	cps
Selenium	82-1	114	164	116	131	21.65	cps
Selenium	77-2	0	0	3	1	173.21	cps
Selenium	78-2	367	367	327	353	6.54	cps
Silicon	28-1	564035	726727	562571	617778	15.27	cps
Silver	107-1	250	220	253	241	7.62	cps
Silver	109-1	237	220	9314	3257	161.06	cps
Sodium	23-2	41887	41289	40627	41267	1.53	cps
Strontium	86-1	680	657	643	660	2.81	cps
Strontium	88-1	163	157	223	181	20.27	cps
Sulfur	34-1	157602	158397	159132	158377	0.48	cps
Terbium	159-1	4905698	4885907	5058505	4950036	1.91	cps
Terbium	159-2	3429750	3391013	3318440	3379735	1.67	cps
Thallium	203-1	600	527	640	589	9.76	cps
Thallium	205-1	1507	1543	1340	1463	7.41	cps
Tin	118-1	3000	2937	2994	2977	1.17	cps
Titanium	47-1	140	90	93	108	25.94	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB01	Instrumnet Name :	P7
Client Sample ID :	CCB01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:14:26	DataFile Name :	018CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	113	67	117	99	28.27	cps
Vanadium	51-2	10	27	17	18	47.19	cps
Yttrium	89-1	7153301	6895192	7037883	7028792	1.84	cps
Yttrium	89-2	2055268	1997745	1982750	2011921	1.90	cps
Zinc	66-2	1523	1403	1727	1551	10.54	cps
Zirconium	90-1	640	563	700	634	10.80	cps
Zirconium	91-1	120	120	120	120	0.00	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CRI01	Instrumnet Name :	P7
Client Sample ID :	CRI01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:18:20	DataFile Name :	019LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3474	3791	3650	3638	4.36	cps
Antimony	121-1	10057	10055	10243	10118	1.07	cps
Arsenic	75-2	681	723	676	693	3.70	cps
Barium	135-1	10401	10994	11168	10854	3.71	cps
Barium	137-1	19417	18929	19781	19376	2.20	cps
Beryllium	9-1	793	890	897	860	6.72	cps
Bismuth	209-1	3383011	3273436	3181843	3279430	3.07	cps
Bismuth	209-2	2689202	2695788	2672781	2685924	0.44	cps
Bromine	81-1	8646	8626	8639	8637	0.12	cps
Bromine	81-2	160	143	167	157	7.67	cps
Cadmium	108-1	90	120	120	110	15.75	cps
Cadmium	106-1	1813	1863	1773	1817	2.48	cps
Cadmium	111-1	2496	2517	2518	2510	0.48	cps
Calcium	43-1	7245	7395	7012	7217	2.68	cps
Calcium	44-1	124298	125901	124681	124960	0.67	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	6702	6605	6521	6609	1.36	cps
Cobalt	59-2	4221	4184	4247	4217	0.75	cps
Copper	63-2	6728	7115	6888	6911	2.81	cps
Dysprosium	156-1	0	10	10	7	86.60	cps
Dysprosium	156-2	10	3	3	6	69.34	cps
Erbium	164-1	37	10	23	23	57.15	cps
Erbium	164-2	23	13	33	23	42.86	cps
Gadolinium	160-1	17	33	23	24	34.31	cps
Gadolinium	160-2	283	277	277	279	1.38	cps
Holmium	165-1	5033585	4988158	4998776	5006840	0.47	cps
Holmium	165-2	3467102	3546957	3478464	3497508	1.24	cps
Indium	115-1	3886104	3956170	3909253	3917176	0.91	cps
Indium	115-2	1454313	1468301	1452699	1458438	0.59	cps
Iron	56-2	148175	148139	147876	148063	0.11	cps
Iron	57-2	4611	4777	4767	4719	1.98	cps
Iron	54-2	9080	8906	9286	9091	2.09	cps
Krypton	83-1	453	407	317	392	17.71	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CRI01	Instrumnet Name :	P7
Client Sample ID :	CRI01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:18:20	DataFile Name :	019LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4147	4001	4047	4065	1.84	cps
Lead	207-1	3491	3597	3470	3519	1.94	cps
Lead	208-1	16301	16157	16041	16166	0.81	cps
Lithium	6-1	517176	509194	502753	509708	1.42	cps
Magnesium	24-2	123397	124267	122937	123533	0.55	cps
Manganese	55-2	2947	2774	2997	2906	4.03	cps
Molybdenum	94-1	10621	10581	10544	10582	0.36	cps
Molybdenum	95-1	12702	12409	12776	12629	1.54	cps
Molybdenum	96-1	14117	14164	14110	14130	0.21	cps
Molybdenum	97-1	7992	7832	7946	7923	1.04	cps
Molybdenum	98-1	20247	20725	20945	20639	1.73	cps
Neodymium	150-1	10	0	3	4	114.60	cps
Neodymium	150-2	3	3	3	3	0.00	cps
Nickel	60-2	1173	1363	1263	1267	7.50	cps
Phosphorus	31-2	2384	2374	2207	2321	4.28	cps
Potassium	39-2	193837	193652	194877	194122	0.34	cps
Rhodium	103-1	3882270	3865620	3900727	3882872	0.45	cps
Rhodium	103-2	2454089	2490741	2465774	2470201	0.76	cps
Scandium	45-1	2387229	2371897	2348662	2369263	0.82	cps
Scandium	45-2	245890	241612	245276	244259	0.95	cps
Selenium	82-1	665	746	751	721	6.71	cps
Selenium	77-2	70	93	57	73	25.30	cps
Selenium	78-2	673	560	480	571	17.01	cps
Silicon	28-1	568594	575547	580709	574950	1.06	cps
Silver	107-1	7295	7385	7269	7316	0.84	cps
Silver	109-1	6818	7205	7005	7010	2.76	cps
Sodium	23-2	225823	225677	225691	225730	0.04	cps
Strontium	86-1	2204	2240	2254	2232	1.16	cps
Strontium	88-1	13460	13630	13536	13542	0.63	cps
Sulfur	34-1	163541	164659	163544	163915	0.39	cps
Terbium	159-1	4920175	4978759	4984411	4961115	0.72	cps
Terbium	159-2	3360989	3427009	3305221	3364406	1.81	cps
Thallium	203-1	5638	5738	5231	5536	4.85	cps
Thallium	205-1	12823	12773	12933	12843	0.64	cps
Tin	118-1	21266	21610	21212	21363	1.01	cps
Titanium	47-1	3487	3360	3470	3439	2.00	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CRI01	Instrumnet Name :	P7
Client Sample ID :	CRI01	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:18:20	DataFile Name :	019LLCC.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	14141	14505	13901	14182	2.14	cps
Vanadium	51-2	10347	10317	10327	10330	0.15	cps
Yttrium	89-1	6934675	6979228	6932947	6948950	0.38	cps
Yttrium	89-2	1972948	1971492	1931259	1958566	1.21	cps
Zinc	66-2	4451	4474	4761	4562	3.79	cps
Zirconium	90-1	9200	9123	9306	9210	1.00	cps
Zirconium	91-1	1993	2150	2214	2119	5.35	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	PB170226BL	Instrumnet Name :	P7
Client Sample ID :	PB170226BL	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:21:44	DataFile Name :	020CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	533	483	443	487	9.27	cps
Antimony	121-1	104	167	234	168	38.71	cps
Arsenic	75-2	8	9	11	9	16.21	cps
Barium	135-1	30	40	27	32	21.53	cps
Barium	137-1	83	63	57	68	20.47	cps
Beryllium	9-1	7	10	17	11	45.82	cps
Bismuth	209-1	3176660	3204257	3298265	3226394	1.98	cps
Bismuth	209-2	2732636	2774385	2715841	2740954	1.10	cps
Bromine	81-1	8559	8349	9030	8646	4.03	cps
Bromine	81-2	137	170	207	171	20.46	cps
Cadmium	108-1	7	10	7	8	24.71	cps
Cadmium	106-1	1583	1570	1653	1602	2.79	cps
Cadmium	111-1	1137	1102	1169	1136	2.96	cps
Calcium	43-1	263	177	187	209	22.70	cps
Calcium	44-1	13313	13129	13132	13191	0.80	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1390	1447	1410	1416	2.03	cps
Cobalt	59-2	90	117	150	119	25.29	cps
Copper	63-2	1093	1193	1020	1102	7.89	cps
Dysprosium	156-1	3	7	3	4	43.40	cps
Dysprosium	156-2	3	0	7	3	100.05	cps
Erbium	164-1	13	40	27	27	50.01	cps
Erbium	164-2	23	13	13	17	34.65	cps
Gadolinium	160-1	13	20	23	19	26.96	cps
Gadolinium	160-2	250	253	267	257	3.44	cps
Holmium	165-1	4762471	4899896	4899648	4854005	1.63	cps
Holmium	165-2	3561045	3529286	3546538	3545623	0.45	cps
Indium	115-1	3861027	3921420	3961132	3914526	1.29	cps
Indium	115-2	1477636	1471139	1460187	1469654	0.60	cps
Iron	56-2	60315	57911	57185	58470	2.80	cps
Iron	57-2	2290	2314	2150	2251	3.92	cps
Iron	54-2	3884	4261	3981	4042	4.84	cps
Krypton	83-1	390	373	403	389	3.87	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	PB170226BL	Instrumnet Name :	P7
Client Sample ID :	PB170226BL	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:21:44	DataFile Name :	020CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	743	633	713	697	8.16	cps
Lead	207-1	570	643	543	586	8.84	cps
Lead	208-1	2667	2607	2583	2619	1.64	cps
Lithium	6-1	504094	497956	501814	501288	0.62	cps
Magnesium	24-2	450	497	440	462	6.54	cps
Manganese	55-2	780	763	807	783	2.79	cps
Molybdenum	94-1	243	357	310	303	18.78	cps
Molybdenum	95-1	250	253	237	247	3.58	cps
Molybdenum	96-1	277	327	373	326	14.85	cps
Molybdenum	97-1	153	193	180	176	11.60	cps
Molybdenum	98-1	340	333	363	346	4.56	cps
Neodymium	150-1	7	0	0	2	173.21	cps
Neodymium	150-2	0	0	0	0	0.00	cps
Nickel	60-2	397	393	387	392	1.30	cps
Phosphorus	31-2	330	317	303	317	4.21	cps
Potassium	39-2	55210	54420	54557	54729	0.77	cps
Rhodium	103-1	3886884	3883866	3902780	3891177	0.26	cps
Rhodium	103-2	2527164	2449896	2463195	2480085	1.67	cps
Scandium	45-1	2326226	2288584	2339413	2318074	1.14	cps
Scandium	45-2	244886	245336	242200	244141	0.69	cps
Selenium	82-1	95	122	92	103	15.95	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	330	330	340	333	1.73	cps
Silicon	28-1	560496	565111	558690	561432	0.59	cps
Silver	107-1	123	147	127	132	9.54	cps
Silver	109-1	113	100	103	106	6.58	cps
Sodium	23-2	31622	30801	31709	31378	1.60	cps
Strontium	86-1	647	540	570	586	9.39	cps
Strontium	88-1	157	137	163	152	9.12	cps
Sulfur	34-1	162186	160445	159475	160702	0.85	cps
Terbium	159-1	4768044	4851545	4884818	4834802	1.24	cps
Terbium	159-2	3258410	3280548	3256589	3265182	0.41	cps
Thallium	203-1	453	397	450	433	7.34	cps
Thallium	205-1	963	973	1027	988	3.45	cps
Tin	118-1	2957	2927	2820	2901	2.48	cps
Titanium	47-1	50	53	53	52	3.68	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	PB170226BL	Instrumnet Name :	P7
Client Sample ID :	PB170226BL	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:21:44	DataFile Name :	020CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	47	27	43	39	27.55	cps
Vanadium	51-2	3	20	30	18	75.79	cps
Yttrium	89-1	6879705	6773676	6935376	6862919	1.20	cps
Yttrium	89-2	1992141	1998185	1962435	1984254	0.96	cps
Zinc	66-2	1557	1453	1477	1496	3.62	cps
Zirconium	90-1	357	337	323	339	4.95	cps
Zirconium	91-1	73	77	70	73	4.55	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	PB170226BS	Instrumnet Name :	P7
Client Sample ID :	PB170226BS	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:25:05	DataFile Name :	021LCSS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1452170	1491761	1453475	1465802	1.53	cps
Antimony	121-1	2443446	2438707	2456714	2446289	0.38	cps
Arsenic	75-2	265210	260795	262037	262681	0.87	cps
Barium	135-1	2769259	2877893	2877598	2841583	2.20	cps
Barium	137-1	5036695	4958610	4976721	4990675	0.82	cps
Beryllium	9-1	388516	394525	394193	392411	0.86	cps
Bismuth	209-1	3166317	3321574	3248649	3245513	2.39	cps
Bismuth	209-2	2686350	2631757	2629835	2649314	1.21	cps
Bromine	81-1	8249	8169	8372	8264	1.24	cps
Bromine	81-2	133	177	120	143	20.67	cps
Cadmium	108-1	49086	50665	51003	50251	2.04	cps
Cadmium	106-1	70437	72781	71884	71700	1.65	cps
Cadmium	111-1	691261	711222	712021	704834	1.67	cps
Calcium	43-1	690859	706665	702725	700083	1.18	cps
Calcium	44-1	10695351	10673657	10868320	10745776	0.99	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1274750	1266672	1251916	1264446	0.92	cps
Cobalt	59-2	1931476	1926811	1933621	1930636	0.18	cps
Copper	63-2	14982601	14740530	14653288	14792140	1.15	cps
Dysprosium	156-1	80	83	103	89	14.20	cps
Dysprosium	156-2	217	193	173	194	11.15	cps
Erbium	164-1	123	173	110	136	24.63	cps
Erbium	164-2	90	80	100	90	11.11	cps
Gadolinium	160-1	83	60	70	71	16.46	cps
Gadolinium	160-2	277	273	313	288	7.71	cps
Holmium	165-1	4988082	4895207	4927500	4936929	0.96	cps
Holmium	165-2	3564991	3500806	3529610	3531802	0.91	cps
Indium	115-1	3789079	3786257	3822599	3799312	0.53	cps
Indium	115-2	1444208	1425830	1420236	1430091	0.88	cps
Iron	56-2	59353192	56702124	58485761	58180359	2.32	cps
Iron	57-2	1479150	1464195	1460728	1468024	0.67	cps
Iron	54-2	3318762	3200344	3257103	3258736	1.82	cps
Krypton	83-1	383	397	367	382	3.93	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	PB170226BS	Instrumnet Name :	P7
Client Sample ID :	PB170226BS	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:25:05	DataFile Name :	021LCSS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	9910953	10219003	10111404	10080453	1.55	cps
Lead	207-1	8175581	8864177	8855509	8631756	4.58	cps
Lead	208-1	38919426	40862051	40578818	40120098	2.62	cps
Lithium	6-1	502942	504982	516588	508171	1.45	cps
Magnesium	24-2	12370145	12459388	12322777	12384103	0.56	cps
Manganese	55-2	10526294	10407384	10353231	10428970	0.85	cps
Molybdenum	94-1	8812136	8772060	8838613	8807603	0.38	cps
Molybdenum	95-1	12617989	12613465	12222793	12484749	1.82	cps
Molybdenum	96-1	13317025	13836809	13116273	13423369	2.77	cps
Molybdenum	97-1	7595145	7548863	7605961	7583323	0.40	cps
Molybdenum	98-1	19760981	20039061	19986258	19928767	0.74	cps
Neodymium	150-1	173	117	127	139	21.78	cps
Neodymium	150-2	27	37	30	31	16.37	cps
Nickel	60-2	509919	509764	503956	507880	0.67	cps
Phosphorus	31-2	82621	83285	82641	82849	0.46	cps
Potassium	39-2	6788006	6665412	6669273	6707563	1.04	cps
Rhodium	103-1	3710153	3804791	3802861	3772602	1.43	cps
Rhodium	103-2	2427228	2367803	2422842	2405957	1.38	cps
Scandium	45-1	2305331	2367665	2320144	2331047	1.40	cps
Scandium	45-2	240540	241953	239481	240658	0.52	cps
Selenium	82-1	58521	59689	59606	59272	1.10	cps
Selenium	77-2	6988	6922	7122	7011	1.45	cps
Selenium	78-2	22878	23028	23005	22970	0.35	cps
Silicon	28-1	23461174	23345610	23256300	23354361	0.44	cps
Silver	107-1	3360388	3469427	3348080	3392632	1.97	cps
Silver	109-1	3182164	3275746	3302357	3253422	1.94	cps
Sodium	23-2	19733167	19926743	19688099	19782670	0.64	cps
Strontium	86-1	772191	792020	789202	784471	1.37	cps
Strontium	88-1	6801893	6963889	6758815	6841533	1.58	cps
Sulfur	34-1	371129	371698	365024	369284	1.00	cps
Terbium	159-1	4737099	4914016	5013872	4888329	2.87	cps
Terbium	159-2	3317689	3362285	3279778	3319918	1.24	cps
Thallium	203-1	2460377	2540094	2479922	2493464	1.67	cps
Thallium	205-1	5869139	6024248	5880581	5924656	1.46	cps
Tin	118-1	1977974	2059385	2032311	2023223	2.05	cps
Titanium	47-1	3128365	3184966	3310098	3207810	2.90	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	PB170226BS	Instrumnet Name :	P7
Client Sample ID :	PB170226BS	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:25:05	DataFile Name :	021LCSS.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	7468447	7797391	7649510	7638450	2.16	cps
Vanadium	51-2	1045481	1037102	1030533	1037705	0.72	cps
Yttrium	89-1	6826723	7054381	6849138	6910081	1.82	cps
Yttrium	89-2	1937346	1932045	1917392	1928928	0.54	cps
Zinc	66-2	2995991	3004782	2890392	2963722	2.15	cps
Zirconium	90-1	4139488	4355418	4376342	4290416	3.06	cps
Zirconium	91-1	937890	970185	960372	956149	1.73	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:33:34	DataFile Name :	022SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	13279402	13471239	13212783	13321141	1.01	cps
Antimony	121-1	5484	5710	5920	5704	3.82	cps
Arsenic	75-2	69859	71582	70788	70743	1.22	cps
Barium	135-1	1171063	1197439	1194695	1187732	1.22	cps
Barium	137-1	2126075	2145295	2147010	2139460	0.54	cps
Beryllium	9-1	5564	5454	5264	5428	2.80	cps
Bismuth	209-1	3629384	3553857	3581370	3588204	1.07	cps
Bismuth	209-2	3060925	3079427	2990934	3043762	1.53	cps
Bromine	81-1	500154	658304	727498	628652	18.54	cps
Bromine	81-2	157553	158554	164211	160106	2.24	cps
Cadmium	108-1	4357	4537	4247	4381	3.34	cps
Cadmium	106-1	8169	8960	8506	8545	4.64	cps
Cadmium	111-1	54323	56018	56590	55644	2.12	cps
Calcium	43-1	871295	886797	886419	881504	1.00	cps
Calcium	44-1	13360060	13791857	13476161	13542693	1.65	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	3865008	3848464	3801876	3838449	0.85	cps
Cobalt	59-2	366604	367067	371386	368352	0.72	cps
Copper	63-2	5224813	5259975	5080664	5188484	1.83	cps
Dysprosium	156-1	127964	131311	131027	130101	1.43	cps
Dysprosium	156-2	117453	117171	117201	117275	0.13	cps
Erbium	164-1	125458	128337	125539	126445	1.30	cps
Erbium	164-2	90018	91823	90578	90807	1.02	cps
Gadolinium	160-1	135549	137026	138215	136930	0.98	cps
Gadolinium	160-2	103889	103704	102408	103334	0.78	cps
Holmium	165-1	5446394	5470833	5477734	5464987	0.30	cps
Holmium	165-2	3952179	4033349	3870113	3951881	2.07	cps
Indium	115-1	4066279	4183737	4157031	4135683	1.49	cps
Indium	115-2	1582280	1580691	1572583	1578518	0.33	cps
Iron	56-2	568473885	564436045	558670978	563860303	0.87	cps
Iron	57-2	14215369	13869710	13814508	13966529	1.56	cps
Iron	54-2	31380859	31022166	31170797	31191274	0.58	cps
Krypton	83-1	610	643	497	583	13.18	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:33:34	DataFile Name :	022SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	8233483	8327525	8377429	8312812	0.88	cps
Lead	207-1	7034842	7266276	7021724	7107614	1.94	cps
Lead	208-1	32468327	33294011	32333217	32698518	1.59	cps
Lithium	6-1	574153	580580	582687	579140	0.77	cps
Magnesium	24-2	15996386	16095012	15929187	16006862	0.52	cps
Manganese	55-2	6901891	6929517	6768696	6866701	1.25	cps
Molybdenum	94-1	291272	296943	298742	295652	1.32	cps
Molybdenum	95-1	45270	47206	45868	46115	2.15	cps
Molybdenum	96-1	95459	99516	98288	97754	2.13	cps
Molybdenum	97-1	28638	29102	29466	29069	1.43	cps
Molybdenum	98-1	73186	74958	74978	74374	1.38	cps
Neodymium	150-1	198921	206233	206056	203736	2.05	cps
Neodymium	150-2	124404	125907	126394	125568	0.83	cps
Nickel	60-2	490945	494491	491747	492394	0.38	cps
Phosphorus	31-2	97079	97649	97478	97402	0.30	cps
Potassium	39-2	5989631	5997594	5809972	5932399	1.79	cps
Rhodium	103-1	4028683	4064545	4081616	4058281	0.67	cps
Rhodium	103-2	2686613	2646540	2637891	2657015	0.98	cps
Scandium	45-1	2826161	2829861	2796382	2817468	0.65	cps
Scandium	45-2	300078	298539	297213	298610	0.48	cps
Selenium	82-1	1595	1553	1753	1634	6.45	cps
Selenium	77-2	653	697	700	683	3.81	cps
Selenium	78-2	1223	1170	1160	1185	2.87	cps
Silicon	28-1	6625311	12716874	5928114	8423433	44.34	cps
Silver	107-1	291348	297155	298182	295562	1.25	cps
Silver	109-1	272301	284488	282687	279826	2.35	cps
Sodium	23-2	21271370	21527196	21546523	21448363	0.72	cps
Strontium	86-1	666148	686935	686101	679728	1.73	cps
Strontium	88-1	5808193	5891497	5789337	5829676	0.93	cps
Sulfur	34-1	2957009	3000620	2961012	2972880	0.81	cps
Terbium	159-1	5338095	5506524	5433406	5426008	1.56	cps
Terbium	159-2	3830696	3762272	3675034	3756001	2.08	cps
Thallium	203-1	10261	10808	10671	10580	2.69	cps
Thallium	205-1	24489	24739	25227	24818	1.51	cps
Tin	118-1	664983	683974	679749	676235	1.47	cps
Titanium	47-1	1517148	1543405	1525634	1528729	0.88	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:33:34	DataFile Name :	022SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	165774	170488	168041	168101	1.40	cps
Vanadium	51-2	746146	748735	732747	742543	1.16	cps
Yttrium	89-1	9112459	9227486	9297503	9212483	1.01	cps
Yttrium	89-2	2653917	2605451	2614075	2624481	0.99	cps
Zinc	66-2	1794462	1803890	1783945	1794099	0.56	cps
Zirconium	90-1	721856	739146	769016	743339	3.21	cps
Zirconium	91-1	169058	162112	164768	165313	2.12	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DUP	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:36:37	DataFile Name :	023SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	13647088	13693239	13617564	13652630	0.28	cps
Antimony	121-1	5755	5976	5677	5803	2.67	cps
Arsenic	75-2	70934	71921	71969	71608	0.82	cps
Barium	135-1	1209459	1211547	1229031	1216679	0.88	cps
Barium	137-1	2176345	2193312	2256134	2208597	1.90	cps
Beryllium	9-1	5491	5564	5401	5485	1.49	cps
Bismuth	209-1	3655378	3685368	3771717	3704154	1.63	cps
Bismuth	209-2	3056013	3013682	3138595	3069430	2.07	cps
Bromine	81-1	567721	715447	775512	686227	15.58	cps
Bromine	81-2	164777	167993	167717	166829	1.07	cps
Cadmium	108-1	4257	4451	4467	4392	2.66	cps
Cadmium	106-1	8856	8889	8683	8809	1.26	cps
Cadmium	111-1	57132	58024	56898	57351	1.04	cps
Calcium	43-1	897169	897384	901058	898537	0.24	cps
Calcium	44-1	13858505	13938891	14114496	13970631	0.94	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	5203363	3931561	3949376	4361433	16.72	cps
Cobalt	59-2	376332	376403	372870	375201	0.54	cps
Copper	63-2	5274645	5278810	5188135	5247197	0.98	cps
Dysprosium	156-1	131647	133626	133717	132997	0.88	cps
Dysprosium	156-2	117879	118257	118018	118051	0.16	cps
Erbium	164-1	128791	129938	129504	129411	0.45	cps
Erbium	164-2	92155	90804	90924	91294	0.82	cps
Gadolinium	160-1	139975	139356	142120	140484	1.03	cps
Gadolinium	160-2	104376	104326	103315	104006	0.58	cps
Holmium	165-1	5586965	5394829	5602215	5528003	2.09	cps
Holmium	165-2	3985025	3902158	3935594	3940926	1.06	cps
Indium	115-1	4286064	4210825	4273536	4256808	0.95	cps
Indium	115-2	1577804	1564293	1567824	1569974	0.45	cps
Iron	56-2	574548951	578005965	578193618	576916178	0.36	cps
Iron	57-2	14367283	14278070	14081350	14242234	1.03	cps
Iron	54-2	31503431	32398408	31116246	31672695	2.08	cps
Krypton	83-1	640	610	600	617	3.38	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DUP	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:36:37	DataFile Name :	023SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	8560041	8319378	8557722	8479047	1.63	cps
Lead	207-1	7139299	7057488	7047288	7081358	0.71	cps
Lead	208-1	33346032	33037909	33022404	33135448	0.55	cps
Lithium	6-1	590295	579589	585506	585130	0.92	cps
Magnesium	24-2	16679907	16324197	16174860	16392988	1.58	cps
Manganese	55-2	6976614	7021466	7050919	7016333	0.53	cps
Molybdenum	94-1	304425	304693	306867	305329	0.44	cps
Molybdenum	95-1	47784	47313	47992	47696	0.73	cps
Molybdenum	96-1	99137	100684	101385	100402	1.15	cps
Molybdenum	97-1	30114	30348	30144	30202	0.42	cps
Molybdenum	98-1	76790	75990	78114	76965	1.39	cps
Neodymium	150-1	208319	210344	210486	209716	0.58	cps
Neodymium	150-2	127244	129055	126243	127514	1.12	cps
Nickel	60-2	500947	507156	506418	504841	0.67	cps
Phosphorus	31-2	99762	100350	100249	100120	0.31	cps
Potassium	39-2	5984948	5943566	6087025	6005180	1.23	cps
Rhodium	103-1	4184535	4186079	4150533	4173716	0.48	cps
Rhodium	103-2	2664085	2676174	2678560	2672940	0.29	cps
Scandium	45-1	2903126	2837597	2875561	2872094	1.15	cps
Scandium	45-2	303073	302163	303924	303053	0.29	cps
Selenium	82-1	1639	1646	1629	1638	0.53	cps
Selenium	77-2	660	683	733	692	5.41	cps
Selenium	78-2	1133	1183	1227	1181	3.95	cps
Silicon	28-1	9607052	27921220	15695965	17741412	52.57	cps
Silver	107-1	307435	313897	313194	311509	1.14	cps
Silver	109-1	294171	297602	298428	296734	0.76	cps
Sodium	23-2	21928770	22109942	22084067	22040926	0.44	cps
Strontium	86-1	690926	691132	701987	694682	0.91	cps
Strontium	88-1	6039738	5999310	6033028	6024025	0.36	cps
Sulfur	34-1	3014360	3041302	3045600	3033754	0.56	cps
Terbium	159-1	5378090	5556452	5551514	5495352	1.85	cps
Terbium	159-2	3642813	3703444	3735140	3693799	1.27	cps
Thallium	203-1	10127	10037	10598	10254	2.93	cps
Thallium	205-1	24556	24238	24863	24552	1.27	cps
Tin	118-1	670520	675889	673672	673360	0.40	cps
Titanium	47-1	1566530	1592086	1623553	1594056	1.79	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DUP	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:36:37	DataFile Name :	023SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	171123	171197	173225	171848	0.69	cps
Vanadium	51-2	760151	757751	756440	758114	0.25	cps
Yttrium	89-1	9190513	9311083	9259585	9253727	0.65	cps
Yttrium	89-2	2628828	2630654	2647037	2635506	0.38	cps
Zinc	66-2	1837137	1808020	1826550	1823902	0.81	cps
Zirconium	90-1	755105	757589	754728	755807	0.21	cps
Zirconium	91-1	168152	169612	169866	169210	0.55	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01LX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 16:39:42	DataFile Name :	024SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2365937	2288246	2309054	2321079	1.73	cps
Antimony	121-1	1004	991	1011	1002	1.00	cps
Arsenic	75-2	12558	12168	11795	12174	3.13	cps
Barium	135-1	202297	201712	203619	202543	0.48	cps
Barium	137-1	357211	359582	356576	357790	0.44	cps
Beryllium	9-1	900	1027	850	926	9.84	cps
Bismuth	209-1	3424656	3479974	3493232	3465954	1.05	cps
Bismuth	209-2	2902504	2836946	2819839	2853096	1.53	cps
Bromine	81-1	149379	166655	176096	164043	8.26	cps
Bromine	81-2	33120	33371	33391	33294	0.45	cps
Cadmium	108-1	887	840	783	837	6.19	cps
Cadmium	106-1	2847	2737	3047	2877	5.46	cps
Cadmium	111-1	10749	10901	10788	10812	0.73	cps
Calcium	43-1	152422	153539	154108	153356	0.56	cps
Calcium	44-1	2331224	2356025	2351675	2346308	0.56	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	677820	684948	666190	676319	1.40	cps
Cobalt	59-2	64893	65713	63440	64682	1.78	cps
Copper	63-2	905796	912804	895863	904821	0.94	cps
Dysprosium	156-1	22024	22228	22408	22220	0.86	cps
Dysprosium	156-2	19801	20185	20592	20192	1.96	cps
Erbium	164-1	21196	21570	21657	21474	1.14	cps
Erbium	164-2	15422	15228	14945	15198	1.58	cps
Gadolinium	160-1	23323	23443	23223	23330	0.47	cps
Gadolinium	160-2	17625	17945	17842	17804	0.92	cps
Holmium	165-1	5070472	5287009	5105529	5154336	2.25	cps
Holmium	165-2	3761702	3657904	3665605	3695070	1.57	cps
Indium	115-1	4104181	4102949	4100206	4102445	0.05	cps
Indium	115-2	1544424	1531881	1517014	1531106	0.90	cps
Iron	56-2	98919375	96876195	96433515	97409695	1.36	cps
Iron	57-2	2468759	2446708	2389206	2434891	1.69	cps
Iron	54-2	5390468	5311695	5277025	5326396	1.09	cps
Krypton	83-1	473	453	433	453	4.41	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01LX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 16:39:42	DataFile Name :	024SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1341197	1393631	1380062	1371630	1.98	cps
Lead	207-1	1113313	1156883	1151851	1140682	2.09	cps
Lead	208-1	5467832	5555459	5634515	5552602	1.50	cps
Lithium	6-1	530970	526204	525808	527661	0.54	cps
Magnesium	24-2	2805004	2824068	2787996	2805690	0.64	cps
Manganese	55-2	1201039	1178871	1178646	1186185	1.08	cps
Molybdenum	94-1	49831	50972	50928	50577	1.28	cps
Molybdenum	95-1	7856	8302	8072	8077	2.77	cps
Molybdenum	96-1	17080	17113	17524	17239	1.43	cps
Molybdenum	97-1	5308	5128	5044	5160	2.61	cps
Molybdenum	98-1	13133	13473	13186	13264	1.38	cps
Neodymium	150-1	34536	35638	34977	35050	1.58	cps
Neodymium	150-2	21697	21426	21106	21410	1.38	cps
Nickel	60-2	88244	88104	87101	87816	0.71	cps
Phosphorus	31-2	17480	17337	17080	17299	1.17	cps
Potassium	39-2	1129677	1133358	1117696	1126910	0.73	cps
Rhodium	103-1	4026525	4012822	4053298	4030882	0.51	cps
Rhodium	103-2	2614345	2615591	2591396	2607111	0.52	cps
Scandium	45-1	2473611	2529751	2499159	2500840	1.12	cps
Scandium	45-2	261609	263698	260277	261861	0.66	cps
Selenium	82-1	309	286	353	316	10.74	cps
Selenium	77-2	113	113	143	123	14.05	cps
Selenium	78-2	540	540	490	523	5.52	cps
Silicon	28-1	1710113	1377235	2126826	1738058	21.61	cps
Silver	107-1	50320	51826	52481	51542	2.15	cps
Silver	109-1	49401	49949	49023	49457	0.94	cps
Sodium	23-2	3811352	3738152	3701974	3750493	1.49	cps
Strontium	86-1	115913	121334	117750	118332	2.33	cps
Strontium	88-1	1011190	1032592	1028359	1024047	1.11	cps
Sulfur	34-1	620634	619395	616116	618715	0.38	cps
Terbium	159-1	5193793	5126234	5143584	5154537	0.68	cps
Terbium	159-2	3533719	3478965	3515899	3509528	0.80	cps
Thallium	203-1	1837	2127	1897	1953	7.84	cps
Thallium	205-1	4738	4561	4841	4713	3.01	cps
Tin	118-1	119434	117572	118846	118617	0.80	cps
Titanium	47-1	260725	265781	266069	264192	1.14	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01LX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 16:39:42	DataFile Name :	024SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	28414	29383	29306	29034	1.86	cps
Vanadium	51-2	126932	127318	126764	127005	0.22	cps
Yttrium	89-1	7507348	7444879	7400146	7450791	0.72	cps
Yttrium	89-2	2215654	2105990	2148099	2156581	2.57	cps
Zinc	66-2	321785	325823	319453	322354	1.00	cps
Zirconium	90-1	125575	127753	127011	126780	0.87	cps
Zirconium	91-1	27960	27846	28167	27991	0.58	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-02	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:43:20	DataFile Name :	025SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	12504061	12156639	12242187	12300962	1.47	cps
Antimony	121-1	2334659	2406115	2378345	2373040	1.52	cps
Arsenic	75-2	335109	333489	327922	332174	1.13	cps
Barium	135-1	3673245	3704309	3768834	3715463	1.31	cps
Barium	137-1	6417814	6451311	6419694	6429606	0.29	cps
Beryllium	9-1	376187	375959	382928	378358	1.05	cps
Bismuth	209-1	3612131	3640581	3681955	3644889	0.96	cps
Bismuth	209-2	2996886	2937239	2932057	2955394	1.22	cps
Bromine	81-1	425066	530803	597569	517813	16.80	cps
Bromine	81-2	131102	129502	134219	131608	1.82	cps
Cadmium	108-1	50518	50966	51484	50989	0.95	cps
Cadmium	106-1	74798	74406	75311	74838	0.61	cps
Cadmium	111-1	711104	721224	728933	720420	1.24	cps
Calcium	43-1	1341303	1375218	1351281	1355934	1.29	cps
Calcium	44-1	21114517	21442018	21486743	21347759	0.95	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4720252	4684153	4615829	4673411	1.13	cps
Cobalt	59-2	2184633	2159274	2156598	2166835	0.71	cps
Copper	63-2	18610138	18489651	18517251	18539014	0.34	cps
Dysprosium	156-1	109023	109799	109762	109528	0.40	cps
Dysprosium	156-2	99128	98801	98214	98714	0.47	cps
Erbium	164-1	105199	108179	108404	107261	1.67	cps
Erbium	164-2	75439	73911	74598	74650	1.02	cps
Gadolinium	160-1	113412	115888	117246	115515	1.68	cps
Gadolinium	160-2	87143	86962	83615	85906	2.31	cps
Holmium	165-1	5386727	5370161	5407697	5388195	0.35	cps
Holmium	165-2	3873582	3860677	3789534	3841264	1.18	cps
Indium	115-1	4082952	4058903	4107867	4083240	0.60	cps
Indium	115-2	1539597	1513487	1503012	1518699	1.24	cps
Iron	56-2	527951125	517123579	509822046	518298917	1.76	cps
Iron	57-2	12799596	12791009	12730088	12773565	0.30	cps
Iron	54-2	28470141	28069566	28578378	28372695	0.94	cps
Krypton	83-1	540	543	553	546	1.27	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-02	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:43:20	DataFile Name :	025SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	17878519	18115191	17552838	17848849	1.58	cps
Lead	207-1	15127079	15583800	15454702	15388527	1.53	cps
Lead	208-1	69633581	71516038	69450761	70200126	1.63	cps
Lithium	6-1	557281	560142	552633	556685	0.68	cps
Magnesium	24-2	26861048	26742339	26281156	26628181	1.15	cps
Manganese	55-2	15287515	15079535	14945999	15104350	1.14	cps
Molybdenum	94-1	4294730	4303349	4373183	4323754	1.00	cps
Molybdenum	95-1	4560632	4556403	4564336	4560457	0.09	cps
Molybdenum	96-1	5002640	5113963	5158882	5091828	1.58	cps
Molybdenum	97-1	2762057	2825605	2908403	2832022	2.59	cps
Molybdenum	98-1	7298750	7244222	7332391	7291788	0.61	cps
Neodymium	150-1	172465	176997	176887	175450	1.47	cps
Neodymium	150-2	106986	104920	104000	105302	1.45	cps
Nickel	60-2	929492	915184	920947	921874	0.78	cps
Phosphorus	31-2	79368	78926	78322	78872	0.67	cps
Potassium	39-2	11159657	11078648	10831680	11023328	1.55	cps
Rhodium	103-1	4067615	4023068	4080686	4057123	0.74	cps
Rhodium	103-2	2553604	2516971	2558254	2542943	0.89	cps
Scandium	45-1	2834289	2761781	2816478	2804183	1.35	cps
Scandium	45-2	291007	287082	284500	287530	1.14	cps
Selenium	82-1	57199	58081	57460	57580	0.79	cps
Selenium	77-2	7098	6698	6702	6833	3.37	cps
Selenium	78-2	22667	22083	21486	22079	2.68	cps
Silicon	28-1	6045675	24922053	9195800	13387843	75.53	cps
Silver	107-1	782344	798171	794869	791795	1.05	cps
Silver	109-1	749908	761630	755173	755570	0.78	cps
Sodium	23-2	39213206	38696042	37885053	38598100	1.73	cps
Strontium	86-1	1415787	1461480	1469710	1448992	2.00	cps
Strontium	88-1	12434083	13010288	12766094	12736821	2.27	cps
Sulfur	34-1	2466899	2544610	2516553	2509354	1.57	cps
Terbium	159-1	5492517	5383816	5499708	5458680	1.19	cps
Terbium	159-2	3602161	3750311	3602104	3651526	2.34	cps
Thallium	203-1	2385174	2355638	2397698	2379503	0.91	cps
Thallium	205-1	5712480	5729935	5797117	5746511	0.78	cps
Tin	118-1	2441179	2462909	2500232	2468107	1.21	cps
Titanium	47-1	1334499	1310516	1326194	1323736	0.92	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-02	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:43:20	DataFile Name :	025SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	7433476	7545975	7516535	7498662	0.78	cps
Vanadium	51-2	1655503	1665332	1618621	1646485	1.50	cps
Yttrium	89-1	8806308	8849377	8898120	8851268	0.52	cps
Yttrium	89-2	2451609	2415598	2421466	2429558	0.80	cps
Zinc	66-2	4359786	4417523	4466692	4414667	1.21	cps
Zirconium	90-1	4704014	4664752	4686802	4685189	0.42	cps
Zirconium	91-1	1030173	1045619	1032972	1036255	0.79	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-03	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:46:14	DataFile Name :	026SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	12381553	12079179	12369147	12276627	1.39	cps
Antimony	121-1	2360873	2353700	2341821	2352132	0.41	cps
Arsenic	75-2	325945	328306	326607	326953	0.37	cps
Barium	135-1	3648795	3676543	3687856	3671065	0.55	cps
Barium	137-1	6333759	6352203	6518433	6401465	1.59	cps
Beryllium	9-1	371210	375551	373904	373555	0.59	cps
Bismuth	209-1	3611402	3654088	3679790	3648427	0.95	cps
Bismuth	209-2	2902400	2883831	2873638	2886623	0.51	cps
Bromine	81-1	444416	555282	611721	537140	15.85	cps
Bromine	81-2	132346	133443	134452	133414	0.79	cps
Cadmium	108-1	50133	50708	49789	50210	0.93	cps
Cadmium	106-1	73505	73006	74105	73538	0.75	cps
Cadmium	111-1	713209	714981	719316	715835	0.44	cps
Calcium	43-1	1304606	1327454	1320713	1317591	0.89	cps
Calcium	44-1	21207600	21110073	20958351	21092008	0.60	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4616873	4513767	4624139	4584926	1.35	cps
Cobalt	59-2	2091623	2145204	2122133	2119653	1.27	cps
Copper	63-2	18262478	18017461	18256030	18178656	0.77	cps
Dysprosium	156-1	109231	110218	110897	110116	0.76	cps
Dysprosium	156-2	95794	98486	97399	97227	1.39	cps
Erbium	164-1	106771	107688	106828	107096	0.48	cps
Erbium	164-2	73871	74987	74665	74508	0.77	cps
Gadolinium	160-1	116326	116712	116541	116526	0.17	cps
Gadolinium	160-2	85982	85184	85462	85543	0.47	cps
Holmium	165-1	5437587	5407658	5403693	5416313	0.34	cps
Holmium	165-2	3819806	3874231	3762312	3818783	1.47	cps
Indium	115-1	4105409	4102209	4023562	4077060	1.14	cps
Indium	115-2	1505344	1513114	1504780	1507746	0.31	cps
Iron	56-2	522056272	506042499	518561792	515553521	1.63	cps
Iron	57-2	12554620	12568099	12574447	12565722	0.08	cps
Iron	54-2	28426631	28058674	28512980	28332762	0.85	cps
Krypton	83-1	560	487	630	559	12.82	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-03	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:46:14	DataFile Name :	026SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	17774471	17706769	17790534	17757258	0.25	cps
Lead	207-1	15243521	15216930	15404583	15288345	0.66	cps
Lead	208-1	69837715	71330233	71039090	70735679	1.12	cps
Lithium	6-1	560876	557162	554610	557549	0.57	cps
Magnesium	24-2	25835440	26448115	26620940	26301498	1.57	cps
Manganese	55-2	14795222	14779714	14942440	14839126	0.61	cps
Molybdenum	94-1	4281442	4253300	4271011	4268584	0.33	cps
Molybdenum	95-1	4485894	4431954	4489368	4469072	0.72	cps
Molybdenum	96-1	5070143	4984177	4989888	5014736	0.96	cps
Molybdenum	97-1	2797311	2771511	2786954	2785259	0.47	cps
Molybdenum	98-1	7094032	7149217	7120770	7121340	0.39	cps
Neodymium	150-1	173123	174453	176539	174705	0.99	cps
Neodymium	150-2	105229	105770	105605	105535	0.26	cps
Nickel	60-2	914140	907941	915271	912451	0.43	cps
Phosphorus	31-2	77338	78721	79365	78474	1.32	cps
Potassium	39-2	10979674	10746905	10781660	10836080	1.16	cps
Rhodium	103-1	3964714	4055386	4050298	4023466	1.27	cps
Rhodium	103-2	2616907	2613608	2531744	2587420	1.86	cps
Scandium	45-1	2745441	2680248	2728904	2718197	1.25	cps
Scandium	45-2	282588	283581	284586	283585	0.35	cps
Selenium	82-1	55583	57213	56225	56340	1.46	cps
Selenium	77-2	6912	7018	6902	6944	0.93	cps
Selenium	78-2	22100	22243	22010	22118	0.53	cps
Silicon	28-1	11389941	5894730	10550038	9278236	31.90	cps
Silver	107-1	781053	780474	788595	783374	0.58	cps
Silver	109-1	742005	742856	746765	743876	0.34	cps
Sodium	23-2	37508690	37325874	38053159	37629241	1.01	cps
Strontium	86-1	1421414	1423697	1451973	1432362	1.19	cps
Strontium	88-1	12455303	12479728	12308236	12414422	0.75	cps
Sulfur	34-1	2396641	2443099	2463527	2434422	1.41	cps
Terbium	159-1	5358374	5525170	5382295	5421946	1.66	cps
Terbium	159-2	3592359	3659205	3657797	3636454	1.05	cps
Thallium	203-1	2342011	2381332	2365273	2362872	0.84	cps
Thallium	205-1	5558502	5621116	5632578	5604065	0.71	cps
Tin	118-1	2437327	2435939	2454637	2442634	0.43	cps
Titanium	47-1	1267820	1274409	1263190	1268473	0.44	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-03	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:46:14	DataFile Name :	026SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	7360944	7616822	7502658	7493474	1.71	cps
Vanadium	51-2	1621690	1622911	1599704	1614768	0.81	cps
Yttrium	89-1	8882519	8761379	8718766	8787555	0.97	cps
Yttrium	89-2	2452065	2525897	2438257	2472073	1.91	cps
Zinc	66-2	4334393	4364242	4283452	4327362	0.94	cps
Zirconium	90-1	4578242	4543304	4594281	4571942	0.57	cps
Zirconium	91-1	1024200	1019779	1036357	1026779	0.84	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01A	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:49:06	DataFile Name :	027SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	12596350	12553454	12943064	12697623	1.68	cps
Antimony	121-1	2331626	2372448	2353740	2352604	0.87	cps
Arsenic	75-2	329641	328851	327969	328821	0.25	cps
Barium	135-1	3622152	3677298	3584363	3627938	1.29	cps
Barium	137-1	6481307	6317638	6397492	6398812	1.28	cps
Beryllium	9-1	366709	373314	379326	373117	1.69	cps
Bismuth	209-1	3537603	3688323	3631007	3618978	2.10	cps
Bismuth	209-2	2927000	2926042	2894283	2915775	0.64	cps
Bromine	81-1	486538	587279	644413	572743	13.96	cps
Bromine	81-2	138700	142422	142328	141150	1.50	cps
Cadmium	108-1	49126	49360	49451	49313	0.34	cps
Cadmium	106-1	72272	72624	72634	72510	0.28	cps
Cadmium	111-1	701519	715956	702256	706577	1.15	cps
Calcium	43-1	1324948	1394017	1354401	1357789	2.55	cps
Calcium	44-1	21610369	21700426	21871788	21727528	0.61	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4538711	4652579	4481210	4557500	1.91	cps
Cobalt	59-2	2131911	2144875	2144052	2140279	0.34	cps
Copper	63-2	18054783	18136502	18073375	18088220	0.24	cps
Dysprosium	156-1	114217	116928	117224	116123	1.43	cps
Dysprosium	156-2	99805	102797	101964	101522	1.52	cps
Erbium	164-1	110510	113446	114213	112723	1.73	cps
Erbium	164-2	78382	79070	78741	78731	0.44	cps
Gadolinium	160-1	121223	121412	123991	122208	1.27	cps
Gadolinium	160-2	88716	90172	89179	89355	0.83	cps
Holmium	165-1	5363566	5406591	5515173	5428443	1.44	cps
Holmium	165-2	3856502	3850230	3754343	3820359	1.50	cps
Indium	115-1	4053927	4098313	4007401	4053214	1.12	cps
Indium	115-2	1482512	1509164	1481423	1491033	1.05	cps
Iron	56-2	542420499	535597872	534404192	537474188	0.80	cps
Iron	57-2	13056486	13365743	13587104	13336445	2.00	cps
Iron	54-2	29505112	29133882	29167489	29268828	0.70	cps
Krypton	83-1	433	557	523	504	12.65	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01A	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:49:06	DataFile Name :	027SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	17865087	17751221	18204846	17940385	1.32	cps
Lead	207-1	15122735	15293556	15599100	15338464	1.57	cps
Lead	208-1	70386674	71569333	71208564	71054857	0.85	cps
Lithium	6-1	545611	561609	560589	555936	1.61	cps
Magnesium	24-2	26755001	27152066	26516005	26807691	1.20	cps
Manganese	55-2	15352085	15009873	14942780	15101579	1.45	cps
Molybdenum	94-1	4300411	4243309	4193538	4245753	1.26	cps
Molybdenum	95-1	4369344	4466488	4425529	4420454	1.10	cps
Molybdenum	96-1	4922681	5040782	4920629	4961364	1.39	cps
Molybdenum	97-1	2726919	2755296	2805927	2762714	1.45	cps
Molybdenum	98-1	6993620	6984516	7138058	7038731	1.22	cps
Neodymium	150-1	180278	181931	183685	181965	0.94	cps
Neodymium	150-2	108766	108427	108333	108509	0.21	cps
Nickel	60-2	909646	903046	910150	907614	0.44	cps
Phosphorus	31-2	82913	84093	83593	83533	0.71	cps
Potassium	39-2	11065124	11041072	10846702	10984299	1.09	cps
Rhodium	103-1	3935554	3998435	3992628	3975539	0.87	cps
Rhodium	103-2	2533919	2580133	2532744	2548932	1.06	cps
Scandium	45-1	2715044	2687773	2718338	2707052	0.62	cps
Scandium	45-2	282685	282141	284552	283126	0.45	cps
Selenium	82-1	55131	56273	56731	56045	1.47	cps
Selenium	77-2	6538	6948	6925	6804	3.39	cps
Selenium	78-2	21749	22110	21980	21946	0.83	cps
Silicon	28-1	7124354	6235629	5680565	6346850	11.47	cps
Silver	107-1	773228	781860	781995	779028	0.64	cps
Silver	109-1	734174	746008	743344	741176	0.84	cps
Sodium	23-2	38752146	38470902	38353294	38525447	0.53	cps
Strontium	86-1	1421473	1488336	1497302	1469037	2.82	cps
Strontium	88-1	12352204	12580428	12845506	12592713	1.96	cps
Sulfur	34-1	2558659	2503807	2628809	2563758	2.44	cps
Terbium	159-1	5341550	5428637	5479053	5416413	1.28	cps
Terbium	159-2	3648878	3562166	3592284	3601109	1.22	cps
Thallium	203-1	2372499	2370105	2411575	2384727	0.98	cps
Thallium	205-1	5568205	5736222	5775575	5693334	1.93	cps
Tin	118-1	2344248	2353641	2487888	2395259	3.35	cps
Titanium	47-1	1323490	1339925	1350125	1337847	1.00	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01A	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:49:06	DataFile Name :	027SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	7471798	7633680	7575169	7560216	1.08	cps
Vanadium	51-2	1607931	1622577	1597508	1609339	0.78	cps
Yttrium	89-1	8817197	8786566	8787707	8797157	0.20	cps
Yttrium	89-2	2450729	2494972	2459450	2468384	0.95	cps
Zinc	66-2	4236709	4257749	4246756	4247071	0.25	cps
Zirconium	90-1	4588994	4591838	4716099	4632310	1.57	cps
Zirconium	91-1	1001344	1029318	1030800	1020487	1.63	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-04	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-119133-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:51:59	DataFile Name :	028SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	23879638	23460110	23383957	23574569	1.13	cps
Antimony	121-1	11833	12088	11863	11928	1.17	cps
Arsenic	75-2	270455	267551	265379	267795	0.95	cps
Barium	135-1	4065660	4125450	4111870	4100993	0.76	cps
Barium	137-1	7001905	7222858	7170107	7131623	1.62	cps
Beryllium	9-1	8359	8522	8402	8428	1.00	cps
Bismuth	209-1	3854008	3927849	3890824	3890894	0.95	cps
Bismuth	209-2	3202592	3029728	3098740	3110353	2.80	cps
Bromine	81-1	904016	1128492	1244809	1092439	15.86	cps
Bromine	81-2	271385	274841	279109	275112	1.41	cps
Cadmium	108-1	3154	3107	3020	3094	2.19	cps
Cadmium	106-1	6905	7599	7382	7295	4.86	cps
Cadmium	111-1	36770	37291	36936	36999	0.72	cps
Calcium	43-1	1112317	1126349	1126597	1121754	0.73	cps
Calcium	44-1	17363413	17492495	17414648	17423519	0.37	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4211985	4112073	4123395	4149151	1.32	cps
Cobalt	59-2	549521	543867	544020	545803	0.59	cps
Copper	63-2	10986146	10935477	10892178	10937933	0.43	cps
Dysprosium	156-1	216876	223563	224667	221702	1.90	cps
Dysprosium	156-2	198677	199752	196691	198373	0.78	cps
Erbium	164-1	217931	224285	219930	220715	1.47	cps
Erbium	164-2	155830	157023	155328	156060	0.56	cps
Gadolinium	160-1	234247	237895	236867	236336	0.80	cps
Gadolinium	160-2	175372	178116	173404	175631	1.35	cps
Holmium	165-1	5428075	5612586	5391302	5477321	2.16	cps
Holmium	165-2	3884811	3954086	3883362	3907419	1.03	cps
Indium	115-1	4068555	4098095	4135885	4100845	0.82	cps
Indium	115-2	1546024	1542483	1532086	1540197	0.47	cps
Iron	56-2	1071850144	1084709584	1083917157	1080158962	0.67	cps
Iron	57-2	26839286	26670303	26520565	26676718	0.60	cps
Iron	54-2	60175961	59432682	58937064	59515236	1.05	cps
Krypton	83-1	813	783	737	778	4.97	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-04	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-119133-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:51:59	DataFile Name :	028SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	29375803	29541703	29830683	29582730	0.78	cps
Lead	207-1	24979519	25066829	25174560	25073636	0.39	cps
Lead	208-1	116032306	118474596	116024754	116843885	1.21	cps
Lithium	6-1	581295	580606	583711	581871	0.28	cps
Magnesium	24-2	23191912	22813845	23137595	23047784	0.89	cps
Manganese	55-2	10008403	10160465	9938339	10035735	1.13	cps
Molybdenum	94-1	408729	417859	413589	413393	1.11	cps
Molybdenum	95-1	46199	46835	47507	46847	1.40	cps
Molybdenum	96-1	118156	121647	119833	119879	1.46	cps
Molybdenum	97-1	29690	29503	29189	29461	0.86	cps
Molybdenum	98-1	73350	75048	74965	74454	1.29	cps
Neodymium	150-1	338711	346436	347809	344319	1.42	cps
Neodymium	150-2	213415	209373	206566	209785	1.64	cps
Nickel	60-2	647939	648393	643473	646602	0.42	cps
Phosphorus	31-2	126484	125570	125594	125883	0.41	cps
Potassium	39-2	10037746	9675662	9727261	9813556	2.00	cps
Rhodium	103-1	3856461	3995418	3918483	3923454	1.77	cps
Rhodium	103-2	2582273	2583782	2555061	2573705	0.63	cps
Scandium	45-1	2935190	2867475	2972734	2925133	1.82	cps
Scandium	45-2	317806	314889	314714	315803	0.55	cps
Selenium	82-1	9015	8922	9054	8997	0.75	cps
Selenium	77-2	1963	1953	2037	1985	2.29	cps
Selenium	78-2	4244	4061	4091	4132	2.38	cps
Silicon	28-1	7751518	8314795	31590746	15885686	85.64	cps
Silver	107-1	318935	324553	322743	322077	0.89	cps
Silver	109-1	300847	311603	310129	307527	1.90	cps
Sodium	23-2	17940507	17686905	17718236	17781883	0.78	cps
Strontium	86-1	1196612	1215600	1209452	1207221	0.80	cps
Strontium	88-1	10507810	10656620	10380907	10515112	1.31	cps
Sulfur	34-1	4644829	4746045	4764634	4718503	1.37	cps
Terbium	159-1	5431698	5456615	5405635	5431316	0.47	cps
Terbium	159-2	3646174	3704233	3664820	3671742	0.81	cps
Thallium	203-1	29131	29980	29308	29473	1.52	cps
Thallium	205-1	68981	70220	68273	69158	1.42	cps
Tin	118-1	1813690	1862218	1882164	1852691	1.90	cps
Titanium	47-1	1633619	1690987	1714569	1679725	2.48	cps

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-04	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-119133-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:51:59	DataFile Name :	028SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	400535	416150	414540	410408	2.09	cps
Vanadium	51-2	1168614	1166959	1156172	1163915	0.58	cps
Yttrium	89-1	10044656	10131155	9960277	10045363	0.85	cps
Yttrium	89-2	2909304	2886090	2905082	2900158	0.43	cps
Zinc	66-2	3960705	3948886	3887760	3932450	1.00	cps
Zirconium	90-1	1040434	1061043	1046100	1049192	1.01	cps
Zirconium	91-1	232598	239688	239551	237279	1.71	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:54:59	DataFile Name :	029CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7779160	7654106	7545012	7659426	1.53	cps
Antimony	121-1	2595035	2625450	2644212	2621566	0.95	cps
Arsenic	75-2	278913	279533	276523	278323	0.57	cps
Barium	135-1	3094700	3074211	3162098	3110337	1.48	cps
Barium	137-1	5457282	5471193	5406097	5444858	0.63	cps
Beryllium	9-1	417760	425301	428163	423742	1.27	cps
Bismuth	209-1	3206442	3205693	3215475	3209203	0.17	cps
Bismuth	209-2	2629409	2562727	2603156	2598431	1.29	cps
Bromine	81-1	107643	94970	84574	95729	12.07	cps
Bromine	81-2	12369	11334	10567	11423	7.91	cps
Cadmium	108-1	51882	52752	52682	52439	0.92	cps
Cadmium	106-1	74098	73424	75733	74418	1.60	cps
Cadmium	111-1	725526	730821	742354	732900	1.17	cps
Calcium	43-1	3469422	3443108	3566179	3492903	1.86	cps
Calcium	44-1	56413202	55180136	55487033	55693457	1.15	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1368468	1386494	1375645	1376869	0.66	cps
Cobalt	59-2	2056621	2060406	2035139	2050722	0.66	cps
Copper	63-2	15847284	15569459	15809736	15742160	0.96	cps
Dysprosium	156-1	173	237	220	210	15.63	cps
Dysprosium	156-2	317	333	293	314	6.39	cps
Erbium	164-1	353	330	367	350	5.30	cps
Erbium	164-2	250	197	240	229	12.38	cps
Gadolinium	160-1	220	227	223	223	1.49	cps
Gadolinium	160-2	387	380	413	393	4.48	cps
Holmium	165-1	5145104	5028953	5147620	5107225	1.33	cps
Holmium	165-2	3639870	3580317	3589067	3603085	0.89	cps
Indium	115-1	3843614	3808882	3882191	3844896	0.95	cps
Indium	115-2	1411369	1408161	1400853	1406794	0.38	cps
Iron	56-2	303768042	303888849	303091242	303582711	0.14	cps
Iron	57-2	7548606	7433831	7442526	7474987	0.85	cps
Iron	54-2	16790071	16949458	17083925	16941151	0.87	cps
Krypton	83-1	463	347	370	393	15.70	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:54:59	DataFile Name :	029CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	10779434	10801723	11131267	10904142	1.81	cps
Lead	207-1	9294578	9551009	9567799	9471129	1.62	cps
Lead	208-1	43067223	43742626	43745273	43518374	0.90	cps
Lithium	6-1	516541	514665	516883	516029	0.23	cps
Magnesium	24-2	68479807	69347367	64690546	67505907	3.67	cps
Manganese	55-2	11365845	11453630	11218317	11345931	1.05	cps
Molybdenum	94-1	9303635	9507783	9437982	9416467	1.10	cps
Molybdenum	95-1	13269557	13602733	13437669	13436653	1.24	cps
Molybdenum	96-1	14339657	14662382	14857389	14619809	1.79	cps
Molybdenum	97-1	8185206	8222986	8607372	8338521	2.80	cps
Molybdenum	98-1	21335046	21423971	21567685	21442234	0.55	cps
Neodymium	150-1	157	220	223	200	18.78	cps
Neodymium	150-2	80	43	80	68	31.24	cps
Nickel	60-2	534153	529282	537832	533756	0.80	cps
Phosphorus	31-2	91176	92581	90646	91468	1.09	cps
Potassium	39-2	35580104	35697324	35294414	35523947	0.58	cps
Rhodium	103-1	3627604	3730225	3714627	3690819	1.50	cps
Rhodium	103-2	2347363	2325046	2347170	2339860	0.55	cps
Scandium	45-1	2361737	2352656	2292060	2335484	1.62	cps
Scandium	45-2	245126	246806	243866	245266	0.60	cps
Selenium	82-1	59295	59985	60738	60006	1.20	cps
Selenium	77-2	6798	7025	6925	6916	1.64	cps
Selenium	78-2	24083	23462	22838	23461	2.65	cps
Silicon	28-1	25367236	26327075	26323169	26005827	2.13	cps
Silver	107-1	3498060	3494264	3484075	3492133	0.21	cps
Silver	109-1	3396735	3419779	3385148	3400554	0.52	cps
Sodium	23-2	103361478	106504955	103791835	104552756	1.63	cps
Strontium	86-1	849672	848544	872197	856804	1.56	cps
Strontium	88-1	7307005	7447077	7655171	7469751	2.35	cps
Sulfur	34-1	383441	384232	383230	383634	0.14	cps
Terbium	159-1	4944003	4970741	4979904	4964883	0.38	cps
Terbium	159-2	3390375	3351413	3409377	3383722	0.87	cps
Thallium	203-1	2648068	2775581	2754570	2726073	2.51	cps
Thallium	205-1	6491587	6476624	6422288	6463500	0.56	cps
Tin	118-1	2180820	2213654	2276873	2223782	2.20	cps
Titanium	47-1	3408127	3455731	3468539	3444132	0.92	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV02	Instrumnet Name :	P7
Client Sample ID :	CCV02	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 16:54:59	DataFile Name :	029CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	8584801	8765453	8683484	8677913	1.04	cps
Vanadium	51-2	1145067	1151738	1134907	1143904	0.74	cps
Yttrium	89-1	6744333	6747871	6897164	6796456	1.28	cps
Yttrium	89-2	1885880	1971850	1976288	1944673	2.62	cps
Zinc	66-2	2987217	2961135	3050458	2999603	1.53	cps
Zirconium	90-1	4607234	4693568	4840183	4713662	2.50	cps
Zirconium	91-1	1031435	1033043	1039077	1034519	0.39	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:00:18	DataFile Name :	030CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	560	580	510	550	6.56	cps
Antimony	121-1	574	510	647	577	11.83	cps
Arsenic	75-2	17	17	15	16	9.31	cps
Barium	135-1	77	53	47	59	26.75	cps
Barium	137-1	97	120	107	108	10.86	cps
Beryllium	9-1	13	13	10	12	15.73	cps
Bismuth	209-1	3278473	3218368	3283842	3260227	1.11	cps
Bismuth	209-2	2718900	2734301	2665175	2706126	1.34	cps
Bromine	81-1	23529	22127	21105	22254	5.47	cps
Bromine	81-2	2430	2404	2307	2380	2.73	cps
Cadmium	108-1	20	10	0	10	100.00	cps
Cadmium	106-1	1500	1367	1490	1452	5.11	cps
Cadmium	111-1	1083	993	1080	1052	4.84	cps
Calcium	43-1	183	123	183	163	21.21	cps
Calcium	44-1	12375	12859	12836	12690	2.15	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1477	1430	1523	1477	3.16	cps
Cobalt	59-2	80	70	90	80	12.50	cps
Copper	63-2	1443	1470	1290	1401	6.93	cps
Dysprosium	156-1	7	13	7	9	43.25	cps
Dysprosium	156-2	3	3	3	3	0.00	cps
Erbium	164-1	13	27	30	23	37.81	cps
Erbium	164-2	13	13	10	12	15.73	cps
Gadolinium	160-1	17	13	10	13	25.01	cps
Gadolinium	160-2	283	220	243	249	12.87	cps
Holmium	165-1	4903652	4891604	4930187	4908481	0.40	cps
Holmium	165-2	3509555	3474193	3421923	3468557	1.27	cps
Indium	115-1	3860427	3824752	3831755	3838978	0.49	cps
Indium	115-2	1440830	1430037	1411927	1427598	1.02	cps
Iron	56-2	59768	60023	58945	59579	0.95	cps
Iron	57-2	2284	2197	2244	2241	1.94	cps
Iron	54-2	4251	4114	4304	4223	2.32	cps
Krypton	83-1	337	360	377	358	5.62	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:00:18	DataFile Name :	030CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	680	730	790	733	7.51	cps
Lead	207-1	650	593	700	648	8.24	cps
Lead	208-1	2810	2860	2903	2858	1.63	cps
Lithium	6-1	504753	494968	496996	498906	1.04	cps
Magnesium	24-2	553	670	547	590	11.76	cps
Manganese	55-2	903	903	950	919	2.93	cps
Molybdenum	94-1	363	383	400	382	4.80	cps
Molybdenum	95-1	280	377	303	320	15.76	cps
Molybdenum	96-1	460	397	503	453	11.83	cps
Molybdenum	97-1	243	167	167	192	23.03	cps
Molybdenum	98-1	550	573	460	528	11.34	cps
Neodymium	150-1	0	13	10	8	89.21	cps
Neodymium	150-2	0	0	3	1	173.21	cps
Nickel	60-2	377	403	447	409	8.64	cps
Phosphorus	31-2	253	280	260	264	5.25	cps
Potassium	39-2	57796	56591	56652	57013	1.19	cps
Rhodium	103-1	3877217	3814458	3814757	3835477	0.94	cps
Rhodium	103-2	2465230	2477933	2399612	2447592	1.72	cps
Scandium	45-1	2286426	2314286	2281073	2293928	0.78	cps
Scandium	45-2	238956	239784	237088	238609	0.58	cps
Selenium	82-1	124	65	64	84	40.77	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	317	343	370	343	7.77	cps
Silicon	28-1	542832	531147	536907	536962	1.09	cps
Silver	107-1	170	153	130	151	13.30	cps
Silver	109-1	130	183	117	143	24.61	cps
Sodium	23-2	45356	45557	44380	45098	1.40	cps
Strontium	86-1	663	613	627	634	4.08	cps
Strontium	88-1	180	200	250	210	17.17	cps
Sulfur	34-1	151926	152273	151997	152065	0.12	cps
Terbium	159-1	4842626	4858023	4848541	4849730	0.16	cps
Terbium	159-2	3316901	3329275	3185969	3277381	2.42	cps
Thallium	203-1	597	567	570	578	2.85	cps
Thallium	205-1	1417	1393	1330	1380	3.25	cps
Tin	118-1	2907	2827	2867	2867	1.40	cps
Titanium	47-1	83	50	80	71	25.82	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB02	Instrumnet Name :	P7
Client Sample ID :	CCB02	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:00:18	DataFile Name :	030CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	77	107	47	77	39.13	cps
Vanadium	51-2	27	37	17	27	37.50	cps
Yttrium	89-1	6760325	6753690	6722896	6745637	0.30	cps
Yttrium	89-2	1924353	1893314	1907945	1908537	0.81	cps
Zinc	66-2	1503	1533	1517	1518	0.99	cps
Zirconium	90-1	507	530	540	526	3.26	cps
Zirconium	91-1	87	123	83	98	22.70	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-05	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-094119-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:03:43	DataFile Name :	031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	17522703	17503419	17818241	17614788	1.00	cps
Antimony	121-1	16005	16076	16576	16219	1.92	cps
Arsenic	75-2	174831	176945	178125	176633	0.94	cps
Barium	135-1	2875092	2926295	2903098	2901495	0.88	cps
Barium	137-1	4899963	4996657	5037174	4977931	1.42	cps
Beryllium	9-1	7105	6868	7185	7053	2.34	cps
Bismuth	209-1	3616668	3695170	3774214	3695351	2.13	cps
Bismuth	209-2	3088855	3007584	3079406	3058615	1.45	cps
Bromine	81-1	606555	792099	884716	761123	18.61	cps
Bromine	81-2	193321	195696	196377	195131	0.82	cps
Cadmium	108-1	9406	9527	9600	9511	1.03	cps
Cadmium	106-1	15225	15385	15538	15383	1.02	cps
Cadmium	111-1	125081	128601	129333	127672	1.78	cps
Calcium	43-1	874195	880782	887109	880695	0.73	cps
Calcium	44-1	13474108	13507149	13671257	13550838	0.78	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	8734380	8727993	8796952	8753108	0.44	cps
Cobalt	59-2	430609	428650	434580	431280	0.70	cps
Copper	63-2	12378254	12313697	12390520	12360824	0.33	cps
Dysprosium	156-1	161758	164064	165854	163892	1.25	cps
Dysprosium	156-2	147513	148463	150915	148964	1.18	cps
Erbium	164-1	161089	163061	164442	162864	1.03	cps
Erbium	164-2	113337	114552	114858	114249	0.70	cps
Gadolinium	160-1	172992	172981	175270	173747	0.76	cps
Gadolinium	160-2	131431	130328	132020	131259	0.65	cps
Holmium	165-1	5326698	5322733	5371763	5340398	0.51	cps
Holmium	165-2	3827603	3859057	3841423	3842694	0.41	cps
Indium	115-1	4057616	4005038	4001280	4021311	0.78	cps
Indium	115-2	1503754	1498715	1519170	1507213	0.71	cps
Iron	56-2	713703056	699804203	725801243	713102834	1.82	cps
Iron	57-2	17657101	17826173	17628702	17703992	0.60	cps
Iron	54-2	39868677	38893294	38894817	39218929	1.43	cps
Krypton	83-1	590	550	653	598	8.72	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-05	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-094119-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:03:43	DataFile Name :	031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	20159347	20375026	20550514	20361629	0.96	cps
Lead	207-1	17195111	17532011	17333149	17353424	0.98	cps
Lead	208-1	80616161	81095774	80354240	80688725	0.47	cps
Lithium	6-1	564762	564586	554857	561401	1.01	cps
Magnesium	24-2	16920569	17083206	16852694	16952156	0.70	cps
Manganese	55-2	6228982	6078654	6117996	6141877	1.27	cps
Molybdenum	94-1	352181	360133	360558	357624	1.32	cps
Molybdenum	95-1	83044	83279	84033	83452	0.62	cps
Molybdenum	96-1	143409	144250	146097	144586	0.95	cps
Molybdenum	97-1	52390	52323	53313	52676	1.05	cps
Molybdenum	98-1	133494	133625	135617	134245	0.89	cps
Neodymium	150-1	259529	264817	266555	263634	1.39	cps
Neodymium	150-2	161986	160274	162013	161424	0.62	cps
Nickel	60-2	828154	837182	839111	834816	0.70	cps
Phosphorus	31-2	137064	136025	138399	137163	0.87	cps
Potassium	39-2	7133016	7152182	6988854	7091351	1.26	cps
Rhodium	103-1	3994681	3886568	3906201	3929150	1.47	cps
Rhodium	103-2	2560570	2527498	2543657	2543908	0.65	cps
Scandium	45-1	2766826	2760169	2794181	2773726	0.65	cps
Scandium	45-2	296708	301069	298218	298665	0.74	cps
Selenium	82-1	4006	4247	4084	4112	2.99	cps
Selenium	77-2	1097	1213	1107	1139	5.68	cps
Selenium	78-2	2184	2224	2224	2210	1.05	cps
Silicon	28-1	5796914	6012319	6041209	5950147	2.24	cps
Silver	107-1	375170	381576	384672	380473	1.27	cps
Silver	109-1	353612	361751	363342	359568	1.45	cps
Sodium	23-2	18074414	17936551	18303400	18104788	1.02	cps
Strontium	86-1	991520	1004222	999370	998370	0.64	cps
Strontium	88-1	8706913	8938223	8718353	8787830	1.48	cps
Sulfur	34-1	3284067	3276278	3421171	3327172	2.45	cps
Terbium	159-1	5314135	5246331	5285463	5281976	0.64	cps
Terbium	159-2	3609015	3618065	3669758	3632279	0.90	cps
Thallium	203-1	19681	19988	20155	19941	1.21	cps
Thallium	205-1	47851	48085	48239	48058	0.41	cps
Tin	118-1	2016322	2118032	2088542	2074299	2.52	cps
Titanium	47-1	1828550	1834019	1832376	1831648	0.15	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-05	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-094119-202	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:03:43	DataFile Name :	031SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	336098	347855	346931	343628	1.90	cps
Vanadium	51-2	1300775	1311534	1304768	1305692	0.42	cps
Yttrium	89-1	9200131	9548000	9337541	9361891	1.87	cps
Yttrium	89-2	2660209	2682152	2691688	2678016	0.60	cps
Zinc	66-2	3767280	3646009	3717630	3710306	1.64	cps
Zirconium	90-1	835308	851674	845888	844290	0.98	cps
Zirconium	91-1	186007	189265	189146	188139	0.98	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3422-01	Instrumnet Name :	P7
Client Sample ID :	PR132-S15-000008-2025	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:06:47	DataFile Name :	032SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	12047231	12049383	11929926	12008847	0.57	cps
Antimony	121-1	7678	8004	7718	7800	2.28	cps
Arsenic	75-2	141378	140652	138923	140318	0.90	cps
Barium	135-1	2327907	2272118	2324166	2308064	1.35	cps
Barium	137-1	3856555	4128600	4070322	4018492	3.56	cps
Beryllium	9-1	4411	4511	4371	4431	1.63	cps
Bismuth	209-1	3671195	3729427	3789220	3729947	1.58	cps
Bismuth	209-2	3051747	3027896	2981673	3020439	1.18	cps
Bromine	81-1	274421	326387	361123	320644	13.61	cps
Bromine	81-2	76487	76530	77203	76740	0.52	cps
Cadmium	108-1	5131	5114	5248	5164	1.41	cps
Cadmium	106-1	9503	9847	9670	9673	1.78	cps
Cadmium	111-1	74620	76105	76534	75753	1.33	cps
Calcium	43-1	346998	355030	354501	352177	1.28	cps
Calcium	44-1	5396932	5360339	5581978	5446417	2.18	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	4048396	3962877	3949103	3986792	1.35	cps
Cobalt	59-2	305080	304271	300818	303390	0.75	cps
Copper	63-2	6007150	5829861	5780377	5872463	2.03	cps
Dysprosium	156-1	119271	121312	122243	120942	1.26	cps
Dysprosium	156-2	110434	110145	108942	109840	0.72	cps
Erbium	164-1	115294	116058	119257	116870	1.80	cps
Erbium	164-2	83817	81161	82194	82390	1.62	cps
Gadolinium	160-1	125921	127306	129381	127536	1.37	cps
Gadolinium	160-2	95829	95833	95047	95569	0.47	cps
Holmium	165-1	5411738	5352128	5439131	5400999	0.82	cps
Holmium	165-2	3944592	3896858	3901567	3914339	0.67	cps
Indium	115-1	4179433	4228524	4115449	4174469	1.36	cps
Indium	115-2	1569500	1551306	1546616	1555807	0.78	cps
Iron	56-2	478405553	465386860	466881046	470224486	1.52	cps
Iron	57-2	11325462	11412529	11355164	11364385	0.39	cps
Iron	54-2	26052582	25285587	25812917	25717029	1.53	cps
Krypton	83-1	670	583	527	593	12.17	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3422-01	Instrumnet Name :	P7
Client Sample ID :	PR132-S15-000008-2025	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:06:47	DataFile Name :	032SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	16101387	16538594	16368975	16336319	1.35	cps
Lead	207-1	14181087	14128576	14069368	14126344	0.40	cps
Lead	208-1	64362460	64459660	64798702	64540274	0.35	cps
Lithium	6-1	561141	565726	559846	562238	0.55	cps
Magnesium	24-2	12048112	11727693	11773277	11849694	1.46	cps
Manganese	55-2	5947532	5878211	5859174	5894972	0.79	cps
Molybdenum	94-1	219901	220615	219570	220029	0.24	cps
Molybdenum	95-1	39530	39717	39473	39573	0.32	cps
Molybdenum	96-1	77434	78808	78244	78162	0.88	cps
Molybdenum	97-1	25452	25506	25102	25353	0.87	cps
Molybdenum	98-1	64093	65165	65131	64796	0.94	cps
Neodymium	150-1	192304	197711	197180	195732	1.52	cps
Neodymium	150-2	119478	120134	116715	118776	1.53	cps
Nickel	60-2	366089	363118	358293	362500	1.09	cps
Phosphorus	31-2	41603	41356	41934	41631	0.70	cps
Potassium	39-2	5161158	5089827	5230263	5160416	1.36	cps
Rhodium	103-1	4052491	4061194	4053211	4055632	0.12	cps
Rhodium	103-2	2653909	2612064	2571904	2612626	1.57	cps
Scandium	45-1	2733697	2715437	2760996	2736710	0.84	cps
Scandium	45-2	296527	290375	293871	293591	1.05	cps
Selenium	82-1	2071	2129	2204	2135	3.13	cps
Selenium	77-2	830	750	787	789	5.08	cps
Selenium	78-2	1480	1517	1537	1511	1.90	cps
Silicon	28-1	7070373	8075792	10295584	8480583	19.46	cps
Silver	107-1	230565	235076	235009	233550	1.11	cps
Silver	109-1	219520	224374	226535	223477	1.61	cps
Sodium	23-2	6634645	6710860	6550445	6631983	1.21	cps
Strontium	86-1	429342	441491	436005	435613	1.40	cps
Strontium	88-1	3826495	3842062	3837264	3835274	0.21	cps
Sulfur	34-1	2053210	2095317	2071114	2073214	1.02	cps
Terbium	159-1	5387084	5578309	5375404	5446932	2.09	cps
Terbium	159-2	3690713	3658079	3666059	3671617	0.46	cps
Thallium	203-1	14294	14444	14318	14352	0.56	cps
Thallium	205-1	34140	33879	34791	34270	1.37	cps
Tin	118-1	660894	664950	672119	665988	0.85	cps
Titanium	47-1	1340688	1320255	1302006	1320983	1.46	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3422-01	Instrumnet Name :	P7
Client Sample ID :	PR132-S15-000008-2025	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:06:47	DataFile Name :	032SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	193311	201390	203285	199329	2.66	cps
Vanadium	51-2	620629	612030	621086	617915	0.83	cps
Yttrium	89-1	8861164	8945527	9070156	8958949	1.17	cps
Yttrium	89-2	2581976	2555616	2541987	2559860	0.79	cps
Zinc	66-2	1882410	1886427	1856976	1875271	0.85	cps
Zirconium	90-1	531299	542045	542183	538509	1.16	cps
Zirconium	91-1	120346	120191	118474	119670	0.87	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-01	Instrumnet Name :	P7
Client Sample ID :	PR132-DP3-20251021	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:09:54	DataFile Name :	033SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	18037695	17807768	17755352	17866938	0.84	cps
Antimony	121-1	9739	9571	9166	9492	3.10	cps
Arsenic	75-2	119055	119159	119306	119173	0.11	cps
Barium	135-1	3186125	3229792	3170500	3195472	0.96	cps
Barium	137-1	5534299	5557606	5468982	5520296	0.83	cps
Beryllium	9-1	6812	7022	6698	6844	2.40	cps
Bismuth	209-1	3943395	3895299	3894674	3911123	0.71	cps
Bismuth	209-2	3190521	3244861	3184069	3206484	1.04	cps
Bromine	81-1	921760	1161387	1270758	1117968	15.97	cps
Bromine	81-2	275526	277410	280093	277676	0.83	cps
Cadmium	108-1	14584	14324	14794	14567	1.62	cps
Cadmium	106-1	22491	22584	22528	22534	0.21	cps
Cadmium	111-1	189728	191756	189528	190337	0.65	cps
Calcium	43-1	918710	930435	925906	925017	0.64	cps
Calcium	44-1	14047631	14163746	14415089	14208822	1.32	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	9682711	9990577	9701343	9791544	1.76	cps
Cobalt	59-2	480598	483292	483069	482320	0.31	cps
Copper	63-2	11992817	11998497	12176484	12055932	0.87	cps
Dysprosium	156-1	167757	167368	167345	167490	0.14	cps
Dysprosium	156-2	149083	149070	149080	149078	0.00	cps
Erbium	164-1	161400	163822	167109	164110	1.75	cps
Erbium	164-2	116172	115800	116630	116200	0.36	cps
Gadolinium	160-1	176286	177049	179806	177714	1.04	cps
Gadolinium	160-2	131996	130485	132228	131570	0.72	cps
Holmium	165-1	5606028	5439379	5436577	5493995	1.77	cps
Holmium	165-2	3879740	3923470	3873430	3892213	0.70	cps
Indium	115-1	4065489	4175517	4210026	4150344	1.82	cps
Indium	115-2	1558443	1552062	1538534	1549680	0.66	cps
Iron	56-2	721756843	734383962	742292576	732811127	1.41	cps
Iron	57-2	18417391	17993897	17993881	18135057	1.35	cps
Iron	54-2	40014190	40039964	40284661	40112938	0.37	cps
Krypton	83-1	637	633	733	668	8.51	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-01	Instrumnet Name :	P7
Client Sample ID :	PR132-DP3-20251021	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:09:54	DataFile Name :	033SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	17121481	17416746	17176941	17238389	0.91	cps
Lead	207-1	14610145	14562272	14973175	14715197	1.53	cps
Lead	208-1	67749880	68279271	67975900	68001684	0.39	cps
Lithium	6-1	572617	575705	570778	573033	0.43	cps
Magnesium	24-2	19322327	19552136	19125896	19333453	1.10	cps
Manganese	55-2	6569182	6814848	6688354	6690795	1.84	cps
Molybdenum	94-1	428629	433606	430244	430827	0.59	cps
Molybdenum	95-1	107445	109063	107888	108132	0.77	cps
Molybdenum	96-1	181499	182173	182370	182014	0.25	cps
Molybdenum	97-1	66219	68854	67529	67534	1.95	cps
Molybdenum	98-1	171424	174499	173893	173272	0.94	cps
Neodymium	150-1	266513	269205	263701	266473	1.03	cps
Neodymium	150-2	162171	159835	160691	160899	0.73	cps
Nickel	60-2	760820	765409	752267	759499	0.88	cps
Phosphorus	31-2	141978	140983	142827	141929	0.65	cps
Potassium	39-2	7547941	7558671	7657887	7588166	0.80	cps
Rhodium	103-1	4102863	4072861	3960713	4045479	1.85	cps
Rhodium	103-2	2578624	2647295	2546885	2590934	1.98	cps
Scandium	45-1	2817445	2919424	2853629	2863499	1.81	cps
Scandium	45-2	302066	304490	302242	302933	0.45	cps
Selenium	82-1	3282	3271	3050	3201	4.09	cps
Selenium	77-2	1137	1040	1057	1078	4.79	cps
Selenium	78-2	1863	1763	1763	1797	3.21	cps
Silicon	28-1	6102710	17258273	7323534	10228172	59.82	cps
Silver	107-1	273023	270664	274096	272594	0.64	cps
Silver	109-1	257685	261412	256754	258617	0.95	cps
Sodium	23-2	36415616	36458487	36165568	36346557	0.44	cps
Strontium	86-1	1135565	1151147	1142677	1143130	0.68	cps
Strontium	88-1	10177577	10020227	9894935	10030913	1.41	cps
Sulfur	34-1	4006669	4016702	4025889	4016420	0.24	cps
Terbium	159-1	5438289	5410780	5519086	5456052	1.03	cps
Terbium	159-2	3750687	3701961	3647169	3699939	1.40	cps
Thallium	203-1	17398	16483	16894	16925	2.71	cps
Thallium	205-1	39792	40948	39925	40222	1.57	cps
Tin	118-1	1235973	1256742	1239587	1244101	0.89	cps
Titanium	47-1	1996370	1920487	1997546	1971468	2.24	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-01	Instrumnet Name :	P7
Client Sample ID :	PR132-DP3-20251021	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:09:54	DataFile Name :	033SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	302419	308674	305109	305401	1.03	cps
Vanadium	51-2	1154486	1143859	1152133	1150159	0.49	cps
Yttrium	89-1	9633064	9657728	9535447	9608746	0.67	cps
Yttrium	89-2	2721114	2715065	2694688	2710289	0.51	cps
Zinc	66-2	4015878	4013986	4000825	4010229	0.20	cps
Zirconium	90-1	995482	1006435	1000124	1000680	0.55	cps
Zirconium	91-1	221634	222987	224557	223059	0.66	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-02	Instrumnet Name :	P7
Client Sample ID :	PR132-S11-010080-2025	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:12:56	DataFile Name :	034SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	20588577	19900868	19826977	20105474	2.09	cps
Antimony	121-1	7570	7959	7636	7721	2.70	cps
Arsenic	75-2	109603	108965	108456	109008	0.53	cps
Barium	135-1	2199813	2245399	2234919	2226711	1.07	cps
Barium	137-1	3855431	3833487	3847324	3845414	0.29	cps
Beryllium	9-1	8636	8706	8776	8706	0.80	cps
Bismuth	209-1	3985519	3903041	3887099	3925219	1.35	cps
Bismuth	209-2	3194767	3221011	3237785	3217854	0.67	cps
Bromine	81-1	978184	1204121	1315422	1165909	14.74	cps
Bromine	81-2	281947	285030	284279	283752	0.57	cps
Cadmium	108-1	11144	10667	11128	10980	2.47	cps
Cadmium	106-1	17878	17861	17507	17749	1.18	cps
Cadmium	111-1	133892	134251	133660	133934	0.22	cps
Calcium	43-1	1170298	1175657	1162491	1169482	0.57	cps
Calcium	44-1	17666951	18247686	18256386	18057008	1.87	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	7639442	7504474	7558843	7567586	0.90	cps
Cobalt	59-2	565165	563197	564416	564259	0.18	cps
Copper	63-2	9847156	9888451	9939817	9891808	0.47	cps
Dysprosium	156-1	186235	186293	188754	187094	0.77	cps
Dysprosium	156-2	168833	169534	167427	168598	0.64	cps
Erbium	164-1	186780	186671	186912	186788	0.06	cps
Erbium	164-2	132180	130908	130167	131085	0.78	cps
Gadolinium	160-1	200465	198426	201204	200032	0.72	cps
Gadolinium	160-2	146859	147307	146663	146943	0.22	cps
Holmium	165-1	5614530	5655229	5579568	5616442	0.67	cps
Holmium	165-2	3999417	4065375	3998102	4020965	0.96	cps
Indium	115-1	4202273	4149684	4255077	4202345	1.25	cps
Indium	115-2	1575670	1570311	1549186	1565056	0.89	cps
Iron	56-2	824920974	832809534	829395828	829042112	0.48	cps
Iron	57-2	20196918	20223598	20362816	20261111	0.44	cps
Iron	54-2	45009288	45395346	45100444	45168359	0.45	cps
Krypton	83-1	643	710	693	682	5.09	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-02	Instrumnet Name :	P7
Client Sample ID :	PR132-S11-010080-2025	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:12:56	DataFile Name :	034SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	18250510	18537796	18641886	18476731	1.10	cps
Lead	207-1	15912409	15793827	15796597	15834277	0.43	cps
Lead	208-1	71965219	73085269	73035172	72695220	0.87	cps
Lithium	6-1	594926	590233	589070	591410	0.52	cps
Magnesium	24-2	23156049	22882695	22764147	22934297	0.88	cps
Manganese	55-2	7865226	7773586	7856156	7831656	0.64	cps
Molybdenum	94-1	489021	491280	491457	490586	0.28	cps
Molybdenum	95-1	112955	112563	113983	113167	0.65	cps
Molybdenum	96-1	195574	197803	199815	197730	1.07	cps
Molybdenum	97-1	71454	71310	71038	71267	0.30	cps
Molybdenum	98-1	180894	183157	183775	182609	0.83	cps
Neodymium	150-1	295503	294936	295730	295390	0.14	cps
Neodymium	150-2	182119	180373	176703	179732	1.54	cps
Nickel	60-2	844546	850203	839031	844593	0.66	cps
Phosphorus	31-2	120420	119371	120691	120161	0.58	cps
Potassium	39-2	8557894	8681554	8501652	8580367	1.07	cps
Rhodium	103-1	4036982	4087967	4117847	4080932	1.00	cps
Rhodium	103-2	2697123	2644909	2594800	2645611	1.93	cps
Scandium	45-1	2953198	2923545	3013360	2963368	1.54	cps
Scandium	45-2	314415	314952	309781	313049	0.91	cps
Selenium	82-1	2720	2689	3045	2818	7.00	cps
Selenium	77-2	1057	1097	1003	1052	4.45	cps
Selenium	78-2	1750	1787	1760	1766	1.07	cps
Silicon	28-1	12883778	6322048	4785721	7997182	53.78	cps
Silver	107-1	311151	315544	322563	316419	1.82	cps
Silver	109-1	294019	301050	304683	299917	1.81	cps
Sodium	23-2	39882656	39467594	38579068	39309772	1.69	cps
Strontium	86-1	1227070	1256469	1241637	1241725	1.18	cps
Strontium	88-1	10877195	11135111	10978046	10996784	1.18	cps
Sulfur	34-1	4735462	4794746	4831265	4787158	1.01	cps
Terbium	159-1	5578215	5526108	5601799	5568707	0.70	cps
Terbium	159-2	3845192	3755682	3693229	3764701	2.03	cps
Thallium	203-1	17935	17511	17665	17704	1.21	cps
Thallium	205-1	41563	40908	42730	41734	2.21	cps
Tin	118-1	1314731	1322338	1329236	1322102	0.55	cps
Titanium	47-1	2120794	2049529	2100760	2090361	1.76	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-02	Instrumnet Name :	P7
Client Sample ID :	PR132-S11-010080-2025	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:12:56	DataFile Name :	034SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	306222	310951	306859	308011	0.83	cps
Vanadium	51-2	1177741	1168441	1168383	1171522	0.46	cps
Yttrium	89-1	9907932	9953773	10102952	9988219	1.02	cps
Yttrium	89-2	2842710	2898479	2795239	2845476	1.82	cps
Zinc	66-2	3777706	3724477	3791194	3764459	0.94	cps
Zirconium	90-1	1154434	1159652	1150806	1154964	0.38	cps
Zirconium	91-1	253898	258560	256394	256284	0.91	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-03	Instrumnet Name :	P7
Client Sample ID :	PR132-S14-00094-20251	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:16:03	DataFile Name :	035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	12947191	12823975	13052390	12941185	0.88	cps
Antimony	121-1	7184	7621	7431	7412	2.96	cps
Arsenic	75-2	86762	86379	86584	86575	0.22	cps
Barium	135-1	1691886	1679574	1709631	1693697	0.89	cps
Barium	137-1	2944186	2944370	2958023	2948860	0.27	cps
Beryllium	9-1	5928	6702	5998	6209	6.89	cps
Bismuth	209-1	3714505	3786077	3726409	3742331	1.02	cps
Bismuth	209-2	3015118	3056700	3107190	3059669	1.51	cps
Bromine	81-1	710481	882720	950789	847996	14.61	cps
Bromine	81-2	204097	203887	204982	204322	0.28	cps
Cadmium	108-1	6838	7215	6992	7015	2.70	cps
Cadmium	106-1	12632	12322	12038	12331	2.41	cps
Cadmium	111-1	90673	91739	91320	91244	0.59	cps
Calcium	43-1	654037	668488	666964	663163	1.20	cps
Calcium	44-1	10139591	10437645	10148614	10241950	1.66	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	5230532	5416887	5312327	5319915	1.76	cps
Cobalt	59-2	360067	362129	354632	358943	1.08	cps
Copper	63-2	7098956	7079232	7056981	7078389	0.30	cps
Dysprosium	156-1	120338	122741	121763	121614	0.99	cps
Dysprosium	156-2	106588	109289	109799	108558	1.59	cps
Erbium	164-1	117678	119661	118175	118505	0.87	cps
Erbium	164-2	82197	84266	82978	83147	1.26	cps
Gadolinium	160-1	126193	129960	130673	128942	1.87	cps
Gadolinium	160-2	94130	95423	94258	94604	0.75	cps
Holmium	165-1	5575565	5638778	5610412	5608252	0.56	cps
Holmium	165-2	3927855	4049763	3939140	3972253	1.70	cps
Indium	115-1	4176553	4023779	4166952	4122428	2.08	cps
Indium	115-2	1550258	1567898	1575689	1564615	0.83	cps
Iron	56-2	526914099	528776259	526264952	527318437	0.25	cps
Iron	57-2	12920505	12999644	12895342	12938497	0.42	cps
Iron	54-2	28726648	29277647	28549960	28851418	1.32	cps
Krypton	83-1	527	580	557	554	4.82	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-03	Instrumnet Name :	P7
Client Sample ID :	PR132-S14-00094-20251	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:16:03	DataFile Name :	035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	10063798	10247955	10112469	10141407	0.94	cps
Lead	207-1	8481041	8647581	8625690	8584770	1.05	cps
Lead	208-1	39571915	40321905	40002033	39965284	0.94	cps
Lithium	6-1	571780	586522	579129	579144	1.27	cps
Magnesium	24-2	14513438	14825386	14529314	14622712	1.20	cps
Manganese	55-2	5100507	5121386	5008605	5076833	1.18	cps
Molybdenum	94-1	311515	315763	310419	312566	0.90	cps
Molybdenum	95-1	77363	76050	78278	77230	1.45	cps
Molybdenum	96-1	128055	131049	129255	129453	1.16	cps
Molybdenum	97-1	48641	48741	47958	48447	0.88	cps
Molybdenum	98-1	124792	123084	123887	123921	0.69	cps
Neodymium	150-1	195405	194325	194522	194751	0.30	cps
Neodymium	150-2	117682	115684	117841	117069	1.03	cps
Nickel	60-2	535573	535861	534527	535320	0.13	cps
Phosphorus	31-2	87703	87767	89040	88170	0.86	cps
Potassium	39-2	5524471	5601781	5530153	5552135	0.78	cps
Rhodium	103-1	4060931	4074177	4077739	4070949	0.22	cps
Rhodium	103-2	2672086	2611503	2724809	2669466	2.12	cps
Scandium	45-1	2750556	2840007	2738840	2776468	1.99	cps
Scandium	45-2	294949	295425	294375	294916	0.18	cps
Selenium	82-1	2030	1961	2047	2013	2.27	cps
Selenium	77-2	643	703	630	659	5.93	cps
Selenium	78-2	1337	1380	1273	1330	4.03	cps
Silicon	28-1	3814405	5149605	3603466	4189159	20.01	cps
Silver	107-1	330274	330395	330528	330399	0.04	cps
Silver	109-1	312754	317759	314030	314848	0.83	cps
Sodium	23-2	24813476	24850366	24865079	24842974	0.11	cps
Strontium	86-1	727718	719874	721530	723041	0.57	cps
Strontium	88-1	6441164	6288344	6385974	6371827	1.21	cps
Sulfur	34-1	2871924	2873200	2786462	2843862	1.75	cps
Terbium	159-1	5552490	5592955	5615825	5587090	0.57	cps
Terbium	159-2	3653666	3792297	3677344	3707769	2.00	cps
Thallium	203-1	11058	11031	11138	11076	0.50	cps
Thallium	205-1	26242	26452	26392	26362	0.41	cps
Tin	118-1	970914	967599	979684	972732	0.64	cps
Titanium	47-1	1320600	1396969	1370318	1362629	2.84	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-03	Instrumnet Name :	P7
Client Sample ID :	PR132-S14-00094-20251	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:16:03	DataFile Name :	035SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	203916	209938	207313	207056	1.46	cps
Vanadium	51-2	815781	820137	812955	816291	0.44	cps
Yttrium	89-1	9236746	8895202	8981570	9037840	1.96	cps
Yttrium	89-2	2536428	2549225	2562952	2549535	0.52	cps
Zinc	66-2	2643825	2626104	2636909	2635613	0.34	cps
Zirconium	90-1	724268	723159	731088	726172	0.59	cps
Zirconium	91-1	161039	163352	160979	161790	0.84	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3434-01	Instrumnet Name :	P7
Client Sample ID :	PR132-WC1-20251022	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:19:03	DataFile Name :	036SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	9841129	9844779	9994522	9893477	0.88	cps
Antimony	121-1	11636	11382	11447	11488	1.15	cps
Arsenic	75-2	77164	78451	78293	77969	0.90	cps
Barium	135-1	1847647	1875409	1942413	1888490	2.58	cps
Barium	137-1	3327168	3292934	3389297	3336467	1.46	cps
Beryllium	9-1	4061	4054	4061	4058	0.09	cps
Bismuth	209-1	3682392	3676960	3624493	3661282	0.87	cps
Bismuth	209-2	2986564	2990268	2907332	2961388	1.58	cps
Bromine	81-1	416695	545737	557685	506705	15.43	cps
Bromine	81-2	113902	114513	115702	114705	0.80	cps
Cadmium	108-1	7799	7232	7665	7565	3.92	cps
Cadmium	106-1	12949	12405	12512	12622	2.28	cps
Cadmium	111-1	103259	105944	105675	104959	1.41	cps
Calcium	43-1	468534	468133	472798	469822	0.55	cps
Calcium	44-1	7261320	7456159	7256565	7324681	1.55	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	5669643	5577661	5712902	5653402	1.22	cps
Cobalt	59-2	261593	263629	263952	263058	0.49	cps
Copper	63-2	7039958	7038599	7183131	7087229	1.17	cps
Dysprosium	156-1	93526	95949	96556	95344	1.68	cps
Dysprosium	156-2	85421	86638	86511	86190	0.78	cps
Erbium	164-1	91675	93256	93608	92847	1.11	cps
Erbium	164-2	65031	65268	65690	65330	0.51	cps
Gadolinium	160-1	99034	102143	102932	101369	2.03	cps
Gadolinium	160-2	74316	74652	73988	74318	0.45	cps
Holmium	165-1	5455335	5346657	5390597	5397530	1.01	cps
Holmium	165-2	3760196	3865881	3851183	3825753	1.50	cps
Indium	115-1	4076093	4183658	4127695	4129149	1.30	cps
Indium	115-2	1508325	1520381	1518288	1515665	0.42	cps
Iron	56-2	392580421	396791327	402386021	397252590	1.24	cps
Iron	57-2	9899523	9729990	9633616	9754376	1.38	cps
Iron	54-2	22028439	21745249	22133379	21969022	0.91	cps
Krypton	83-1	537	600	550	562	5.94	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3434-01	Instrumnet Name :	P7
Client Sample ID :	PR132-WC1-20251022	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:19:03	DataFile Name :	036SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	9071278	8991920	8985466	9016221	0.53	cps
Lead	207-1	7629579	7818576	7691011	7713055	1.25	cps
Lead	208-1	35331212	35532199	35612877	35492096	0.41	cps
Lithium	6-1	548805	557452	556873	554377	0.87	cps
Magnesium	24-2	10071815	10038410	10077865	10062697	0.21	cps
Manganese	55-2	3880022	3888658	3873816	3880832	0.19	cps
Molybdenum	94-1	232671	235989	234035	234231	0.71	cps
Molybdenum	95-1	70425	70981	71101	70836	0.51	cps
Molybdenum	96-1	109291	110813	109631	109912	0.73	cps
Molybdenum	97-1	44615	45504	45343	45154	1.05	cps
Molybdenum	98-1	113120	112900	114850	113623	0.94	cps
Neodymium	150-1	153796	154655	155515	154655	0.56	cps
Neodymium	150-2	95501	92820	94396	94239	1.43	cps
Nickel	60-2	421462	423995	426990	424149	0.65	cps
Phosphorus	31-2	73556	74765	74681	74334	0.91	cps
Potassium	39-2	4216598	4244563	4251501	4237554	0.44	cps
Rhodium	103-1	3991593	4088266	4080827	4053562	1.33	cps
Rhodium	103-2	2568728	2570957	2591677	2577121	0.49	cps
Scandium	45-1	2615601	2658414	2712255	2662090	1.82	cps
Scandium	45-2	279590	279879	283180	280883	0.71	cps
Selenium	82-1	1605	1725	1724	1685	4.08	cps
Selenium	77-2	557	640	550	582	8.61	cps
Selenium	78-2	1123	1137	1117	1126	0.91	cps
Silicon	28-1	7648915	6393747	5440136	6494266	17.06	cps
Silver	107-1	356471	363561	364832	361621	1.25	cps
Silver	109-1	338739	347809	346564	344371	1.43	cps
Sodium	23-2	13915822	14115566	14104772	14045387	0.80	cps
Strontium	86-1	590664	605516	601256	599145	1.28	cps
Strontium	88-1	5323781	5294844	5242137	5286921	0.78	cps
Sulfur	34-1	2134441	2118754	2138779	2130658	0.49	cps
Terbium	159-1	5218654	5320857	5266254	5268588	0.97	cps
Terbium	159-2	3578915	3558448	3590989	3576117	0.46	cps
Thallium	203-1	9567	9914	9407	9629	2.69	cps
Thallium	205-1	23310	23958	23524	23597	1.40	cps
Tin	118-1	672483	681995	690128	681536	1.30	cps
Titanium	47-1	1200864	1228434	1225396	1218231	1.24	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3434-01	Instrumnet Name :	P7
Client Sample ID :	PR132-WC1-20251022	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:19:03	DataFile Name :	036SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	194652	198632	201524	198270	1.74	cps
Vanadium	51-2	702176	703817	711916	705970	0.74	cps
Yttrium	89-1	8501672	8417880	8697313	8538955	1.68	cps
Yttrium	89-2	2455978	2365648	2418728	2413451	1.88	cps
Zinc	66-2	2212032	2234369	2262154	2236185	1.12	cps
Zirconium	90-1	518757	529938	528534	525743	1.16	cps
Zirconium	91-1	114264	117321	117106	116230	1.47	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:22:31	DataFile Name :	037SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2609468	2647353	2591859	2616227	1.08	cps
Antimony	121-1	1025	1124	1142	1097	5.74	cps
Arsenic	75-2	13846	14262	13256	13788	3.67	cps
Barium	135-1	227385	229609	231353	229449	0.87	cps
Barium	137-1	398294	398529	398762	398529	0.06	cps
Beryllium	9-1	943	973	1007	974	3.25	cps
Bismuth	209-1	3340659	3458746	3438017	3412474	1.85	cps
Bismuth	209-2	2858341	2908248	2866861	2877817	0.93	cps
Bromine	81-1	167816	187805	194959	183527	7.67	cps
Bromine	81-2	38246	37979	38346	38190	0.50	cps
Cadmium	108-1	863	820	1010	898	11.09	cps
Cadmium	106-1	3064	2964	3037	3021	1.71	cps
Cadmium	111-1	12037	12308	11783	12043	2.18	cps
Calcium	43-1	167276	170353	166577	168069	1.20	cps
Calcium	44-1	2600439	2578934	2627995	2602456	0.94	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	757284	764652	748930	756956	1.04	cps
Cobalt	59-2	72581	73234	71051	72289	1.55	cps
Copper	63-2	1009109	1003593	1007862	1006855	0.29	cps
Dysprosium	156-1	24405	24879	24715	24666	0.98	cps
Dysprosium	156-2	22451	22108	21780	22113	1.52	cps
Erbium	164-1	24111	24328	24431	24290	0.67	cps
Erbium	164-2	17361	17251	16850	17154	1.57	cps
Gadolinium	160-1	26572	26792	26522	26629	0.54	cps
Gadolinium	160-2	20041	19954	19864	19953	0.44	cps
Holmium	165-1	5296121	5249054	5305614	5283596	0.57	cps
Holmium	165-2	3809321	3689605	3722928	3740618	1.65	cps
Indium	115-1	4090722	4235106	4084645	4136824	2.06	cps
Indium	115-2	1540469	1524654	1528566	1531230	0.54	cps
Iron	56-2	109791088	110006472	106230628	108676063	1.95	cps
Iron	57-2	2728517	2759583	2660970	2716357	1.86	cps
Iron	54-2	6042923	5893805	6021914	5986214	1.35	cps
Krypton	83-1	433	470	447	450	4.12	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:22:31	DataFile Name :	037SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1526424	1529406	1535078	1530303	0.29	cps
Lead	207-1	1270119	1278085	1279568	1275924	0.40	cps
Lead	208-1	6084262	6235668	6189912	6169947	1.26	cps
Lithium	6-1	526590	530403	532778	529924	0.59	cps
Magnesium	24-2	3169342	3199649	3130238	3166410	1.10	cps
Manganese	55-2	1322286	1324287	1325648	1324074	0.13	cps
Molybdenum	94-1	56990	58334	56676	57334	1.54	cps
Molybdenum	95-1	8753	9253	8806	8937	3.08	cps
Molybdenum	96-1	18302	19276	18632	18737	2.65	cps
Molybdenum	97-1	5561	5778	5811	5717	2.38	cps
Molybdenum	98-1	14511	14868	14517	14632	1.40	cps
Neodymium	150-1	39756	38626	39271	39218	1.45	cps
Neodymium	150-2	23550	23727	23713	23663	0.42	cps
Nickel	60-2	97212	98182	96884	97426	0.69	cps
Phosphorus	31-2	18471	19242	19042	18918	2.11	cps
Potassium	39-2	1187934	1205387	1190860	1194727	0.78	cps
Rhodium	103-1	4139515	4042350	3938449	4040105	2.49	cps
Rhodium	103-2	2571465	2527919	2604099	2567828	1.49	cps
Scandium	45-1	2520278	2462484	2516424	2499729	1.29	cps
Scandium	45-2	264574	265023	264156	264584	0.16	cps
Selenium	82-1	370	416	374	387	6.59	cps
Selenium	77-2	127	130	140	132	5.25	cps
Selenium	78-2	620	560	490	557	11.69	cps
Silicon	28-1	1930118	1781442	2229160	1980240	11.52	cps
Silver	107-1	56399	58896	57972	57756	2.19	cps
Silver	109-1	54308	55292	55379	54993	1.08	cps
Sodium	23-2	4151192	4225551	4270521	4215755	1.43	cps
Strontium	86-1	130568	130123	130355	130349	0.17	cps
Strontium	88-1	1133698	1143980	1146729	1141469	0.60	cps
Sulfur	34-1	657126	655885	662596	658536	0.54	cps
Terbium	159-1	5287885	5306211	5257748	5283948	0.46	cps
Terbium	159-2	3494400	3488710	3439458	3474189	0.87	cps
Thallium	203-1	2324	2294	2187	2268	3.17	cps
Thallium	205-1	5485	5261	5548	5431	2.77	cps
Tin	118-1	134906	133933	133402	134080	0.57	cps
Titanium	47-1	289850	300891	291856	294199	2.00	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:22:31	DataFile Name :	037SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	32146	31942	32146	32078	0.37	cps
Vanadium	51-2	143714	142923	142637	143091	0.39	cps
Yttrium	89-1	7494877	7632042	7674117	7600345	1.23	cps
Yttrium	89-2	2134127	2137388	2139116	2136877	0.12	cps
Zinc	66-2	362341	360630	362323	361765	0.27	cps
Zirconium	90-1	139580	140980	142667	141076	1.10	cps
Zirconium	91-1	31096	31450	30829	31125	1.00	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:25:48	DataFile Name :	038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2829684	2807854	2815998	2817846	0.39	cps
Antimony	121-1	1171	1234	1157	1187	3.44	cps
Arsenic	75-2	15215	15271	15150	15212	0.40	cps
Barium	135-1	244672	248466	249818	247652	1.08	cps
Barium	137-1	429512	436083	432286	432627	0.76	cps
Beryllium	9-1	1103	1180	1027	1103	6.95	cps
Bismuth	209-1	3397413	3405155	3359639	3387403	0.72	cps
Bismuth	209-2	2856738	2853388	2840713	2850280	0.30	cps
Bromine	81-1	144644	174361	185618	168208	12.58	cps
Bromine	81-2	39172	39082	38510	38921	0.92	cps
Cadmium	108-1	927	1010	950	962	4.47	cps
Cadmium	106-1	3187	2884	2964	3011	5.22	cps
Cadmium	111-1	13117	12679	12951	12916	1.71	cps
Calcium	43-1	180882	182656	182757	182098	0.58	cps
Calcium	44-1	2760306	2808030	2850769	2806368	1.61	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	822527	815567	818070	818721	0.43	cps
Cobalt	59-2	78273	78866	77445	78195	0.91	cps
Copper	63-2	1088422	1088806	1084375	1087201	0.23	cps
Dysprosium	156-1	26692	26739	26969	26800	0.55	cps
Dysprosium	156-2	23660	24548	23603	23937	2.21	cps
Erbium	164-1	25927	26519	25948	26131	1.28	cps
Erbium	164-2	18239	19354	18466	18686	3.15	cps
Gadolinium	160-1	28636	28362	28345	28448	0.57	cps
Gadolinium	160-2	21423	21837	21083	21448	1.76	cps
Holmium	165-1	5264648	5138965	5227685	5210433	1.24	cps
Holmium	165-2	3697154	3825525	3817061	3779913	1.90	cps
Indium	115-1	4025367	4106259	4130664	4087430	1.35	cps
Indium	115-2	1548446	1535920	1523762	1536042	0.80	cps
Iron	56-2	120770078	118419855	120097292	119762408	1.01	cps
Iron	57-2	2945431	2994868	2966838	2969046	0.84	cps
Iron	54-2	6612787	6629095	6541422	6594435	0.71	cps
Krypton	83-1	420	470	430	440	6.01	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:25:48	DataFile Name :	038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1631201	1643714	1641289	1638735	0.40	cps
Lead	207-1	1351142	1365207	1374445	1363598	0.86	cps
Lead	208-1	6633468	6599490	6635129	6622696	0.30	cps
Lithium	6-1	523742	525669	527168	525526	0.33	cps
Magnesium	24-2	3399958	3387830	3377147	3388312	0.34	cps
Manganese	55-2	1487593	1425824	1454865	1456094	2.12	cps
Molybdenum	94-1	61445	61006	61462	61304	0.42	cps
Molybdenum	95-1	9537	9840	9967	9781	2.26	cps
Molybdenum	96-1	19967	20675	20575	20405	1.88	cps
Molybdenum	97-1	6125	6031	6328	6161	2.46	cps
Molybdenum	98-1	15839	16296	16142	16092	1.45	cps
Neodymium	150-1	41772	42544	42862	42392	1.32	cps
Neodymium	150-2	25944	26699	25937	26193	1.67	cps
Nickel	60-2	106192	104847	104226	105088	0.96	cps
Phosphorus	31-2	20604	20761	20671	20678	0.38	cps
Potassium	39-2	1289763	1299768	1301318	1296950	0.48	cps
Rhodium	103-1	4111109	4026244	4082967	4073440	1.06	cps
Rhodium	103-2	2646330	2634575	2604415	2628440	0.82	cps
Scandium	45-1	2476918	2446718	2512388	2478675	1.33	cps
Scandium	45-2	262509	264001	264245	263585	0.36	cps
Selenium	82-1	448	402	456	435	6.78	cps
Selenium	77-2	207	160	130	166	23.34	cps
Selenium	78-2	597	513	507	539	9.31	cps
Silicon	28-1	2149358	2325981	3071704	2515681	19.46	cps
Silver	107-1	63870	64225	64767	64287	0.70	cps
Silver	109-1	59123	60091	61276	60163	1.79	cps
Sodium	23-2	4606723	4605844	4515307	4575958	1.15	cps
Strontium	86-1	140877	141459	142782	141706	0.69	cps
Strontium	88-1	1219187	1235979	1242344	1232503	0.97	cps
Sulfur	34-1	686195	698888	702779	695954	1.25	cps
Terbium	159-1	5208702	5104884	5205266	5172951	1.14	cps
Terbium	159-2	3439871	3539389	3545173	3508144	1.69	cps
Thallium	203-1	2280	2340	2277	2299	1.55	cps
Thallium	205-1	5451	5538	5711	5567	2.38	cps
Tin	118-1	138729	139310	138235	138758	0.39	cps
Titanium	47-1	313135	323000	321091	319075	1.64	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01DUPDLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:25:48	DataFile Name :	038SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	34295	34244	34298	34279	0.09	cps
Vanadium	51-2	155270	156513	154202	155328	0.74	cps
Yttrium	89-1	7669406	7659984	7622799	7650729	0.32	cps
Yttrium	89-2	2178147	2100904	2122749	2133933	1.87	cps
Zinc	66-2	393594	391696	392450	392580	0.24	cps
Zirconium	90-1	166722	154305	154719	158582	4.45	cps
Zirconium	91-1	33646	33575	34193	33805	1.00	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01LDLX25	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	25
Date & Time Acquired :	2025-10-23 17:29:03	DataFile Name :	039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	677	567	613	619	8.92	cps
Antimony	121-1	50	33	40	41	20.39	cps
Arsenic	75-2	15	6	10	10	43.63	cps
Barium	135-1	93	87	53	78	27.56	cps
Barium	137-1	117	113	93	108	11.71	cps
Beryllium	9-1	17	20	3	13	66.16	cps
Bismuth	209-1	3178887	3368776	3320784	3289482	3.00	cps
Bismuth	209-2	2781149	2773865	2752887	2769300	0.53	cps
Bromine	81-1	30198	27950	25976	28041	7.53	cps
Bromine	81-2	3067	2894	2750	2904	5.46	cps
Cadmium	108-1	10	17	0	9	94.38	cps
Cadmium	106-1	1713	1533	1647	1631	5.58	cps
Cadmium	111-1	1206	1078	1166	1150	5.67	cps
Calcium	43-1	190	160	147	166	13.41	cps
Calcium	44-1	11951	11935	12352	12079	1.95	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1627	1607	1623	1619	0.66	cps
Cobalt	59-2	97	53	60	70	33.34	cps
Copper	63-2	980	917	993	963	4.25	cps
Dysprosium	156-1	13	23	13	17	34.65	cps
Dysprosium	156-2	3	0	0	1	173.21	cps
Erbium	164-1	20	33	17	23	37.78	cps
Erbium	164-2	23	7	23	18	54.11	cps
Gadolinium	160-1	27	20	20	22	17.33	cps
Gadolinium	160-2	213	243	250	236	8.29	cps
Holmium	165-1	5061570	4945381	5114870	5040607	1.72	cps
Holmium	165-2	3623762	3646466	3603917	3624715	0.59	cps
Indium	115-1	3996814	3902907	3967814	3955845	1.22	cps
Indium	115-2	1500223	1494298	1494539	1496353	0.22	cps
Iron	56-2	33217	32322	33053	32864	1.45	cps
Iron	57-2	1590	1603	1613	1602	0.73	cps
Iron	54-2	2884	2640	2824	2783	4.56	cps
Krypton	83-1	370	390	453	404	10.76	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01LDLX25	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	25
Date & Time Acquired :	2025-10-23 17:29:03	DataFile Name :	039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	847	783	753	794	6.00	cps
Lead	207-1	683	567	600	617	9.75	cps
Lead	208-1	2937	2857	3014	2936	2.67	cps
Lithium	6-1	503470	505571	510447	506496	0.71	cps
Magnesium	24-2	753	673	587	671	12.42	cps
Manganese	55-2	543	547	547	546	0.35	cps
Molybdenum	94-1	193	237	217	216	10.06	cps
Molybdenum	95-1	190	157	183	177	9.98	cps
Molybdenum	96-1	187	223	260	223	16.42	cps
Molybdenum	97-1	70	87	117	91	25.96	cps
Molybdenum	98-1	243	260	237	247	4.87	cps
Neodymium	150-1	7	13	13	11	34.61	cps
Neodymium	150-2	7	0	0	2	173.21	cps
Nickel	60-2	357	403	327	362	10.67	cps
Phosphorus	31-2	320	337	303	320	5.21	cps
Potassium	39-2	56414	56588	55859	56287	0.68	cps
Rhodium	103-1	3911447	3923237	3979276	3937987	0.92	cps
Rhodium	103-2	2561412	2548464	2511830	2540569	1.01	cps
Scandium	45-1	2398804	2305681	2330836	2345107	2.05	cps
Scandium	45-2	250955	251110	250572	250879	0.11	cps
Selenium	82-1	151	73	47	90	60.15	cps
Selenium	77-2	0	3	3	2	86.60	cps
Selenium	78-2	407	343	367	372	8.61	cps
Silicon	28-1	534670	535428	535160	535086	0.07	cps
Silver	107-1	200	173	110	161	28.69	cps
Silver	109-1	157	153	140	150	5.88	cps
Sodium	23-2	39484	38952	38334	38924	1.48	cps
Strontium	86-1	573	600	717	630	12.10	cps
Strontium	88-1	250	233	207	230	9.50	cps
Sulfur	34-1	121350	123184	123951	122828	1.09	cps
Terbium	159-1	5095402	4937055	4936023	4989493	1.84	cps
Terbium	159-2	3392290	3389643	3430915	3404283	0.68	cps
Thallium	203-1	220	203	183	202	9.08	cps
Thallium	205-1	477	493	490	487	1.81	cps
Tin	118-1	2137	2387	2090	2205	7.24	cps
Titanium	47-1	83	87	97	89	7.81	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01LDLX25	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	25
Date & Time Acquired :	2025-10-23 17:29:03	DataFile Name :	039SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	17	13	27	19	36.75	cps
Vanadium	51-2	37	30	17	28	36.66	cps
Yttrium	89-1	6891247	7011148	7075541	6992645	1.34	cps
Yttrium	89-2	1999441	1994240	1985535	1993072	0.35	cps
Zinc	66-2	1567	1417	1403	1462	6.20	cps
Zirconium	90-1	300	233	283	272	12.75	cps
Zirconium	91-1	80	37	60	59	36.83	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-02DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:32:39	DataFile Name :	040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2398606	2391334	2395284	2395075	0.15	cps
Antimony	121-1	446944	458201	445916	450354	1.51	cps
Arsenic	75-2	65580	64887	64440	64969	0.88	cps
Barium	135-1	670357	677264	680344	675988	0.76	cps
Barium	137-1	1174911	1172997	1200728	1182879	1.31	cps
Beryllium	9-1	72415	73178	73828	73140	0.97	cps
Bismuth	209-1	3340888	3397975	3311252	3350038	1.32	cps
Bismuth	209-2	2781165	2790348	2846686	2806067	1.26	cps
Bromine	81-1	100465	122640	134594	119233	14.52	cps
Bromine	81-2	27355	27102	27182	27213	0.48	cps
Cadmium	108-1	9763	9497	10070	9777	2.94	cps
Cadmium	106-1	15198	16029	15916	15714	2.87	cps
Cadmium	111-1	143859	146529	140562	143650	2.08	cps
Calcium	43-1	263562	266790	263209	264521	0.75	cps
Calcium	44-1	4108445	4163544	4212335	4161441	1.25	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	905994	902803	899251	902683	0.37	cps
Cobalt	59-2	424151	418310	415456	419305	1.06	cps
Copper	63-2	3635866	3661235	3742919	3680007	1.52	cps
Dysprosium	156-1	20632	20519	20478	20543	0.39	cps
Dysprosium	156-2	18756	18419	18683	18619	0.95	cps
Erbium	164-1	20582	20325	20175	20360	1.01	cps
Erbium	164-2	14317	14204	13884	14135	1.59	cps
Gadolinium	160-1	21436	22455	21864	21918	2.33	cps
Gadolinium	160-2	16647	16810	16283	16580	1.63	cps
Holmium	165-1	5169390	5140338	5205114	5171614	0.63	cps
Holmium	165-2	3719134	3754458	3731887	3735160	0.48	cps
Indium	115-1	4049502	4015584	4001813	4022300	0.61	cps
Indium	115-2	1513583	1505932	1507512	1509009	0.27	cps
Iron	56-2	99194612	100465629	99659235	99773159	0.64	cps
Iron	57-2	2510651	2549477	2465937	2508688	1.67	cps
Iron	54-2	5518926	5545047	5542248	5535407	0.26	cps
Krypton	83-1	347	457	387	397	14.04	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-02DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:32:39	DataFile Name :	040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3355630	3449254	3325654	3376846	1.91	cps
Lead	207-1	2933535	2969151	2981870	2961519	0.85	cps
Lead	208-1	13237744	13554840	13405690	13399424	1.18	cps
Lithium	6-1	528687	534499	537167	533451	0.81	cps
Magnesium	24-2	5154280	5097739	5246607	5166209	1.45	cps
Manganese	55-2	2936188	2909258	2948740	2931395	0.69	cps
Molybdenum	94-1	820484	808448	817378	815436	0.77	cps
Molybdenum	95-1	848975	834919	851460	845118	1.06	cps
Molybdenum	96-1	965921	962523	967217	965220	0.25	cps
Molybdenum	97-1	536639	533998	530625	533754	0.56	cps
Molybdenum	98-1	1365936	1370122	1384172	1373410	0.70	cps
Neodymium	150-1	32267	33239	32441	32649	1.59	cps
Neodymium	150-2	19958	19480	20355	19931	2.20	cps
Nickel	60-2	183603	183104	183124	183277	0.15	cps
Phosphorus	31-2	15925	15842	15782	15849	0.45	cps
Potassium	39-2	2177511	2197555	2154675	2176580	0.99	cps
Rhodium	103-1	3942554	3973469	4065755	3993926	1.60	cps
Rhodium	103-2	2596169	2569448	2567974	2577863	0.62	cps
Scandium	45-1	2501415	2479497	2530312	2503741	1.02	cps
Scandium	45-2	260069	258738	257078	258628	0.58	cps
Selenium	82-1	11556	11690	11826	11691	1.16	cps
Selenium	77-2	1483	1450	1277	1403	7.91	cps
Selenium	78-2	4764	4901	4667	4777	2.45	cps
Silicon	28-1	2093782	2350373	1789444	2077866	13.51	cps
Silver	107-1	153682	156342	155666	155230	0.89	cps
Silver	109-1	144133	145392	145682	145069	0.57	cps
Sodium	23-2	7554388	7374022	7508368	7478926	1.25	cps
Strontium	86-1	276792	273841	274209	274947	0.59	cps
Strontium	88-1	2367892	2437038	2419643	2408191	1.49	cps
Sulfur	34-1	578824	577989	572111	576308	0.63	cps
Terbium	159-1	5055313	5202731	5354449	5204164	2.87	cps
Terbium	159-2	3538169	3493386	3435121	3488892	1.48	cps
Thallium	203-1	421216	419693	430915	423941	1.44	cps
Thallium	205-1	1003622	1017882	999961	1007155	0.94	cps
Tin	118-1	456744	461862	459703	459436	0.56	cps
Titanium	47-1	242601	255725	250490	249605	2.65	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-02DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:32:39	DataFile Name :	040SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1288793	1296677	1282600	1289357	0.55	cps
Vanadium	51-2	322455	320530	317310	320098	0.81	cps
Yttrium	89-1	7501137	7369172	7440673	7436994	0.89	cps
Yttrium	89-2	2121754	2134379	2098540	2118224	0.86	cps
Zinc	66-2	896758	891921	893806	894162	0.27	cps
Zirconium	90-1	882336	875199	883644	880393	0.52	cps
Zirconium	91-1	195620	190167	198349	194712	2.14	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:35:48	DataFile Name :	041CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7521085	7630724	7497812	7549874	0.94	cps
Antimony	121-1	2611512	2605040	2623546	2613366	0.36	cps
Arsenic	75-2	278523	278170	273171	276622	1.08	cps
Barium	135-1	3082779	3103231	3153254	3113088	1.16	cps
Barium	137-1	5394692	5453358	5439981	5429344	0.57	cps
Beryllium	9-1	418548	427813	425972	424111	1.16	cps
Bismuth	209-1	3098657	3225652	3129542	3151284	2.10	cps
Bismuth	209-2	2548513	2556384	2578974	2561290	0.62	cps
Bromine	81-1	22501	20728	19647	20958	6.88	cps
Bromine	81-2	1953	1893	1933	1927	1.59	cps
Cadmium	108-1	51836	52615	52260	52237	0.75	cps
Cadmium	106-1	73840	75197	73679	74239	1.12	cps
Cadmium	111-1	719785	727512	733068	726788	0.92	cps
Calcium	43-1	3424683	3450578	3466653	3447305	0.61	cps
Calcium	44-1	54355911	55551128	54961243	54956094	1.09	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1326515	1325135	1324675	1325441	0.07	cps
Cobalt	59-2	2084185	2086817	2037895	2069632	1.33	cps
Copper	63-2	15889538	15698867	15516978	15701794	1.19	cps
Dysprosium	156-1	193	200	213	202	5.04	cps
Dysprosium	156-2	307	290	373	323	13.64	cps
Erbium	164-1	337	357	310	334	7.00	cps
Erbium	164-2	233	250	230	238	4.51	cps
Gadolinium	160-1	183	187	213	194	8.46	cps
Gadolinium	160-2	360	397	390	382	5.11	cps
Holmium	165-1	5068032	5093939	5114584	5092185	0.46	cps
Holmium	165-2	3561750	3520421	3612210	3564794	1.29	cps
Indium	115-1	3707356	3764955	3799876	3757396	1.24	cps
Indium	115-2	1399059	1397067	1398563	1398230	0.07	cps
Iron	56-2	297181456	301438849	300284616	299634973	0.73	cps
Iron	57-2	7520208	7427437	7570610	7506085	0.97	cps
Iron	54-2	16282337	16352773	16474629	16369913	0.59	cps
Krypton	83-1	433	417	410	420	2.86	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:35:48	DataFile Name :	041CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	10478277	10698719	10823531	10666842	1.64	cps
Lead	207-1	9258038	9281754	9461600	9333797	1.19	cps
Lead	208-1	42026299	43033239	43270489	42776675	1.54	cps
Lithium	6-1	517388	520039	518140	518522	0.26	cps
Magnesium	24-2	67463776	67720496	68252887	67812386	0.59	cps
Manganese	55-2	11151627	11279498	11296477	11242534	0.70	cps
Molybdenum	94-1	9244722	9413512	9367217	9341817	0.93	cps
Molybdenum	95-1	13488216	13644888	13536960	13556688	0.59	cps
Molybdenum	96-1	14341938	14709124	14513214	14521425	1.27	cps
Molybdenum	97-1	8272830	8266265	8403748	8314281	0.93	cps
Molybdenum	98-1	21247404	21719618	21736922	21567981	1.29	cps
Neodymium	150-1	187	147	170	168	11.98	cps
Neodymium	150-2	87	63	103	84	23.79	cps
Nickel	60-2	527569	524663	522735	524989	0.46	cps
Phosphorus	31-2	90774	92474	90144	91130	1.32	cps
Potassium	39-2	35078256	35208908	34834139	35040434	0.54	cps
Rhodium	103-1	3681730	3648483	3672449	3667554	0.47	cps
Rhodium	103-2	2336275	2302202	2318361	2318946	0.73	cps
Scandium	45-1	2278648	2308905	2324138	2303897	1.01	cps
Scandium	45-2	240927	244340	241923	242397	0.72	cps
Selenium	82-1	59191	59571	60818	59860	1.42	cps
Selenium	77-2	6938	7088	7028	7018	1.08	cps
Selenium	78-2	23128	23258	23015	23134	0.53	cps
Silicon	28-1	25958350	26339232	26224099	26173894	0.75	cps
Silver	107-1	3482638	3577435	3499866	3519980	1.43	cps
Silver	109-1	3268114	3426691	3359572	3351459	2.38	cps
Sodium	23-2	104818675	104272288	104596508	104562491	0.26	cps
Strontium	86-1	844363	851534	851573	849157	0.49	cps
Strontium	88-1	7448888	7374105	7606254	7476416	1.58	cps
Sulfur	34-1	388570	386848	386021	387146	0.34	cps
Terbium	159-1	5007657	4986946	4969990	4988198	0.38	cps
Terbium	159-2	3334213	3333856	3416700	3361590	1.42	cps
Thallium	203-1	2650372	2686542	2685438	2674117	0.77	cps
Thallium	205-1	6365375	6498376	6372269	6412006	1.17	cps
Tin	118-1	2155807	2188059	2153972	2165946	0.89	cps
Titanium	47-1	3360480	3464954	3448860	3424764	1.64	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV03	Instrumnet Name :	P7
Client Sample ID :	CCV03	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:35:48	DataFile Name :	041CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	8332049	8604024	8817837	8584636	2.84	cps
Vanadium	51-2	1130830	1128462	1128723	1129338	0.11	cps
Yttrium	89-1	6790076	6934773	6720972	6815274	1.60	cps
Yttrium	89-2	1896298	1956489	1932259	1928349	1.57	cps
Zinc	66-2	3041013	2946856	3010906	2999592	1.60	cps
Zirconium	90-1	4584397	4588881	4616330	4596536	0.38	cps
Zirconium	91-1	1024119	1035065	1033377	1030854	0.57	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:43:18	DataFile Name :	042CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	517	613	617	582	9.76	cps
Antimony	121-1	420	414	487	440	9.23	cps
Arsenic	75-2	17	20	4	13	63.74	cps
Barium	135-1	80	53	60	64	21.54	cps
Barium	137-1	143	143	120	136	9.94	cps
Beryllium	9-1	23	23	13	20	28.87	cps
Bismuth	209-1	3194871	3244362	3268816	3236016	1.16	cps
Bismuth	209-2	2620444	2678359	2726556	2675120	1.99	cps
Bromine	81-1	11405	11094	11058	11185	1.70	cps
Bromine	81-2	733	747	743	741	0.94	cps
Cadmium	108-1	7	0	3	3	100.05	cps
Cadmium	106-1	1490	1470	1260	1407	9.06	cps
Cadmium	111-1	1072	1052	913	1012	8.55	cps
Calcium	43-1	290	140	177	202	38.67	cps
Calcium	44-1	12479	12569	12572	12540	0.42	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1453	1530	1457	1480	2.93	cps
Cobalt	59-2	140	60	73	91	47.04	cps
Copper	63-2	1177	1117	1213	1169	4.17	cps
Dysprosium	156-1	10	10	3	8	49.52	cps
Dysprosium	156-2	3	7	3	4	43.40	cps
Erbium	164-1	23	30	20	24	20.83	cps
Erbium	164-2	7	3	10	7	50.03	cps
Gadolinium	160-1	17	23	23	21	18.21	cps
Gadolinium	160-2	293	240	257	263	10.36	cps
Holmium	165-1	4865259	4828296	4961527	4885027	1.41	cps
Holmium	165-2	3430234	3441558	3493638	3455143	0.98	cps
Indium	115-1	3833656	3807577	3826703	3822645	0.35	cps
Indium	115-2	1420161	1432882	1424244	1425762	0.46	cps
Iron	56-2	59665	58764	58985	59138	0.79	cps
Iron	57-2	2274	2410	2104	2262	6.79	cps
Iron	54-2	4554	4467	4044	4355	6.27	cps
Krypton	83-1	370	347	380	366	4.68	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:43:18	DataFile Name :	042CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	717	637	677	677	5.91	cps
Lead	207-1	587	630	573	597	4.97	cps
Lead	208-1	2690	2493	2683	2622	4.26	cps
Lithium	6-1	497919	493396	497921	496412	0.53	cps
Magnesium	24-2	713	840	820	791	8.61	cps
Manganese	55-2	810	863	913	862	5.99	cps
Molybdenum	94-1	310	353	410	358	14.02	cps
Molybdenum	95-1	257	283	343	294	15.08	cps
Molybdenum	96-1	373	450	400	408	9.54	cps
Molybdenum	97-1	170	230	220	207	15.55	cps
Molybdenum	98-1	513	437	477	476	8.06	cps
Neodymium	150-1	7	13	13	11	34.61	cps
Neodymium	150-2	0	7	0	2	173.21	cps
Nickel	60-2	460	377	350	396	14.51	cps
Phosphorus	31-2	357	247	280	294	19.16	cps
Potassium	39-2	55283	55902	55671	55619	0.56	cps
Rhodium	103-1	3700925	3756384	3682695	3713335	1.03	cps
Rhodium	103-2	2429210	2424631	2492864	2448902	1.56	cps
Scandium	45-1	2206532	2217295	2294652	2239493	2.15	cps
Scandium	45-2	235682	234806	231919	234136	0.84	cps
Selenium	82-1	110	134	63	102	35.03	cps
Selenium	77-2	0	3	0	1	173.21	cps
Selenium	78-2	320	353	353	342	5.62	cps
Silicon	28-1	518671	517837	543594	526701	2.78	cps
Silver	107-1	93	110	100	101	8.30	cps
Silver	109-1	77	97	73	82	15.35	cps
Sodium	23-2	41519	40751	40928	41066	0.98	cps
Strontium	86-1	630	630	560	607	6.66	cps
Strontium	88-1	213	180	227	207	11.63	cps
Sulfur	34-1	152067	151916	150209	151397	0.68	cps
Terbium	159-1	4900703	4845048	5022472	4922741	1.84	cps
Terbium	159-2	3287778	3251162	3286275	3275072	0.63	cps
Thallium	203-1	343	303	293	313	8.44	cps
Thallium	205-1	820	783	707	770	7.51	cps
Tin	118-1	2757	2620	2840	2739	4.06	cps
Titanium	47-1	123	103	73	100	25.17	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB03	Instrumnet Name :	P7
Client Sample ID :	CCB03	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 17:43:18	DataFile Name :	042CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	83	80	127	97	26.93	cps
Vanadium	51-2	23	20	17	20	16.65	cps
Yttrium	89-1	6735530	6693047	6713538	6714038	0.32	cps
Yttrium	89-2	1918843	1899030	1890673	1902849	0.76	cps
Zinc	66-2	1547	1510	1640	1566	4.28	cps
Zirconium	90-1	413	480	523	472	11.73	cps
Zirconium	91-1	83	120	137	113	24.08	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-03DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:47:07	DataFile Name :	043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2371234	2422275	2363635	2385715	1.34	cps
Antimony	121-1	441844	441972	446862	443559	0.64	cps
Arsenic	75-2	64056	63852	63968	63959	0.16	cps
Barium	135-1	659667	676234	666692	667531	1.25	cps
Barium	137-1	1172682	1174146	1186396	1177741	0.64	cps
Beryllium	9-1	73121	73379	72927	73142	0.31	cps
Bismuth	209-1	3335539	3467675	3375477	3392897	2.00	cps
Bismuth	209-2	2795339	2733177	2809016	2779177	1.45	cps
Bromine	81-1	90685	112263	122849	108599	15.09	cps
Bromine	81-2	25542	25288	26080	25637	1.58	cps
Cadmium	108-1	9587	9677	9900	9721	1.66	cps
Cadmium	106-1	15295	15452	15395	15380	0.52	cps
Cadmium	111-1	137695	139870	142775	140113	1.82	cps
Calcium	43-1	255319	265484	261460	260754	1.96	cps
Calcium	44-1	4040229	4125397	3973756	4046461	1.88	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	880038	885303	893239	886193	0.75	cps
Cobalt	59-2	408842	413587	414436	412288	0.73	cps
Copper	63-2	3648690	3628722	3551865	3609759	1.42	cps
Dysprosium	156-1	21436	21016	20408	20954	2.47	cps
Dysprosium	156-2	18419	18656	18659	18578	0.74	cps
Erbium	164-1	19644	20942	20675	20421	3.36	cps
Erbium	164-2	14227	14141	14624	14331	1.80	cps
Gadolinium	160-1	21810	22041	21707	21853	0.78	cps
Gadolinium	160-2	16476	16703	16183	16454	1.59	cps
Holmium	165-1	5109970	5171792	5059301	5113688	1.10	cps
Holmium	165-2	3699118	3656531	3630262	3661971	0.95	cps
Indium	115-1	3848253	3904675	3923740	3892223	1.01	cps
Indium	115-2	1486967	1470250	1487376	1481531	0.66	cps
Iron	56-2	101015148	99592709	99803142	100137000	0.77	cps
Iron	57-2	2523501	2452689	2452934	2476375	1.65	cps
Iron	54-2	5510833	5470853	5471736	5484474	0.42	cps
Krypton	83-1	370	390	390	383	3.01	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-03DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:47:07	DataFile Name :	043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3367892	3457338	3388426	3404552	1.38	cps
Lead	207-1	2959812	3031297	2988397	2993169	1.20	cps
Lead	208-1	13583518	13774405	13576070	13644664	0.82	cps
Lithium	6-1	519133	537137	514658	523643	2.27	cps
Magnesium	24-2	5168685	5076319	5026792	5090599	1.41	cps
Manganese	55-2	2884263	2842583	2874853	2867233	0.76	cps
Molybdenum	94-1	788111	799467	811051	799543	1.43	cps
Molybdenum	95-1	822883	842357	846148	837129	1.49	cps
Molybdenum	96-1	938204	943267	961547	947673	1.30	cps
Molybdenum	97-1	520243	523890	536045	526726	1.57	cps
Molybdenum	98-1	1342716	1362522	1352714	1352651	0.73	cps
Neodymium	150-1	32464	33089	33613	33055	1.74	cps
Neodymium	150-2	19988	20225	20205	20139	0.65	cps
Nickel	60-2	179130	179406	179873	179470	0.21	cps
Phosphorus	31-2	15618	15348	15912	15626	1.80	cps
Potassium	39-2	2146333	2167713	2202521	2172189	1.31	cps
Rhodium	103-1	3846110	3910061	3825003	3860391	1.15	cps
Rhodium	103-2	2470301	2471529	2553780	2498537	1.91	cps
Scandium	45-1	2388238	2363952	2375261	2375817	0.51	cps
Scandium	45-2	251970	252014	253516	252500	0.35	cps
Selenium	82-1	11285	11299	11743	11442	2.28	cps
Selenium	77-2	1367	1390	1387	1381	0.91	cps
Selenium	78-2	4597	4447	4774	4606	3.55	cps
Silicon	28-1	1363618	1926300	6744232	3344717	88.42	cps
Silver	107-1	146011	150687	154049	150249	2.69	cps
Silver	109-1	141154	141773	144186	142371	1.13	cps
Sodium	23-2	7444156	7347917	7397441	7396504	0.65	cps
Strontium	86-1	265837	267115	275629	269527	1.97	cps
Strontium	88-1	2294107	2352308	2394765	2347060	2.15	cps
Sulfur	34-1	583007	572002	586095	580368	1.28	cps
Terbium	159-1	5055463	5108433	5096341	5086745	0.55	cps
Terbium	159-2	3368124	3430558	3421132	3406605	0.99	cps
Thallium	203-1	427315	425746	427530	426864	0.23	cps
Thallium	205-1	1008309	1022035	1024437	1018260	0.85	cps
Tin	118-1	455911	455186	458275	456457	0.35	cps
Titanium	47-1	246337	240445	245310	244031	1.29	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-03DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:47:07	DataFile Name :	043SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1296029	1303807	1315026	1304954	0.73	cps
Vanadium	51-2	313768	313743	313860	313790	0.02	cps
Yttrium	89-1	7145721	7269078	7214026	7209608	0.86	cps
Yttrium	89-2	2118059	2068400	2014829	2067096	2.50	cps
Zinc	66-2	875853	878594	878611	877686	0.18	cps
Zirconium	90-1	853030	872284	874653	866656	1.37	cps
Zirconium	91-1	191888	193088	195303	193426	0.90	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01ADLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:50:14	DataFile Name :	044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2545871	2518418	2526765	2530351	0.56	cps
Antimony	121-1	443346	453574	452349	449756	1.24	cps
Arsenic	75-2	64210	64798	64604	64537	0.46	cps
Barium	135-1	672169	682981	683940	679696	0.96	cps
Barium	137-1	1165224	1183182	1205141	1184516	1.69	cps
Beryllium	9-1	72397	73888	75124	73803	1.85	cps
Bismuth	209-1	3416144	3416623	3478726	3437164	1.05	cps
Bismuth	209-2	2715654	2893596	2750431	2786560	3.38	cps
Bromine	81-1	99705	127260	132949	119971	14.82	cps
Bromine	81-2	27426	27967	28047	27813	1.21	cps
Cadmium	108-1	9737	10040	9767	9848	1.70	cps
Cadmium	106-1	16226	15485	16256	15989	2.73	cps
Cadmium	111-1	141314	143347	142829	142497	0.74	cps
Calcium	43-1	273314	279409	271990	274904	1.44	cps
Calcium	44-1	4234285	4277592	4244457	4252111	0.53	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	891074	893839	895131	893348	0.23	cps
Cobalt	59-2	414185	418463	419326	417325	0.66	cps
Copper	63-2	3611263	3666253	3619174	3632230	0.82	cps
Dysprosium	156-1	21226	22064	22251	21847	2.50	cps
Dysprosium	156-2	19490	19908	20031	19810	1.43	cps
Erbium	164-1	21941	21550	22061	21850	1.22	cps
Erbium	164-2	15389	14811	15165	15122	1.92	cps
Gadolinium	160-1	22929	23293	23737	23319	1.74	cps
Gadolinium	160-2	17027	17244	17738	17336	2.10	cps
Holmium	165-1	5213616	5118625	5294138	5208793	1.69	cps
Holmium	165-2	3690406	3793308	3762197	3748637	1.41	cps
Indium	115-1	3978476	3984322	4076160	4012986	1.37	cps
Indium	115-2	1486125	1489437	1499743	1491768	0.48	cps
Iron	56-2	105206285	105228852	105613278	105349472	0.22	cps
Iron	57-2	2602548	2568016	2604526	2591696	0.79	cps
Iron	54-2	5777000	5770626	5737933	5761853	0.36	cps
Krypton	83-1	377	417	410	401	5.34	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01ADLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:50:14	DataFile Name :	044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3428052	3449338	3385710	3421033	0.95	cps
Lead	207-1	3044603	2972803	2953326	2990244	1.61	cps
Lead	208-1	13703717	13710209	13520006	13644644	0.79	cps
Lithium	6-1	543054	543606	538854	541838	0.48	cps
Magnesium	24-2	5341745	5191901	5292335	5275327	1.45	cps
Manganese	55-2	3047344	2972079	2978425	2999283	1.39	cps
Molybdenum	94-1	798511	815519	802893	805641	1.10	cps
Molybdenum	95-1	828653	845185	848814	840884	1.28	cps
Molybdenum	96-1	935257	950480	958496	948077	1.25	cps
Molybdenum	97-1	521791	528481	530145	526806	0.84	cps
Molybdenum	98-1	1336859	1370490	1360597	1355982	1.27	cps
Neodymium	150-1	35171	34636	35351	35052	1.06	cps
Neodymium	150-2	21179	20882	21413	21158	1.26	cps
Nickel	60-2	179392	181886	180358	180546	0.70	cps
Phosphorus	31-2	16933	16045	16709	16562	2.79	cps
Potassium	39-2	2249437	2206341	2153028	2202935	2.19	cps
Rhodium	103-1	3821862	3885252	3959415	3888843	1.77	cps
Rhodium	103-2	2534954	2527458	2524918	2529110	0.21	cps
Scandium	45-1	2389009	2402280	2405755	2399015	0.37	cps
Scandium	45-2	254637	250944	256999	254193	1.20	cps
Selenium	82-1	11560	11578	11502	11547	0.34	cps
Selenium	77-2	1440	1307	1397	1381	4.92	cps
Selenium	78-2	4601	4604	4848	4684	3.02	cps
Silicon	28-1	3067826	1483205	3415579	2655537	38.79	cps
Silver	107-1	152344	154984	155506	154278	1.10	cps
Silver	109-1	141604	145546	147924	145025	2.20	cps
Sodium	23-2	7408454	7560249	7751689	7573464	2.27	cps
Strontium	86-1	270949	278363	280169	276493	1.77	cps
Strontium	88-1	2461597	2386864	2396393	2414951	1.68	cps
Sulfur	34-1	598915	591887	602156	597653	0.88	cps
Terbium	159-1	5063969	5015618	5210110	5096566	1.99	cps
Terbium	159-2	3461709	3437693	3555049	3484817	1.78	cps
Thallium	203-1	422812	425109	439635	429185	2.13	cps
Thallium	205-1	1006133	1014061	1024999	1015064	0.93	cps
Tin	118-1	449214	456463	469320	458332	2.22	cps
Titanium	47-1	250871	254693	256747	254104	1.17	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-01ADLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-015094-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:50:14	DataFile Name :	044SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	1285921	1304061	1338394	1309459	2.04	cps
Vanadium	51-2	317584	318046	321839	319156	0.73	cps
Yttrium	89-1	7399706	7339894	7280033	7339877	0.82	cps
Yttrium	89-2	2061975	2052230	2079369	2064524	0.67	cps
Zinc	66-2	879031	877440	878558	878343	0.09	cps
Zirconium	90-1	867294	896604	882256	882051	1.66	cps
Zirconium	91-1	192806	196133	198613	195851	1.49	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-04DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-119133-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:53:24	DataFile Name :	045SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	4669503	4677865	4689277	4678881	0.21	cps
Antimony	121-1	2346	2483	2525	2451	3.83	cps
Arsenic	75-2	53590	53711	54194	53832	0.59	cps
Barium	135-1	759753	773472	774357	769194	1.06	cps
Barium	137-1	1305756	1337722	1349109	1330862	1.69	cps
Beryllium	9-1	1563	1717	1710	1663	5.21	cps
Bismuth	209-1	3425031	3353188	3402387	3393535	1.08	cps
Bismuth	209-2	2863128	2903565	2861067	2875920	0.83	cps
Bromine	81-1	185076	240614	268290	231327	18.32	cps
Bromine	81-2	54567	56106	55537	55403	1.40	cps
Cadmium	108-1	637	593	590	607	4.29	cps
Cadmium	106-1	2844	2840	2804	2829	0.78	cps
Cadmium	111-1	8420	8458	8525	8467	0.63	cps
Calcium	43-1	216005	219966	223282	219751	1.66	cps
Calcium	44-1	3328668	3513228	3446269	3429388	2.72	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	830248	834966	829046	831420	0.38	cps
Cobalt	59-2	109785	109197	108291	109091	0.69	cps
Copper	63-2	2212351	2169027	2209565	2196981	1.10	cps
Dysprosium	156-1	42106	43400	44029	43179	2.27	cps
Dysprosium	156-2	38486	38710	38727	38641	0.35	cps
Erbium	164-1	41899	42418	43675	42664	2.14	cps
Erbium	164-2	30490	30326	30346	30388	0.29	cps
Gadolinium	160-1	44771	46259	46052	45694	1.76	cps
Gadolinium	160-2	34670	34035	33908	34204	1.19	cps
Holmium	165-1	5093424	5198709	5224921	5172351	1.35	cps
Holmium	165-2	3727903	3719877	3746737	3731506	0.37	cps
Indium	115-1	3892746	4057163	4031495	3993801	2.21	cps
Indium	115-2	1507899	1530835	1512818	1517184	0.80	cps
Iron	56-2	216100857	213745697	217032423	215626326	0.79	cps
Iron	57-2	5328366	5244581	5213453	5262133	1.13	cps
Iron	54-2	11766343	11906621	11584121	11752362	1.38	cps
Krypton	83-1	467	473	440	460	3.83	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-04DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-119133-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:53:24	DataFile Name :	045SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	5672805	5767536	5805888	5748743	1.19	cps
Lead	207-1	4791225	4897046	4826820	4838364	1.11	cps
Lead	208-1	22166444	22691695	22671018	22509719	1.32	cps
Lithium	6-1	545725	551242	547052	548007	0.53	cps
Magnesium	24-2	4540392	4564193	4546560	4550381	0.27	cps
Manganese	55-2	2011072	2048923	2028369	2029455	0.93	cps
Molybdenum	94-1	81248	81220	82910	81793	1.18	cps
Molybdenum	95-1	9100	9403	9573	9359	2.56	cps
Molybdenum	96-1	22838	24047	24360	23748	3.38	cps
Molybdenum	97-1	5771	5548	5771	5697	2.26	cps
Molybdenum	98-1	15035	14954	15261	15083	1.06	cps
Neodymium	150-1	66097	65498	65552	65716	0.50	cps
Neodymium	150-2	40963	40565	39960	40496	1.25	cps
Nickel	60-2	128807	131194	128817	129606	1.06	cps
Phosphorus	31-2	25835	25521	25702	25686	0.61	cps
Potassium	39-2	1991739	1967620	1986556	1981971	0.64	cps
Rhodium	103-1	3911061	3934554	4120601	3988739	2.88	cps
Rhodium	103-2	2570606	2597467	2596291	2588121	0.59	cps
Scandium	45-1	2439627	2545167	2546204	2510332	2.44	cps
Scandium	45-2	269525	271533	265354	268804	1.17	cps
Selenium	82-1	1977	1928	2038	1981	2.78	cps
Selenium	77-2	393	407	333	378	10.34	cps
Selenium	78-2	1157	1223	1150	1177	3.45	cps
Silicon	28-1	2073113	3242903	1683677	2333231	34.78	cps
Silver	107-1	63204	64727	64757	64229	1.38	cps
Silver	109-1	59786	61761	62990	61512	2.63	cps
Sodium	23-2	3601816	3493965	3547982	3547921	1.52	cps
Strontium	86-1	235243	237145	237901	236763	0.58	cps
Strontium	88-1	2085620	2111738	2130475	2109278	1.07	cps
Sulfur	34-1	1031608	1049362	1047095	1042688	0.93	cps
Terbium	159-1	5171204	5214504	5050243	5145317	1.65	cps
Terbium	159-2	3580060	3518697	3487002	3528586	1.34	cps
Thallium	203-1	5805	5935	5995	5911	1.64	cps
Thallium	205-1	13894	13564	13881	13779	1.36	cps
Tin	118-1	348433	363934	362442	358270	2.39	cps
Titanium	47-1	323266	337437	335296	332000	2.30	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-04DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-119133-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:53:24	DataFile Name :	045SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	76379	78133	76323	76945	1.34	cps
Vanadium	51-2	228975	228009	225591	227525	0.77	cps
Yttrium	89-1	7750704	7753818	7849967	7784830	0.72	cps
Yttrium	89-2	2211126	2249627	2224750	2228501	0.88	cps
Zinc	66-2	822488	829718	825056	825754	0.44	cps
Zirconium	90-1	204414	205898	210508	206940	1.54	cps
Zirconium	91-1	45514	46691	46350	46185	1.31	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-05DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-094119-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:56:35	DataFile Name :	046SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3593586	3600518	3504565	3566223	1.50	cps
Antimony	121-1	3281	3120	3065	3155	3.55	cps
Arsenic	75-2	36142	36677	36297	36372	0.76	cps
Barium	135-1	564614	570067	565410	566697	0.52	cps
Barium	137-1	976536	985506	991407	984483	0.76	cps
Beryllium	9-1	1480	1413	1503	1466	3.19	cps
Bismuth	209-1	3384343	3473523	3364218	3407361	1.71	cps
Bismuth	209-2	2849038	2861296	2822565	2844300	0.70	cps
Bromine	81-1	153526	187343	202718	181196	13.89	cps
Bromine	81-2	41027	41675	41351	41351	0.78	cps
Cadmium	108-1	1873	1987	1967	1942	3.12	cps
Cadmium	106-1	4731	4614	4741	4695	1.50	cps
Cadmium	111-1	27807	27766	27848	27807	0.15	cps
Calcium	43-1	179287	181023	182420	180910	0.87	cps
Calcium	44-1	2765223	2802099	2770653	2779325	0.72	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1775842	1745211	1771381	1764145	0.94	cps
Cobalt	59-2	88029	89579	87912	88507	1.05	cps
Copper	63-2	2559150	2587969	2624385	2590502	1.26	cps
Dysprosium	156-1	32932	33136	32414	32827	1.13	cps
Dysprosium	156-2	30506	29949	29665	30040	1.43	cps
Erbium	164-1	31980	32865	32247	32364	1.40	cps
Erbium	164-2	22815	23450	22512	22926	2.09	cps
Gadolinium	160-1	34322	35304	35127	34918	1.50	cps
Gadolinium	160-2	26846	26235	26338	26473	1.24	cps
Holmium	165-1	5303441	5213826	5349040	5288769	1.30	cps
Holmium	165-2	3700624	3788295	3770947	3753289	1.24	cps
Indium	115-1	4074748	4087470	4123417	4095212	0.62	cps
Indium	115-2	1509273	1521332	1511578	1514061	0.42	cps
Iron	56-2	146461454	145982398	142970375	145138076	1.30	cps
Iron	57-2	3570844	3608627	3557703	3579058	0.74	cps
Iron	54-2	7985182	8153118	7975917	8038072	1.24	cps
Krypton	83-1	507	450	483	480	5.93	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-05DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-094119-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:56:35	DataFile Name :	046SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	4120501	4103498	4064790	4096263	0.70	cps
Lead	207-1	3529447	3517211	3523067	3523242	0.17	cps
Lead	208-1	16408100	16245401	16279728	16311076	0.53	cps
Lithium	6-1	546719	547371	540844	544978	0.66	cps
Magnesium	24-2	3465778	3488018	3476462	3476753	0.32	cps
Manganese	55-2	1249323	1269881	1253467	1257557	0.86	cps
Molybdenum	94-1	71386	72673	73084	72381	1.22	cps
Molybdenum	95-1	16690	16953	17067	16903	1.14	cps
Molybdenum	96-1	28655	29162	29637	29151	1.68	cps
Molybdenum	97-1	10504	10627	11211	10781	3.50	cps
Molybdenum	98-1	27245	27393	27756	27465	0.96	cps
Neodymium	150-1	52681	53096	52671	52816	0.46	cps
Neodymium	150-2	31736	31833	31893	31820	0.25	cps
Nickel	60-2	172263	173758	172305	172776	0.49	cps
Phosphorus	31-2	29104	28777	28226	28703	1.55	cps
Potassium	39-2	1485652	1483495	1490288	1486478	0.23	cps
Rhodium	103-1	3963644	4017314	4164235	4048398	2.57	cps
Rhodium	103-2	2606959	2607591	2573939	2596163	0.74	cps
Scandium	45-1	2432270	2503265	2420218	2451917	1.83	cps
Scandium	45-2	262581	262461	262356	262466	0.04	cps
Selenium	82-1	901	869	976	915	6.02	cps
Selenium	77-2	230	197	247	224	11.34	cps
Selenium	78-2	777	617	793	729	13.38	cps
Silicon	28-1	2053738	1840485	1683538	1859254	9.99	cps
Silver	107-1	78143	79297	78381	78607	0.78	cps
Silver	109-1	73961	74511	76263	74911	1.60	cps
Sodium	23-2	3564502	3689007	3735393	3662967	2.41	cps
Strontium	86-1	200528	203191	205664	203128	1.26	cps
Strontium	88-1	1750976	1762134	1865791	1792967	3.53	cps
Sulfur	34-1	773119	786144	790750	783338	1.17	cps
Terbium	159-1	5092454	5168707	5208909	5156690	1.15	cps
Terbium	159-2	3426521	3485143	3540291	3483985	1.63	cps
Thallium	203-1	4487	4284	4581	4451	3.41	cps
Thallium	205-1	9960	10251	9977	10063	1.62	cps
Tin	118-1	421808	423163	426488	423820	0.57	cps
Titanium	47-1	363103	373362	376708	371058	1.91	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3419-05DLX5	Instrumnet Name :	P7
Client Sample ID :	PR-132-S16-094119-202	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:56:35	DataFile Name :	046SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	65896	68199	67937	67344	1.87	cps
Vanadium	51-2	263234	266289	263261	264261	0.66	cps
Yttrium	89-1	7626206	7535648	7606839	7589564	0.63	cps
Yttrium	89-2	2195064	2142520	2169421	2169002	1.21	cps
Zinc	66-2	796045	790084	789033	791721	0.48	cps
Zirconium	90-1	168529	171854	171445	170610	1.06	cps
Zirconium	91-1	37337	38193	38587	38039	1.68	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3422-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S15-000008-2025	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:59:54	DataFile Name :	047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2390885	2400431	2393459	2394925	0.21	cps
Antimony	121-1	1632	1520	1540	1564	3.82	cps
Arsenic	75-2	28095	28418	27885	28133	0.95	cps
Barium	135-1	435844	438940	443801	439528	0.91	cps
Barium	137-1	764785	769443	770858	768362	0.41	cps
Beryllium	9-1	890	947	987	941	5.16	cps
Bismuth	209-1	3485760	3312937	3524700	3441132	3.28	cps
Bismuth	209-2	2830952	2882212	2838798	2850654	0.97	cps
Bromine	81-1	67859	79764	82438	76687	10.12	cps
Bromine	81-2	16169	16413	16503	16361	1.06	cps
Cadmium	108-1	980	1083	1050	1038	5.08	cps
Cadmium	106-1	3587	3447	3284	3439	4.42	cps
Cadmium	111-1	15982	16693	16408	16361	2.19	cps
Calcium	43-1	70680	70945	72151	71259	1.10	cps
Calcium	44-1	1128226	1141747	1153946	1141306	1.13	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	810262	807653	804152	807356	0.38	cps
Cobalt	59-2	60943	60317	60826	60695	0.55	cps
Copper	63-2	1166180	1178865	1180066	1175037	0.65	cps
Dysprosium	156-1	23670	24034	24298	24001	1.31	cps
Dysprosium	156-2	21186	22124	22775	22028	3.63	cps
Erbium	164-1	23063	23149	22552	22921	1.41	cps
Erbium	164-2	16069	16834	15939	16281	2.97	cps
Gadolinium	160-1	24812	25103	25239	25051	0.87	cps
Gadolinium	160-2	19160	18683	19103	18982	1.37	cps
Holmium	165-1	5148135	5337259	5155893	5213762	2.05	cps
Holmium	165-2	3704665	3779392	3753981	3746013	1.01	cps
Indium	115-1	4120654	4027313	4044308	4064092	1.22	cps
Indium	115-2	1515369	1541748	1511551	1522889	1.08	cps
Iron	56-2	94641339	95229579	94466672	94779196	0.42	cps
Iron	57-2	2311309	2318332	2281346	2303663	0.85	cps
Iron	54-2	5182886	5146847	5152004	5160579	0.38	cps
Krypton	83-1	407	500	423	443	11.23	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3422-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S15-000008-2025	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:59:54	DataFile Name :	047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3257702	3160547	3239382	3219211	1.60	cps
Lead	207-1	2807985	2817387	2744559	2789977	1.42	cps
Lead	208-1	12952602	12734481	12861310	12849464	0.85	cps
Lithium	6-1	532978	531831	530685	531831	0.22	cps
Magnesium	24-2	2396969	2423320	2425805	2415365	0.66	cps
Manganese	55-2	1185394	1177544	1185920	1182953	0.40	cps
Molybdenum	94-1	42762	43872	44183	43606	1.71	cps
Molybdenum	95-1	7795	8162	8346	8101	3.46	cps
Molybdenum	96-1	15652	15672	15895	15740	0.86	cps
Molybdenum	97-1	5031	5111	5194	5112	1.60	cps
Molybdenum	98-1	13169	13106	13296	13190	0.73	cps
Neodymium	150-1	37607	38406	38265	38093	1.12	cps
Neodymium	150-2	23383	23720	23159	23421	1.21	cps
Nickel	60-2	73077	73844	74709	73876	1.10	cps
Phosphorus	31-2	8899	8366	8909	8725	3.56	cps
Potassium	39-2	1116460	1137946	1125823	1126743	0.96	cps
Rhodium	103-1	4014050	3993172	4111215	4039479	1.56	cps
Rhodium	103-2	2595888	2604748	2556692	2585776	0.99	cps
Scandium	45-1	2500784	2447363	2479399	2475849	1.09	cps
Scandium	45-2	262441	265443	263076	263653	0.60	cps
Selenium	82-1	622	469	517	536	14.55	cps
Selenium	77-2	157	150	117	141	15.19	cps
Selenium	78-2	537	590	550	559	4.97	cps
Silicon	28-1	2537613	1785018	2728026	2350219	21.22	cps
Silver	107-1	46585	47120	47528	47077	1.00	cps
Silver	109-1	44502	46066	45491	45353	1.75	cps
Sodium	23-2	1382007	1396616	1351357	1376660	1.68	cps
Strontium	86-1	85812	91626	88196	88544	3.30	cps
Strontium	88-1	750376	760810	777161	762782	1.77	cps
Sulfur	34-1	512115	514757	511164	512679	0.36	cps
Terbium	159-1	5121089	5038001	5147639	5102243	1.12	cps
Terbium	159-2	3491170	3573770	3515599	3526846	1.20	cps
Thallium	203-1	2940	3297	3077	3105	5.80	cps
Thallium	205-1	7055	7502	7079	7212	3.49	cps
Tin	118-1	133830	134595	135255	134560	0.53	cps
Titanium	47-1	256933	259439	265337	260570	1.66	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3422-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S15-000008-2025	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 17:59:54	DataFile Name :	047SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	38005	38302	38336	38214	0.48	cps
Vanadium	51-2	124448	124543	122956	123982	0.72	cps
Yttrium	89-1	7445156	7547989	7671851	7554999	1.50	cps
Yttrium	89-2	2158273	2186245	2135970	2160162	1.17	cps
Zinc	66-2	387179	389755	382106	386347	1.01	cps
Zirconium	90-1	104570	107221	108702	106831	1.96	cps
Zirconium	91-1	23312	23976	24260	23850	2.04	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-DP3-20251021DL	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:03:09	DataFile Name :	048SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3605052	3606278	3639342	3616891	0.54	cps
Antimony	121-1	1898	1874	2138	1970	7.41	cps
Arsenic	75-2	24019	24108	24098	24075	0.20	cps
Barium	135-1	610585	607338	605559	607827	0.42	cps
Barium	137-1	1051166	1040131	1064388	1051895	1.15	cps
Beryllium	9-1	1403	1400	1430	1411	1.17	cps
Bismuth	209-1	3444011	3448757	3315997	3402922	2.21	cps
Bismuth	209-2	2860464	2781316	2877155	2839645	1.80	cps
Bromine	81-1	191518	241939	259253	230903	15.24	cps
Bromine	81-2	54299	54898	55802	55000	1.37	cps
Cadmium	108-1	2860	3014	3087	2987	3.87	cps
Cadmium	106-1	6088	5658	5955	5900	3.73	cps
Cadmium	111-1	39384	39874	40064	39774	0.88	cps
Calcium	43-1	182846	188324	181226	184132	2.02	cps
Calcium	44-1	2872274	2873368	2833033	2859558	0.80	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1917413	1950233	1977549	1948398	1.55	cps
Cobalt	59-2	97789	97112	98051	97651	0.50	cps
Copper	63-2	2536934	2488409	2430962	2485435	2.13	cps
Dysprosium	156-1	32153	32504	32514	32391	0.63	cps
Dysprosium	156-2	29351	29605	29291	29415	0.57	cps
Erbium	164-1	32220	32317	32545	32361	0.51	cps
Erbium	164-2	22685	22565	23019	22756	1.03	cps
Gadolinium	160-1	34686	34663	35127	34826	0.75	cps
Gadolinium	160-2	26185	25847	26114	26049	0.68	cps
Holmium	165-1	5338136	5131569	5225473	5231726	1.98	cps
Holmium	165-2	3690406	3693799	3703560	3695922	0.18	cps
Indium	115-1	4111394	4103251	4039416	4084687	0.96	cps
Indium	115-2	1529796	1513029	1516288	1519704	0.58	cps
Iron	56-2	148605238	148320598	149273904	148733247	0.33	cps
Iron	57-2	3656193	3616386	3563606	3612062	1.29	cps
Iron	54-2	8271491	8119923	8161059	8184158	0.96	cps
Krypton	83-1	397	467	430	431	8.12	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-DP3-20251021DL	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:03:09	DataFile Name :	048SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3453641	3434674	3387318	3425211	1.00	cps
Lead	207-1	2845278	2901087	2861819	2869395	1.00	cps
Lead	208-1	13292827	13466952	13156879	13305553	1.17	cps
Lithium	6-1	524208	536560	524078	528282	1.36	cps
Magnesium	24-2	3887621	3864367	3854190	3868726	0.44	cps
Manganese	55-2	1336686	1324729	1334197	1331871	0.47	cps
Molybdenum	94-1	82665	84730	84949	84115	1.50	cps
Molybdenum	95-1	21269	21276	22013	21519	1.99	cps
Molybdenum	96-1	35807	36061	35473	35780	0.82	cps
Molybdenum	97-1	13573	13813	13526	13638	1.13	cps
Molybdenum	98-1	33846	34862	34477	34395	1.49	cps
Neodymium	150-1	52042	52002	51976	52007	0.06	cps
Neodymium	150-2	30947	31291	31235	31158	0.59	cps
Nickel	60-2	156043	155443	154269	155252	0.58	cps
Phosphorus	31-2	28994	29215	28727	28979	0.84	cps
Potassium	39-2	1586127	1567663	1579821	1577870	0.59	cps
Rhodium	103-1	4017384	4014857	4121584	4051275	1.50	cps
Rhodium	103-2	2542148	2576378	2562886	2560470	0.67	cps
Scandium	45-1	2521791	2466044	2494268	2494034	1.12	cps
Scandium	45-2	264961	262427	265995	264461	0.69	cps
Selenium	82-1	776	654	818	750	11.35	cps
Selenium	77-2	193	200	183	192	4.36	cps
Selenium	78-2	630	643	810	694	14.44	cps
Silicon	28-1	1510462	4376608	1796474	2561181	61.64	cps
Silver	107-1	54395	56004	55720	55373	1.55	cps
Silver	109-1	51859	52110	53074	52348	1.22	cps
Sodium	23-2	7306256	7290921	7271763	7289647	0.24	cps
Strontium	86-1	225574	224421	228022	226006	0.81	cps
Strontium	88-1	1984130	1960936	2007593	1984220	1.18	cps
Sulfur	34-1	873548	887839	893895	885094	1.18	cps
Terbium	159-1	5109485	4993781	5264676	5122647	2.65	cps
Terbium	159-2	3549773	3474083	3500277	3508044	1.10	cps
Thallium	203-1	3517	3224	3347	3363	4.38	cps
Thallium	205-1	8216	8102	7969	8096	1.53	cps
Tin	118-1	247399	244954	248554	246969	0.74	cps
Titanium	47-1	377813	383667	389916	383799	1.58	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-DP3-20251021DL	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:03:09	DataFile Name :	048SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	56098	56815	57745	56886	1.45	cps
Vanadium	51-2	231472	228495	228228	229398	0.79	cps
Yttrium	89-1	7538697	7866449	7637633	7680926	2.19	cps
Yttrium	89-2	2208676	2180882	2129253	2172937	1.85	cps
Zinc	66-2	832661	833321	837499	834494	0.31	cps
Zirconium	90-1	197219	198809	197018	197682	0.50	cps
Zirconium	91-1	43441	43899	43538	43626	0.55	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-02DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S11-010080-2025	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:06:16	DataFile Name :	049SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	3892256	3904349	3841883	3879496	0.85	cps
Antimony	121-1	1523	1702	1539	1588	6.24	cps
Arsenic	75-2	21579	20953	21011	21181	1.63	cps
Barium	135-1	397287	403972	400553	400604	0.83	cps
Barium	137-1	699684	709811	698613	702703	0.88	cps
Beryllium	9-1	1620	1443	1720	1595	8.79	cps
Bismuth	209-1	3350045	3396955	3457498	3401499	1.58	cps
Bismuth	209-2	2828975	2832463	2831833	2831090	0.07	cps
Bromine	81-1	194764	239991	264646	233134	15.20	cps
Bromine	81-2	54731	54701	54276	54569	0.47	cps
Cadmium	108-1	1997	2007	2120	2041	3.36	cps
Cadmium	106-1	4861	4798	4597	4752	2.89	cps
Cadmium	111-1	26382	26588	26993	26654	1.17	cps
Calcium	43-1	220783	220663	223868	221771	0.82	cps
Calcium	44-1	3471191	3429479	3459845	3453505	0.62	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1458122	1448458	1456577	1454386	0.36	cps
Cobalt	59-2	109869	110090	109248	109736	0.40	cps
Copper	63-2	1949110	1961995	1957964	1956357	0.34	cps
Dysprosium	156-1	34402	33821	35157	34460	1.94	cps
Dysprosium	156-2	31509	31091	31382	31327	0.68	cps
Erbium	164-1	34202	34359	34723	34428	0.78	cps
Erbium	164-2	24649	24431	24682	24587	0.55	cps
Gadolinium	160-1	37159	36985	36752	36965	0.55	cps
Gadolinium	160-2	27881	27798	27724	27801	0.28	cps
Holmium	165-1	5253210	5151337	5186070	5196872	1.00	cps
Holmium	165-2	3797864	3766563	3700910	3755112	1.32	cps
Indium	115-1	4006073	4055647	4094960	4052227	1.10	cps
Indium	115-2	1524478	1520631	1514725	1519944	0.32	cps
Iron	56-2	160839848	161015508	158724094	160193150	0.80	cps
Iron	57-2	3980170	3935716	3912455	3942780	0.87	cps
Iron	54-2	8768925	8678834	8827982	8758580	0.86	cps
Krypton	83-1	403	457	450	437	6.66	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-02DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S11-010080-2025	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:06:16	DataFile Name :	049SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	3425336	3460639	3409085	3431687	0.77	cps
Lead	207-1	2965143	2975154	2918423	2952907	1.03	cps
Lead	208-1	13395083	13508453	13540856	13481464	0.57	cps
Lithium	6-1	521959	515862	533513	523778	1.71	cps
Magnesium	24-2	4400567	4362491	4362478	4375179	0.50	cps
Manganese	55-2	1528130	1548032	1537496	1537886	0.65	cps
Molybdenum	94-1	92151	94385	91866	92800	1.49	cps
Molybdenum	95-1	21195	21486	21055	21245	1.03	cps
Molybdenum	96-1	37471	37792	37495	37586	0.48	cps
Molybdenum	97-1	12736	13443	13877	13352	4.31	cps
Molybdenum	98-1	33839	34926	34855	34540	1.76	cps
Neodymium	150-1	53437	55442	55178	54686	1.99	cps
Neodymium	150-2	33871	33326	32962	33386	1.37	cps
Nickel	60-2	166170	165452	165368	165663	0.27	cps
Phosphorus	31-2	23154	23832	23739	23575	1.56	cps
Potassium	39-2	1709462	1714429	1722757	1715550	0.39	cps
Rhodium	103-1	4010489	3929922	4015559	3985323	1.21	cps
Rhodium	103-2	2549639	2588520	2556412	2564857	0.81	cps
Scandium	45-1	2502102	2439025	2551543	2497556	2.26	cps
Scandium	45-2	266418	266966	266533	266639	0.11	cps
Selenium	82-1	626	651	634	637	1.96	cps
Selenium	77-2	227	227	190	214	9.87	cps
Selenium	78-2	663	633	650	649	2.32	cps
Silicon	28-1	1472626	1921088	1297292	1563669	20.57	cps
Silver	107-1	60097	61838	62223	61386	1.84	cps
Silver	109-1	57671	58695	58431	58266	0.91	cps
Sodium	23-2	7490334	7646354	7589809	7575499	1.04	cps
Strontium	86-1	232329	238890	242280	237833	2.13	cps
Strontium	88-1	2034371	2121383	2104290	2086681	2.21	cps
Sulfur	34-1	994775	990700	988478	991317	0.32	cps
Terbium	159-1	5077169	5064063	5200759	5113997	1.47	cps
Terbium	159-2	3443307	3555444	3450255	3483002	1.80	cps
Thallium	203-1	3454	3480	3667	3534	3.29	cps
Thallium	205-1	7902	8052	8019	7991	0.99	cps
Tin	118-1	249664	248643	251674	249994	0.62	cps
Titanium	47-1	388103	391651	396063	391939	1.02	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-02DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S11-010080-2025	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:06:16	DataFile Name :	049SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	54780	54616	54837	54744	0.21	cps
Vanadium	51-2	225359	223861	223966	224395	0.37	cps
Yttrium	89-1	7537164	7790612	7680068	7669281	1.66	cps
Yttrium	89-2	2220870	2243237	2211089	2225065	0.74	cps
Zinc	66-2	764228	758231	755602	759354	0.58	cps
Zirconium	90-1	214186	220712	219244	218047	1.57	cps
Zirconium	91-1	47848	49286	49684	48939	1.97	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-03DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S14-00094-20251	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:09:30	DataFile Name :	050SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	2525594	2482793	2579195	2529194	1.91	cps
Antimony	121-1	1419	1343	1547	1436	7.19	cps
Arsenic	75-2	17270	17364	17191	17275	0.50	cps
Barium	135-1	311342	309130	312706	311060	0.58	cps
Barium	137-1	538543	539201	546183	541309	0.78	cps
Beryllium	9-1	1173	1213	1260	1216	3.57	cps
Bismuth	209-1	3457227	3359681	3478996	3431968	1.85	cps
Bismuth	209-2	2843273	2830848	2890953	2855025	1.11	cps
Bromine	81-1	148000	179776	196670	174815	14.14	cps
Bromine	81-2	39870	39737	40198	39935	0.59	cps
Cadmium	108-1	1373	1367	1337	1359	1.44	cps
Cadmium	106-1	3567	3594	3514	3558	1.15	cps
Cadmium	111-1	18506	18409	18751	18555	0.95	cps
Calcium	43-1	127679	128549	130755	128994	1.23	cps
Calcium	44-1	1977693	2069844	2066670	2038069	2.57	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1056625	1054760	1049864	1053750	0.33	cps
Cobalt	59-2	71462	71211	72497	71724	0.95	cps
Copper	63-2	1384091	1393542	1383304	1386979	0.41	cps
Dysprosium	156-1	22425	22812	22822	22686	1.00	cps
Dysprosium	156-2	20896	20829	20665	20797	0.57	cps
Erbium	164-1	22158	22602	22001	22253	1.40	cps
Erbium	164-2	15729	15662	15622	15671	0.34	cps
Gadolinium	160-1	24338	24562	24595	24498	0.57	cps
Gadolinium	160-2	18599	17968	18025	18197	1.92	cps
Holmium	165-1	5216456	5163442	5141844	5173914	0.74	cps
Holmium	165-2	3795577	3668846	3740485	3734969	1.70	cps
Indium	115-1	4099702	4086454	4102507	4096221	0.21	cps
Indium	115-2	1536016	1525877	1531022	1530971	0.33	cps
Iron	56-2	104069162	103179022	103588055	103612080	0.43	cps
Iron	57-2	2544294	2527212	2603820	2558442	1.57	cps
Iron	54-2	5736761	5773820	5634195	5714926	1.27	cps
Krypton	83-1	410	363	490	421	15.21	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-03DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S14-00094-20251	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:09:30	DataFile Name :	050SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1903011	1952564	1955683	1937086	1.53	cps
Lead	207-1	1514536	1521662	1538986	1525061	0.82	cps
Lead	208-1	7358256	7464088	7542790	7455044	1.24	cps
Lithium	6-1	523120	513426	525273	520606	1.21	cps
Magnesium	24-2	2850263	2930658	2844811	2875244	1.67	cps
Manganese	55-2	1003882	1001860	1001491	1002411	0.13	cps
Molybdenum	94-1	58771	59273	59551	59198	0.67	cps
Molybdenum	95-1	15191	14961	15338	15164	1.25	cps
Molybdenum	96-1	24407	25626	24521	24851	2.71	cps
Molybdenum	97-1	9553	9453	9026	9344	3.00	cps
Molybdenum	98-1	24494	24350	23683	24176	1.79	cps
Neodymium	150-1	36417	36982	36628	36675	0.78	cps
Neodymium	150-2	21817	23029	22869	22572	2.92	cps
Nickel	60-2	106428	105965	107264	106552	0.62	cps
Phosphorus	31-2	17647	18067	17564	17759	1.52	cps
Potassium	39-2	1204299	1193716	1211979	1203331	0.76	cps
Rhodium	103-1	3952467	4035666	4041947	4010027	1.25	cps
Rhodium	103-2	2585993	2523796	2579536	2563108	1.33	cps
Scandium	45-1	2452408	2383291	2438814	2424838	1.51	cps
Scandium	45-2	264201	260919	263862	262994	0.69	cps
Selenium	82-1	475	556	438	490	12.32	cps
Selenium	77-2	143	150	147	147	2.27	cps
Selenium	78-2	547	587	537	557	4.75	cps
Silicon	28-1	1197860	1302163	1206123	1235382	4.69	cps
Silver	107-1	63344	64352	64878	64191	1.21	cps
Silver	109-1	59709	61386	61902	60999	1.88	cps
Sodium	23-2	4907284	4876210	4922425	4901973	0.48	cps
Strontium	86-1	137684	139474	139209	138789	0.70	cps
Strontium	88-1	1206549	1219855	1222660	1216355	0.71	cps
Sulfur	34-1	636942	636148	640188	637759	0.34	cps
Terbium	159-1	5247646	5213021	5192535	5217734	0.53	cps
Terbium	159-2	3518434	3539690	3413508	3490544	1.94	cps
Thallium	203-1	2244	2210	2344	2266	3.06	cps
Thallium	205-1	5248	5428	5394	5357	1.79	cps
Tin	118-1	187326	190717	190664	189569	1.02	cps
Titanium	47-1	264350	265167	266781	265433	0.47	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3424-03DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-S14-00094-20251	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:09:30	DataFile Name :	050SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	38091	38158	38409	38220	0.44	cps
Vanadium	51-2	159066	159066	160867	159666	0.65	cps
Yttrium	89-1	7482455	7420458	7338378	7413764	0.97	cps
Yttrium	89-2	2148489	2126759	2160162	2145137	0.79	cps
Zinc	66-2	534468	527957	533612	532013	0.66	cps
Zirconium	90-1	138358	140310	139953	139540	0.74	cps
Zirconium	91-1	30448	30415	31076	30647	1.22	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3434-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-WC1-20251022D	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:12:42	DataFile Name :	051SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	1996848	1979608	1938209	1971555	1.53	cps
Antimony	121-1	2386	2191	2206	2261	4.81	cps
Arsenic	75-2	15516	15525	15120	15387	1.50	cps
Barium	135-1	352955	356440	354810	354735	0.49	cps
Barium	137-1	617824	623106	623369	621433	0.50	cps
Beryllium	9-1	837	733	783	784	6.59	cps
Bismuth	209-1	3379494	3286985	3451857	3372779	2.45	cps
Bismuth	209-2	2783751	2801674	2821295	2802240	0.67	cps
Bromine	81-1	88873	105474	112286	102211	11.78	cps
Bromine	81-2	21953	22360	22494	22269	1.26	cps
Cadmium	108-1	1430	1513	1403	1449	3.96	cps
Cadmium	106-1	3701	3911	3684	3765	3.36	cps
Cadmium	111-1	21600	21755	22044	21800	1.03	cps
Calcium	43-1	92725	92960	92604	92763	0.20	cps
Calcium	44-1	1424356	1434234	1383369	1413987	1.91	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1109903	1105019	1115585	1110169	0.48	cps
Cobalt	59-2	52277	52649	51618	52181	1.00	cps
Copper	63-2	1396996	1398467	1399523	1398328	0.09	cps
Dysprosium	156-1	18653	18679	18853	18728	0.58	cps
Dysprosium	156-2	16617	16179	16410	16402	1.33	cps
Erbium	164-1	17898	18002	17892	17931	0.34	cps
Erbium	164-2	13126	12569	12663	12786	2.33	cps
Gadolinium	160-1	19157	19771	19517	19481	1.58	cps
Gadolinium	160-2	14521	15062	14247	14610	2.84	cps
Holmium	165-1	5158066	5298713	5131474	5196085	1.73	cps
Holmium	165-2	3694581	3646313	3718352	3686416	1.00	cps
Indium	115-1	4088539	4127998	4077557	4098031	0.65	cps
Indium	115-2	1502505	1513279	1519024	1511603	0.55	cps
Iron	56-2	78492472	76855526	78028801	77792266	1.08	cps
Iron	57-2	1939015	1986044	1914482	1946514	1.87	cps
Iron	54-2	4403433	4369037	4364807	4379092	0.48	cps
Krypton	83-1	423	383	393	400	5.20	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3434-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-WC1-20251022D	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:12:42	DataFile Name :	051SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	1755484	1743841	1729229	1742851	0.75	cps
Lead	207-1	1374447	1379783	1378630	1377620	0.20	cps
Lead	208-1	6756011	6797226	6735567	6762935	0.46	cps
Lithium	6-1	519447	516226	517938	517870	0.31	cps
Magnesium	24-2	1966772	2000033	1985094	1983966	0.84	cps
Manganese	55-2	764798	776812	766881	769497	0.83	cps
Molybdenum	94-1	49942	45514	46186	47214	5.05	cps
Molybdenum	95-1	13910	14017	14364	14097	1.68	cps
Molybdenum	96-1	21219	21389	21750	21453	1.26	cps
Molybdenum	97-1	8679	8419	8956	8685	3.09	cps
Molybdenum	98-1	22567	23502	22965	23012	2.04	cps
Neodymium	150-1	29284	29397	29798	29493	0.92	cps
Neodymium	150-2	18716	18048	18065	18276	2.08	cps
Nickel	60-2	85237	84966	84808	85004	0.26	cps
Phosphorus	31-2	15358	14954	15011	15108	1.45	cps
Potassium	39-2	933086	908984	910212	917428	1.48	cps
Rhodium	103-1	4070212	4106442	3993909	4056854	1.42	cps
Rhodium	103-2	2583992	2616433	2523585	2574670	1.83	cps
Scandium	45-1	2409119	2451329	2417275	2425907	0.92	cps
Scandium	45-2	260057	258985	260296	259779	0.27	cps
Selenium	82-1	484	467	482	478	1.91	cps
Selenium	77-2	107	173	77	119	41.62	cps
Selenium	78-2	507	567	543	539	5.61	cps
Silicon	28-1	2814670	1656341	1510292	1993768	35.84	cps
Silver	107-1	71740	72989	72875	72535	0.95	cps
Silver	109-1	67751	68166	68746	68221	0.73	cps
Sodium	23-2	2790327	2785626	2785028	2786994	0.10	cps
Strontium	86-1	117289	119614	118832	118578	1.00	cps
Strontium	88-1	1028784	1034183	1031937	1031634	0.26	cps
Sulfur	34-1	500097	501345	511230	504224	1.21	cps
Terbium	159-1	5138082	5122591	5134664	5131779	0.16	cps
Terbium	159-2	3476787	3383653	3529437	3463292	2.13	cps
Thallium	203-1	1990	2077	2054	2040	2.20	cps
Thallium	205-1	4728	4834	4774	4779	1.12	cps
Tin	118-1	134757	135629	135341	135242	0.33	cps
Titanium	47-1	231638	237058	236370	235022	1.26	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	Q3434-01DLX5	Instrumnet Name :	P7
Client Sample ID :	PR132-WC1-20251022D	Dilution Factor :	5
Date & Time Acquired :	2025-10-23 18:12:42	DataFile Name :	051SMPL.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	36491	36841	37296	36876	1.10	cps
Vanadium	51-2	138011	137285	138463	137920	0.43	cps
Yttrium	89-1	7592444	7346187	7348094	7428908	1.91	cps
Yttrium	89-2	2120325	2214722	2119659	2151569	2.54	cps
Zinc	66-2	452514	451992	448122	450876	0.53	cps
Zirconium	90-1	102469	104551	103479	103500	1.01	cps
Zirconium	91-1	22621	22758	22801	22727	0.41	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P7
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 18:19:25	DataFile Name :	053CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	7968899	7865675	7658545	7831040	2.02	cps
Antimony	121-1	2679327	2772626	2712887	2721613	1.74	cps
Arsenic	75-2	288253	285264	283008	285508	0.92	cps
Barium	135-1	3160182	3211791	3145148	3172373	1.10	cps
Barium	137-1	5556501	5477992	5618851	5551115	1.27	cps
Beryllium	9-1	419213	422165	427842	423073	1.04	cps
Bismuth	209-1	3196224	3267151	3255788	3239721	1.18	cps
Bismuth	209-2	2629577	2618878	2606058	2618171	0.45	cps
Bromine	81-1	13750	13453	13279	13494	1.76	cps
Bromine	81-2	927	1000	967	964	3.81	cps
Cadmium	108-1	53515	53756	54201	53824	0.65	cps
Cadmium	106-1	75173	77194	75881	76083	1.35	cps
Cadmium	111-1	740015	746930	752082	746342	0.81	cps
Calcium	43-1	3557588	3554009	3576905	3562834	0.35	cps
Calcium	44-1	56838502	56139573	56284737	56420937	0.65	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1415477	1382167	1394091	1397245	1.21	cps
Cobalt	59-2	2150059	2126757	2108709	2128508	0.97	cps
Copper	63-2	15979184	16035516	16127044	16047248	0.47	cps
Dysprosium	156-1	187	153	123	154	20.51	cps
Dysprosium	156-2	380	330	277	329	15.71	cps
Erbium	164-1	337	327	360	341	5.02	cps
Erbium	164-2	260	260	253	258	1.49	cps
Gadolinium	160-1	207	233	197	212	8.93	cps
Gadolinium	160-2	377	377	373	376	0.51	cps
Holmium	165-1	5144513	4989035	5127223	5086923	1.68	cps
Holmium	165-2	3711890	3696220	3610361	3672824	1.49	cps
Indium	115-1	3910363	3930456	3889447	3910089	0.52	cps
Indium	115-2	1449154	1419868	1415703	1428241	1.28	cps
Iron	56-2	316316655	309643382	308515329	311491789	1.35	cps
Iron	57-2	7759356	7676706	7793873	7743312	0.78	cps
Iron	54-2	17288753	16855806	16832271	16992277	1.51	cps
Krypton	83-1	390	420	383	398	4.91	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P7
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 18:19:25	DataFile Name :	053CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	10680357	11123100	11034364	10945940	2.14	cps
Lead	207-1	9290296	9607740	9520534	9472857	1.73	cps
Lead	208-1	42665800	44524078	43629577	43606485	2.13	cps
Lithium	6-1	515716	515381	517551	516216	0.23	cps
Magnesium	24-2	69938782	70033674	68683877	69552111	1.08	cps
Manganese	55-2	11792143	11392419	11497894	11560819	1.79	cps
Molybdenum	94-1	9694203	9881374	9661653	9745744	1.22	cps
Molybdenum	95-1	13825932	13916978	13832455	13858455	0.37	cps
Molybdenum	96-1	15126677	15098022	14965758	15063486	0.57	cps
Molybdenum	97-1	8528430	8793549	8424723	8582234	2.22	cps
Molybdenum	98-1	21829923	22534202	21856283	22073469	1.81	cps
Neodymium	150-1	247	193	223	221	12.09	cps
Neodymium	150-2	73	73	107	84	22.80	cps
Nickel	60-2	540735	544678	540862	542092	0.41	cps
Phosphorus	31-2	94269	93208	93339	93605	0.62	cps
Potassium	39-2	36647944	36346803	36883251	36625999	0.73	cps
Rhodium	103-1	3819652	3693521	3706732	3739968	1.85	cps
Rhodium	103-2	2427460	2426666	2360171	2404766	1.61	cps
Scandium	45-1	2319401	2337311	2322919	2326544	0.41	cps
Scandium	45-2	253823	247935	250920	250893	1.17	cps
Selenium	82-1	61258	61351	61444	61351	0.15	cps
Selenium	77-2	7239	6802	6912	6984	3.25	cps
Selenium	78-2	23969	23205	22871	23348	2.41	cps
Silicon	28-1	26827555	27090958	26520720	26813078	1.06	cps
Silver	107-1	3586242	3596652	3611282	3598059	0.35	cps
Silver	109-1	3459530	3467033	3404570	3443711	0.99	cps
Sodium	23-2	108166602	109398505	107627918	108397675	0.84	cps
Strontium	86-1	870738	883472	874060	876090	0.75	cps
Strontium	88-1	7630813	7637708	7806196	7691572	1.29	cps
Sulfur	34-1	391031	391235	388725	390330	0.36	cps
Terbium	159-1	5118385	5114104	5055219	5095902	0.69	cps
Terbium	159-2	3567179	3363562	3438200	3456314	2.98	cps
Thallium	203-1	2665760	2750073	2765128	2726987	1.96	cps
Thallium	205-1	6541501	6607132	6685818	6611484	1.09	cps
Tin	118-1	2237968	2261246	2273743	2257652	0.80	cps
Titanium	47-1	3555190	3656662	3567332	3593061	1.54	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCV04	Instrumnet Name :	P7
Client Sample ID :	CCV04	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 18:19:25	DataFile Name :	053CCV.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	8700343	8662966	8642531	8668613	0.34	cps
Vanadium	51-2	1179626	1170962	1171446	1174012	0.41	cps
Yttrium	89-1	7006893	6906391	6993297	6968860	0.78	cps
Yttrium	89-2	2012938	1985828	2011765	2003511	0.76	cps
Zinc	66-2	3091352	3090045	3081374	3087590	0.18	cps
Zirconium	90-1	4823871	4838271	4761966	4808036	0.84	cps
Zirconium	91-1	1055384	1064802	1062742	1060976	0.47	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P7
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 18:28:42	DataFile Name :	055CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Aluminium	27-2	653	613	547	604	8.92	cps
Antimony	121-1	180	207	304	230	28.16	cps
Arsenic	75-2	8	12	14	11	26.07	cps
Barium	135-1	90	90	90	90	0.00	cps
Barium	137-1	120	133	140	131	7.77	cps
Beryllium	9-1	10	27	30	22	48.22	cps
Bismuth	209-1	3448153	3456332	3397663	3434049	0.93	cps
Bismuth	209-2	2854636	2760191	2745008	2786612	2.13	cps
Bromine	81-1	10187	10117	10164	10156	0.35	cps
Bromine	81-2	480	423	463	456	6.39	cps
Cadmium	108-1	13	10	3	9	57.30	cps
Cadmium	106-1	1607	1670	1453	1577	7.07	cps
Cadmium	111-1	1149	1202	1028	1126	7.90	cps
Calcium	43-1	193	187	233	204	12.35	cps
Calcium	44-1	12482	12739	12102	12441	2.58	cps
Carbon	12-1						cps
Carbon	12-2						cps
Chlorine	35-1						cps
Chlorine	35-2						cps
Chromium	52-2	1577	1517	1647	1580	4.12	cps
Cobalt	59-2	97	100	80	92	11.62	cps
Copper	63-2	1067	963	943	991	6.68	cps
Dysprosium	156-1	17	0	13	10	88.20	cps
Dysprosium	156-2	3	0	3	2	86.60	cps
Erbium	164-1	27	20	17	21	24.12	cps
Erbium	164-2	23	10	17	17	39.99	cps
Gadolinium	160-1	17	23	10	17	39.99	cps
Gadolinium	160-2	240	220	267	242	9.67	cps
Holmium	165-1	5146438	5140643	5147772	5144951	0.07	cps
Holmium	165-2	3754973	3633141	3647800	3678638	1.81	cps
Indium	115-1	4042993	4103930	4036850	4061258	0.91	cps
Indium	115-2	1497417	1489923	1497703	1495014	0.30	cps
Iron	56-2	30584	30184	29599	30122	1.64	cps
Iron	57-2	1533	1450	1490	1491	2.80	cps
Iron	54-2	2750	2547	2577	2625	4.18	cps
Krypton	83-1	380	390	373	381	2.20	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P7
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 18:28:42	DataFile Name :	055CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Lead	206-1	757	673	680	703	6.58	cps
Lead	207-1	673	603	623	633	5.69	cps
Lead	208-1	3047	2787	2757	2863	5.57	cps
Lithium	6-1	508022	504177	501205	504468	0.68	cps
Magnesium	24-2	1177	1110	893	1060	13.98	cps
Manganese	55-2	577	600	553	577	4.05	cps
Molybdenum	94-1	293	297	360	317	11.86	cps
Molybdenum	95-1	317	327	267	303	10.60	cps
Molybdenum	96-1	377	370	370	372	1.03	cps
Molybdenum	97-1	143	227	253	208	27.62	cps
Molybdenum	98-1	490	507	503	500	1.76	cps
Neodymium	150-1	7	3	0	3	100.05	cps
Neodymium	150-2	7	0	0	2	173.21	cps
Nickel	60-2	423	357	410	397	8.89	cps
Phosphorus	31-2	280	273	217	257	13.56	cps
Potassium	39-2	54962	54393	54875	54744	0.56	cps
Rhodium	103-1	3853707	4031841	3993909	3959819	2.37	cps
Rhodium	103-2	2596783	2521181	2563114	2560359	1.48	cps
Scandium	45-1	2385113	2380558	2339021	2368231	1.07	cps
Scandium	45-2	247480	243705	243931	245038	0.86	cps
Selenium	82-1	168	61	128	119	45.70	cps
Selenium	77-2	0	0	0	0	0.00	cps
Selenium	78-2	350	293	293	312	10.48	cps
Silicon	28-1	527090	519608	521223	522640	0.75	cps
Silver	107-1	127	97	113	112	13.39	cps
Silver	109-1	57	73	87	72	20.81	cps
Sodium	23-2	37369	36914	36787	37023	0.83	cps
Strontium	86-1	630	653	600	628	4.26	cps
Strontium	88-1	173	247	223	214	17.47	cps
Sulfur	34-1	146498	146100	146951	146516	0.29	cps
Terbium	159-1	5045511	5034677	5093599	5057929	0.62	cps
Terbium	159-2	3465539	3433224	3440416	3446393	0.49	cps
Thallium	203-1	257	243	237	246	4.15	cps
Thallium	205-1	707	630	630	656	6.75	cps
Tin	118-1	2260	2360	2154	2258	4.58	cps
Titanium	47-1	93	97	117	102	12.35	cps

Reviewed By:mohan
On:10/27/2025 4:30:02 PM
Inst Id :P7
LB :LB137649

LB Number :	LB137649	Operator :	Jaswal
Lab Sample ID :	CCB04	Instrumnet Name :	P7
Client Sample ID :	CCB04	Dilution Factor :	1
Date & Time Acquired :	2025-10-23 18:28:42	DataFile Name :	055CCBE.d

Parameter	Mass	CPS1	CPS2	CPS3	CPSMean	CPSRSD	Units
Uranium	238-1	70	93	60	74	22.98	cps
Vanadium	51-2	27	10	17	18	47.19	cps
Yttrium	89-1	7113378	7105797	7037655	7085610	0.59	cps
Yttrium	89-2	2014143	2043885	2009512	2022514	0.92	cps
Zinc	66-2	1430	1397	1417	1415	1.19	cps
Zirconium	90-1	367	370	423	387	8.22	cps
Zirconium	91-1	97	60	83	80	23.20	cps

Alliance TECHNICAL GROUP

Soil/Sludge Mercury Preparation Sheet

PB170230

SOP ID : M7471B-Mercury-19

SDG No : NA

Matrix : SOIL

Pippete ID: HG A

Balance ID : M SC-3

Filter paper ID : N/A

pH Strip ID : NA

Hood ID : #1

Block ID: 1. HG HOT BLOCK#3 2. N/A

Start Digest Date: 10/23/2025 **Time :** 10:22 **Temp :** 94 °C

End Digest Date: 10/23/2025 **Time :** 10:50 **Temp :** 94 °C

Digestion tube ID: M5595

Block thermometer ID: HG-DIG#3

Dig Technician Signature: MB

Supervisor Signature: [illegible]

Temp : 1. 94°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
ICV	30mL	MP87709
CCV	30mL	MP87711
CRA	30mL	MP87713
Blank Spike	0.48mL	MP87702
Matrix Spike	0.48mL	MP87702

Chemical Used	ML/SAMPLE USED	Lot Number
AQUA REGIA	1.5Ml	MP87702
KMnO4 (5%)	4.5mL	MP87072
Hydroxylamine HCL (12%)	2.0Ml	MP87149
PTFE Boiling Stones	--------	M5582
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	MP87703
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	30mL	MP87704
2.5 ppb	S2.5	30mL	MP87705
5.0 ppb	S5.0	30mL	MP87706
7.5 ppb	S7.5	30mL	MP87707
10.0 ppb	S10.0	30mL	MP87708
ICV	ICV	30mL	MP87709
ICB	ICB	30mL	MP87710
CCV	CCV	30mL	MP87711
CCB	CCB	30mL	MP87712
CRI	CRI	30mL	MP87713
CHK STD	CHK STD	30mL	MP87714

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/23/25 [illegible]	MB- Dig Lab	MB- Metal Lab
11:15	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

Soil/Sludge Mercury Preparation Sheet

PB170230

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Comment	Prep Pos
PB170230BL	PBS230	0.50	35	N/A	N/A	3-1
PB170230BS	LCS230	0.50	35	N/A	MP87702	2
Q3399-01	COMP-ROLLOFF	0.59	35	N/A	N/A	3
Q3412-01	TP-6	0.57	35	N/A	N/A	4
Q3416-01	NB-08-10212025	0.56	35	N/A	N/A	5
Q3419-01	PR-132-S16-015094-20251021	0.56	35	N/A	N/A	6
Q3419-01DUP	PR-132-S16-015094-20251021DUP	0.55	35	N/A	N/A	7
Q3419-02	Q3419-01MS	0.60	35	N/A	MP87702	8
Q3419-03	Q3419-01MSD	0.54	35	N/A	MP87702	9
Q3419-04	PR-132-S16-119133-20251021	0.53	35	N/A	N/A	10
Q3419-05	PR-132-S16-094119-20251021	0.57	35	N/A	N/A	11
Q3422-01	PR132-S15-000008-20251017	0.56	35	N/A	N/A	12
Q3424-01	PR132-DP3-20251021	0.57	35	N/A	N/A	13
Q3424-02	PR132-S11-010080-20251021	0.58	35	N/A	N/A	14
Q3424-03	PR132-S14-00094-20251021	0.56	35	N/A	N/A	15
Q3427-01	TP-8	0.50	35	N/A	N/A	16
Q3431-01	EO-02-10222025	0.56	35	N/A	N/A	17
Q3434-01	PR132-WC1-20251022	0.56	35	N/A	N/A	18
Q3439-01	TP-9	0.56	35	N/A	N/A	19
Q3439-05	TP-10	0.58	35	N/A	N/A	20

WORKLIST(Hardcopy Internal Chain)

WorkList Name : 102325_7471 **WorkList ID :** 192636 **Department :** Digestion **Date :** 10-23-2025 09:06:22

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3399-01	COMP-ROLLOFF	Solid	Mercury	Cool 4 deg C	ICES02	D41	10/20/2025	7471B
Q3412-01	TP-6	Solid	Mercury	Cool 4 deg C	PSEG03	D31	10/20/2025	7471B
Q3416-01	NB-08-10212025	Solid	Mercury	Cool 4 deg C	PSEG05	D31	10/21/2025	7471B
Q3419-01	PR-132-S16-015094-20251021	Solid	Mercury	Cool 4 deg C	AECO02	D41	10/21/2025	7471B
Q3419-02	Q3419-01MS	Solid	Mercury	Cool 4 deg C	AECO02	D41	10/21/2025	7471B
Q3419-03	Q3419-01MSD	Solid	Mercury	Cool 4 deg C	AECO02	D41	10/21/2025	7471B
Q3419-04	PR-132-S16-119133-20251021	Solid	Mercury	Cool 4 deg C	AECO02	D41	10/21/2025	7471B
Q3419-05	PR-132-S16-094119-20251021	Solid	Mercury	Cool 4 deg C	AECO02	D41	10/21/2025	7471B
Q3422-01	PR132-S15-000008-20251017	Solid	Mercury	Cool 4 deg C	AECO02	D41	10/21/2025	7471B
Q3424-01	PR132-DP3-20251021	Solid	Mercury	Cool 4 deg C	AECO02	D31	10/21/2025	7471B
Q3424-02	PR132-S11-010080-20251021	Solid	Mercury	Cool 4 deg C	AECO02	D31	10/21/2025	7471B
Q3424-03	PR132-S14-00094-20251021	Solid	Mercury	Cool 4 deg C	AECO02	D31	10/21/2025	7471B
Q3427-01	TP-8	Solid	Mercury	Cool 4 deg C	PSEG03	D41	10/21/2025	7471B
Q3431-01	EO-02-10222025	Solid	Mercury	Cool 4 deg C	PSEG05	D41	10/22/2025	7471B
Q3434-01	PR132-WC1-20251022	Solid	Mercury	Cool 4 deg C	AECO02	D41	10/22/2025	7471B
Q3439-01	TP-9	Solid	Mercury	Cool 4 deg C	PSEG03	D41	10/22/2025	7471B
Q3439-05	TP-10	Solid	Mercury	Cool 4 deg C	PSEG03	D41	10/23/2025	7471B

Date/Time 10/23/25 @ 9:50

Raw Sample Received by: MB - Dig. Lab

Raw Sample Relinquished by: MB - Dig Lab

Date/Time 10/23/25 @ 11:00

Raw Sample Received by: MB - Dig. Lab

Raw Sample Relinquished by: MB - Dig. Lab

Alliance TECHNICAL GROUP

Soil/Sludge Metals Preparation Sheet

PB170226

SOP ID : M3050B-Digestion-20

SDG No : N/A

Matrix : SOIL

Pippete ID: ICP A

Balance ID : M SC-2

Filter paper ID : N/A

pH Strip ID : N/A

Hood ID : #3

Block ID: 1. HOT BLOCK #2 2. N/A

Start Digest Date: 10/23/2025 **Time :** 10:42 **Temp :** 95 °C

End Digest Date: 10/23/2025 **Time :** 12:42 **Temp :** 95 °C

Digestion tube ID: M6054

Block thermometer ID: MET-DIG. #2

Dig Technician Signature: SRS

Supervisor Signature:

Temp : 1. 95°C 2. N/A

Standared Name	MLS USED	STD REF. # FROM LOG
Spike Sol 1	1.00	MP87570
Spike Sol 2	2.00	MP87575
Spike Sol 3	2.00	MP87578
Spike Sol 4	2.00	MP87581
Spike Sol 5	2.00	MP87582

Chemical Used	ML/SAMPLE USED	Lot Number
Conc. HNO3	3.00	M6158
1:1 HNO3	10.00	MP86978
30% H2O2	3.00	M6170
PTFE Boiling Stones	N/A	M5581
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#2 CELL#35 96 C
X*MP87578,MP87581,MP87582

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/23/25 13:42	SRS meridia	Metals Lab
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	pH	Initial Weight (g)	Final Vol (ml)	Color Before	Color After	Texture	Artifact	Comment	Prep Pos
PB170226BL	PBS226	N/A	1.00	100	Colorless	Colorless	Fine	No	N/A	12
PB170226BS	LCS226	N/A	1.00	100	Colorless	Colorless	Fine	No	MP87570,MP87575,X*	13
Q3419-01DUP	PR-132-S16-015094-20251021DUP	N/A	1.15	100	Black	Yellow	Medium	No	N/A	15
Q3419-01	PR-132-S16-015094-20251021	N/A	1.14	100	Black	Yellow	Medium	No	N/A	14
Q3419-02	Q3419-01MS	N/A	1.12	100	Black	Yellow	Medium	No	MP87570,MP87575,X*	16
Q3419-03	Q3419-01MSD	N/A	1.18	100	Black	Yellow	Medium	No	MP87570,MP87575,X*	17
Q3419-04	PR-132-S16-119133-20251021	N/A	1.24	100	Black	Yellow	Medium	No	N/A	18
Q3419-05	PR-132-S16-094119-20251021	N/A	1.18	100	Black	Yellow	Medium	No	N/A	19
Q3422-01	PR132-S15-000008-20251017	N/A	1.14	100	Black	Yellow	Medium	No	N/A	20
Q3424-01	PR132-DP3-20251021	N/A	1.08	100	Black	Yellow	Medium	No	N/A	21
Q3424-02	PR132-S11-010080-20251021	N/A	1.09	100	Black	Yellow	Medium	No	N/A	22
Q3424-03	PR132-S14-00094-20251021	N/A	1.16	100	Black	Yellow	Medium	No	N/A	23
Q3434-01	PR132-WC1-20251022	N/A	1.12	100	Black	Yellow	Medium	No	N/A	24

WORKLIST(Hardcopy Internal Chain)

WorkList Name : PB170226 **WorkList ID :** 192642 **Department :** Digestion **Date :** 10-23-2025 10:04:50

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3419-01	PR-132-S16-015094-20251021	Solid	Metals ICP-TAL	Cool 4 deg C	AECO02	D41	10/21/2025	6020B
Q3419-02	Q3419-01MS	Solid	Metals ICP-TAL	Cool 4 deg C	AECO02	D41	10/21/2025	6020B
Q3419-03	Q3419-01MSD	Solid	Metals ICP-TAL	Cool 4 deg C	AECO02	D41	10/21/2025	6020B
Q3419-04	PR-132-S16-119133-20251021	Solid	Metals ICP-TAL	Cool 4 deg C	AECO02	D41	10/21/2025	6020B
Q3419-05	PR-132-S16-094119-20251021	Solid	Metals ICP-TAL	Cool 4 deg C	AECO02	D41	10/21/2025	6020B
Q3422-01	PR132-S15-000008-20251017	Solid	Metals ICP-TAL	Cool 4 deg C	AECO02	D41	10/21/2025	6020B
Q3424-01	PR132-DP3-20251021	Solid	Metals ICP-TAL	Cool 4 deg C	AECO02	D31	10/21/2025	6020B
Q3424-02	PR132-S11-010080-20251021	Solid	Metals ICP-TAL	Cool 4 deg C	AECO02	D31	10/21/2025	6020B
Q3424-03	PR132-S14-00094-20251021	Solid	Metals ICP-TAL	Cool 4 deg C	AECO02	D31	10/21/2025	6020B
Q3434-01	PR132-WC1-20251022	Solid	Metals ICP-TAL	Cool 4 deg C	AECO02	D41	10/22/2025	6020B

Date/Time 10/23/25 10:25
Raw Sample Received by: SLG met dD
Raw Sample Relinquished by: CP(Sm)

Date/Time 10/23/25 10:50
Raw Sample Received by: CP(Sm)
Raw Sample Relinquished by: SLG met dD

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/23/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 10/22/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 104
Time OUT: 08:15
Out Date: 10/23/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID-OVEN

QC: LB137614

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q3419-01	PR-132-S16-015094-20251021	1	1.15	11.01	12.16	7.14	54.4	
Q3419-02	Q3419-01MS	2	1.15	11.01	12.16	7.14	54.4	
Q3419-03	Q3419-01MSD	3	1.15	11.01	12.16	7.14	54.4	
Q3419-04	PR-132-S16-119133-20251021	4	1.16	10.07	11.23	6.37	51.7	
Q3419-05	PR-132-S16-094119-20251021	5	1.19	11.07	12.26	6.38	46.9	
Q3422-01	PR132-S15-000008-20251017	6	1.18	11.02	12.2	7.58	58.1	
Q3424-01	PR132-DP3-20251021	7	1.15	10.36	11.51	5.91	45.9	
Q3424-02	PR132-S11-010080-20251021	8	1.12	10.72	11.84	6.49	50.1	
Q3424-03	PR132-S14-00094-20251021	9	1.14	11.34	12.48	6.82	50.1	
Q3427-01	TP-8	10	1.11	10.77	11.88	10.84	90.3	
Q3427-02	TP-8-EPH	11	1.18	10.97	12.15	10.98	89.3	
Q3427-03	TP-8-VOC	12	1.19	10.26	11.45	10.52	90.9	
Q3429-01	40309	13	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3429-02	40310	14	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3430-01	BUR-25-0095	15	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
Q3431-01	EO-02-10222025	16	1.11	10.55	11.66	10.64	90.3	
Q3431-02	EO-02-10222025-E2	17	1.17	10.59	11.76	10.59	89.0	
Q3434-01	PR132-WC1-20251022	18	1.13	10.43	11.56	7.17	57.9	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

VB 137614

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-102225 **WorkList ID :** 192597 **Department :** Wet-Chemistry **Date :** 10-22-2025 09:03:13

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q3419-01	PR-132-S16-015094-20251021	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/21/2025	Chemtech -SO
Q3419-02	Q3419-01MS	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/21/2025	Chemtech -SO
Q3419-03	Q3419-01MSD	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/21/2025	Chemtech -SO
Q3419-04	PR-132-S16-119133-20251021	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/21/2025	Chemtech -SO
Q3419-05	PR-132-S16-094119-20251021	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/21/2025	Chemtech -SO
Q3422-01	PR132-S15-000008-20251017	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/21/2025	Chemtech -SO
Q3424-01	PR132-DP3-20251021	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/21/2025	Chemtech -SO
Q3424-02	PR132-S11-010080-20251021	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/21/2025	Chemtech -SO
Q3424-03	PR132-S14-00094-20251021	Solid	Percent Solids	Cool 4 deg C	AECO02	D31	10/21/2025	Chemtech -SO
Q3427-01	TP-8	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	10/21/2025	Chemtech -SO
Q3427-02	TP-8-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	10/21/2025	Chemtech -SO
Q3427-03	TP-8-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	D41	10/21/2025	Chemtech -SO
Q3429-01	40309	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	10/22/2025	Chemtech -SO
Q3429-02	40310	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	10/22/2025	Chemtech -SO
Q3430-01	BUR-25-0095	Solid	Percent Solids	Cool 4 deg C	PSEG03	D51	10/22/2025	Chemtech -SO
Q3431-01	EO-02-10222025	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	10/22/2025	Chemtech -SO
Q3431-02	EO-02-10222025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	D41	10/22/2025	Chemtech -SO
Q3434-01	PR132-WC1-20251022	Solid	Percent Solids	Cool 4 deg C	AECO02	D41	10/22/2025	Chemtech -SO

Date/Time 10/22/25 15:00

Raw Sample Received by: JB WC

Raw Sample Relinquished by:

Date/Time 10/22/25 17:25

Raw Sample Received by:

Raw Sample Relinquished by: JB WC

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

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB137626

Review By	jaswal	Review On	10/24/2025 6:51:30 PM
Supervise By	mohan	Supervise On	10/27/2025 8:24:01 AM

STD. NAME	STD REF.#
ICAL Standard	MP87703,MP87704,MP87705,MP87706,MP87707,MP87708
ICV Standard	MP87709
CCV Standard	MP87711
ICSA Standard	
CRI Standard	MP87713
LCS Standard	
Chk Standard	MP87710,MP87712,MP87714,MP87716

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	10/23/25 13:31		mohan	OK
2	S0.2	S0.2	CAL2	10/23/25 13:34		mohan	OK
3	S2.5	S2.5	CAL3	10/23/25 13:36		mohan	OK
4	S5	S5	CAL4	10/23/25 13:39		mohan	OK
5	S7.5	S7.5	CAL5	10/23/25 13:41		mohan	OK
6	S10	S10	CAL6	10/23/25 13:47		mohan	OK
7	ICV85	ICV85	ICV	10/23/25 13:51		mohan	OK
8	ICB85	ICB85	ICB	10/23/25 13:57		mohan	OK
9	CCV79	CCV79	CCV	10/23/25 14:01		mohan	OK
10	CCB79	CCB79	CCB	10/23/25 14:05		mohan	OK
11	CRA	CRA	CRDL	10/23/25 14:07		mohan	OK
12	HighStd	HighStd	HIGH STD	10/23/25 14:10		mohan	OK
13	ChkStd	ChkStd	SAM	10/23/25 14:12		mohan	OK
14	PB170230BL	PB170230BL	MB	10/23/25 14:15		mohan	OK
15	PB170230BS	PB170230BS	LCS	10/23/25 14:20		mohan	OK
16	Q3399-01	COMP-ROLLOFF	SAM	10/23/25 14:22		mohan	OK
17	Q3412-01	TP-6	SAM	10/23/25 14:25		mohan	OK
18	Q3416-01	NB-08-10212025	SAM	10/23/25 14:27		mohan	OK

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

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB137626

Review By	jaswal	Review On	10/24/2025 6:51:30 PM
Supervise By	mohan	Supervise On	10/27/2025 8:24:01 AM

STD. NAME	STD REF.#
ICAL Standard	MP87703,MP87704,MP87705,MP87706,MP87707,MP87708
ICV Standard	MP87709
CCV Standard	MP87711
ICSA Standard	
CRI Standard	MP87713
LCS Standard	
Chk Standard	MP87710,MP87712,MP87714,MP87716

19	Q3419-01DUP	PR-132-S16-015094-2	DUP	10/23/25 14:32	Hg high, Need Dilution	mohan	Dilution
20	CCV80	CCV80	CCV	10/23/25 14:35		mohan	OK
21	CCB80	CCB80	CCB	10/23/25 14:38		mohan	OK
22	Q3419-02	PR-132-S16-015094-2	MS	10/23/25 14:40	Hg high, Need Dilution	mohan	Dilution
23	Q3419-03	PR-132-S16-015094-2	MSD	10/23/25 14:42	Hg high, Need Dilution	mohan	Dilution
24	Q3419-04	PR132-S16-119133-2	SAM	10/23/25 14:45	Hg high, Need Dilution	mohan	Dilution
25	Q3419-05	PR132-S16-094119-2	SAM	10/23/25 14:48	Hg high, Need Dilution	mohan	Dilution
26	Q3422-01	PR132-S15-000008-2	SAM	10/23/25 14:51	Hg high, Need Dilution	mohan	Dilution
27	Q3424-01	PR132-DP3-2025102	SAM	10/23/25 14:54	Hg high, Need Dilution	mohan	Dilution
28	Q3424-02	PR132-S11-010080-2	SAM	10/23/25 14:57	Hg high, Need Dilution	mohan	Dilution
29	Q3424-03	PR132-S14-000094-2	SAM	10/23/25 15:01	Hg high, Need Dilution	mohan	Dilution
30	Q3427-01	TP-8	SAM	10/23/25 15:04		mohan	OK
31	Q3431-01	EO-02-10222025	SAM	10/23/25 15:07		mohan	OK
32	CCV81	CCV81	CCV	10/23/25 15:09		mohan	OK
33	CCB81	CCB81	CCB	10/23/25 15:11		mohan	OK
34	Q3434-01	PR132-WC1-2025102	SAM	10/23/25 15:14	Hg high, Need Dilution	mohan	Dilution
35	Q3439-01	TP-9	SAM	10/23/25 15:16		mohan	OK
36	Q3439-05	TP-10	SAM	10/23/25 15:19		mohan	OK
37	Q3419-01L	PR-132-S16-015094-2	SD	10/23/25 15:21		mohan	OK
38	Q3419-01A	PR-132-S16-015094-2	PS	10/23/25 15:24		mohan	OK

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

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QCBatch ID # LB137626

Review By	jaswal	Review On	10/24/2025 6:51:30 PM
Supervise By	mohan	Supervise On	10/27/2025 8:24:01 AM

STD. NAME	STD REF.#
ICAL Standard	MP87703,MP87704,MP87705,MP87706,MP87707,MP87708
ICV Standard	MP87709
CCV Standard	MP87711
ICSA Standard	
CRI Standard	MP87713
LCS Standard	
Chk Standard	MP87710,MP87712,MP87714,MP87716

39	Q3419-01	PR-132-S16-015094-2	SAM	10/23/25 15:26	Hg high, Need Dilution	mohan	Dilution
40	CCV82	CCV82	CCV	10/23/25 15:29		mohan	OK
41	CCB82	CCB82	CCB	10/23/25 15:32		mohan	OK
42	Q3419-01DUPDL	PR-132-S16-015094-2	DUP	10/23/25 15:37	10x For Hg	mohan	Confirms
43	Q3419-02DL	PR-132-S16-015094-2	MS	10/23/25 15:39	10x For Hg	mohan	Confirms
44	Q3419-03DL	PR-132-S16-015094-2	MSD	10/23/25 15:42	10x For Hg	mohan	Confirms
45	Q3419-04DL	PR132-S16-119133-2	SAM	10/23/25 15:44	10x For Hg	mohan	Confirms
46	Q3419-05DL	PR132-S16-094119-2	SAM	10/23/25 15:46	10x For Hg	mohan	Confirms
47	Q3422-01DL	PR132-S15-000008-2	SAM	10/23/25 15:49	10x For Hg	mohan	Confirms
48	Q3424-01DL	PR132-DP3-2025102	SAM	10/23/25 15:51	10x For Hg	mohan	Confirms
49	Q3424-02DLRE	PR132-S11-010080-2	SAM	10/23/25 15:54	not use	mohan	Not Ok
50	Q3424-03DL	PR132-S14-000094-2	SAM	10/23/25 15:56	10x For Hg	mohan	Confirms
51	CCV83	CCV83	CCV	10/23/25 15:59		mohan	OK
52	CCB83	CCB83	CCB	10/23/25 16:02		mohan	OK
53	Q3419-01DL	PR-132-S16-015094-2	SAM	10/23/25 16:05	10x For Hg	mohan	Confirms
54	Q3434-01DL	PR132-WC1-2025102	SAM	10/23/25 16:07	10x For Hg	mohan	Confirms
55	Q3424-02DL	PR132-S11-010080-2	SAM	10/23/25 16:11	10x For Hg	mohan	Confirms
56	CCV84	CCV84	CCV	10/23/25 16:14		mohan	OK
57	CCB84	CCB84	CCB	10/23/25 16:16		mohan	OK

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

Instrument ID: P7

Daily Analysis Runlog For Sequence/QCBatch ID # LB137649

Review By	jaswal	Review On	10/27/2025 3:23:45 PM
Supervise By	mohan	Supervise On	10/27/2025 4:30:02 PM

STD. NAME	STD REF.#
ICAL Standard	MP87545,MP87554,MP87553,MP87551,MP87550,MP87549,MP87548,MP87547,MP87546
ICV Standard	MP87566,MP87553
CCV Standard	MP87555
ICSA Standard	MP87556,MP87557
CRI Standard	MP87553
LCS Standard	
Chk Standard	MP87559,MP87560

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	TUNE	TUNE	TUNE	10/23/25 11:27		Jaswal	OK
2	S0	S0	CAL1	10/23/25 15:00		Jaswal	OK
3	S2	S2	CAL3	10/23/25 15:03		Jaswal	OK
4	S3	S3	CAL4	10/23/25 15:07		Jaswal	OK
5	S4	S4	CAL5	10/23/25 15:10		Jaswal	OK
6	S5	S5	CAL6	10/23/25 15:13		Jaswal	OK
7	S6	S6	CAL7	10/23/25 15:16		Jaswal	OK
8	S7	S7	CAL8	10/23/25 15:19		Jaswal	OK
9	S8	S8	CAL9	10/23/25 15:22		Jaswal	OK
10	ICV01	ICV01	ICV	10/23/25 15:44		Jaswal	OK
11	LLICV01	LLICV01	LLICV	10/23/25 15:53		Jaswal	OK
12	ICB01	ICB01	ICB	10/23/25 15:58		Jaswal	OK
13	ICSA01	ICSA01	ICSA	10/23/25 16:03		Jaswal	OK
14	ICSAB01	ICSAB01	ICSAB	10/23/25 16:07		Jaswal	OK
15	CCV01	CCV01	CCV	10/23/25 16:10		Jaswal	OK
16	CCB01	CCB01	CCB	10/23/25 16:14		Jaswal	OK
17	CRI01	CRI01	CRDL	10/23/25 16:18		Jaswal	OK
18	PB170226BL	PB170226BL	MB	10/23/25 16:21		Jaswal	OK

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

Instrument ID: P7

Daily Analysis Runlog For Sequence/QCBatch ID # LB137649

Review By	jaswal	Review On	10/27/2025 3:23:45 PM
Supervise By	mohan	Supervise On	10/27/2025 4:30:02 PM

STD. NAME	STD REF.#
ICAL Standard	MP87545,MP87554,MP87553,MP87551,MP87550,MP87549,MP87548,MP87547,MP87546
ICV Standard	MP87566,MP87553
CCV Standard	MP87555
ICSA Standard	MP87556,MP87557
CRI Standard	MP87553
LCS Standard	
Chk Standard	MP87559,MP87560

19	PB170226BS	PB170226BS	LCS	10/23/25 16:25		Jaswal	OK
20	Q3419-01	PR-132-S16-015094-2	SAM	10/23/25 16:33	Cr High , INT_STD 89Y(1&2) Fail	Jaswal	Dilution
21	Q3419-01DUP	PR-132-S16-015094-2	DUP	10/23/25 16:36	Cr High , INT_STD 89Y(1&2) Fail	Jaswal	Dilution
22	Q3419-01L	PR-132-S16-015094-2	SD	10/23/25 16:39	INT_STD 89Y(1&2) Fail	Jaswal	Dilution
23	Q3419-02	PR-132-S16-015094-2	MS	10/23/25 16:43	Cr High , INT_STD 89Y(1&2) Fail	Jaswal	Dilution
24	Q3419-03	PR-132-S16-015094-2	MSD	10/23/25 16:46	Cr High , INT_STD 89Y(1&2) Fail	Jaswal	Dilution
25	Q3419-01A	PR-132-S16-015094-2	PS	10/23/25 16:49	INT_STD 89Y(1&2) Fail(0.1ml mp87570,0.2ml each mp87575,mp87578,mp875 781-10ml sample)	Jaswal	Dilution
26	Q3419-04	PR132-S16-119133-2	SAM	10/23/25 16:51	Al,Cr,Fe,PB High, INT_STD 89Y(1&2) Fail	Jaswal	Dilution
27	CCV02	CCV02	CCV	10/23/25 16:54		Jaswal	OK
28	CCB02	CCB02	CCB	10/23/25 17:00		Jaswal	OK
29	Q3419-05	PR132-S16-094119-2	SAM	10/23/25 17:03	Cr,Fe High, INT_STD 89Y(1&2) Fail	Jaswal	Dilution
30	Q3422-01	PR132-S15-000008-2	SAM	10/23/25 17:06	Cr High , INT_STD 89Y(1&2) Fail	Jaswal	Dilution
31	Q3424-01	PR132-DP3-2025102	SAM	10/23/25 17:09	Cr,Fe High, INT_STD 89Y(1&2) Fail	Jaswal	Dilution
32	Q3424-02	PR132-S11-010080-2	SAM	10/23/25 17:12	Al,Cr,Fe High , INT_STD 89Y(1&2) Fail	Jaswal	Dilution
33	Q3424-03	PR132-S14-000094-2	SAM	10/23/25 17:16	Cr High , INT_STD 89Y(1&2) Fail	Jaswal	Dilution

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

Instrument ID: P7

Daily Analysis Runlog For Sequence/QCBatch ID # LB137649

Review By	jaswal	Review On	10/27/2025 3:23:45 PM
Supervise By	mohan	Supervise On	10/27/2025 4:30:02 PM

STD. NAME	STD REF.#
ICAL Standard	MP87545,MP87554,MP87553,MP87551,MP87550,MP87549,MP87548,MP87547,MP87546
ICV Standard	MP87566,MP87553
CCV Standard	MP87555
ICSA Standard	MP87556,MP87557
CRI Standard	MP87553
LCS Standard	
Chk Standard	MP87559,MP87560

34	Q3434-01	PR132-WC1-2025102	SAM	10/23/25 17:19	Cr High	Jaswal	Dilution
35	Q3419-01DL	PR-132-S16-015094-2	SAM	10/23/25 17:22	5X For Cr, 5X For INT_STD 89Y(1&2)	Jaswal	Confirms
36	Q3419-01DUPDL	PR-132-S16-015094-2	DUP	10/23/25 17:25	5X For Cr, 5X For INT_STD 89Y(1&2)	Jaswal	Confirms
37	Q3419-01LDL	PR-132-S16-015094-2	SD	10/23/25 17:29	25X For INT_STD 89Y(1&2)	Jaswal	Confirms
38	Q3419-02DL	PR-132-S16-015094-2	MS	10/23/25 17:32	5X For Cr, 5X For INT_STD 89Y(1&2)	Jaswal	Confirms
39	CCV03	CCV03	CCV	10/23/25 17:35		Jaswal	OK
40	CCB03	CCB03	CCB	10/23/25 17:43		Jaswal	OK
41	Q3419-03DL	PR-132-S16-015094-2	MSD	10/23/25 17:47	5X For Cr, 5X For INT_STD 89Y(1&2)	Jaswal	Confirms
42	Q3419-01ADL	PR-132-S16-015094-2	PS	10/23/25 17:50	5X For INT_STD 89Y(1&2)	Jaswal	Confirms
43	Q3419-04DL	PR132-S16-119133-2	SAM	10/23/25 17:53	5X For Al,Cr,Fe,Pb, 5X For INT_STD 89Y(1&2)	Jaswal	Confirms
44	Q3419-05DL	PR132-S16-094119-2	SAM	10/23/25 17:56	5X For Cu,Fe , 5X For INT_STD 89Y(1&2)	Jaswal	Confirms
45	Q3422-01DL	PR132-S15-000008-2	SAM	10/23/25 17:59	5X For Cr, 5X For INT_STD 89Y(1&2)	Jaswal	Confirms
46	Q3424-01DL	PR132-DP3-2025102	SAM	10/23/25 18:03	5X For Cr,Fe , 5X For INT_STD 89Y(1&2)	Jaswal	Confirms
47	Q3424-02DL	PR132-S11-010080-2	SAM	10/23/25 18:06	5X For Al,Cr,Fe , 5X For INT_STD 89Y(1&2)	Jaswal	Confirms
48	Q3424-03DL	PR132-S14-000094-2	SAM	10/23/25 18:09	5X For Cr, 5X For INT_STD 89Y(1&2)	Jaswal	Confirms
49	Q3434-01DL	PR132-WC1-2025102	SAM	10/23/25 18:12	5X For Cr	Jaswal	Confirms

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

Instrument ID: P7

Daily Analysis Runlog For Sequence/QCBatch ID # LB137649

Review By	jaswal	Review On	10/27/2025 3:23:45 PM
Supervise By	mohan	Supervise On	10/27/2025 4:30:02 PM

STD. NAME	STD REF.#
ICAL Standard	MP87545,MP87554,MP87553,MP87551,MP87550,MP87549,MP87548,MP87547,MP87546
ICV Standard	MP87566,MP87553
CCV Standard	MP87555
ICSA Standard	MP87556,MP87557
CRI Standard	MP87553
LCS Standard	
Chk Standard	MP87559,MP87560

50	CCV04	CCV04	CCV	10/23/25 18:19		Jaswal	OK
51	CCB04	CCB04	CCB	10/23/25 18:28		Jaswal	OK

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

Prep Standard - Chemical Standard Summary

Order ID : Q3434

Test : Mercury,Metals ICP-TAL

Prepbatch ID : PB170226,PB170230,

Sequence ID/Qc Batch ID: LB137626,LB137649,

Standard ID :
MP86978,MP87072,MP87149,MP87545,MP87546,MP87547,MP87548,MP87549,MP87550,MP87551,MP87552,MP875
53,MP87554,MP87555,MP87556,MP87557,MP87558,MP87559,MP87560,MP87566,MP87570,MP87575,MP87578,MP
87581,MP87582,MP87702,MP87703,MP87704,MP87705,MP87706,MP87707,MP87708,MP87709,MP87710,MP 87711,
MP87712,MP87713,MP87714,MP87716,

Chemical ID :
M4916,M5062,M5245,M5581,M5582,M5658,M5697,M5739,M5798,M5799,M5800,M5801,M5815,M5817,M5882,M5884
,M5962,M5979,M5981,M6021,M6023,M6025,M6026,M6027,M6028,M6030,M6032,M6055,M6079,M6086,M6128,M613
7,M6140,M6142,M6145,M6153,M6158,M6159,M6160,M6161,M6162,M6163,M6164,M6165,M6170,M6171,M6172,M61
75,M6176,M6178,M6185,M6187,M6196,M6200,W3112,

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
169	1:1HNO3	MP86978	08/28/2025	11/27/2025	Sagar Kanani	None	None	Sarabjit Jaswal 08/28/2025

FROM 1250.00000ml of M6162 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP87072	09/04/2025	03/04/2026	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 09/04/2025

FROM 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	MP87149	09/09/2025	02/03/2026	Mohan Bera	METALS_SCALE_2 (M SC-2)	None	Sarabjit Jaswal 09/10/2025

FROM 2000.00000ml of W3112 + 240.00000gram of M5884 + 240.00000ml of M6196 = Final Quantity: 2000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1122	ICPMS CALIB BLANK(S0/ICB/CCB)	MP87545	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 25.00000ml of M6200 + 4925.00000ml of W3112 + 50.00000ml of M6187 = Final Quantity: 5000.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2902	S8 ICPMS	MP87546	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICPA)	Sarabjit Jaswal 10/16/2025

FROM 1.00000ml of M6159 + 2.50000ml of M6140 + 2.50000ml of M6142 + 5.00000ml of M6086 + 5.00000ml of M6171 + 5.00000ml of M6172 + 79.00000ml of MP87545 = 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)	MP87547	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICPA)	Sarabjit Jaswal 10/16/2025

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 M5697 + 10.00000ml of M5979 + 10.00000ml of M6128 + 10.00000ml of M6145 + 10.00000ml of M6178 + 10.00000ml of M6187 + 2.00000ml of M5815 + 2.00000ml of M5817 + 4.00000ml of M6025 + 4.00000ml of M6032 + 4.90000ml of M6140 + 4.90000ml of M6142 + 5.00000ml of M6200 + 50.00000ml of M6175 + 827.50000ml of W3112 + 9.90000ml of M6086 + 9.90000ml of M6171 + 9.90000ml of M6172 = Final Quantity: 1000.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3948	S6(SFAM,6020,200.8)	MP87548	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 0.50000ml of M6200 + 1.00000ml of M6187 + 48.50000ml of W3112 + 50.00000ml of MP87547 = 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)	MP87549	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 0.50000ml of M6200 + 1.00000ml of M6187 + 73.50000ml of W3112 + 25.00000ml of MP87547 = Final Quantity: 100.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3954	S4(SFAM,6020,200.8)	MP87550	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 0.50000ml of M6200 + 1.00000ml of M6187 + 86.00000ml of W3112 + 12.50000ml of MP87547 = 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)	MP87551	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 0.50000ml of M6200 + 1.00000ml of M6187 + 88.50000ml of W3112 + 10.00000ml of MP87548 = Final Quantity: 100.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3955	S2CONC(SFAM,6020,200.8)	MP87552	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICPA)	Sarabjit Jaswal 10/16/2025

FROM 0.00500ml of M6153 + 0.05000ml of M5798 + 0.05000ml of M5800 + 0.05000ml of M5801 + 0.05000ml of M5981 + 0.05000ml of M6023 + 0.05000ml of M6025 + 0.05000ml of M6027 + 0.05000ml of M6028 + 0.05000ml of M6030 + 0.05000ml of M6079 + 0.05000ml of M6128 + 0.10000ml of M5658 + 0.10000ml of M5697 + 0.10000ml of M6159 + 0.10000ml of M6160 + 0.25000ml of M5799 + 0.25000ml of M5962 + 0.25000ml of M5979 + 0.25000ml of M6021 + 0.25000ml of M6140 + 0.25000ml of M6145 + 0.25000ml of M6178 + 0.50000ml of M6032 + 0.50000ml of M6137 + 1.25000ml of M5815 + 1.25000ml of M5817 + 1.25000ml of M6200 + 2.50000ml of M6086 + 2.50000ml of M6142 + 2.50000ml of M6171 + 2.50000ml of M6172 + 2.50000ml of M6187 + 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)	MP87553	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICPA)	Sarabjit Jaswal 10/16/2025

FROM 0.50000ml of M6200 + 1.00000ml of M6187 + 98.00000ml of W3112 + 0.50000ml of MP87552 = Final Quantity: 100.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3957	S1(SFAM,6020,200.8)	MP87554	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 0.50000ml of M6200 + 1.00000ml of M6187 + 88.50000ml of W3112 + 10.00000ml of MP87553 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3961	CCV	MP87555	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 0.20000ml of M6026 + 0.50000ml of M5799 + 0.50000ml of M5981 + 0.50000ml of M6079 + 0.50000ml of M6137 + 0.50000ml of M6176 + 1.00000ml of M5815 + 1.00000ml of M5817 + 10.00000ml of M6187 + 12.45000ml of M6140 + 12.45000ml of M6142 + 2.00000ml of M6032 + 24.95000ml of M6086 + 24.95000ml of M6171 + 24.95000ml of M6172 + 25.00000ml of M6175 + 4.50000ml of M5697 + 4.50000ml of M6128 + 4.50000ml of M6145 + 4.95000ml of M6159 + 5.00000ml of M6200 + 5.50000ml of M5979 + 5.50000ml of M6178 + 824.10000ml of W3112 = Final Quantity: 1000.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1142	ICSA ICPMS	MP87556	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 10.00000ml of M6185 + 90.00000ml of MP87545 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1143	ICSAB ICPMS	MP87557	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 10.00000ml of M5245 + 10.00000ml of M6185 + 80.00000ml of MP87545 = Final Quantity: 100.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3962	MG 10PPM FOR TUNE	MP87558	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 0.01000ml of M6171 + 9.99000ml of MP87545 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3894	TUNE 200PPB	MP87559	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 2.00000ml of M6055 + 2.00000ml of MP87558 + 96.00000ml of MP87545 = Final Quantity: 100.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3903	ISS 3PPM	MP87560	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 5.00000ml of M6187 + 75.00000ml of M5739 + 170.00000ml of MP87545 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4213	NEW ICV-6020B	MP87566	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 0.00800ml of M6164 + 0.00800ml of M6165 + 0.01600ml of M6163 + 49.96800ml of MP87545 = Final Quantity: 50.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3880	M&B SPIKE-1	MP87570	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 5.00000ml of M5658 + 5.00000ml of M5798 + 5.00000ml of M5800 + 5.00000ml of M5962 + 5.00000ml of M5981 + 5.00000ml of M6021 + 5.00000ml of M6023 + 5.00000ml of M6027 + 5.00000ml of M6028 + 5.00000ml of M6030 + 5.00000ml of M6079 + 5.00000ml of M6160 + 5.00000ml of M6176 + 35.00000ml of MP87545 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3881	M&B SPIKE-2	MP87575	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 10.00000ml of M5979 + 10.00000ml of M6178 + 12.50000ml of M6032 + 12.50000ml of M6140 + 12.50000ml of M6142 + 2.50000ml of M5799 + 2.50000ml of M6137 + 5.00000ml of M6159 + 32.50000ml of MP87545 = Final Quantity: 100.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3882	M&B SPIKE-3	MP87578	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 0.62500ml of M6026 + 12.50000ml of M5697 + 12.50000ml of M6128 + 12.50000ml of M6145 + 11.87500ml of MP87545 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3900	M&B SPIKE-4	MP87581	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 6.25000ml of M6086 + 6.25000ml of M6171 + 6.25000ml of M6172 + 6.25000ml of MP87545 = Final Quantity: 25.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4025	M&B SPIKE-5	MP87582	10/07/2025	11/07/2025	Janvi Patel	None	METALS_PIPETTE_1 (ICP A)	Sarabjit Jaswal 10/16/2025

FROM 15.00000ml of M5979 + 15.00000ml of M6178 + 20.00000ml of MP87545 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP87702	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 10/28/2025

FROM 1.00000ml of M6187 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1340	Hg 0.00 PPB STD	MP87703	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1341	Hg 0.2 PPB STD	MP87704	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 247.30000ml of W3112 + 0.20000ml of MP87702 = Final Quantity: 250.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1342	Hg 2.5 PPB STD	MP87705	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 245.00000ml of W3112 + 2.50000ml of MP87702 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1343	Hg 5.0 PPB STD	MP87706	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 242.50000ml of W3112 + 5.00000ml of MP87702 = Final Quantity: 250.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1344	Hg 7.5 PPB STD	MP87707	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 240.00000ml of W3112 + 7.50000ml of MP87702 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1345	Hg 10.0 PPB STD	MP87708	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 237.50000ml of W3112 + 10.00000ml of MP87702 = Final Quantity: 250.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1346	Hg ICV SOLUTION	MP87709	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6161 + 2.50000ml of M6187 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1351	ICB (Hg 0.00 PPB SOLUTION)	MP87710	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1358	CCV (Hg 5.0 PPB SOLUTION)	MP87711	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 485.00000ml of W3112 + 5.00000ml of M6187 + 10.00000ml of MP87702 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1352	CCB (Hg 0.00 PPB SOLUTION)	MP87712	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 495.00000ml of W3112 + 5.00000ml of M6187 = Final Quantity: 500.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1349	CRA/CRI (Hg 0.2 PPB SOLUTION)	MP87713	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 247.30000ml of W3112 + 0.20000ml of MP87702 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1350	CHK STD (Hg 7.0 PPB SOLUTION)	MP87714	10/23/2025	10/24/2025	Sagar Kanani	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 10/28/2025

FROM 2.50000ml of M6187 + 240.50000ml of W3112 + 7.00000ml of MP87702 = Final Quantity: 250.000 ml

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

Metals STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
68	STANNOUS CHLORIDE SOLUTION	MP87716	10/23/2025	10/24/2025	Sagar Kanani	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 10/28/2025

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6200 = Final Quantity: 500.000 ml

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 #
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 #
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 #
EPA	PART B / ICSB (ICPMS) STOCK SOLUTION	CP-MS ICSB-0803	07/01/2026	07/02/2025 / jaswal	02/20/2020 / jaswal	M5245

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	26397-103 / PTFE BOILING STONES	W126678	03/20/2026	03/20/2025 / Jaswal	06/12/2023 / jaswal	M5581

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	26397-103 / PTFE BOILING STONES	W126678	12/31/2025	06/17/2023 / Al-Terek	06/12/2023 / jaswal	M5582

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

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.	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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57004 / Be, 1000 PPM, 125 ml	102523	10/25/2026	02/09/2024 / bin	02/09/2024 / bin	M5798

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57050 / Sn, 1000 PPM, 125 ml	071123	07/11/2026	02/09/2024 / bin	02/09/2024 / bin	M5799

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57027 / CO, 1000 PPM, 125 ml	091923	09/19/2026	05/31/2024 / bin	02/09/2024 / bin	M5800

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

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.	57115 / P, 10000 PPM, 125 ml	041723	04/17/2026	05/21/2024 / Jaswal	02/09/2024 / jaswal	M5815

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57116 / S, 10000 PPM, 125 ml	071123	07/11/2026	03/01/2024 / jaswal	02/09/2024 / jaswal	M5817

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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 #
Absolute Standards, Inc.	57034 / Se, 1000 PPM, 125 ml	060624	06/06/2027	07/02/2024 / Jaswal	06/14/2024 / Jaswal	M5962

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGTI1-1 / TITANIUM 125mL 1000ug/mL	T2-TI719972	08/05/2026	08/06/2025 / Janvi	02/22/2024 / Jaswal	M5979

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.	57092 / U, 1000 PPM, 125 ml	060724	06/07/2027	07/29/2024 / Jaswal	06/11/2024 / Jaswal	M5981

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57023 / V, 1000 PPM, 125 ml	062424	06/24/2027	09/28/2024 / jaswal	08/05/2024 / Jaswal	M6021

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57081 / 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.	57028 / Ni, 1000 PPM, 125 ml	062024	06/20/2027	06/04/2025 / Janvi	08/05/2024 / Jaswal	M6027

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.	57048 / Cd, 1000 PPM, 125 ml	070124	07/01/2027	08/05/2024 / kareem	08/05/2024 / Jaswal	M6028

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57047 / Ag, 1000 PPM, 125 ml	122823	12/28/2026	08/05/2024 / kareem	08/05/2024 / Jaswal	M6030

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	57056 / Ba, 1000 PPM, 125 ml	010924	01/09/2027	01/14/2025 / Jaswal	08/05/2024 / Jaswal	M6032

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	IV-STOCK-12 / ICP-MS TUNING SOLUTION, 125mL	U2-MEB734294	06/21/2028	08/21/2024 / Jaswal	08/19/2024 / Jaswal	M6055

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
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

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.	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.	58126 / Fe, 10000 PPM, 500 ml	011025	01/10/2028	06/25/2025 / Janvi	01/13/2025 / Jaswal	M6140

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	103024	10/30/2027	05/06/2025 / JANVI	01/13/2025 / Jaswal	M6142

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

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

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 #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	10/30/2025	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	07/17/2027	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 #
EPA	ICV-5 / ICV (HG) STOCK SOLN	ICV 5 0415	12/31/2025	05/01/2025 / mohan	03/30/2024 / mohan	M6161

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)	24H0162012	11/27/2025	05/27/2025 / Sagar	04/27/2025 / Sagar	M6162

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-1-125ML / EPA CLP ICP Verification Standard1	V2-MEB744107	06/08/2026	06/09/2025 / jaswal	06/06/2025 / jaswal	M6163

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 #
Inorganic Ventures	QCP-CICV-2-125ML / EPA CLP ICP Verification Standard2	U2-MEB733713	06/08/2026	06/09/2025 / jaswal	06/09/2025 / jaswal	M6164

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	QCP-CICV-3-125ML / EPA CLP ICP Verification Standard3	V2-MEB749572	06/08/2026	06/09/2025 / jaswal	06/09/2025 / jaswal	M6165

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-2186-03 / Hydrogen Peroxide (cs/4x4L)	24D1961001	10/31/2025	06/25/2025 / Jaswal	05/20/2025 / Sagar	M6170

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	011525	01/15/2028	07/15/2025 Jaswal/	02/13/2025 / Janvi	M6171

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	CGNA10-5 / Sodium, 500 ml, 10000 PPM	V2-NA740547	07/29/2026	07/29/2025 / Janvi	01/25/2025 / Janvi	M6172

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	6020CAL-1 / Calibration Standard Method 6020	V2-MEB742014	07/17/2026	07/17/2025 / Janvi	01/27/2025 / Janvi	M6175

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.	57038 / Sr, 1000 PPM, 125 ml	092724	09/27/2027	08/06/2025 / Janvi	08/06/2025 / Janvi	M6176

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	080528	08/05/2028	08/06/2025 / Janvi	08/06/2025 / Janvi	M6178

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	PART A / ICSA (ICPMS) STOCK SOLN	MS ICSA-0803	07/01/2026	07/02/2025 / Jaswal	07/14/2022 / Janvi	M6185

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)	24H0162012	01/28/2026	08/29/2025 / Sagar	08/08/2025 / Sagar	M6187

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	H330-500 / HYDROXYLAMINE HYDROCHLORIDE ACS 500G	243373	02/03/2026	09/04/2025 / mohan	08/04/2025 / mohan	M6196

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)	24D1562005	02/10/2026	09/11/2025 / Sagar	08/25/2025 / Sagar	M6200

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 #
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

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

R 8/5/24

CERTIFIED WEIGHT REPORT:

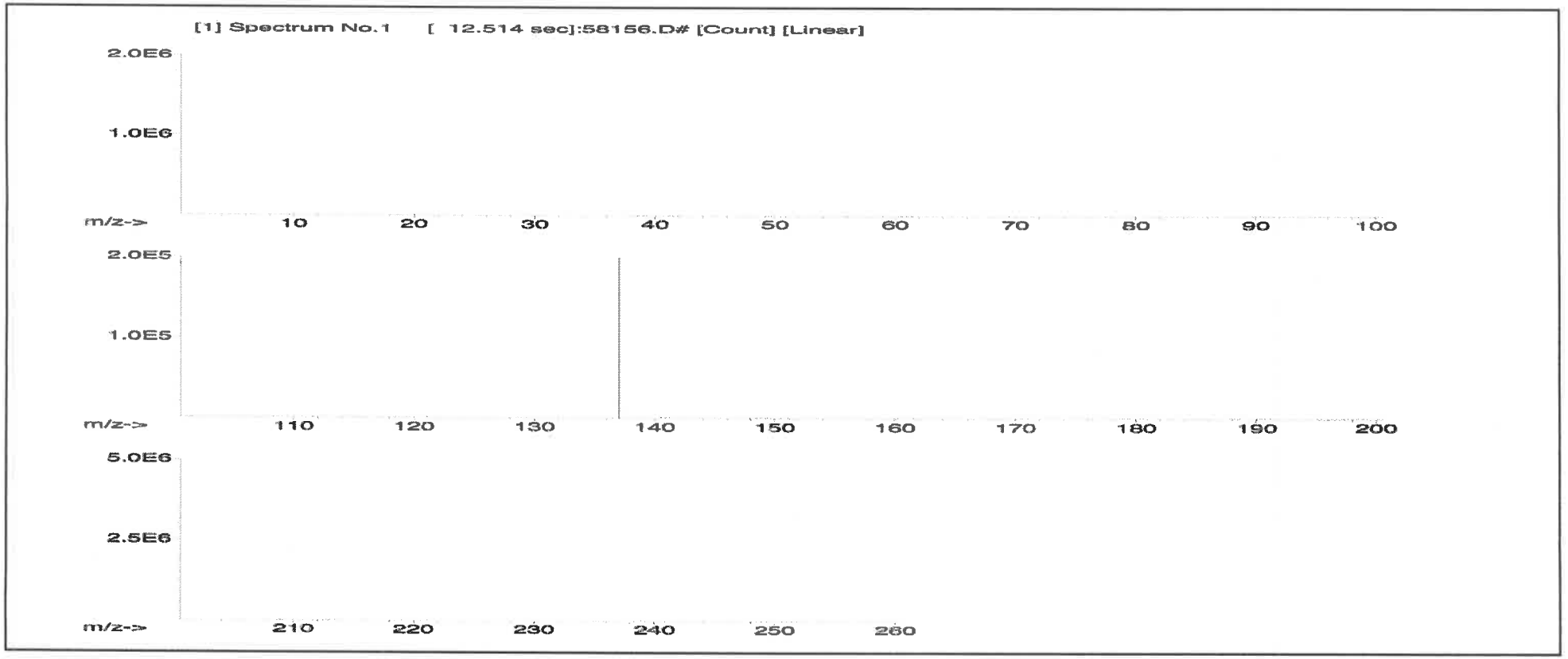
Part Number: 57056
Lot Number: 010924
Description: Barium (Ba)
Expiration Date: 010927
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.02

	Lot #		
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	Eu	<0.02	In	<0.02	Mg	<0.01	Os	<0.02	Rh	<0.02	Ag	<0.02	Tl	<0.02	V	<0.02
Ba	T	Cs	<0.02	Gd	<0.02	Ir	<0.02	Mn	<0.02	Pd	<0.02	Rb	<0.02	Na	<0.2	Th	<0.02	Yb	<0.02
Be	<0.01	Cr	<0.02	Ga	<0.02	Fe	<0.2	Hg	<0.2	P	<0.02	Ru	<0.02	Sr	<0.02	Tm	<0.02	Y	<0.02
Bi	<0.02	Co	<0.02	Ge	<0.02	La	<0.02	Mo	<0.02	Pt	<0.02	Sm	<0.02	S	<0.02	Sn	<0.02	Zn	<0.02
B	<0.02	Cu	<0.02	Au	<0.02	Pb	<0.02	Nd	<0.02	K	<0.2	Sc	<0.02	Ta	<0.02	Ti	<0.02	Zr	<0.02

(T) = Target analyte

Physical Characterization:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are 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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Revd 10/14/2024 MG085/MG086/MG087

CERTIFIED WEIGHT REPORT:

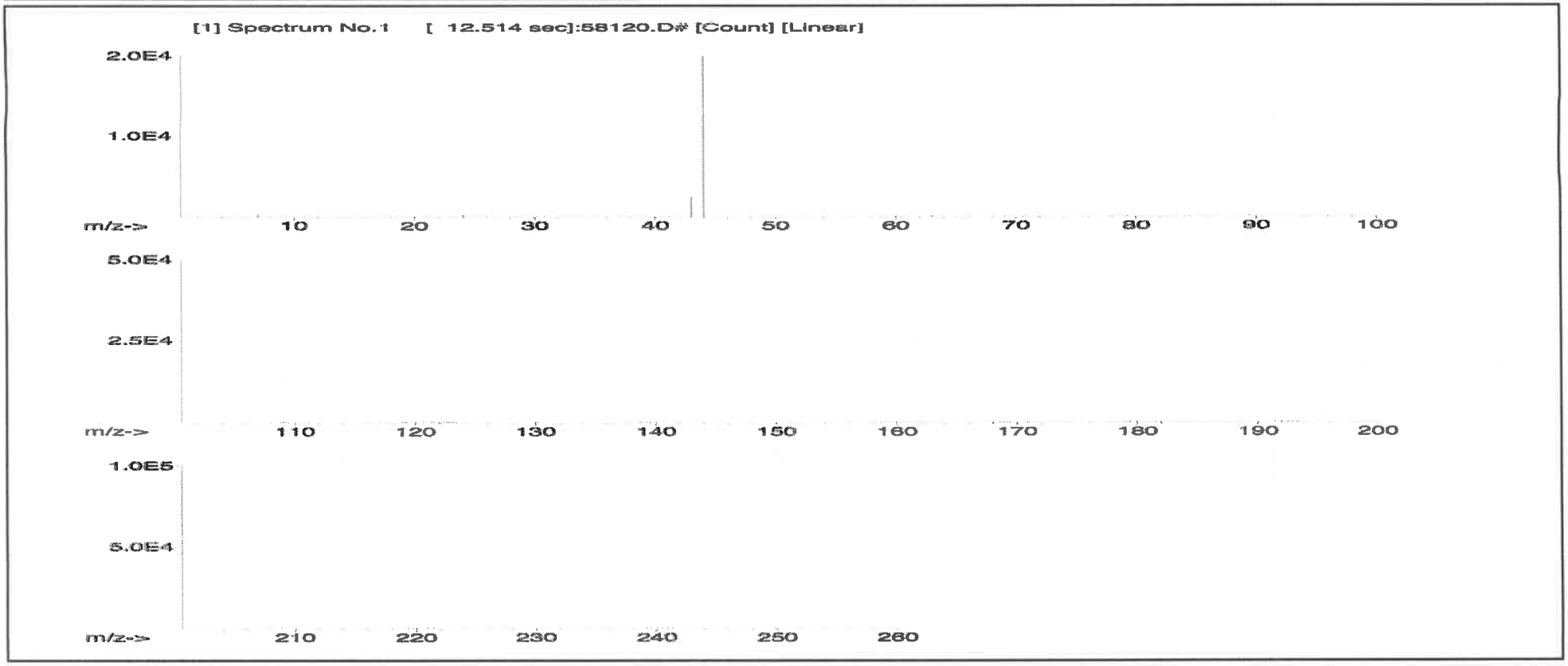
Part Number: 58120
Lot Number: 082324
Description: Calcium (Ca)
Expiration Date: 082327
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 4000.1

	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	CAD03203383	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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	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.
* 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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6028

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

R 8/15/24

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

Weight shown below was diluted to (mL): 2000.07 0.100 Flask Uncertainty

		Lot #	
Solvent:	24002546	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

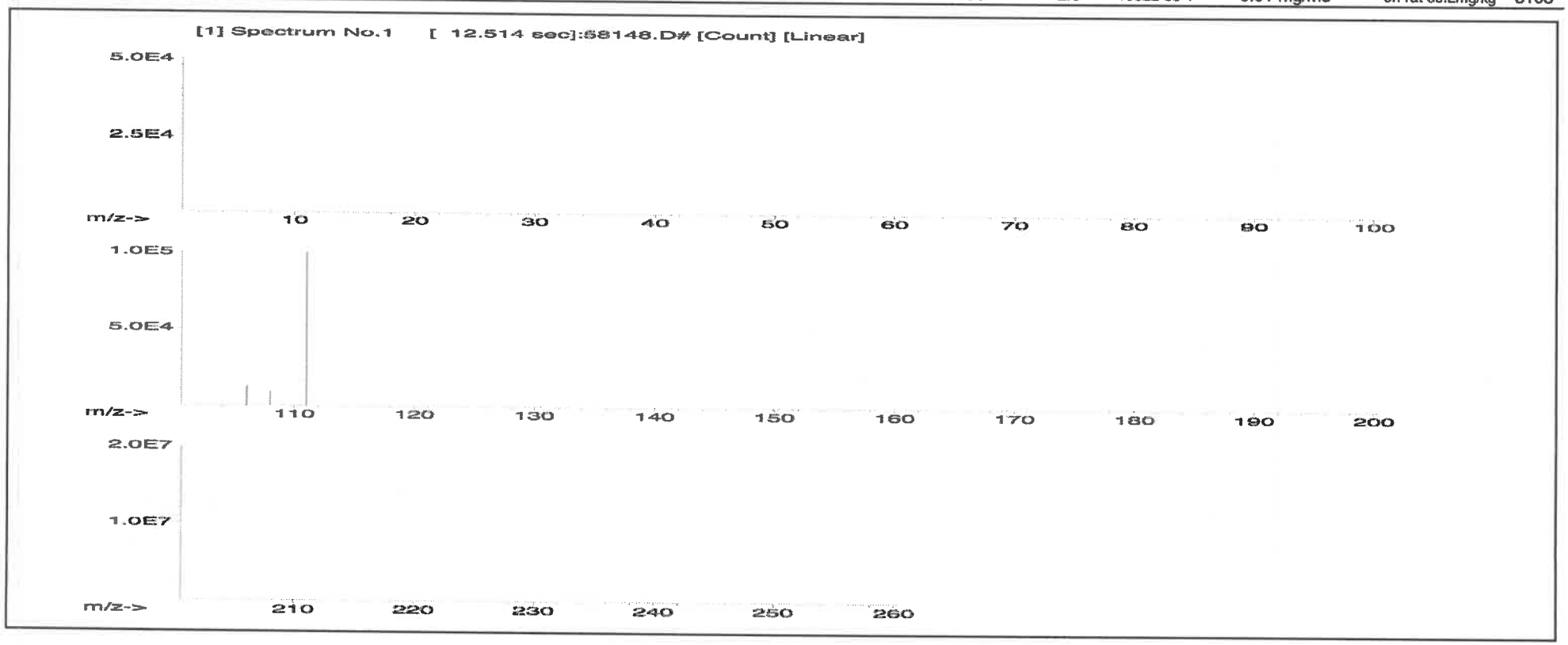
5E-05 Balance Uncertainty

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	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:

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).

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 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*

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.

ICSA: M5244

ICSB: M5245

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803

Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.10)	-1.9	2.1	19.0	16.2	21.9
Ba	10	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0.0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.70)	-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	(0.30)	-9.7	10.0	(19.0)	9.0	29.0
Ag	1.0	(0.0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0.0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.50)	-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.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 8/5/24 M6025

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

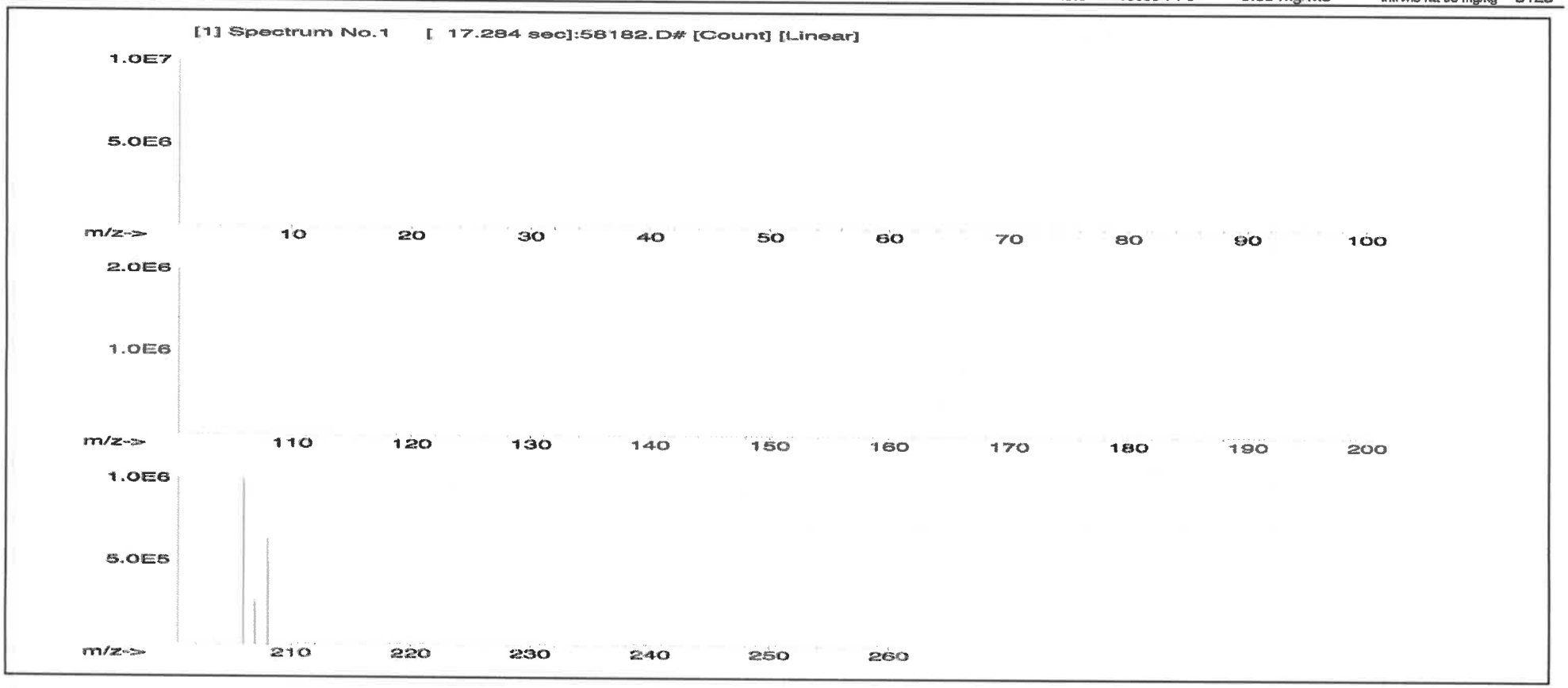
Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6026

R: 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

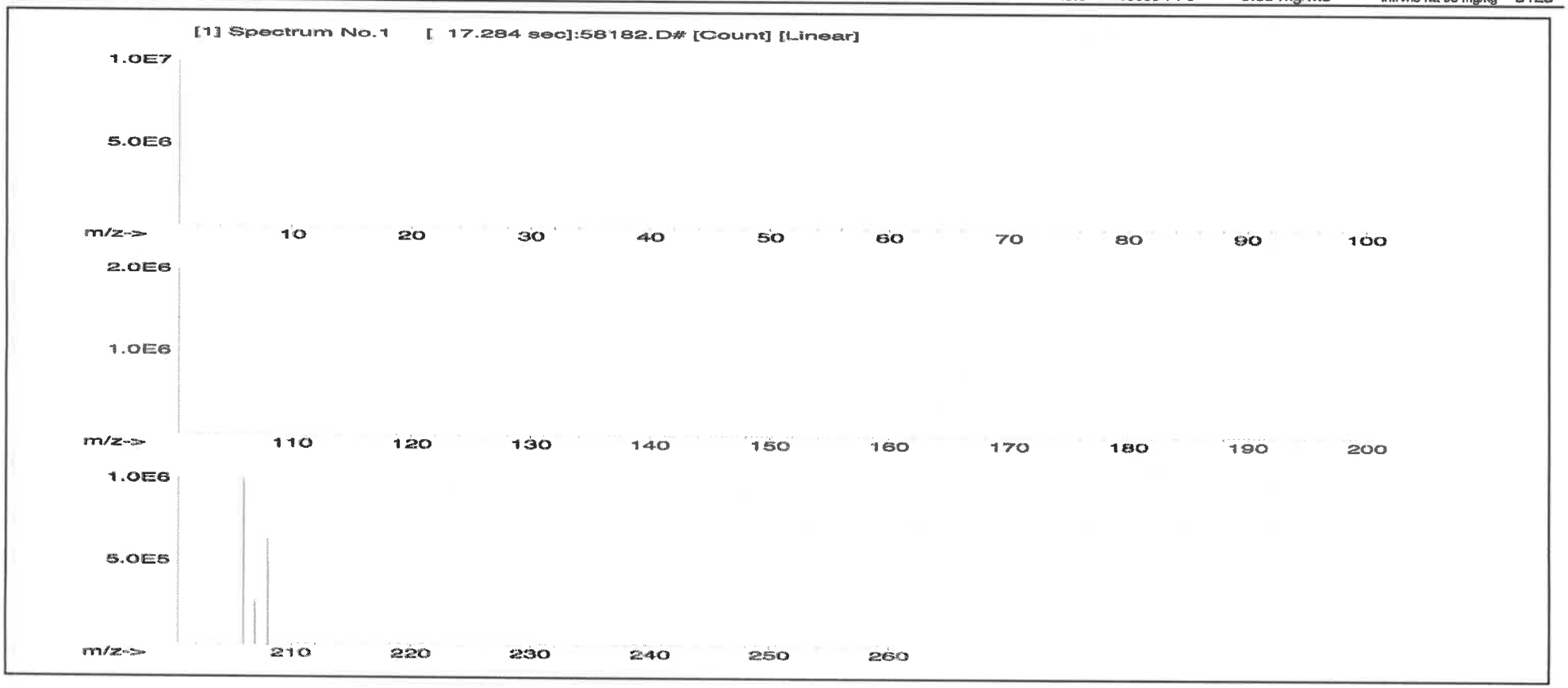
Part Number: 57182
Lot Number: 110923
Description: Lead (Pb)

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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).

ThermoFisher SCIENTIFIC

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.

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

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.

$$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$$

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

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/4}$$

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

JENSEN INERT PRODUCTS

MATERIAL CERTIFICATE OF COMPLIANCE

DATE: JUNE 12, 2023

CUSTOMER:	PCI SCIENTIFIC SUPPLY, INC
PURCHASE ORDER NO.	6054931
CATALOG NO.	BOI5021-450L
PRODUCT DESCRIPTION:	BOILING STONES, TFE, 454GMS
QUANTITY:	10 EACH
LOT NO.	W126678
SPECIFICATION (S):	Made from Virgin PTFE Resin

We certify that we have complied with the terms and conditions of the above Purchase Order and the Part Specifications in the manufacturing of the above product.

Laura Valencia

Laura Valencia
Quality Assurance Inspector

F:U:J:CF:PCISCI:COC-55114-BOI5021-061223

3773 NW 126th Avenue • Coral Springs, Florida 33065 • Fax (954) 344-2008 • 1-800 446-3781
Email: jensen@jenseninert.com Visit our Web Site at www.jenseninert.com

JENSEN INERT PRODUCTS

MATERIAL CERTIFICATE OF COMPLIANCE

DATE: JUNE 12, 2023

CUSTOMER:	PCI SCIENTIFIC SUPPLY, INC
PURCHASE ORDER NO.	6054931
CATALOG NO.	BOI5021-450L
PRODUCT DESCRIPTION:	BOILING STONES, TFE, 454GMS
QUANTITY:	10 EACH
LOT NO.	W126678
SPECIFICATION (S):	Made from Virgin PTFE Resin

We certify that we have complied with the terms and conditions of the above Purchase Order and the Part Specifications in the manufacturing of the above product.

Laura Valencia

Laura Valencia
Quality Assurance Inspector

F:U:J:CF:PCISCI:COC-55114-BOI5021-061223

3773 NW 126th Avenue • Coral Springs, Florida 33065 • Fax (954) 344-2008 • 1-800 446-3781
Email: jensen@jenseninert.com Visit our Web Site at www.jenseninert.com

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5658 R ! 8/25/23

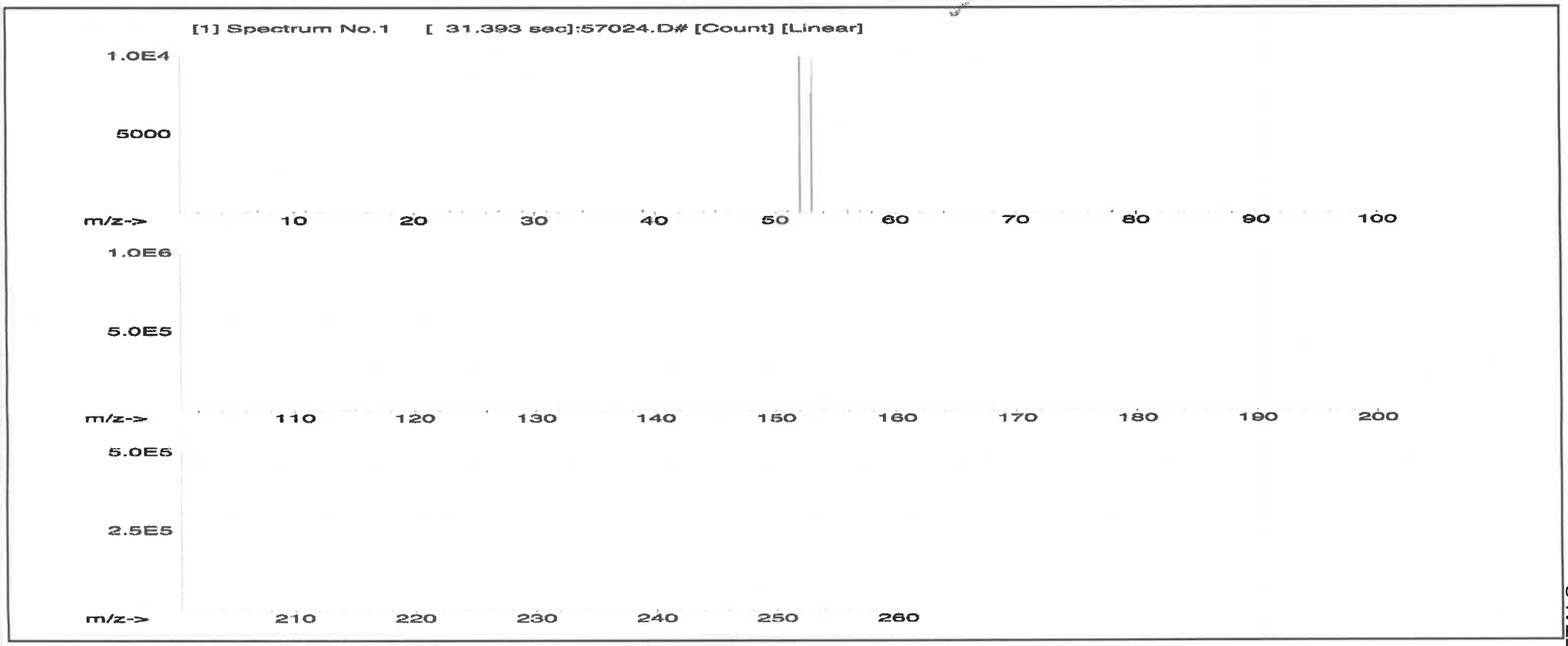
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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.
* 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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5697 R: 10/27/23

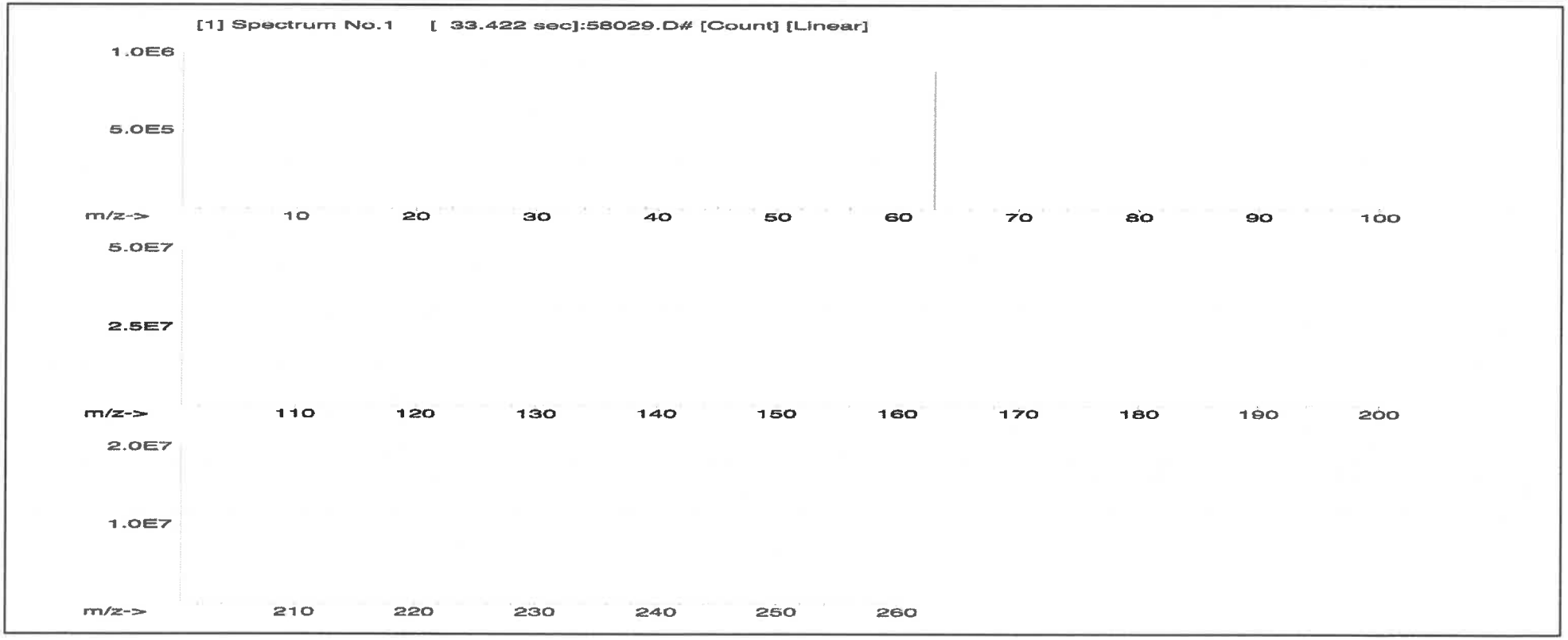
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



Absolute Standards, Inc.
300-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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.
* 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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5798

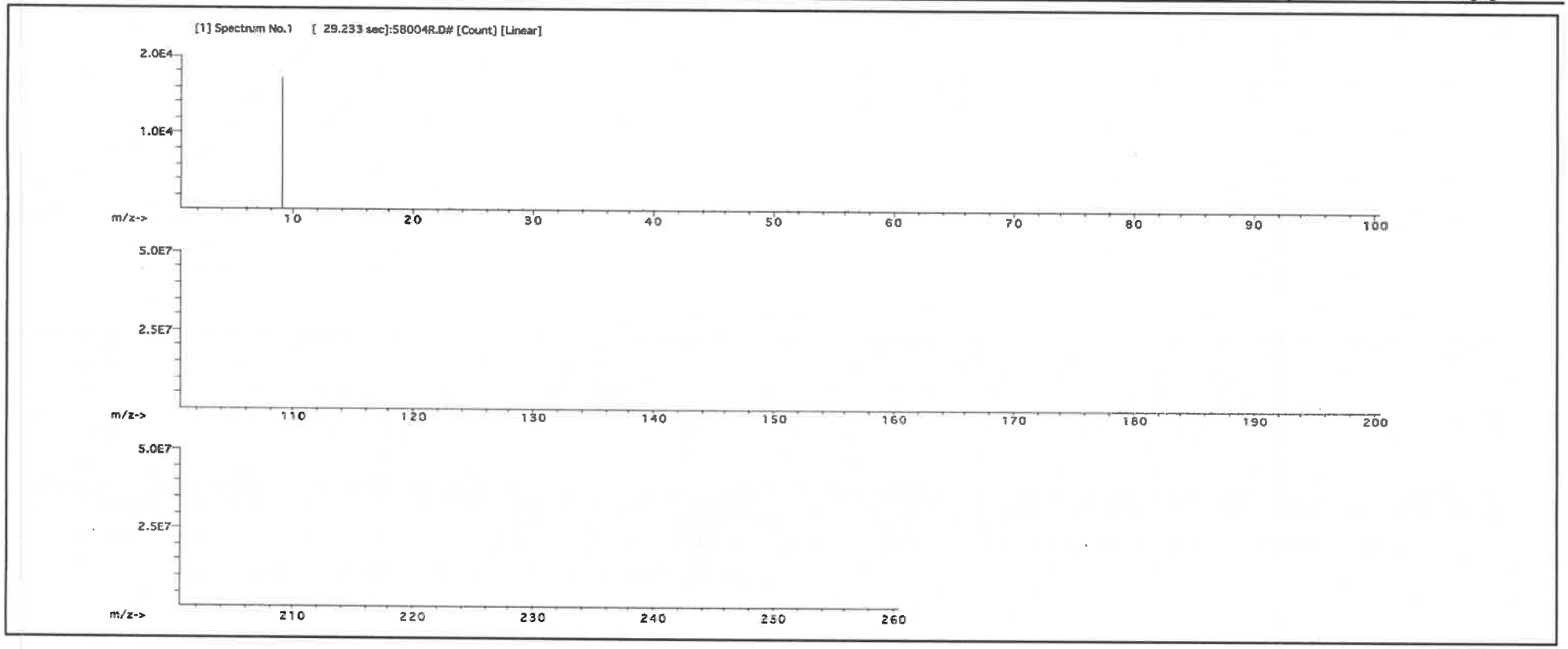
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

		Lot #	Solvent:		
Part Number:	**57004**	24002546	Nitric Acid		
Lot Number:	**102523**				
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



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.

* 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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R? 02/09/24 IM5799

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57050
Lot Number: 071123
Description: Tin (Sn)

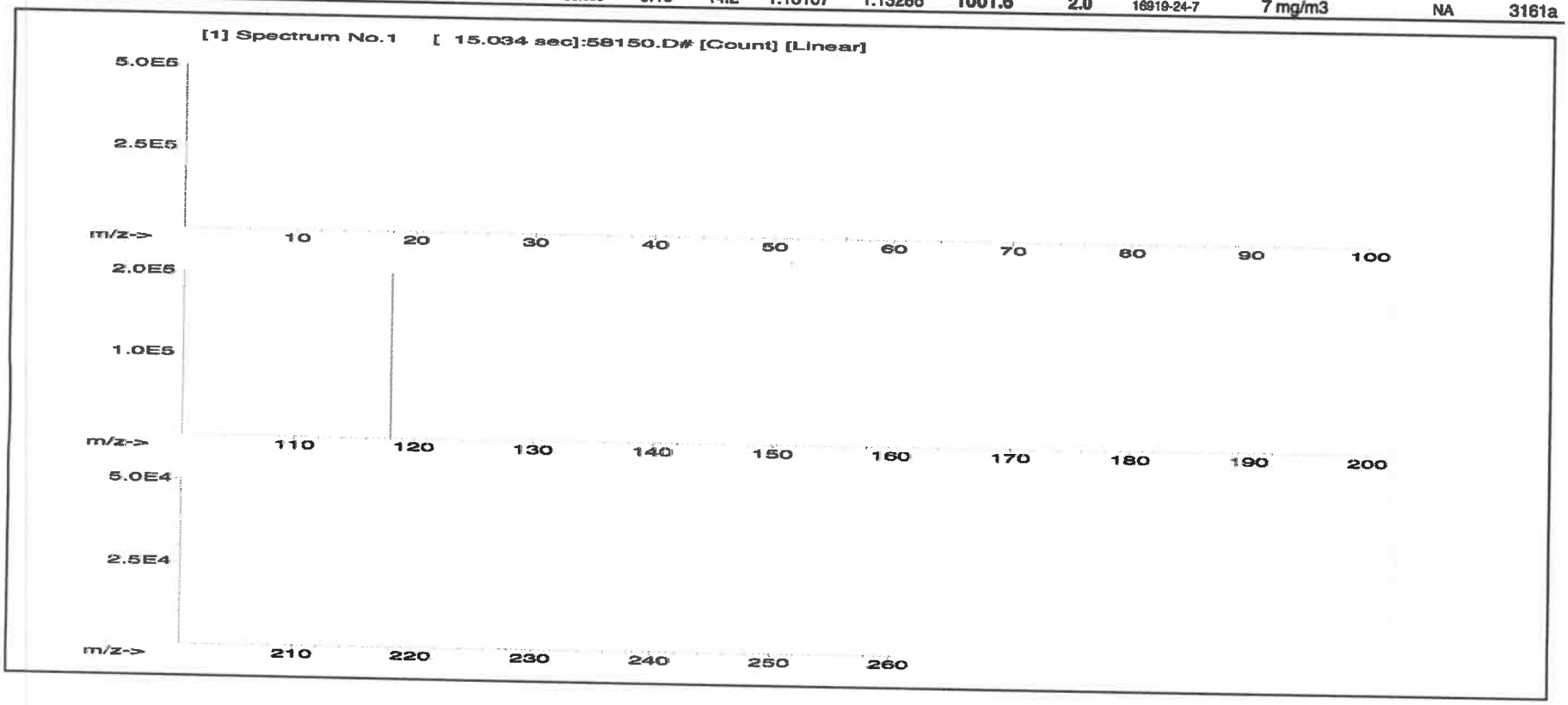
Expiration Date: 071126
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 499.93

	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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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:

* 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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 IM5800 BH

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

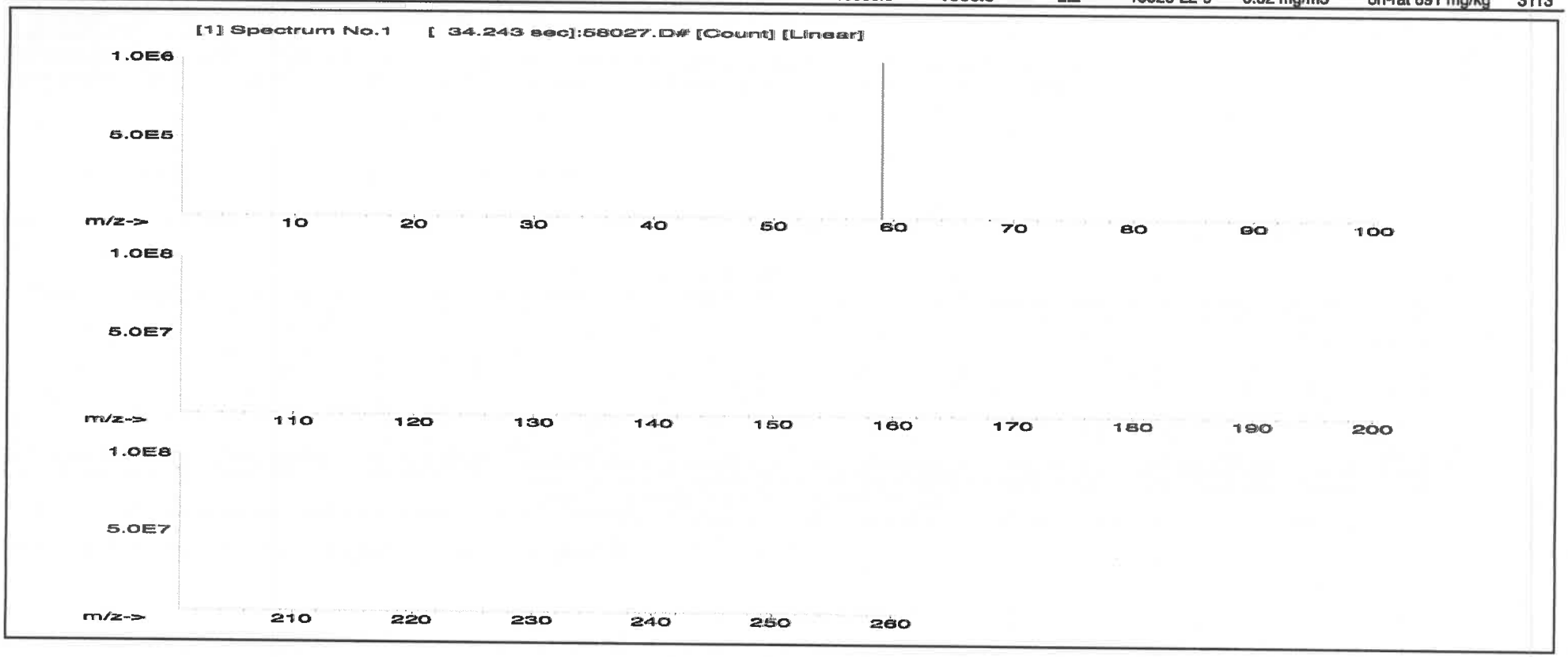
CERTIFIED WEIGHT REPORT:

		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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass 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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5801 BH

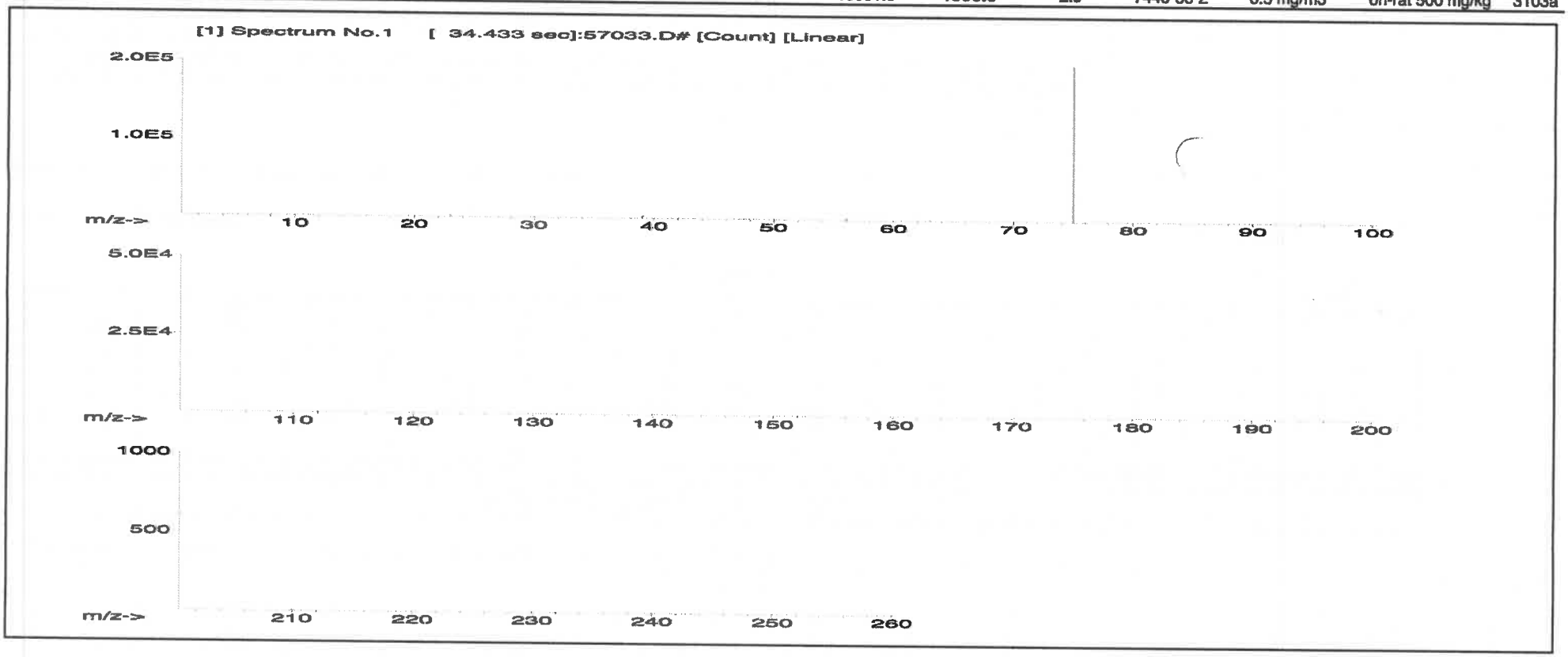
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED **WEIGHT** REPORT:

		Lot #	Solvent:		
Part Number:	**57033**				
Lot Number:	**111323**	24002546	Nitric Acid		
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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	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.

* 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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R1 02/09/24. M58165

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

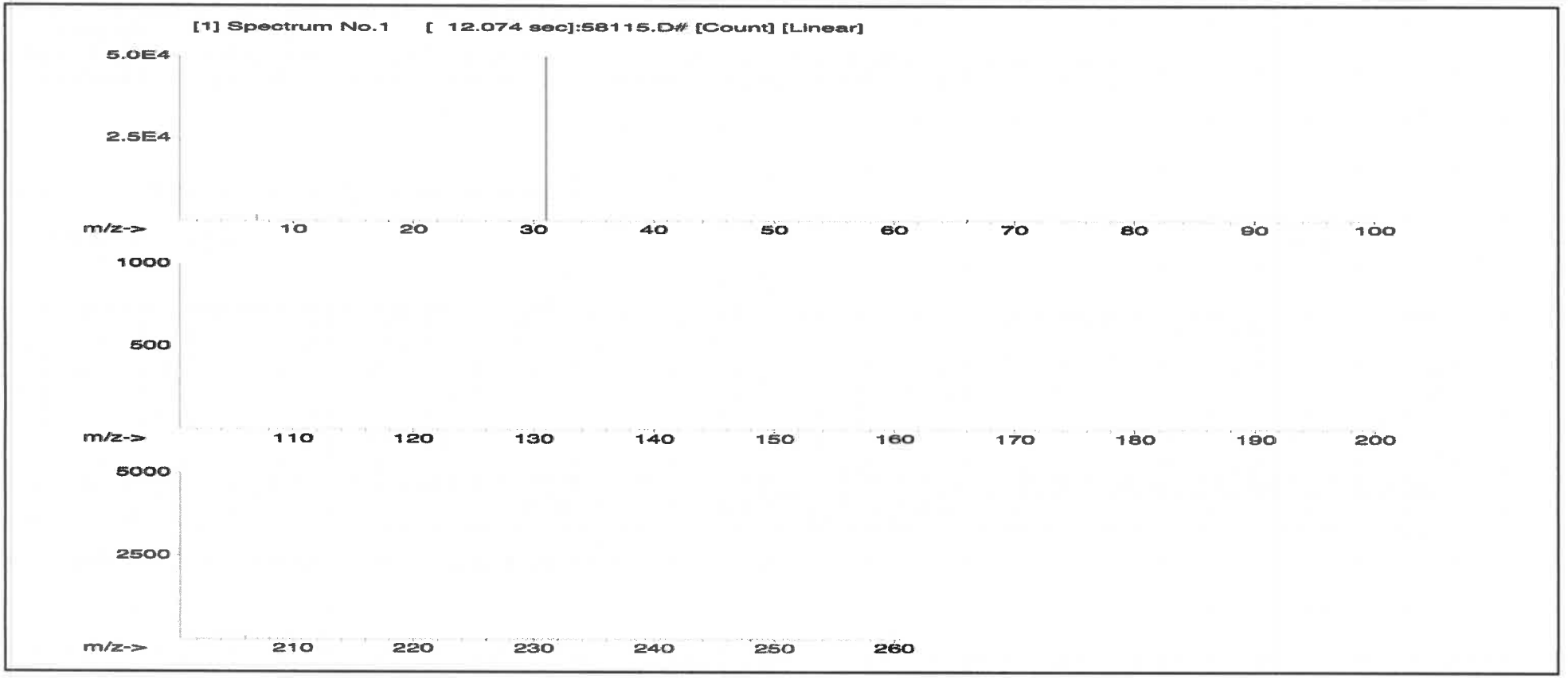
Part Number: 57115
Lot Number: 041723
Description: Phosphorous (P)

Expiration Date: 041726
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:	21110221	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass 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.

* 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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

R: 02/09/24 M5817

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

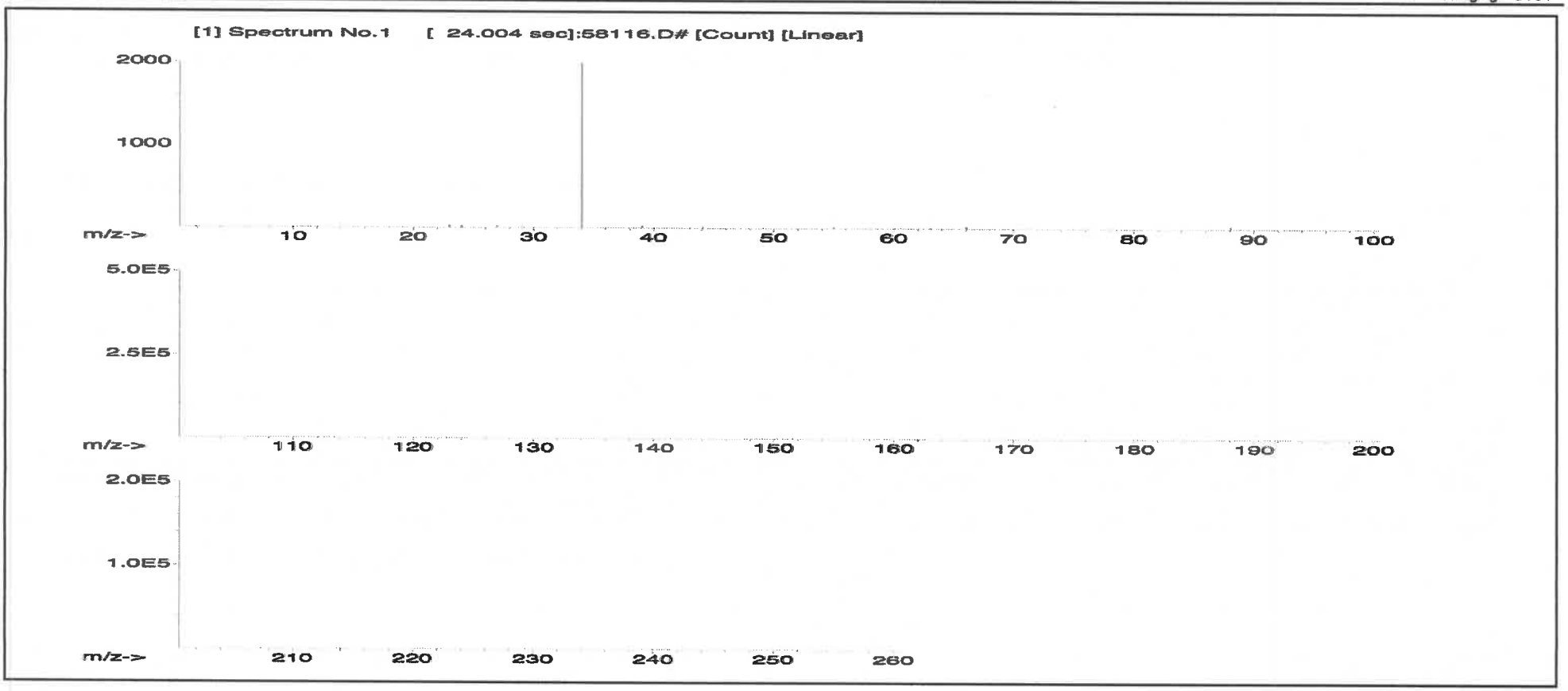
Part Number: 57116
Lot Number: 071123
Description: Sulfur (S)

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	ori-rat 4250mg/kg	3181



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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:

* 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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M5962 R! 06/14/24.

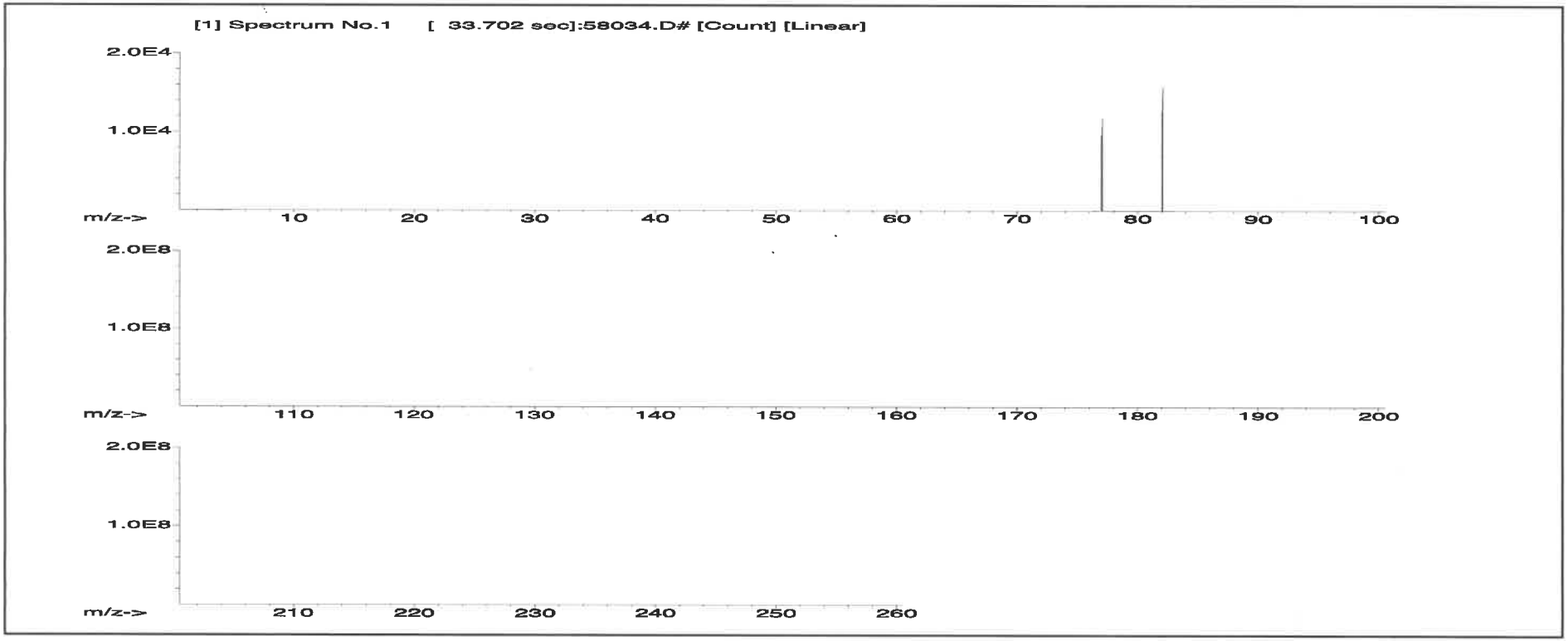
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																		
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	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).

MS978, MS979

INORGANIC VENTURES

Certificate of Analysis

Refine your results. Redefine your industry.

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

R: 2/22/24

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 865.01 — ACCREDITED Reference Material Producer Certificate 865.02

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 TI Metal
Starting Material:	
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:

$$X_{CRM/RM} = (\Sigma x_a)\,(1/n_{Char\ a})$$

X_a = mean of Assay Method A with $n_{Char\ a}$ = 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)

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

H5981 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		

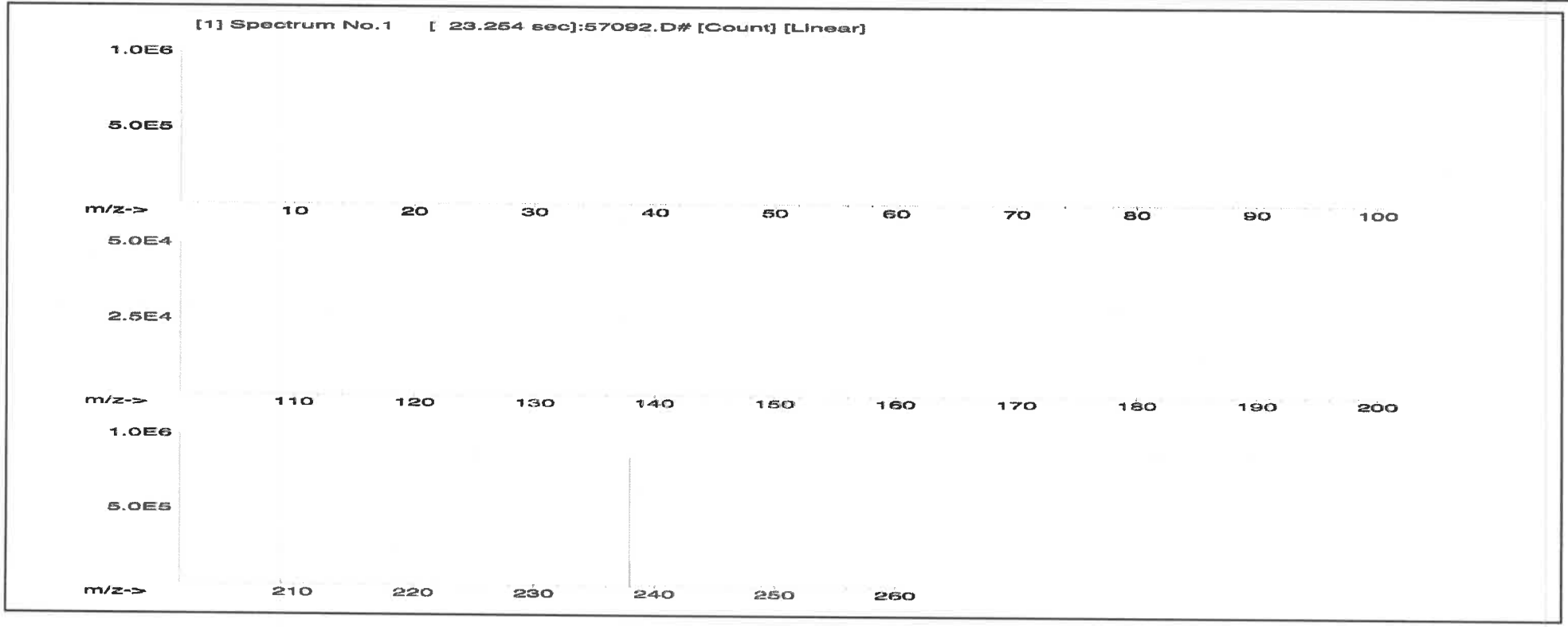
Giovanni Esposito

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	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**

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

R 8/19/24, M60055

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:	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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6079 R: 9/30/24

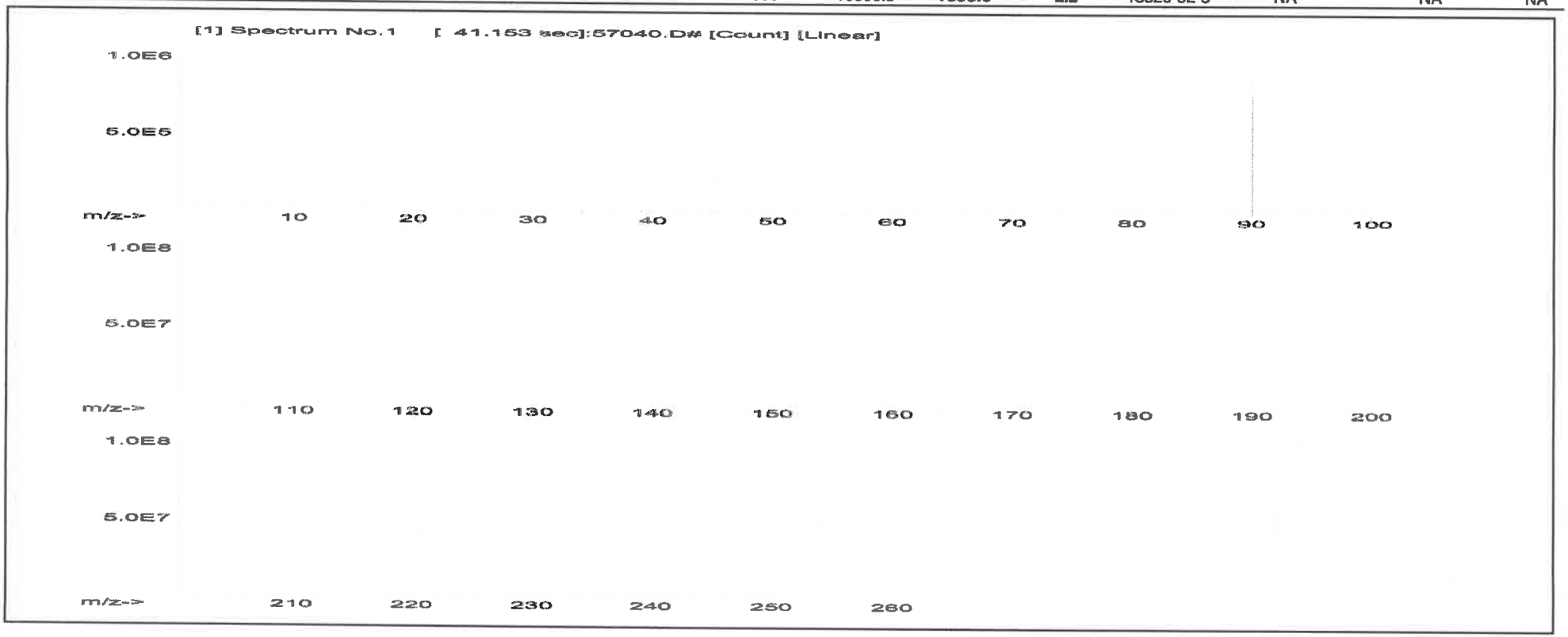
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																			
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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).

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->1/13/28

M6128

Part Number:	**58025**	**Solvent:**	**Lot #** 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	

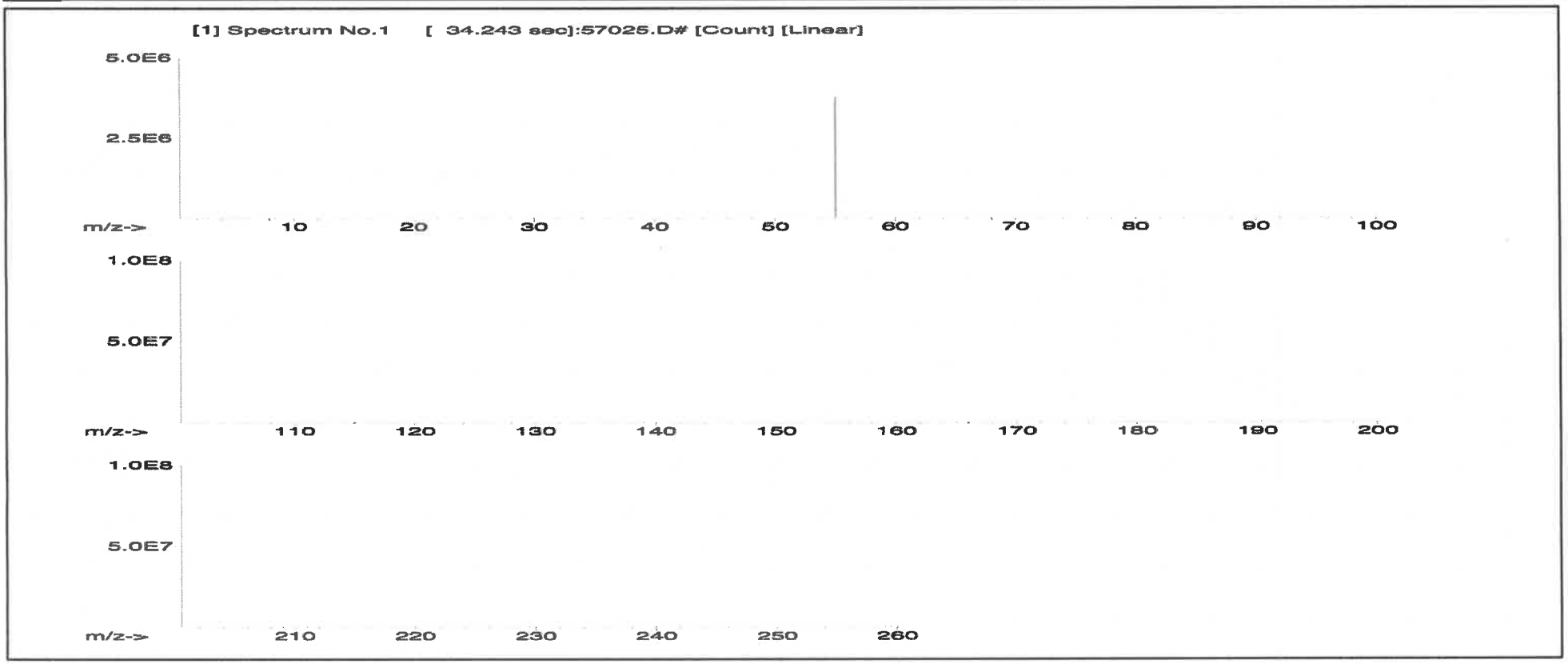
Giovanni Esposito

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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).

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

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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

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.

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:

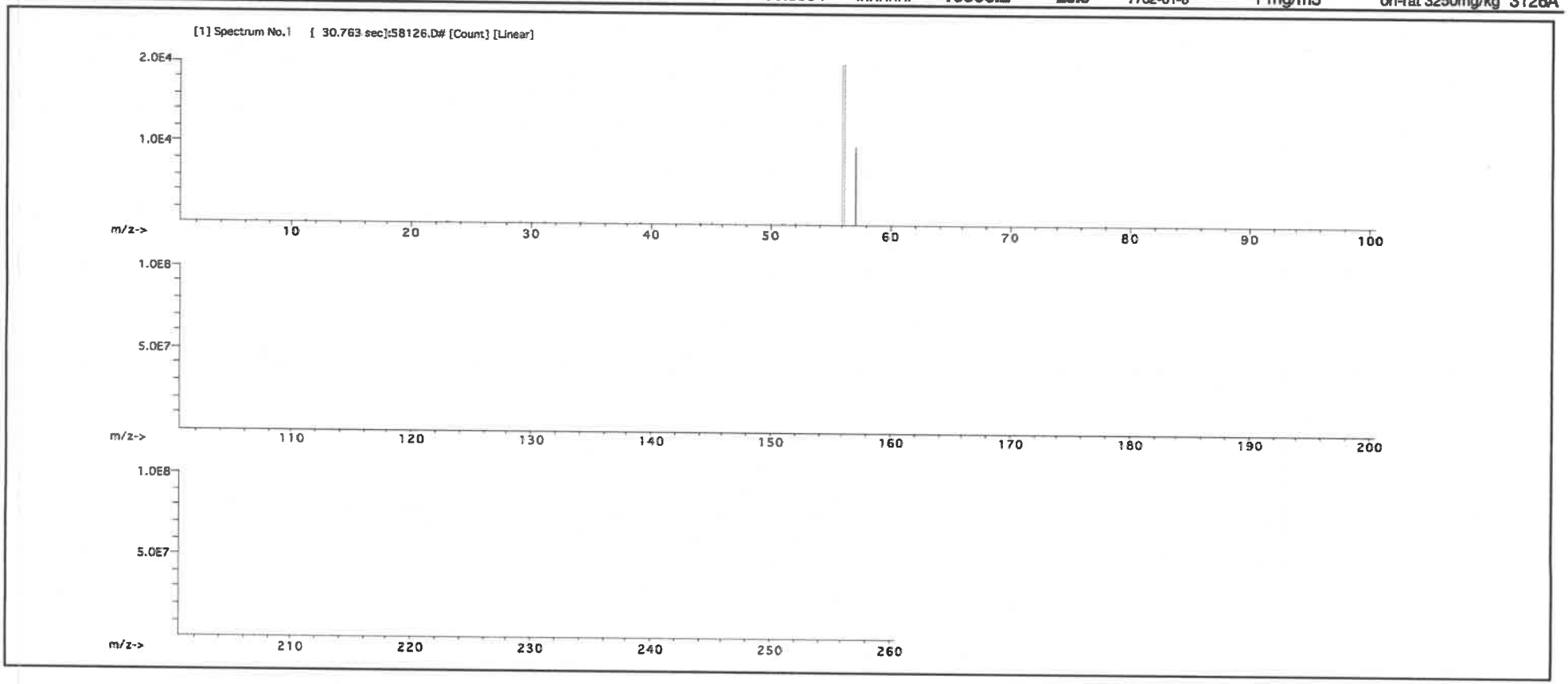
Part Number: 58126 R->1|B|2S
Lot Number: 011025
Description: Iron (Fe) M6140
Expiration Date: 011028
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.07

	Lot #		
Solvent:	24012496	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	

5E-05 Balance Uncertainty
0.100 Flask Uncertainty

Formulated By:	Benson Chan	011025
Reviewed By:	Pedro L. Rentas	011025

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(III) nitrate nonahydrate (Fe)	IN028	FED082023A1	10000	99.999	0.10	13.0	153.8534	######	**10000.2**	**20.0**	7782-61-8	1 mg/m3	orl-rat 3250mg/kg	3126A



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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	T	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).

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

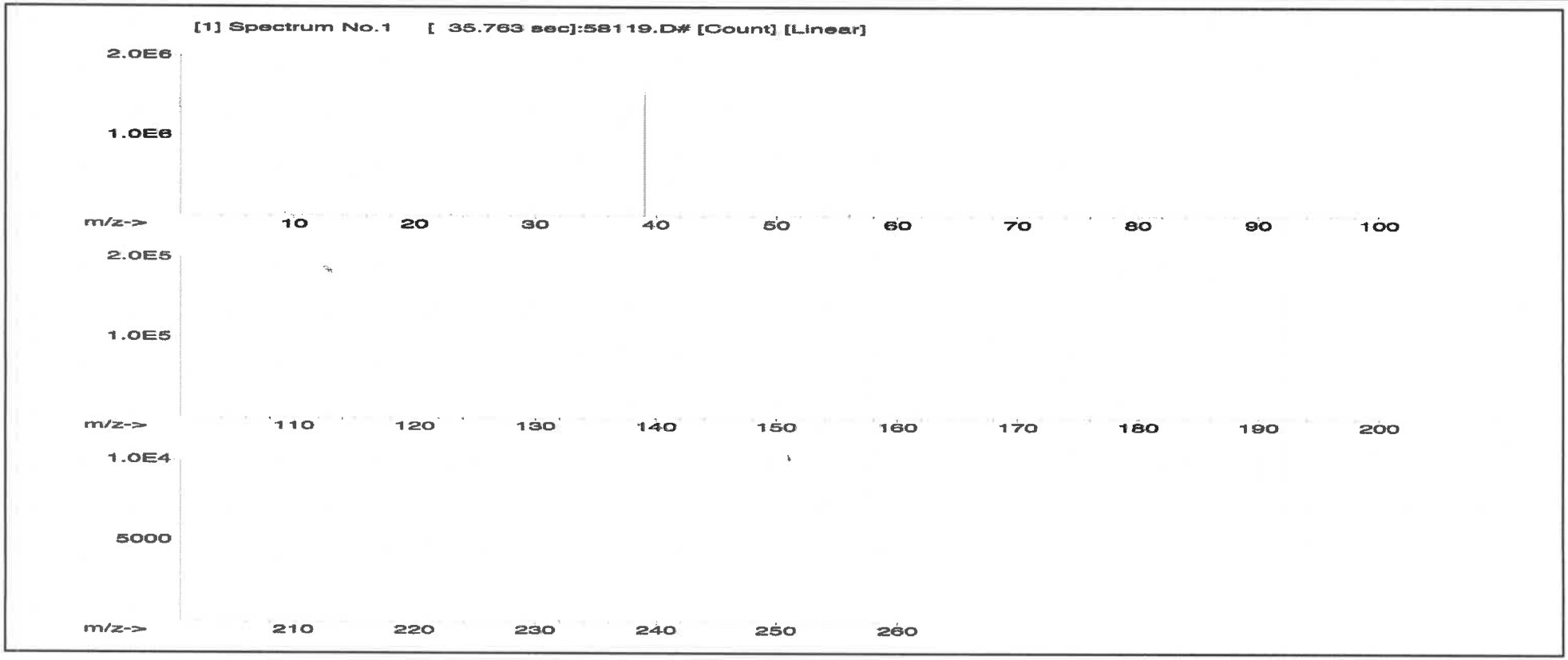
Part Number:	**57119**		**Lot #**		
Lot Number:	**103024**	**Solvent:**	24002546	Nitric Acid	
Description:	**Potassium (K)**	2%	80.0 (mL)	Nitric Acid	
Expiration Date:	103027				
Recommended Storage:	Ambient (20 °C)				
Nominal Concentration (µg/mL):	**10000**				
NIST Test Number:	6UTB	5E-05	Balance Uncertainty		
Weight shown below was diluted to (mL):	4000.1	0.15	Flask Uncertainty		

M6141
M6142
M6143

Giovanni Esposito

Formulated By:	Giovanni Esposito	103024
Reviewed By:	Pedro L. Rentas	103024

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	KD062022A1	10000	99.999	0.10	37.7	106.1040	######	**10001.1**	**20.0**	7757-79-1	5 mg/m3	orl-rat 3750 mg/kg	3141a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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:

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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 58030
Lot Number: 121724
Description: Zinc (Zn)

R → 1/13/25

M6145

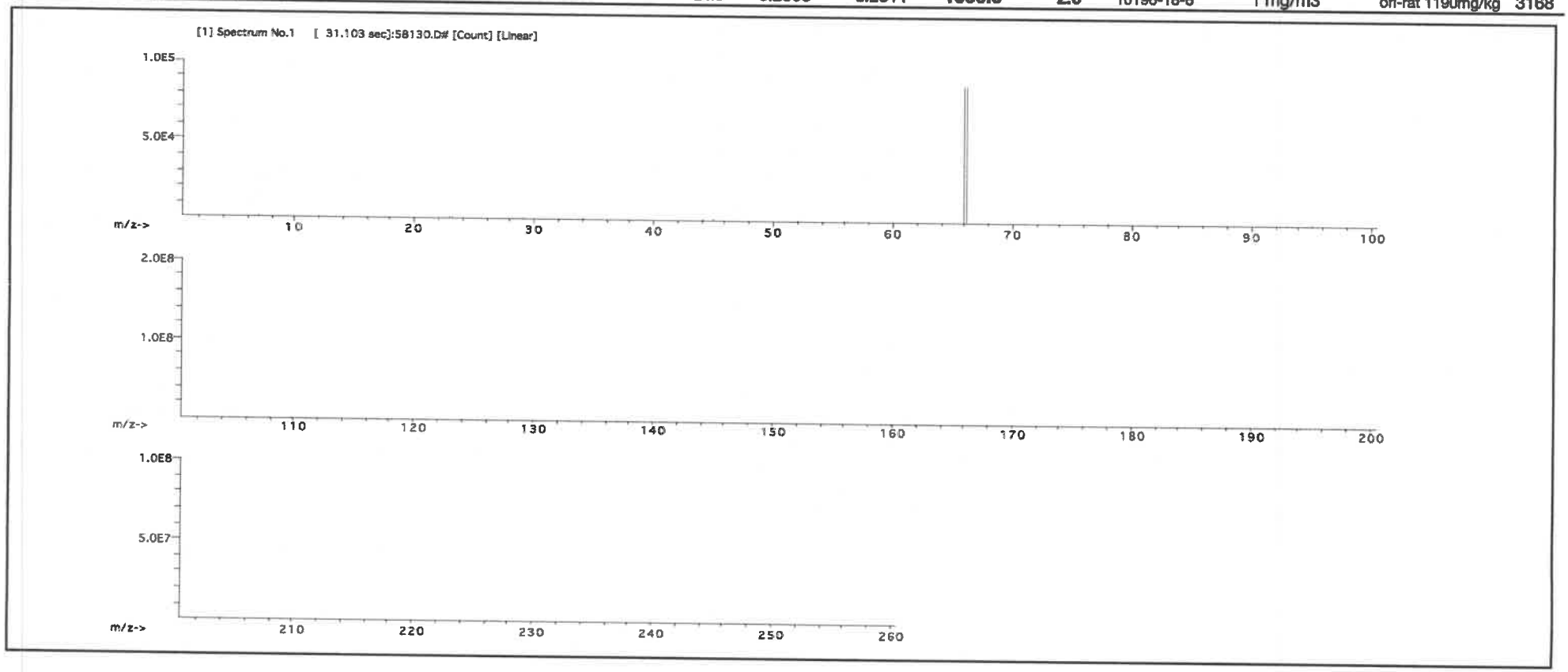
Expiration Date: 121727
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test Number: 6UTB

		Lot #	
Solvent:	24012496	Nitric Acid	
	2%	40.0 (mL)	Nitric Acid

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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).

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:

$w_i = (1/u_{char\ i})^2 / \langle\Sigma(1/(u_{char\ i})^2)$

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

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 26, 2024

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- August 26, 2029

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Custom Processing Supervisor

Certificate Approved By:

Muzzammil Khan
Stock Laboratory Supervisor

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Nitric Acid 69%
CMOS

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

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

M-5162

R. Date :- 04/27/2025

Material No.: 9606-03
Batch No.: 24H0162012
Manufactured Date: 2024-06-28
Retest Date: 2029-06-27
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	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	0.1 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	0.1 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	< 1 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 1 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 1.0 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	< 1.0 ppb

>>> Continued on page 2 >>>

For questions on this Certificate of Analysis please contact Technical Services at 855 282 6867 or +1 610 386 1700

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result
Trace Impurities - Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Potassium (K)	≤ 50 ppb	< 1 ppb
Trace Impurities - Silicon (Si)	≤ 50 ppb	1 ppb
Trace Impurities - Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Sodium (Na)	≤ 150.0 ppb	< 1.0 ppb
Trace Impurities - Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Tantalum (Ta)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Thallium (Tl)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Tin (Sn)	≤ 20.0 ppb	< 1.0 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	13 par/ml
Particle Count - 1.0 µm and greater	≤ 10 par/ml	5 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

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.

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:	QCP-CICV-1
Lot Number:	V2-MEB744107
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	2 500 µg/mL ea: Calcium, Potassium, Magnesium, Sodium, 1 000 µg/mL ea: Aluminum, Barium, 500 µg/mL ea: Iron, 250 µg/mL ea: Nickel, Vanadium, Zinc, Cobalt, Manganese, 125 µg/mL ea: Silver, Copper, 100 µg/mL ea: Chromium, 25 µg/mL ea: Beryllium

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	1 000 ± 4 µg/mL	Barium, Ba	1 000 ± 6 µg/mL
Beryllium, Be	24.98 ± 0.12 µg/mL	Calcium, Ca	2 500 ± 8 µg/mL
Chromium, Cr	99.9 ± 0.6 µg/mL	Cobalt, Co	250.2 ± 1.2 µg/mL
Copper, Cu	125.0 ± 0.5 µg/mL	Iron, Fe	500.0 ± 2.2 µg/mL
Magnesium, Mg	2 500 ± 11 µg/mL	Manganese, Mn	249.9 ± 1.1 µg/mL
Nickel, Ni	250.0 ± 1.2 µg/mL	Potassium, K	2 500 ± 11 µg/mL
Silver, Ag	125.0 ± 0.6 µg/mL	Sodium, Na	2 500 ± 11 µg/mL
Vanadium, V	250.0 ± 1.1 µg/mL	Zinc, Zn	249.9 ± 1.1 µg/mL

Density: 1.081 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
Cu	ICP Assay	3114	120618
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	200413
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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**

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

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

May 22, 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

- **May 22, 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.

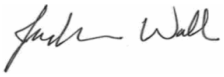
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor

Certificate Approved By:

Jodie Wall
Stock VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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

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:	QCP-CICV-2
Lot Number:	U2-MEB733713
Matrix:	3% (w/v) Tartaric acid 1% (v/v) HNO3
Value / Analyte(s):	500 µg/mL ea: Antimony

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**500.0 ± 2.8 µg/mL**		

Density: 1.017 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Sb	ICP Assay	3102a	140911

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**

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 01, 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 01, 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

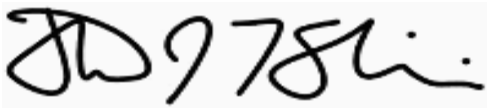
- Sealed TCT Bag Open Date: _____

- 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

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

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:	QCP-CICV-3
Lot Number:	V2-MEB749572
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	500 µg/mL ea: Arsenic, Lead, Selenium, Thallium, 250 µg/mL ea: Cadmium

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Arsenic, As	**500.0 ± 3.1 µg/mL**	**Cadmium, Cd**	**250.1 ± 1.1 µg/mL**
Lead, Pb	**500.0 ± 2.3 µg/mL**	**Selenium, Se**	**500.0 ± 3.2 µg/mL**
Thallium, Tl	**500.0 ± 3.0 µg/mL**		

Density: 1.040 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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

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

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

January 02, 2025

- 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 02, 2030**

- 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.

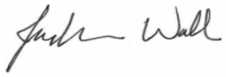
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor

Certificate Approved By:

Jodie Wall
Stock VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Hydrogen Peroxide, 30%
CMOS
(Stabilized)

M-6170

R.Date . 8-05/20/2025

avantor™ | J.T.Baker®

Material No.: 2190-03
Batch No.: 24D1961001

Test	Specification	Result
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Nickel (Ni)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Niobium (Nb)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 600.0 ppb	176.7 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 50.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	190.0 – 500.0 ppb	272.3 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)	≤ 50 ppb	< 1 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.2 µm and greater	≤ 1175 par/ml	202 par/ml
Particle Count – 0.5 µm and greater	≤ 100 par/ml	33 par/ml

>>> Continued on page 3 >>>

Hydrogen Peroxide, 30%
CMOS
(Stabilized)

avantor™ | J.T.Baker®

Material No.: 2190-03
Batch No.: 24D1961001

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

Michelle Bales
Sr. Manager, Quality Assurance

Hydrogen Peroxide, 30%
CMOS
(Stabilized)

avantor™ | J.T.Baker®

Material No.: 2190-03
Batch No.: 24D1961001
Manufactured Date: 2024-04-17
Expiration Date: 2025-10-16
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (H_2O_2)	30.0 - 32.0 %	31.6 %
Color (APHA)	≤ 10	< 5
Free Acid (µeq/g)	≤ 0.2	0.1
Residue after Evaporation	≤ 10 ppm	2 ppm
Ammonium (NH_4)	≤ 3 ppm	< 3 ppm
Chloride (Cl)	≤ 0.2 ppm	< 0.2 ppm
Nitrate (NO_3)	≤ 2 ppm	< 2 ppm
Phosphate (PO_4)	≤ 1 ppm	1 ppm
Sulfate (SO_4)	≤ 3 ppm	< 3 ppm
Trace Impurities - Aluminum (Al)	≤ 70.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities - Barium (Ba)	≤ 20.0 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)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities - Chromium (Cr)	≤ 20.0 ppb	1.5 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)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities - Gold (Au)	≤ 10.0 ppb	< 5.0 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 250.0 ppb
Trace Impurities - Iron (Fe)	≤ 50.0 ppb	4.6 ppb
Trace Impurities - Lead (Pb)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 10.0 ppb	< 1.0 ppb

>>> Continued on page 2 >>>

R -> 013125

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:

M 6171

Part Number: 58112
Lot Number: 011525
Description: Magnesium (Mg)

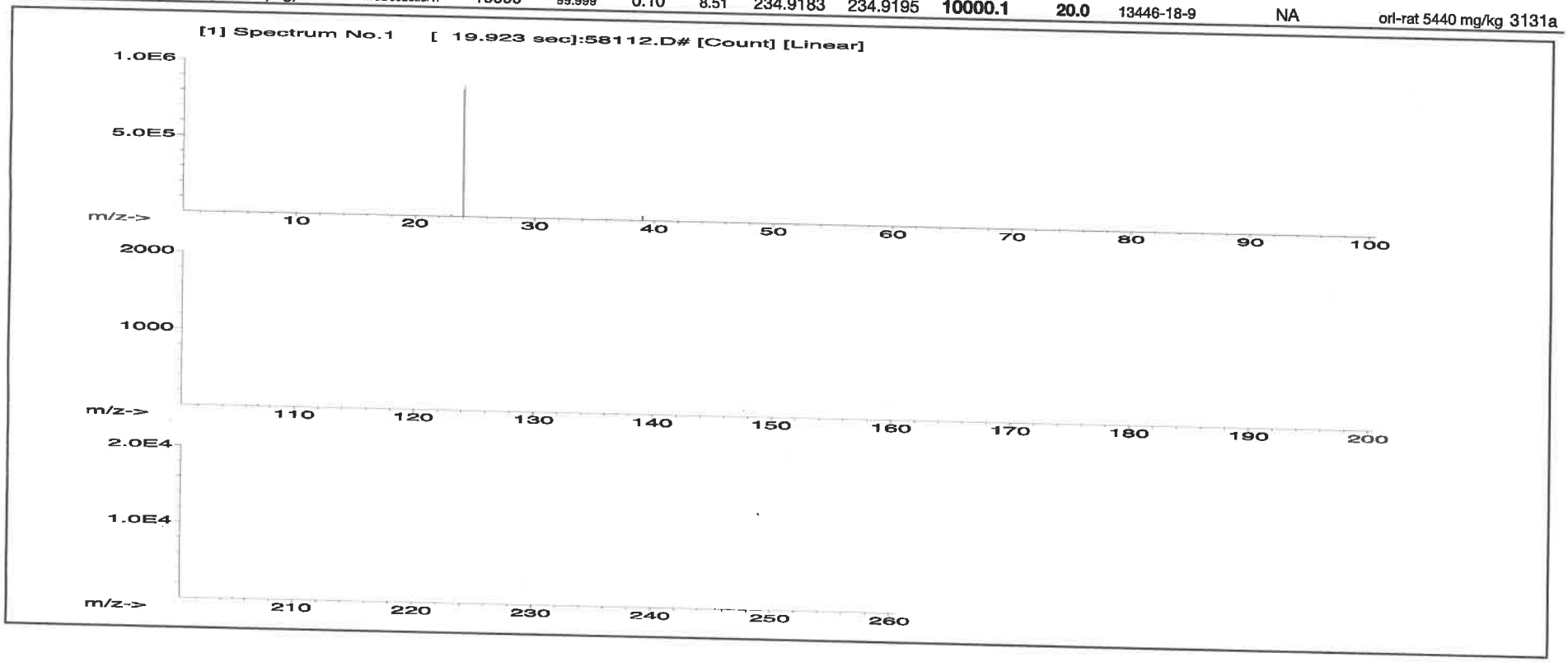
Expiration Date: 011528
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 10000
NIST Test Number: 6UTB
Weight shown below was diluted to (mL): 2000.07

	Lot #		
Solvent:	24012496	Nitric Acid	
2%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.100	Flask Uncertainty	

Formulated By: Benson Chan 011525

Reviewed By: Pedro L. Rentas 011525

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	234.9195	**10000.1**	**20.0**	13446-18-9	NA	orl-rat 5440 mg/kg	3131a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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:

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-> 1/25/25 M6172

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

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:	CGNA10
Lot Number:	V2-NA740547
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Sodium Carbonate
Starting Material Lot#:	2453 and 2606
Starting Material Purity:	99.9976%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10018 ± 30 µg/mL

Density: 1.033 g/mL (measured at 20 ± 4 °C)

Assay Information:

Assay Method #1	**10026 ± 18 µg/mL** Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #2	**9986 ± 66 µg/mL** ICP Assay NIST SRM 3152a Lot Number: 200413
Assay Method #3	**10002 ± 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	<	0.000860	M	Eu	<	0.000860	s	Na	<		O	Se	<	0.034000	O	Zn		0.000387
O	Al		0.003121	O	Fe		0.001622	M	Nb	<	0.000860	O	Si		0.044943	M	Zr	<	0.001800
M	As	<	0.001800	M	Ga	<	0.000860	M	Nd	<	0.000860	M	Sm	<	0.000860				
M	Au	<	0.005700	M	Gd	<	0.000860	O	Ni	<	0.000980	M	Sn	<	0.000860				
O	B	<	0.025000	M	Ge	<	0.003500	M	Os	<	0.029000	M	Sr		0.000436				
M	Ba		0.004494	M	Hf	<	0.000860	O	P		0.005742	M	Ta	<	0.000086				
O	Be	<	0.000160	M	Hg	<	0.002900	M	Pb	<	0.002600	M	Tb	<	0.000860				
M	Bi	<	0.000860	M	Ho	<	0.000860	M	Pd	<	0.004300	M	Te	<	0.004300				
O	Ca		0.112358	M	In	<	0.000860	M	Pr	<	0.000860	M	Th	<	0.003500				
O	Cd	<	0.000730	M	Ir	<	0.000940	M	Pt	<	0.000860	O	Ti		0.000399				
M	Ce	<	0.000860	O	K		0.349560	M	Rb		0.000436	M	Tl	<	0.000860				
M	Co	<	0.000860	M	La	<	0.000860	M	Re	<	0.000860	M	Tm	<	0.000860				
O	Cr	<	0.002000	O	Li		0.000224	M	Rh	<	0.000860	M	U	<	0.000860				
M	Cs		0.000287	M	Lu	<	0.000860	M	Ru	<	0.000940	O	V	<	0.001500				
O	Cu	<	0.004100	M	Mg		0.097377	O	S		0.018726	M	W	<	0.007700				
M	Dy	<	0.000860	M	Mn	<	0.007700	M	Sb	<	0.000860	M	Y	<	0.000860				
M	Er	<	0.000860	O	Mo	<	0.002800	O	Sc	<	0.000610	M	Yb	<	0.000860				

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 - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

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 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

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 23, 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 23, 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

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→ 11/27/25

M6175

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:	V2-MEB742014
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	20.02 ± 0.08 µg/mL	Antimony, Sb	20.03 ± 0.11 µg/mL
Arsenic, As	20.03 ± 0.16 µg/mL	Barium, Ba	20.02 ± 0.11 µg/mL
Beryllium, Be	20.02 ± 0.15 µg/mL	Cadmium, Cd	20.02 ± 0.11 µg/mL
Calcium, Ca	20.03 ± 0.09 µg/mL	Chromium, Cr	20.03 ± 0.13 µg/mL
Cobalt, Co	20.03 ± 0.12 µg/mL	Copper, Cu	20.03 ± 0.10 µg/mL
Iron, Fe	20.04 ± 0.09 µg/mL	Lead, Pb	20.03 ± 0.11 µg/mL
Magnesium, Mg	20.03 ± 0.10 µg/mL	Manganese, Mn	20.03 ± 0.11 µg/mL
Nickel, Ni	20.03 ± 0.11 µg/mL	Potassium, K	20.03 ± 0.10 µg/mL
Selenium, Se	20.03 ± 0.13 µg/mL	Silver, Ag	20.03 ± 0.09 µg/mL
Sodium, Na	20.03 ± 0.10 µg/mL	Thallium, Tl	20.03 ± 0.10 µg/mL
Vanadium, V	20.03 ± 0.11 µg/mL	Zinc, Zn	20.03 ± 0.11 µg/mL

Density: 1.027 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
As	Calculated		See Sec. 4.2
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
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
Sb	ICP Assay	3102a	140911
Se	ICP Assay	3149	100901
Tl	ICP Assay	3158	151215
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 (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

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.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

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

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 11, 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

- March 11, 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:

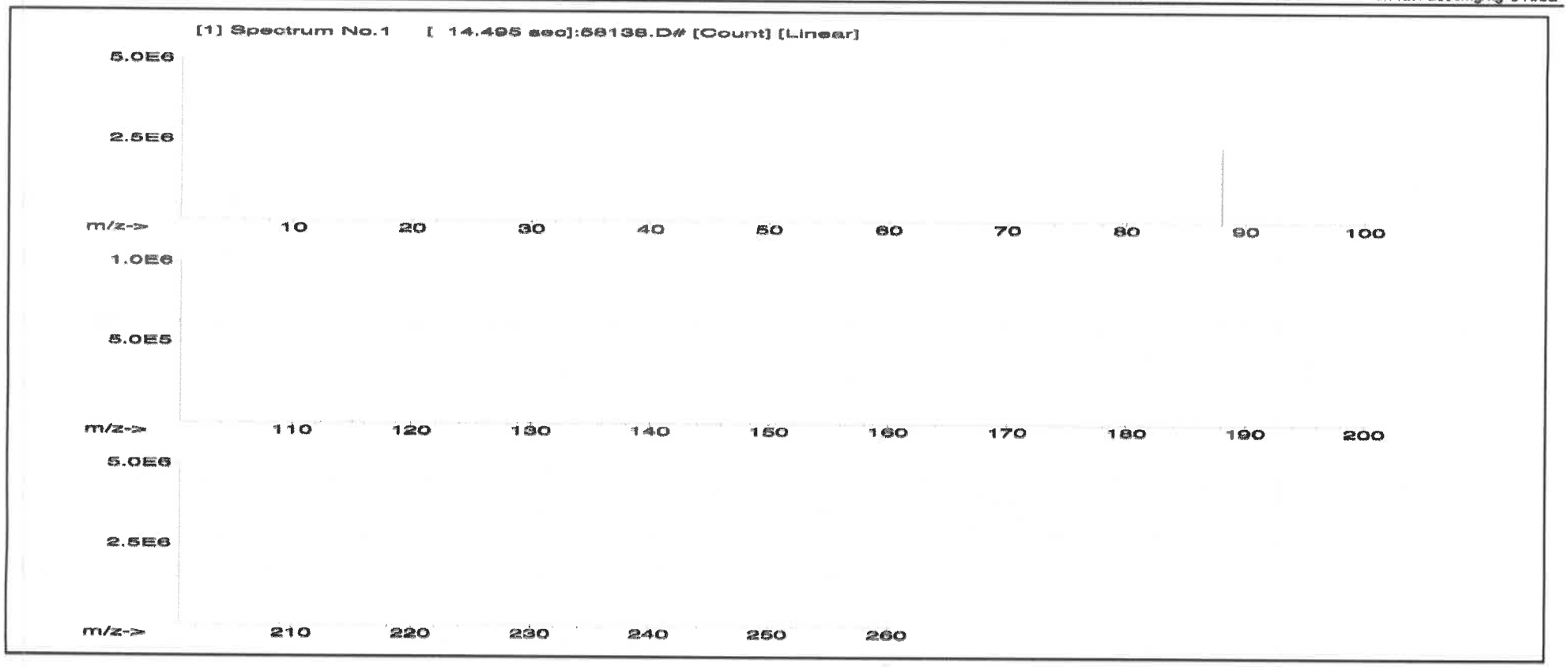
R->8/6/25

M6176

Part Number:	**57038**		**Lot #**		
Lot Number:	**092724**	**Solvent:**	24002546	Nitric Acid	
Description:	**Strontium (Sr)**	2%	40.0 (mL)	Nitric Acid	
Expiration Date:	092727				
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):	2000.07	0.100	Flask Uncertainty		

Formulated By:	Benson Chan	092724
Reviewed By:	Pedro L. Rentas	092724

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. Strontium nitrate (Sr)	IN017	SRZ022018A1	1000	99.997	0.10	41.2	4.85470	4.85481	**1000.0**	**2.0**	10042-76-9	NA	orl-rat >2000mg/kg	3153a



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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	T	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).

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>8/6/28
M6178

Part Number:	**57082**		**Lot #**		
Lot Number:	**031525**	**Solvent:**	24014457	Nitric Acid	
Description:	**Lead (Pb)**		2%	40.0 (mL)	Nitric Acid
Expiration Date:	031528				
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):	2000.07	0.10	Flask Uncertainty		

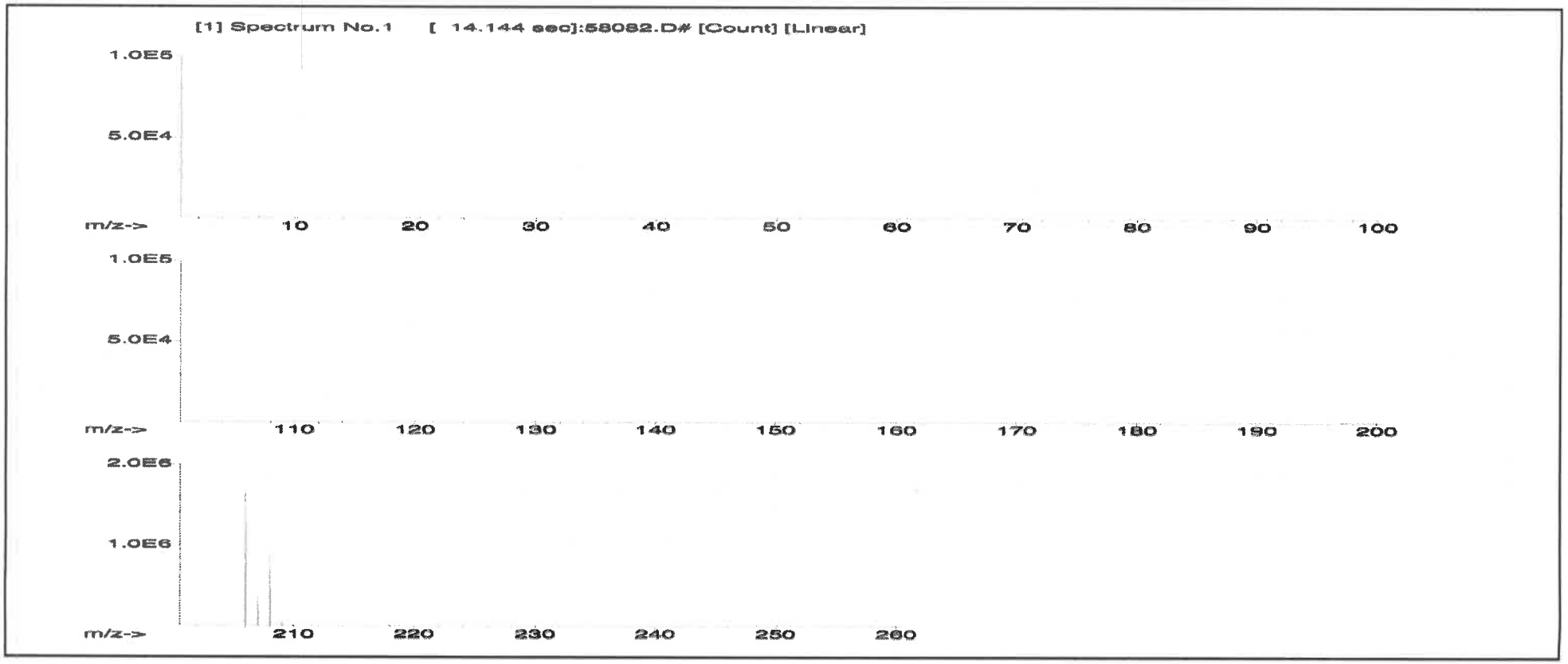
Giovanni Esposito

Formulated By:	Giovanni Esposito	031525

Pedro Rentas

Reviewed By:	Pedro L. Rentas	031525

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	3.20015	3.20067	**1000.2**	**2.0**	10099-74-8	0.05 mg/m3	intrvns-rat 93 mg/kg	3128



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	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	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).

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:

The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.

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.

M6185 ICSA

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803

Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20.0	[100000]			[100000]		
Sb	2.0	(1.5)	-2.5	5.5	(22.0)	18.0	26.0
As	1.0	(0.1)	-1.9	2.1	19.0	16.2	21.9
Ba	10.0	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1.0	(0)	-2.0	2.0	19.0	16.2	21.9
Cd	1.0	(0.7)	-1.3	2.7	20.0	17.0	23.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2.0	(21.0)	17.0	25.0	40.0	34.0	46.0
Co	1.0	(1.0)	-1.0	3.0	20.0	17.0	23.0
Cu	2.0	(8.0)	4.0	12.0	(25.0)	21.0	29.0
Fe	200	[100000]			[100000]		
Pb	1.0	(4.0)	2.0	6.0	25.0	21.3	28.8
Mg	500	[100000]			[100000]		
Mn	1.0	(7.0)	5.0	9.0	27.0	23.0	31.1
Mo		[2000]			[2000]		
Ni	1.0	(6.0)	4.0	8.0	24.0	20.4	27.6
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5.0	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1.0	(0)	-2.0	2.0	18.0	15.3	20.7
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1.0	(0)	-2.0	2.0	21.0	17.9	24.2
Ti		[2000]			[2000]		
V	5.0	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	5.0	(11.0)	1.0	21.0	(29.0)	19.0	39.0

[ ] Indicates analytes that do not require ICP-MS determination in the ICS.
The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 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.

Nitric Acid 69%
CMOS

M6187
R.D :- 08/08/25

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012
Manufactured Date: 2024-06-28
Retest Date: 2029-06-27
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	< 1.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	0.1 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	0.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	0.1 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	< 1 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 1 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 1.0 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	< 1.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	< 1 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	1 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 1.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 1.0 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	13 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	5 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24H0162012

Test	Specification	Result

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

M6200
R.0 → 08/25/25

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 24D1562005
Manufactured Date: 2024-03-18
Retest Date: 2029-03-17
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.6 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.192
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	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	2.2 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 1.0 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	31.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	0.2 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	< 0.2 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	3 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.: 24D1562005

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.2 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	0.2 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 1.0 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	< 0.3 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.0 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	< 0.9 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.4 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	< 0.1 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.: 24D1562005

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6027

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

R1 8/05/24

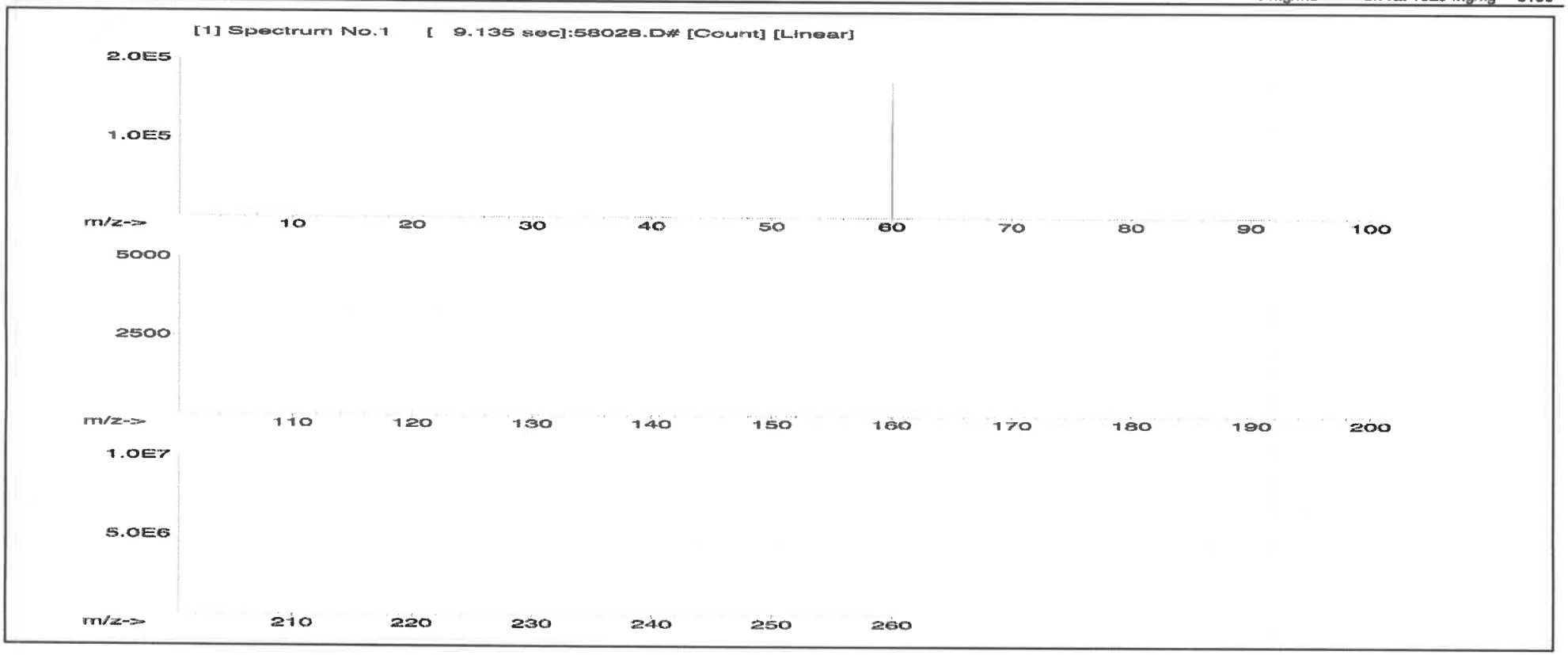
CERTIFIED WEIGHT REPORT:

Part Number:	**57028**
Lot Number:	**062024**
Description:	**Nickel (Ni)**
Expiration Date:	062027
Recommended Storage:	Ambient (20 °C)
Nominal Concentration (µg/mL):	**1000**
NIST Test Number:	6UTB
Volume shown below was diluted to (mL):	2000.07

Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	
	5E-05	Balance Uncertainty	
	0.100	Flask Uncertainty	

Formulated **By:**	Benson Chan	062024
Reviewed By:	Pedro L. Rentas	062024

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	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).

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
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:	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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

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

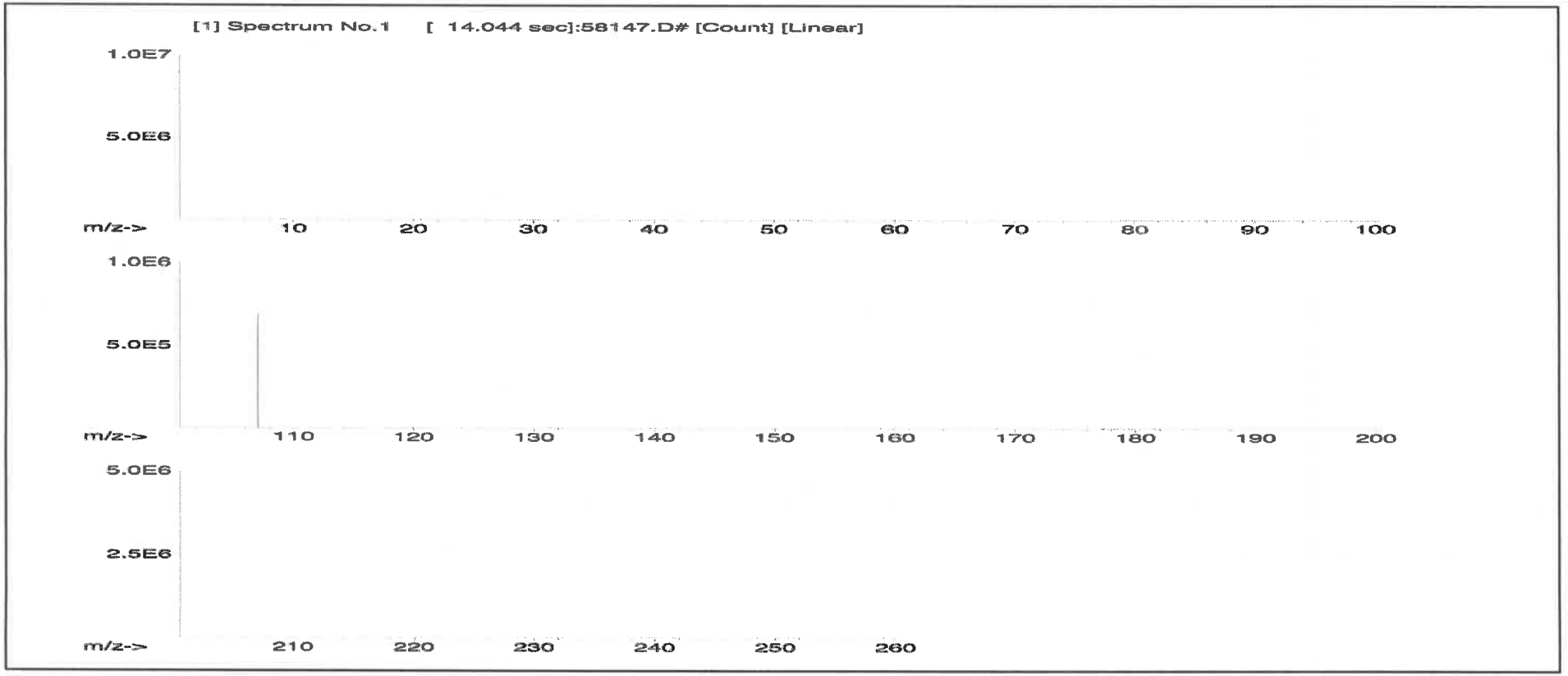
Weight shown below was diluted to (mL): 4000.30 0.058 Flask Uncertainty

	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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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).

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

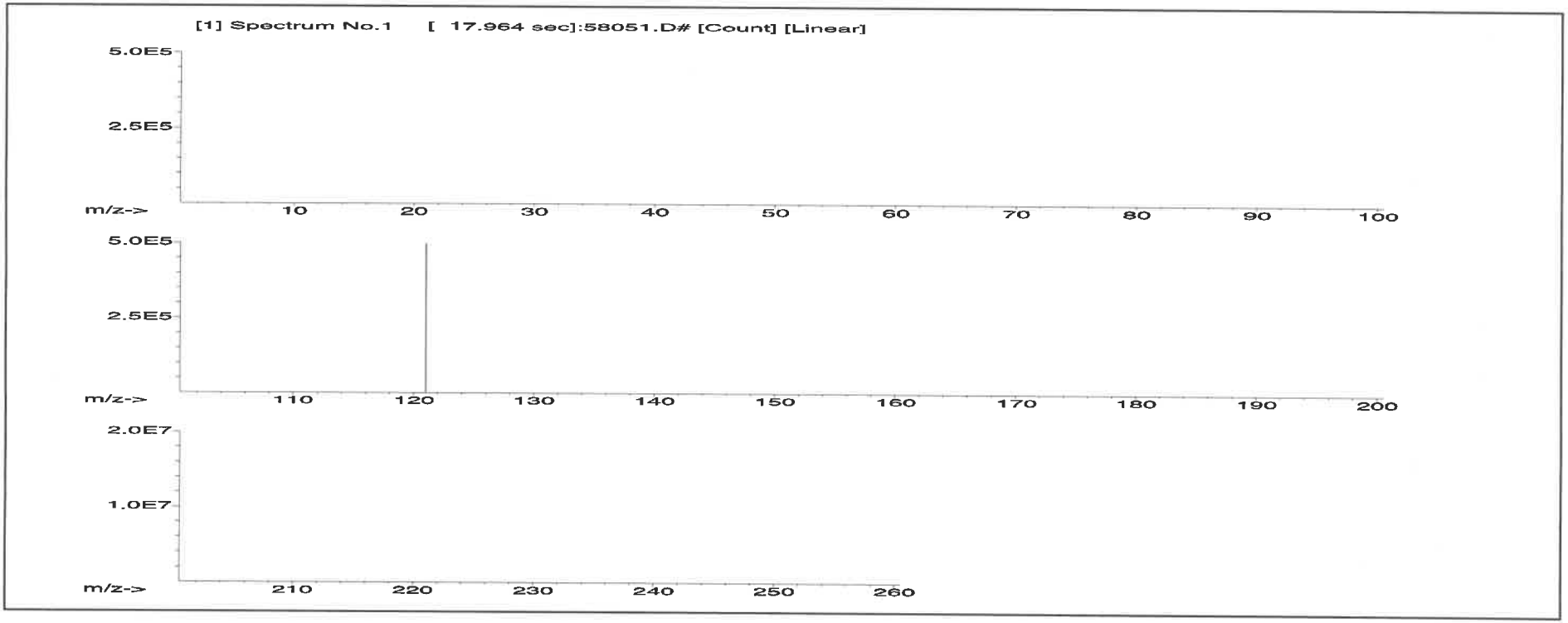
Lot #	Solvent:		
24002546	Nitric Acid		
2.0%	40.0 (mL)	Nitric Acid	

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.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	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).

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

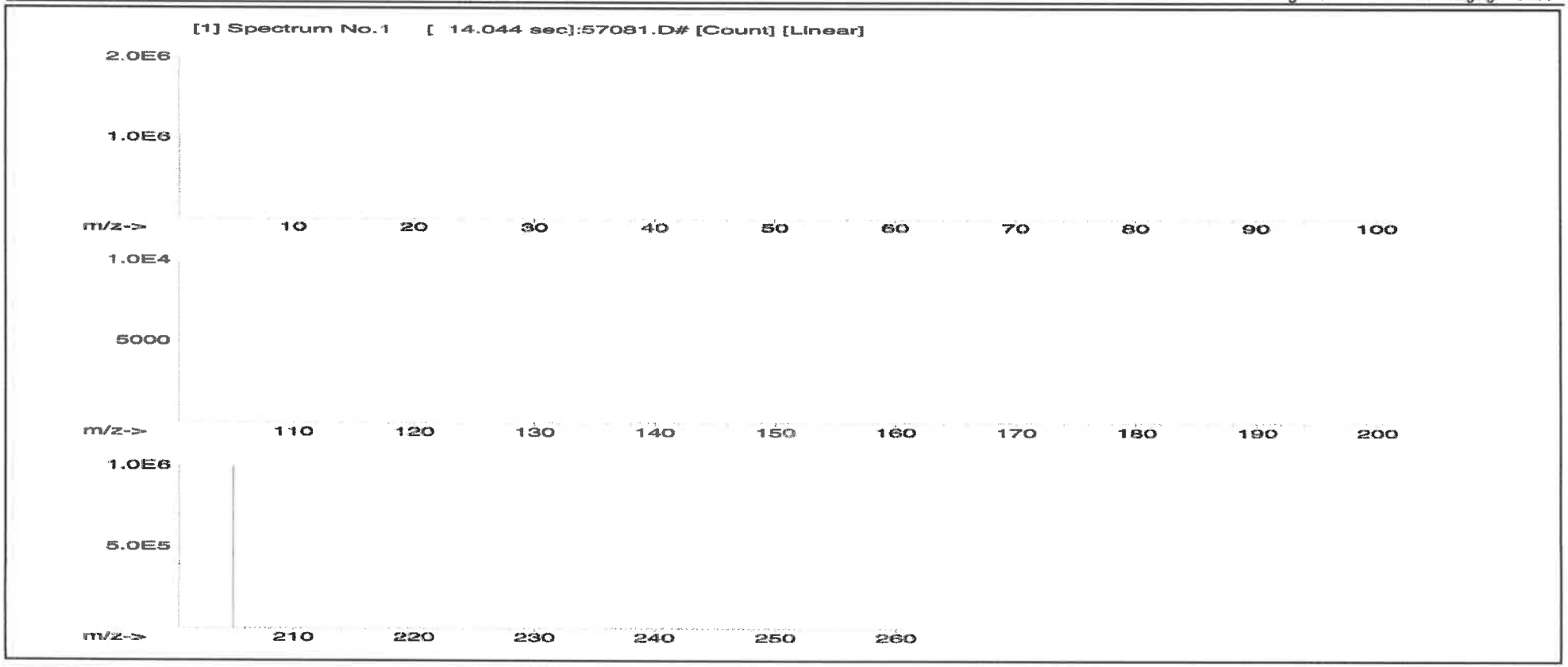
CERTIFIED WEIGHT REPORT:

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)																	
Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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).

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

M6021

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Rc. 8/5/24

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	

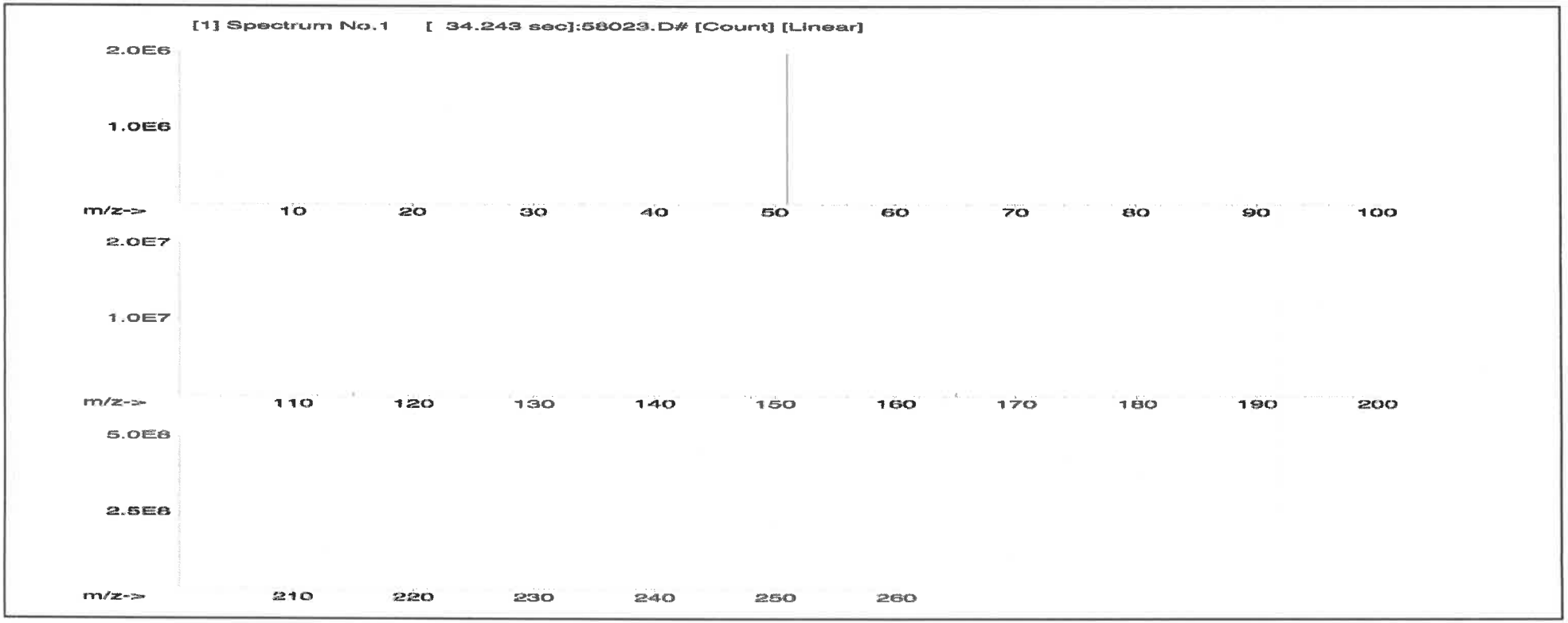
Aleah O'Brady

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



Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

Trace Metals Verification by ICP-MS (µg/mL)

Al	<0.02	Cd	<0.02	Dy	<0.02	Hf	<0.02	Li	<0.02	Ni	<0.02	Pr	<0.02	Se	<0.2	Tb	<0.02	W	<0.02
Sb	<0.02	Ca	<0.2	Er	<0.02	Ho	<0.02	Lu	<0.02	Nb	<0.02	Re	<0.02	Si	<0.02	Te	<0.02	U	<0.02
As	<0.2	Ce	<0.02	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.
* 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).

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. Q3434
COC Number 2045129

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: AECOM
ADDRESS: 605 3rd Ave
CITY New York STATE: NY ZIP: 10158
ATTENTION: Robert Forstner
PHONE: 212-377-8721 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Port Richmond 132
PROJECT NO.: 60693795 LOCATION: Staten Isl
PROJECT MANAGER: Rob Forstner
e-mail: Robert.Forstner@aecom.com
PHONE: 11 FAX:

CLIENT BILLING INFORMATION

BILL TO: AECOM PO#:
ADDRESS: 11
CITY STATE: ZIP:
ATTENTION: Rob Forstner PHONE: 11

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ 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 SVOC
2 Pesticides
3 Hg, Metals
4 Cr+6, Cyanide, Sulfides
5 TPH
6 VOC
7 Flash Point
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	2	3	4	5	6	7	8	9	COMMENTS
1.	PR132-WC1-20251022	S		X	10/22	10:18	9	X	X	X	X	X	X				
2.	PR132-WC2-20251022	A		X	10/22	10:30	7	X	x	X	X	X	X	X			
3.	TB	A			10/22		3										
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. Jim Alderson	10/22/25 1pm	1. 1300 10.22.25
2.		2.
3.	1416 10-22-25	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.8 °C
Comments:

Page ____ of

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete ☐ YES ☐ NO

Q3434-METALS

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.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q3434 AECO02
Client Name : AECOM
Client Contact : Rob Forstner
Invoice Name : AECOM
Invoice Contact : Rob Forstner

Order Date : 10/22/2025 1:40:00 PM
Project Name : AE1-CTY 3.2.Z-PR-DOCK
Receive DateTime : 10/22/2025 2:16:00 PM
Purchase Order :

Project Mgr :
Report Type : NYS ASP B
EDD Type : EQUIS
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q3434-01	PR132-WC1-20251022	Solid	10/22/2025	10:18					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q3434-02	PR132-WC2-20251022	Water	10/22/2025	10:30					
					VOC-TCLVOA-10		8260D		10 Bus. Days
Q3434-03	TB	Water	10/22/2025	10:00					
					VOC-TCLVOA-10		8260D		10 Bus. Days

Relinguished By :
Date / Time : 10-22-25 1505

Received By : Sam
Date / Time : 10/22/25 1515

Storage Area : VOA Refridgerator Room

Rq +6
EZ
Rq +5